Satellites and Site Destruction: An Analysis of Modern Impacts on the Archaeological Resource of the Ancient Near East

EMMA LOUISE CUNLIFFE

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~ Volume 3 of 3~

~Appendices~

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Appendix A
Image Processing Details and Dates

This survey uses multiple satellite images to provide information about archaeological sites in the Middle East. The Corona satellite images provide information about the landscape in the 1960s, at the advent of the major changes that are discussed in this thesis. Later imagery provides information about the period 2003-2010. The missions and dates of all imagery used are in Table 4-1: Details of Imagery Used in the Study p123, in Chapter 4.2. This Appendix provides supporting information on the processing of the imagery used in this research.

A.1.1 - CORONA

All Corona images were originally obtained from the USGS Earth Explorer website (United States Geological Survey 2009). They were then projected into the UTM projection and coordinate system for Zone 37N using the 1984 datum.

Corona images were processed by the Fragile Crescent Project (FCP) group in ERDAS Imagine 8.6 using a polynomial geometric model, second or third-order polynomial warp and nearest neighbour sampling against pre-georeferenced 15m resolution ETM panchromatic Landsat images taken between 2000 and 2002 available from USGS. Output varied between 2-4m depending on the distortion of the Corona frame. Corona image processing by Ur (2010a, b) was carried out in ERDAS Imagine using a second-order polynomial warp and cubic convolution interpolation, against 10m resolution orthorectified panchromatic SPOT imagery available from the US National Geospatial-Intelligence Agency's Raster Roam interface, and output to a resolution of 2m. Positioning error fluctuates but rarely exceeds 15m.

Some image manipulation was carried out in order to enhance visibility on Corona, usually a standard deviation stretch, but occasionally a histogram equalise stretch.

A.1.2 - SPOT IMAGERY

Little information is available on the SPOT imagery available on Google Earth. Images were taken by the SPOT 5 satellite over a three year period. Image processing used radiometric correction, geometric correction of distortions in UTM WGS 1984 based on ground control points and a DEM based on Reference 3D data to create an orthorectified mosaic covering the entire earth with a positioning error of less than 10m (Astrium GEO-Information Services 2008; 2012a).

The date of this imagery is subject to some debate. Although Google Earth lists the date as 31 December 2004, the imagery clearly shows fields under crops more consistent with summer than winter. Furthermore, the date of the mosaic is the same regardless of global location examined, despite the 3 year acquisition window. Dates of the SPOT imagery available for the two survey areas were examined on the Spot Image Catalogue (Astrium GEO-Information Services 2012b). The only imagery for the Tell Beydar area available before the release of the Astrium agreement with Google Earth (17 December 2008) is the 16 June 2006, 16 July 2006, 17 August 2006, and 08 October 2008. Therefore the Tell Beydar SPOT imagery can be almost certainly dated to summer 2006. Similarly the imagery in the catalogue for the area of the Land of Carchemish Project dates to 20, 21 and 30 June 2006, 05 and 26 July 2006, and 16 August 2006, suggesting this area of the mosaic also dates to summer 2006.

A.1.3 - DIGITALGLOBE IMAGERY

No information is available on the processing of the DigitalGlobe imagery available on Google Earth.

A.1.4 - GEOEYE IMAGERY

No information is available on the processing of the Geoeye imagery available on Google Earth. Both multispectral and panchromatic Geoeye were obtained by the FCP. This imagery was pre-corrected for distortions. The November 2009 image was further geocorrected by Dr Galiatsatos using an ASTER DEM. The other two images were added and mosaicked together. All three were corrected further using the GPS points taken in LCP field seasons (2006-2010).

A.1.5 – COMPUTER TOOLS

As well as ERDAS Imagine 8.6, ArcGIS 9.1, 9.2, 9.3 and 10 have all been utilised to process, display and enhance the imagery.

Appendix B
Visibility, Feature Identification and Damage Extents

This Appendix gives details and examples of how sites, land cover, land use, and damage extents appear on imagery. They are given in the order in which they appear in the text.

B.1.1 – Visibility

As discussed in Chapter 4.5.3, Visibility refers to how visible a site is on imagery, and is defined as it was in Chapter 4.

Table B-1: Definitions of Database Fields for Visibility of Sites on Imagery

Visibility	Evidence
Visible (1)	• A site is clearly visible
Partially visible (2)	• The resolution is poor so the site is only partially visible • Part of the site is visible but part is not, either because the resolution of the imagery changes over the site, or some parts of the site are too small to see, such as water channels or rock cut tombs • Part of the site is obscured under a cemetery or modern village, or by clouds.
Barely visible (3)	• Very little of the site is visible, usually because the resolution is too poor to make out more than the location of the site.
Obscured (4)	• Something is preventing the site from being seen. It is not visible on imagery as it is under a cemetery, modern buildings, or underwater, for example, or the view is blocked by clouds or other weather conditions.
Not visible (5)	• The site is not visible on the imagery at all, but nothing obvious (like buildings) is preventing it from being seen.

The following example demonstrates visibility of sites on satellite imagery and how the categories are applied. Figure B-1 shows LCP 18 on Corona, and Figure B-2 shows it on Geoeye imagery. On Corona no parts of the site are visible (Not Visible). Site

boundaries are estimated from the field sketch map and the GPS locations, shown on Figure B-2. The Geoeye image gives examples of other site visibilities. LCP 18_1 and LCP_4 are still Not Visible, and are known only from the field visit notes. LCP 18_2 is Barely Visible: the close up shows the tomb noted on the sketch map, which can just be discerned. LCP 18_3 is Obscured as it is under the later cemetery. (The cemetery can be seen in more detail in Figure 3-56, p100).

B.1.2 – Land Use, Land Cover and Damage Threat Identification

Key to the identification of damage is the identification of the land uses and land cover on and around sites, as discussed in the Methodology Chapter 4.5.4, and defined on Table 4-3, p142. The following sections discuss the identification of these features with examples of how they appear on satellite imagery. As in some cases land cover is the same as a damage threat, for example agriculture, no distinction is made between them here. Further examples of those which are also damage threats can be seen in Chapter 3.

Land Use / Cover – Bare or Low Scrub
Damage Threat – No equivalent

For some sites on Corona, it was not possible to distinguish on imagery between crop-covered land and land which had not been converted to arable land. The reflectance of the scrub is the same as the reflectance pattern of crop cover, and field boundaries are not always visible. In some cases, such as sites on the limestone hills around Tell Carchemish, it was not always possible to distinguish between bare earth and stone or land with some form of vegetation cover. Figure B-3 (p467) demonstrates different land covers south of Carchemish in 1967. Fields are visible by the straight, regular alternating pattern between LCP 1 and LCP 18. One particular feature is known from later imagery to be bare, and this has a different reflectance pattern. However, LCP 18 is also known to be bare (Figure B-4), and this is not visible.

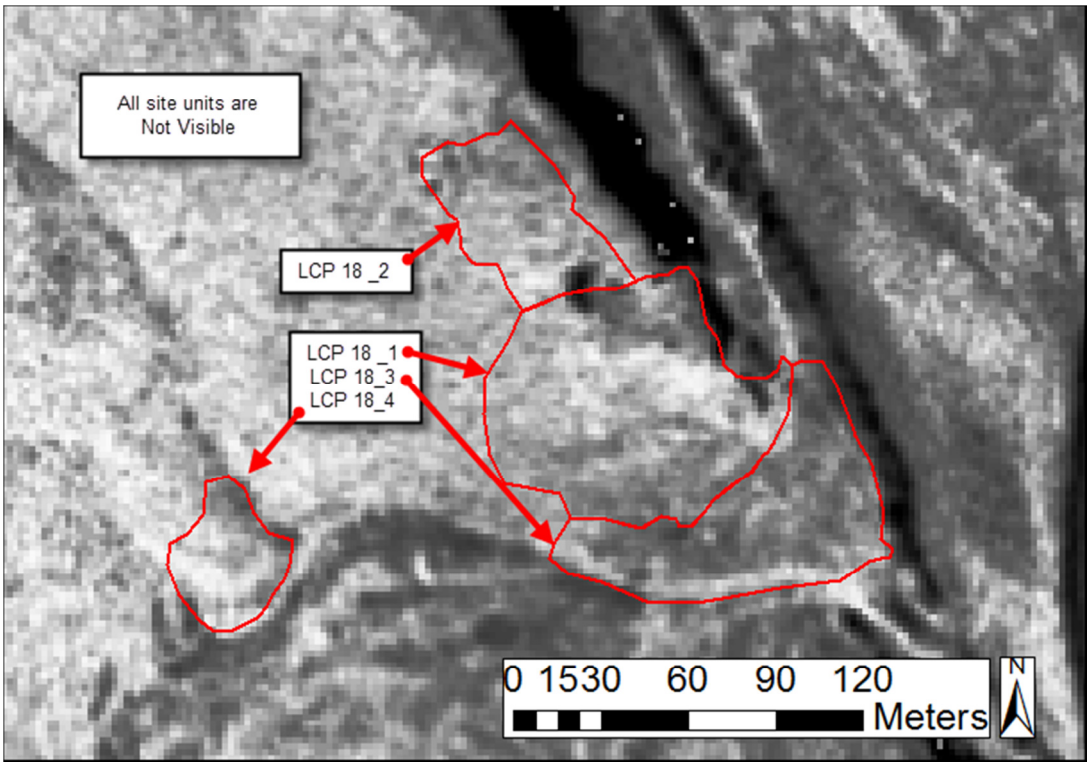


FIGURE B-1: LCP 18 ON CORONA IMAGE [168]

FIGURE B-2: LCP 18 ON GEOEYE IMAGE, WITH CLOSE UP OF LCP 18_2[169]

Red lines indicate approximate site boundaries

[168] Corona Image, ds1104-1009da014, histogram equalize stretch, 08 August 1968

[169] DigitalGlobe Image, 02 September 2003. Taken from Google Earth 02 February 2013

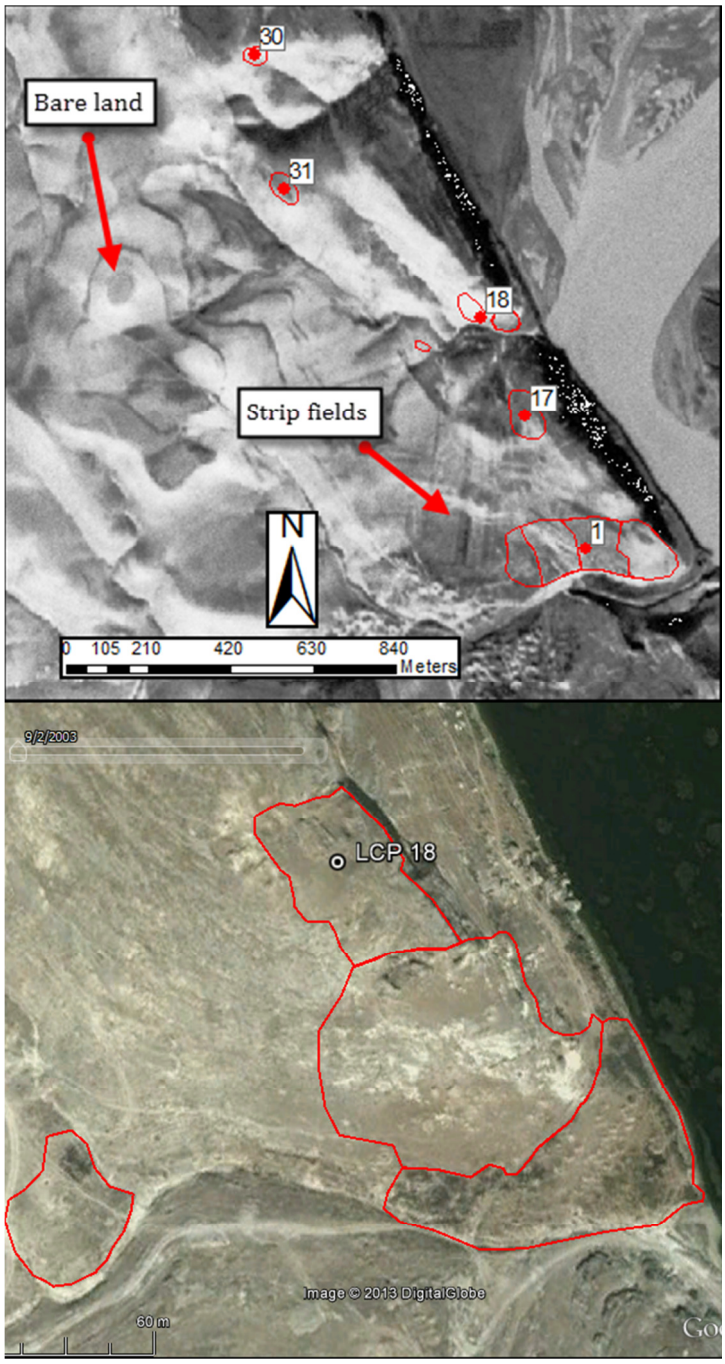


FIGURE B-3: (TOP) BARE LAND AND LOW SCRUB ALONG THE EUPHRATES NEAR CARCHEMISH ON CORONA IMAGE[170]

FIGURE B-4: (BOTTOM) BARE LAND ON AND AROUND LCP 18 ON DIGITALGLOBE IMAGE[171]

(In both cases red lines indicate approximate site boundaries)

[170] Corona Image, ds1038-2120df066, standard deviation stretch, 22 January 1967

[171] DigitalGlobe Image 02 September 2003. Taken from Google Earth 30 November 2012.

Land Use / Cover – Modern Settlement(s) OR Modern Structure(s)
Damage Threat – Development

(See Chapter 3.5.1, p46). Buildings were easy to recognise from their regular morphology, high reflectance, and the shadows cast by the walls, as well as their association with roads or tracks, which also have high reflectance and a linear morphology. Figure 6-45 shows a village on TBS 42 on Corona. Figure B-6 shows a group of small farmhouses on Geoeye imagery. They are visible by their white roofs, regular morphology and the white tracks linking them.

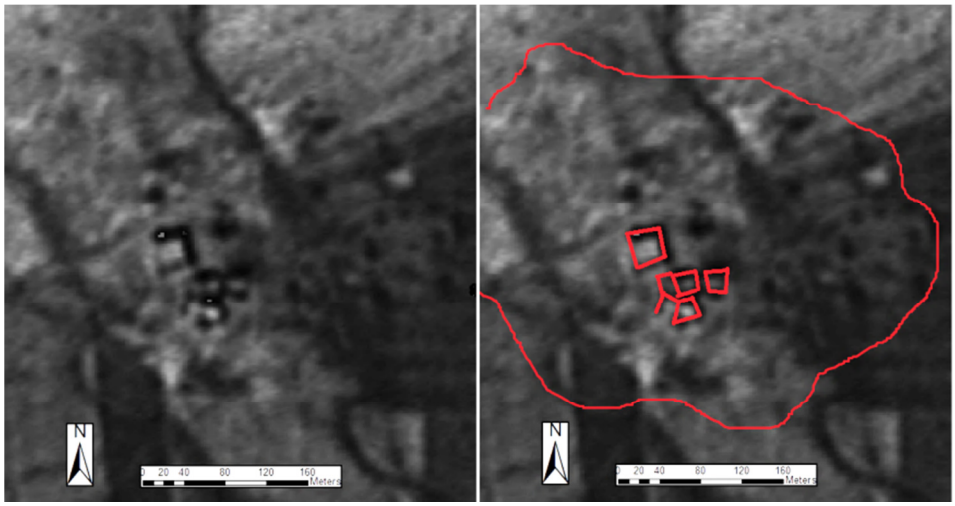


FIGURE B-5: VILLAGE ON TBS 42 ON CORONA[172]

Walls are drawn in red, and the approximate extent of the site is shown by the red circle

FIGURE B-6: SMALL FARMING COMPLEX ON LCP66 ON GEOEYE IMAGE[173]

LCP 66 is indicated by the red circle.

[172] Corona Image, 1102-1025DF006-1_37N, 09 December 1967

[173] Geoeye Image, 22 September 2009. Taken from Google Earth 17 February 2013

Land Use / Cover – Arable (Ploughed, Unploughed and Grazing)

Damage Threat – Arable Agriculture

(See Chapter 3.5.2, p54). Arable land accounted for most land cover in all periods. On Corona, most land was either bare or covered with crops: crop cover was identifiable from unnaturally straight field boundaries and changes in land colour, as shown on Figure B-7. As discussed in Chapter 3.5.2, p58, ploughing is rarely identifiable on Corona, although envelope ploughing is occasionally visible (highlighted in the red circles on Figure B-7). This can also be seen in Figure 3-10, p58, in Chapter 3.5.2, where the characteristic lines left by ploughing are highlighted. It was known from the sites visits that some fields were not ploughed: however, absence of visible plough lines on imagery does not mean ploughing has not occurred.

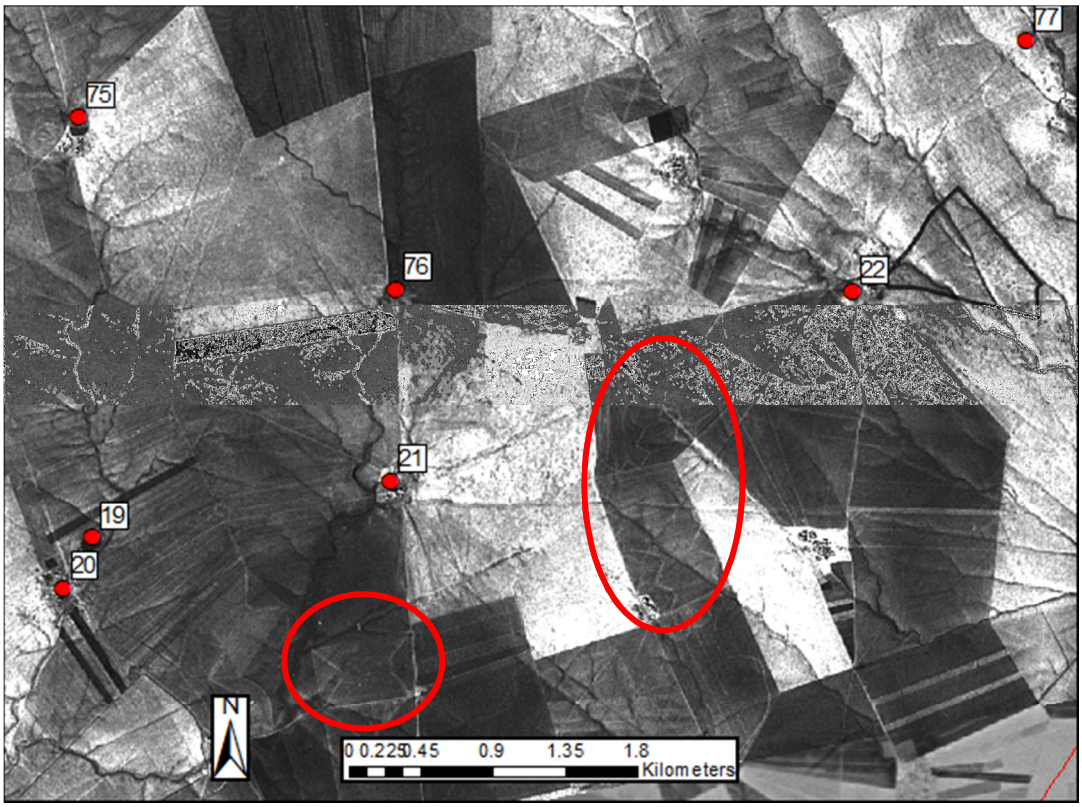


FIGURE B-7: FIELDS IN THE TELL BEYDAR AREA ON CORONA IMAGE[174].

Fields are identified by dark sections with straight edges. Envelope ploughing is highlighted in the red circles.

On later imagery, most examined land was covered by either irrigated cotton or crops. The former were identifiable by the regular irrigation lines cut into the soil, combined

[174] Corona Image 1102-1025df006-1, 11 December 1967

with the colour of the land. The latter were identifiable from the colour of the crops – most were golden at the time of the image capture – or by the plough lines, which are visible due to the shadows they cast. Both plough lines and cotton fields can be seen on Figure B-8.

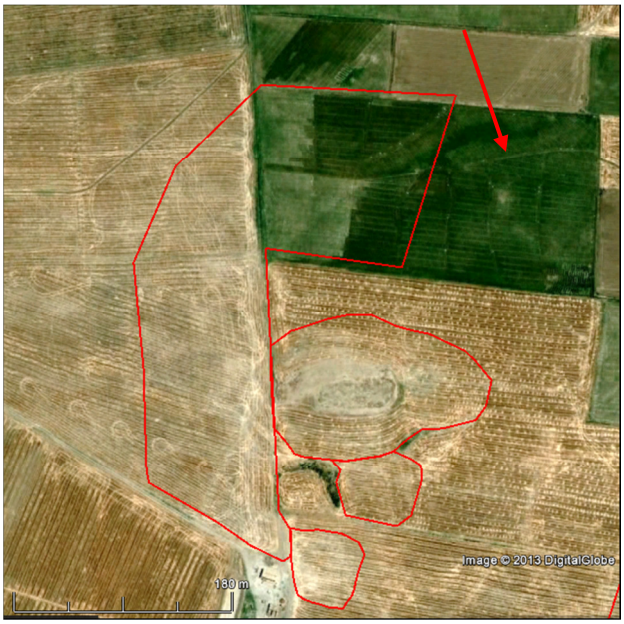


FIGURE B-8: COTTON FIELDS (TOP RIGHT) AND PLOUGH LINES AROUND AND OVER TBS 47 ON GEOEYE IMAGE[175].

Note the irrigation channel in the top right, indicated with the arrow.

As discussed in Chapter 3.5.2, grazing was only visible on high resolution imagery if, by co-incidence, the image was taken or site visits conducted whilst there were animals present (Figure B-9).

FIGURE B-9: GRAZING ANIMALS BY LCP 14_1 AND LCP 14_2[176]

Grazing animals are marked by the red circle at the bottom of the image and the sites are marked by the red outlines at the top.

[175] DigitalGlobe Image 02 September 2003. Taken from Google Earth 26 April 2013.

[176] Geoeye Image, 22 September 2009. Taken from Google Earth 19 February 2013

Land Use / Cover – Orchards

Damage Threat – Orchards

(See Chapter 3.5.3, p67). Olive groves and orchards were identified by the textural variation and regular pattern of black marks but were only visible once on Corona. This can be seen on Figure B-10.

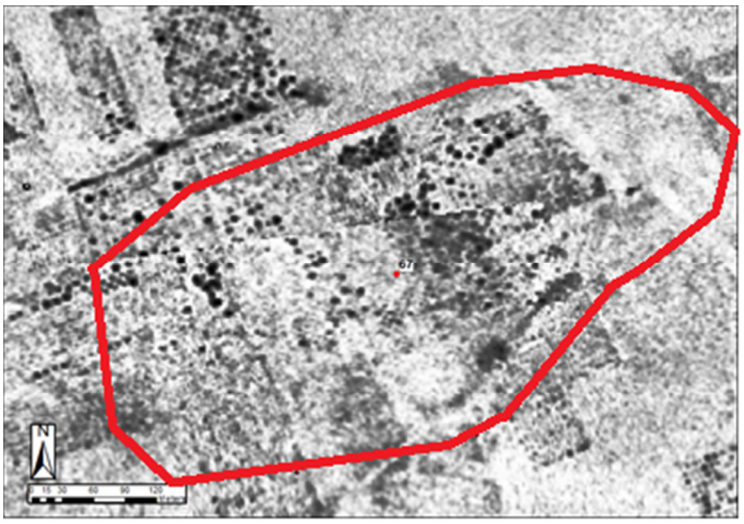


FIGURE B-10: REGULAR PATTERNING INDICATING ORCHARDS ON AND AROUND LCP 67 ON CORONA IMAGE[177].

Site extent is indicated by the red outline.

On later imagery orchards were identifiable by the regular textural variation and green or brown colouring, and the shadows cast by the trees, as shown on Figure B-11.

FIGURE B-11 - REGULAR PATTERNING INDICATING ORCHARDS ON AND AROUND LCP 67 ON DIGITALGLOBE IMAGE[178].

Site extent is indicated by the red outline. Note the grey road passing from the top centre of the image to the mid right.

[177] Corona Image, ds1104-1009da014, histogram equalize stretch, 08 August 1968

[178] DigitalGlobe Image 02 September 2003. Taken from Google Earth 30 November 2012

Land Use / Cover – Irrigation Channel(s)

Damage Threat – Irrigation

(See Chapter 3.5.4, p69). As discussed, only one potential irrigation channel was visible on Corona imagery (shown on Figure 6-56, p256 in Section 6.7.4). This is presumably because any irrigation that was present in this period will have been practised by local farmers, or was large-scale irrigation implemented by regional or government agencies. The small channels dug by local farmers will not be visible on the lower resolution Corona.

Modern irrigation channels fall into two types. Small irrigation channels are still present, shown in Figure B-12. The water itself is not usually visible; they are identified by the presence of increased vegetation, indicated by darker lines.

FIGURE B-12 - SMALL IRRIGATION CHANNELS AT TBS 54 ON 2010 GEOEYE IMAGE[179].

The red circle indicates the approximate location of site parts 2 and 3, some of which have been bulldozed. The red arrows indicate the irrigation channels, evidenced by dark green lines.

Larger irrigation channels from government programs are also visible and are usually lined with concrete. Figure B-13 shows the government irrigation scheme, extending from the West Hasseke Dam in the south of the Tell Beydar area. In periods of high rainfall, irrigation channels are detectable on imagery by the reflectance pattern of the water and the unnatural straightness of the feature. During periods of low rainfall, they cannot always be identified on the basis of the reflectance signature of the water, and may appear to be similar to roads. However, they have a distinct morphological signature, running in straight lines with sharp angular curves, and roads have regularly been built on their margins. Further images of government irrigation channels can be found in Chapter 6.7.4, p254.

[179] Geoeye Image, 23 June 2010. Taken from Google Earth 15 August 2012.

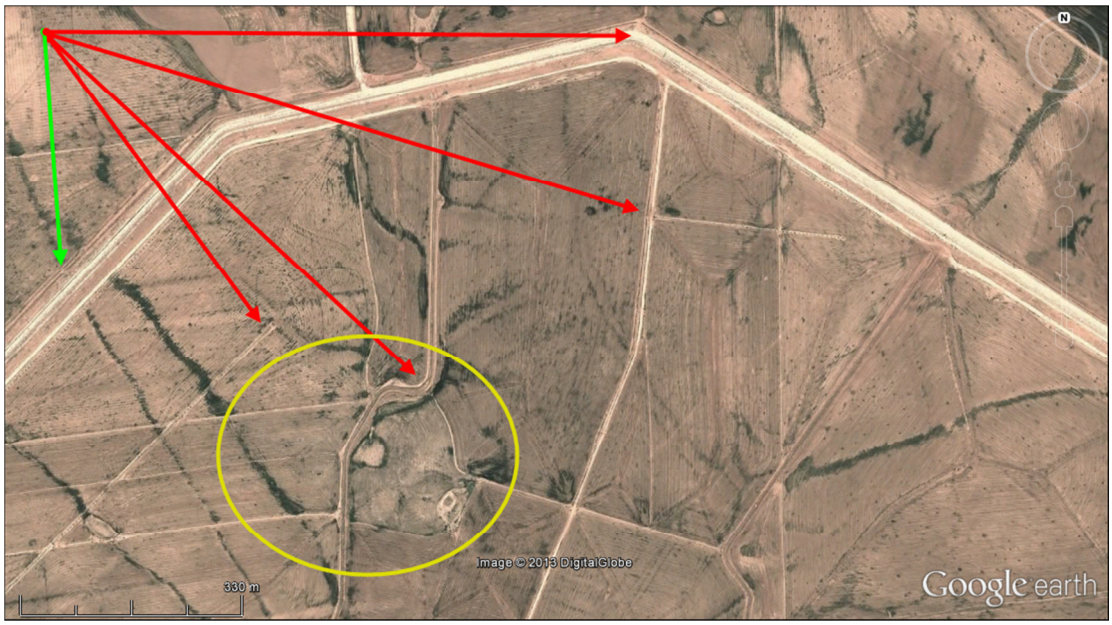


FIGURE B-13 - MULTIPLE STATE-SPONSORED IRRIGATION CHANNELS AROUND TBS 76[180].

The yellow circle indicates the location of the site, The red arrows indicate the major irrigation channel leading from the West Hasseke Dam, and the smaller channels running off it. They are very straight, and the concrete is visible as white lines. The green arrow indicates the track running parallel to the channel. Note how the irrigation canals clearly cut through and are later than the broad, dark lines, many of which are traces of much earlier hollow ways.

Land Use / Cover – Dam Bed

Damage Threat – Water Erosion / Irrigation

(See Chapter 3.5.4, p69 and 3.5.9, p88). No dams or similarly large bodies of water were visible on Corona. On recent imagery, large areas of water, such as reservoirs, are visible as large dark patches (Figure B-14).

FIGURE B-14: THE WEST HASSEKE DAM(S) ON 2012 GEOEYE IMAGERY[181]

[180] Geoeye Image 17 April 2012. Taken from Google Earth 26 April 2013.

[181] Geoeye Image 17 April 2012. Taken from Google Earth 26 April 2013.

The edges of the reservoir bed are clear on the imagery: the banks are identifiable by the shadows they cast as shown in Figure B-15. The fields around the reservoir bed come up to the edges of the embankment. The area of the reservoir bed is also distinctive due to the different soil colour, presumably resulting from the effect of the reservoir water before the water levels dropped.

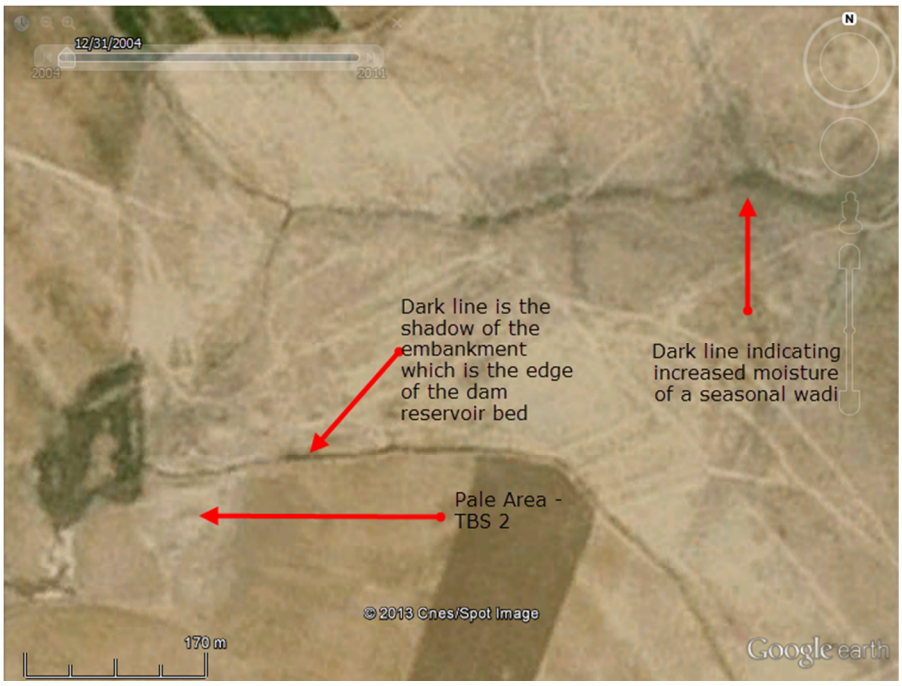


FIGURE B-15: RESERVOIR BED FOR THE WEST HASSEKE DAM BY TBS 2 ON 2004 SPOT[182]

Land Use / Cover – Roads / Track (s)

Damage Threat – Roads / Tracks

(See Chapter 3.5.5, p72). Roads, particularly packed earth roads and tarmac roads, have high reflectance and straight morphology, making them easy to identify. On Corona, they are visible as straight white lines connecting areas (Figure B-16). On later imagery, small tracks are visible due to either the shadows cast by the indentation of car and tractor tracks, or the disturbance of the ground, leading to the erosion of vegetation and indentation of the soil, which casts shadows. Some tracks are gravelled and these are visible as white lines. Others are tarmacked: the grey lines are clearly visible, such as in Figure B-11.

[182] SPOT Image, 31 December 2004(?). Taken from Google Earth 24 January 2013

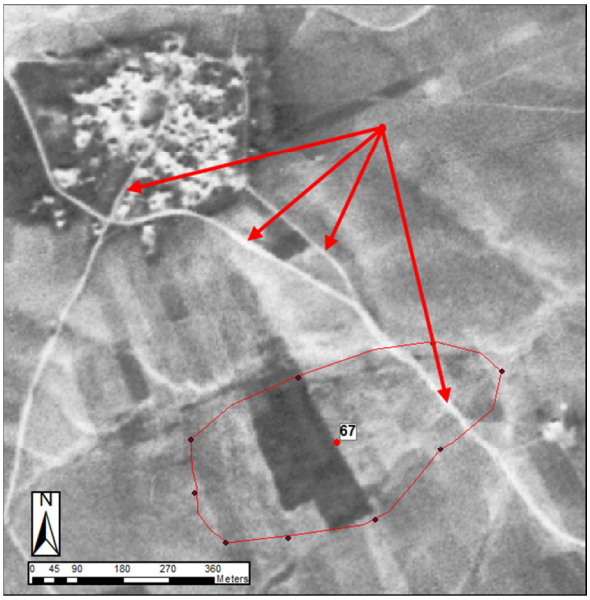


FIGURE B-16 - ROADS VISIBLE AROUND AND THROUGH LCP 67 ON CORONA IMAGE[183]

The roads are indicated by red arrows. LCP 67 is outlined in red: the blue dots are the GPS points taken during the survey indicating the edges of the site.

Land Use / Cover – Quarry
Damage Threat – Mineral Extraction / Quarrying

(See Chapter 3.5.6, p75). Quarries are visible only on the higher resolution imagery, when stone can be distinguished from the surrounding land cover, and the darker shadows of the quarry are visible. Theoretically, given their size, large industrial-scale quarries would be visible on earlier images of sufficient resolution: their absence implies they had not been created in the 1960s. However, small quarries dug by local people would not be visible without very high resolution imagery.

Land Use / Cover – No Equivalent
Damage Threat – Military Damage

(See Chapter 3.5.7, p76). No examples of military damage were visible on satellite imagery in either case study area.

[183] Corona Image, ds1038-2120df066, standard deviation stretch, 22 January 1967

Land Use / Cover – Bulldozing
Damage Threat – Bulldozing

(See Chapter 3.5.8, p77). Recognizing bulldozing on imagery is extremely difficult, and is discussed extensively in Chapter 3, Section 3.5.8. It is not related to reflectance patterns, but to the lack of clearly visible depth on imagery.

Land Use / Cover – Water Body /ies
Damage Threat – Water Erosion

(See Chapter 3.5.9, p88). Natural channels are usually seasonal and, on Corona, exist for the majority of the year as soil marks with higher reflectance than the surrounding soil matrix (presumably from wadi silts and gravels). As detailed in Chapter 3, many of these features are masked or blurred on more recent imagery. Although anthropogenic channels share the same reflectance characteristics as natural channels, they differ in that they run almost parallel to the contours rather than nearly normal to them (after Beck 2004). Figure B-17 shows multiple wadis on Corona, indicated by the arrows. Figure B-15 (following page) shows a seasonal wadi on SPOT imagery.

Erosion which is caused by water is indicated if a site has a non-regular shape, and there are water channels in close proximity. However, many sites are built along water channels, and other factors can affect the shape of site, so unless it is exceptionally clear that this is what has occurred, in practice water erosion is usually identified from field visit notes.

Land Use / Cover – No Equivalent
Damage Threat – Visitor Erosion / Vandalism

(See Chapter 3.5.10, p90). Only one example of visitor erosion was visible on satellite imagery: this is discussed in Chapter 6.9.1 as part of the case study on the basalt plateau sites (p275).

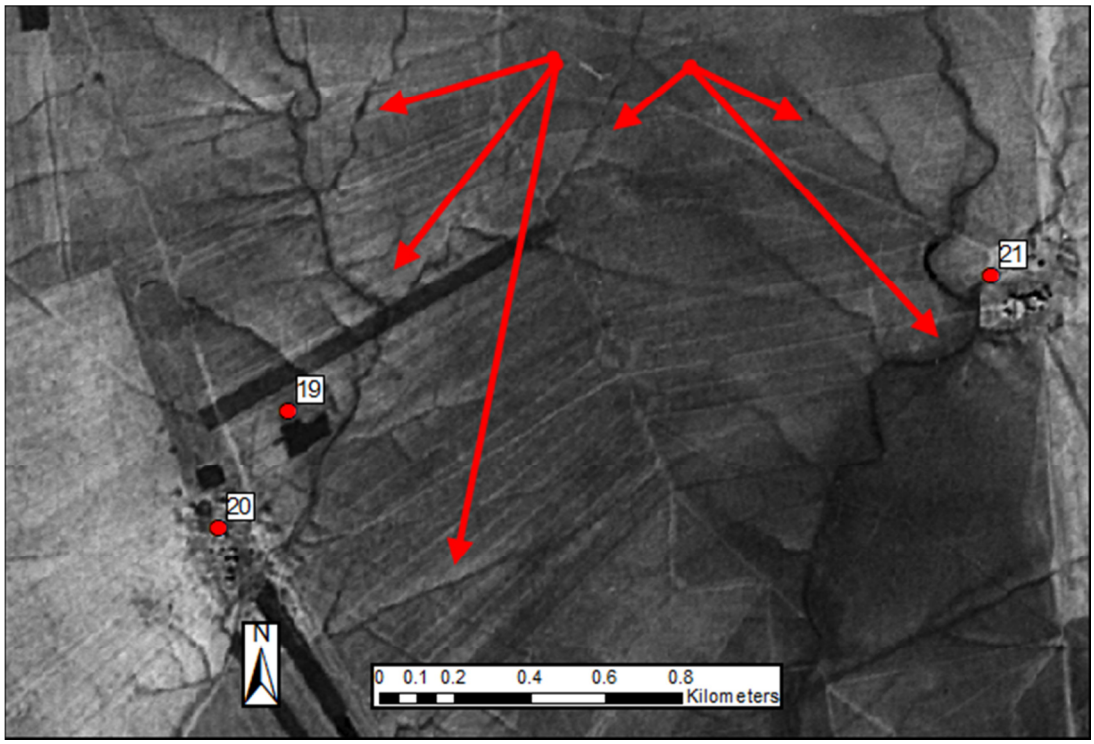


FIGURE B-17 - MULTIPLE SEASONAL CHANNELS AROUND SITES IN THE TELL BEYDAR AREA ON CORONA IMAGE[184]

Land Use / Cover – Archaeological Excavation

Damage Threat – Archaeological Excavation

(See Chapter 3.5.11, p92). Archaeological excavation is only visible on higher resolution imagery. Smaller excavations, such as trial pits, have the same morphological characteristics as any others pits. Their purpose is determined from site excavation reports. Larger excavations are identifiable as the excavated features and lack of other surface cover is distinctive. In the Near East, excavated tells in particular have exposed features which have a similar spectral reflectance profile to other, non-excavated parts of the tell, but are composed of regular linear features, such as walls and ditches.

[184] Corona Image, 1102-1025df006-1, 11 December 1967

Land Use / Cover – Looter's Holes, Mudbrick Pits, Pits (Other)
Damage Threats – Pits, Cuts and Looting

(For Looting, see Chapter 3.5.12, p93; for Mudbrick Pit Excavation, see Chapter 3.5.13, p97; for Dumping Pits, see Chapter 3.5.14, p98; and for Pits (Other) see Chapter 3.5.17, p101).

Holes, whether dug for looting, mudbrick extraction or an unknown purpose, are not visible on lower resolution imagery like Corona. On higher resolution imagery, as described by Stone

> *"Looting holes vary in their density, distribution and visual traces. Some sites had only a single hole, others thousands; in some the holes varied in size and shape, in others (almost always the larger sites) they were more regular; in some the looting was fresh, with sharp edges casting deep shadows, in others they were old and erosion had softened their edges and partially filled in the holes" (2008: 127).*

The combination of shadows, sharp edges and occasionally the whiter reflectance of upcast soil allow the identification of such holes. When it is possible to identify them, looters holes are distinguishable from excavations for mudbrick by their size and shape. Looters holes are usually rounded, small and dark, sometimes with an upcast. Mudbrick excavation pits are usually shallower and larger, with a more irregular shape. Mudbrick excavations are also often large cuts into the side of tells. It is not always possible to tell the difference.

Land Use / Cover – Modern Graves
Damage Threats – Grave Pits

(See Chapter 3.5.16, p99). Graves are not visible on earlier lower resolution imagery. On higher resolution imagery, they are visible due to the shadows cast by the mound over the grave, such as in Figure 3-56, and the reflectance of the headstone or other grave marker if one is present (shown on Figure B-19).

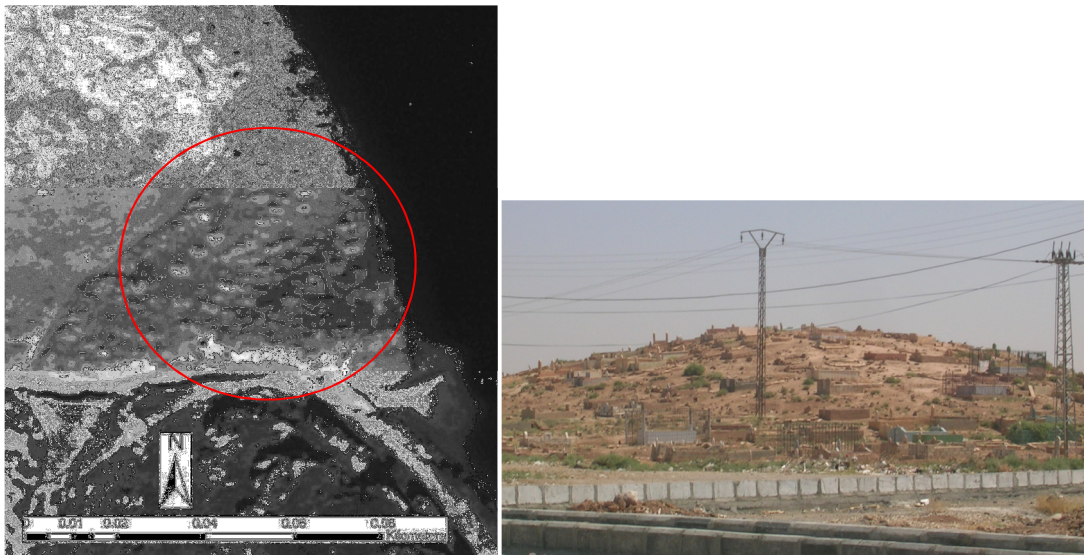


FIGURE B-18: CEMETERY ON LCP 18 ON GEOEYE IMAGE[185].

FIGURE B-19: HEADSTONES AND RAISED GRAVE MARKERS IN CEMETERY ON UNKNOWN TELL ON THE EDGE OF HASSEKE[186]

Land Use / Cover – Structural Decay

Damage Threat – Natural Erosion

(See Chapter 3.5.18, p102). Natural erosion is discussed extensively in Chapter 3, Section 3.5.18. It is detectable when the soil around the site has the same spectral reflectance profile as the site itself, and the edges of the site are no longer distinct. Natural erosion on earlier images is determined from the reflectance pattern, particularly when compared to the field visit. If a site appears significantly larger than described by the field visit, then it is possible that it has eroded, and that the image has captured the lower absorbance of the eroded particles which have washed down the sides of the tell to the surrounding ground, making it appear larger. This may also lead to characteristic erosion gullies in the sides of tells, visible as lines of shadow. Erosion can also be determined from site shape, as an eroded tell can have an irregular, non-circular outline. Figure B-20 shows eroded soil around LCP 55 (Tell Houlwanja / Douknouk). It is visible on Corona as a pale area, where soil from the tell has washed down the slopes. On later chromatic imagery the eroded soil around LCP 55 appears grey.

[185]Panchromatic Geoeye, po_3801419_pan_001_1, 10 November 2009

[186] Photo: July 2010. Copyright: the author

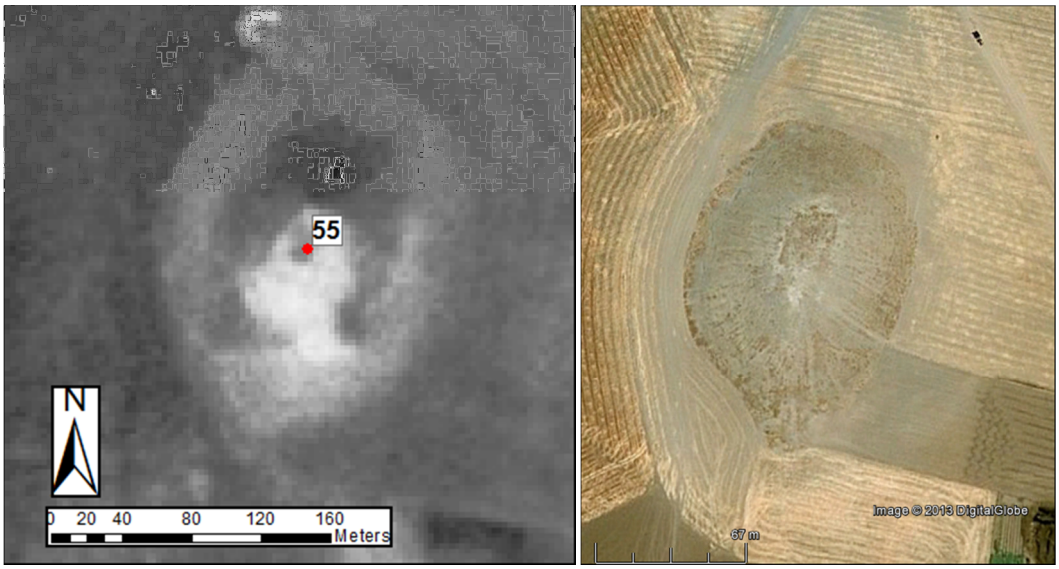


FIGURE B-20: EROSION PATTERN AROUND LCP 55 ON CORONA IMAGE (LEFT) AND DIGITALGLOBE IMAGE (RIGHT)[187]

In this particular case, the soil may also be evidence of a seasonal wadi which no longer flows. The lighter / greyer soil, which has the reflectance signature as the tell, extends for some distance from the site in the characteristic meander pattern of a water body.

Land Use / Cover – Road / Track(s)
Damage Threat – Railway

(See Chapter 3.5.19, p112). Like roads, railways are visible as a deep dark line which extends for some distance, connecting villages and towns. The morphology is linear, and it crosses other features, particularly older features, and even water. In Figure B-21, the railway is a dark line with a pale upcast, which crosses features such as the Euphrates. Although it has similar morphological characteristics to roads, it is narrower. This can be seen on Figure B-22, which shows the railway near a modern road by Carchemish.

[187] Corona Image, 1038-2120df066, standard deviation stretch, 22 January 1967

[187] Geoeye Image, 26 July 2009. Taken from Google Earth 30 November 2012

FIGURE B-21: RAILWAY ALONG THE SYRIAN-TURKISH BORDER AT CARCHEMISH ON CORONA IMAGE[188]

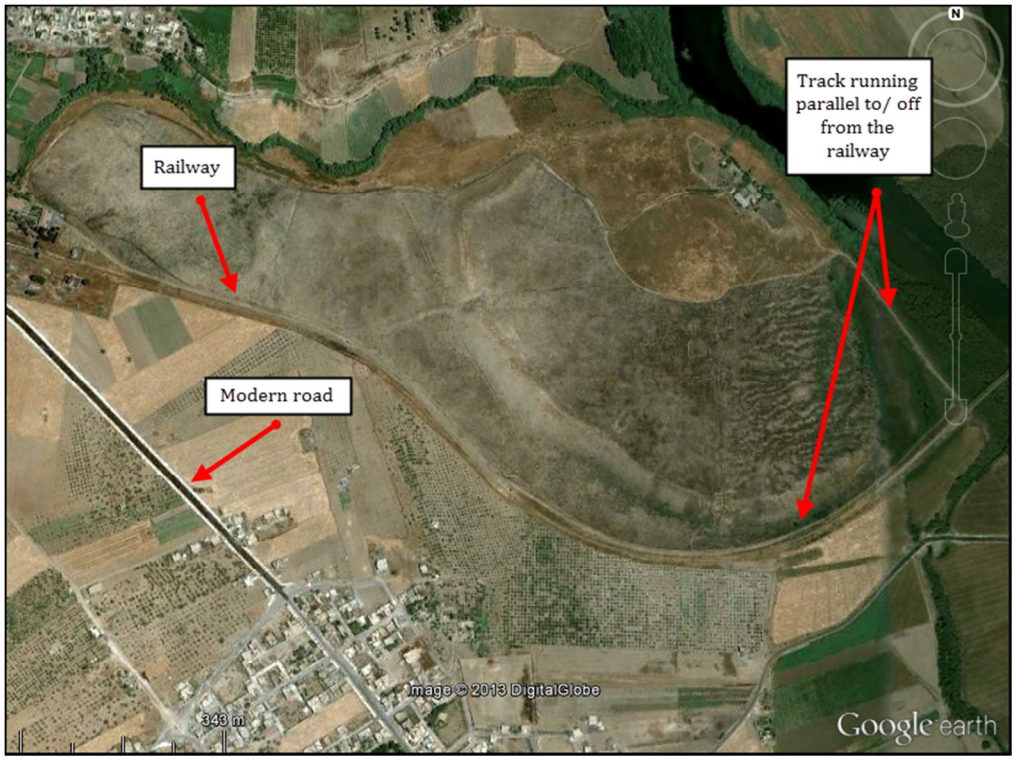


FIGURE B-22 - RAILWAY ALONG THE SYRIAN-TURKISH BORDER AT CARCHEMISH ON DIGITALGLOBE IMAGE[189]

[188] Corona Image, 1038-2120df066, standard deviation stretch, 22 January 1967

[189] DigitalGlobe Image, 02 September 2009. Taken from Google Earth 24 November 2012.

B.1.3 – Vertical and Horizontal Damage Extents

As discussed in chapter 2, it is not possible to calculate the precise extent of damage from the top down view given by imagery without a site visit and excavation. Only relative assessments can be made of how much of site remains on, above, or under, the ground. Damage has therefore been defined according to the horizontal extent of the damage (Table 4-4), and the vertical extent (Table 4-5), reproduced here from the Methodology Chapter. Examples of how these appear on imagery follow.

Table B-2: Definitions of Database Fields for Horizontal Damage Extents[190]

Horizontal Damage Extent	Evidence
None / undamaged (0)	• No damage is visible on the site. * Given the time span over which the sites have existed, and the natural decay processes which affect them, this has not actually been applied to any sites, as per Chapter 3.5.21
Unknown (1)	• The field records for the site are missing, or the land cover on the site is not visible, so that the state of the site at the time of the visit is unknown. If no obvious damage is visible on a site, given the decay processes affecting them, damage is usually marked as Unknown, rather than none, as it is unlikely there is no damage. Natural taphonomic processes will always have affected a site, so "No damage" would be a misnomer. This therefore ranks more highly than None[71].
Peripheral (2)	• The damage is around the edge of the site, and may be affecting the edges of the site, or may represent a threat which puts the site at risk, but is not currently affecting the site, such as an expanding quarry on the edge of the site. If damage extends on to the site, such as an orchard around and on the site, it is recorded as being on the site, rather than around it as well.
Intermittent / Fractional (3)	• A very small part of the site is affected, or the amount of damage being done is very small, such as a hole dug for looting.
Sectional / Partial (4)	• A large part of the site is damaged If the site can be split into clear sections, such as an upper and lower site, or areas of different date, that section (usually as defined by the field team) is affected.
Majority / Extensive (5)	• Most of the site is affected except a small section.
Total / Wholesale (6)	• The entirety of the site is affected, or the site is affected by wholesale damage.

[190] The numbers in brackets are because this methodology was also developed to create a method for assessing and ranking sites to determine the most damaged site in any given area. This requires Unknown damage to sites to be included as a multiplier (hence the value of 1). However, this work was outside the scope of this thesis, although the values are used in Chapter 9 as part of a damage calculation.

TABLE 4-5: DEFINITIONS OF DATABASE FIELDS FOR VERTICAL DAMAGE EXTENTS

Vertical Damage Extent	Evidence
None / Undamaged (0)	• As for horizontal damage extent, and Chapter 3.5.21
Unknown (1)	• As for horizontal damage extent, and Chapter 3.5.21
Site buried (2)	• The site has been buried, perhaps by alluviation, colluviation, or the flood water and associated sediments behind a modern dam.
Pitted (3)	• Pits have been dug in the site, perhaps for looting, or burials. The pits are of varying depth, and do not cover the entire site. This is considered to be a lesser degree of damage than "upper levels damage". If the entire site is pitted, such as a cemetery covering the entire site, this is recorded as "upper levels damaged".
Site slightly dispersed / degraded (4)	• This usually refers to a mound which is gradually degraded by ploughing, or a site which is being dispersed by erosion.
Upper levels damaged (5)	• The upper levels of the site are being damaged, perhaps by ploughing or a small amount of levelling for a track.
Site heavily dispersed / degraded (6)	• The site is heavily eroded, or has been heavily dispersed / degraded by agriculture. This also refers to heavily looted rock cut tombs. Often when the tombs are looted, artefacts which are considered to be of little value, such as pottery, will be left strewn across the landscape outside the tomb. The tombs are heavily degraded by the looting.
Site destroyed to ground level (7)	• The site has been deliberately (rather than through natural processes) destroyed to the current ground level, but there are (or may be) subsurface remains.
Site destroyed (8)	• There is nothing left of the site, even below the ground.

A series of examples will be used to demonstrate how the different damage extents appear on different images.

Example 1 – Unknown Damage at LCP 18

Figure B-1 (on page 466) shows LCP 18 on Corona. The damage is Unknown as neither the site nor the land cover can be seen. Figure B-2 (on page 466) shows LCP 18 on Geoeye. For most of the site the damage is Unknown. Whilst there is no obvious damage affecting the site, and none was recorded during the field visit, taphonomic processes will have affected the site and the factors affecting image acquisition may mean that damage is not visible.

Example 2 – Damage Threats at Carchemish

The following figures (Figure B-23 and Figure B-24) show different damage extents at Carchemish on 1102 Corona and 2009 panchromatic Geoeye, demonstrating how these extents can change over time. The key to the extents follows the figures (Table B-3 and Table B-4). (It should be noted that in this discussion the terms Significance and Severity are used interchangeably to refer to the ranked order of the extent of damage).

On Corona, mines (listed as 1 – military damage) cover a section of the whole site – the tell itself and a small part of the outer town on the Turkish side of the border. As discussed in Chapter 3.5.7 (p76), and again in Chapter 8.7.7 (p377), it was not possible to detect the mines from satellite imagery. Mining the site has damaged the Upper Levels of the site. Due to the risk involved (i.e. that should the mines explode the damage could be extremely serious), as a result of the size of the area they cover, and also because they completely deny access, the mines are considered the main threat to the site on both Corona and Geoeye (Significance 1).

The second most serious threat - on both Corona and Geoeye – is the railway. It covers a section of the site, but a much smaller section than that covered by the mines, and is therefore a less serious threat. It also has a smaller horizontal extent and covers a smaller area than the arable agriculture marked as the next most serious threat on Corona (which is ranked as Significance / Severity 3). However, the vertical damage caused by building the railway is much greater than that caused by agriculture, so it is considered the second most serious threat. The vertical damage recorded is marked as Site Destroyed to Ground Level. The ground was flattened and heavily disturbed, which will certainly have destroyed any surface level remains. We cannot know how deep the disturbance in the area of the railway goes, so the site cannot be said to be Totally Destroyed, which would be the next category.

On Corona, the third most serious threat was arable agriculture, which covered almost the entire Syrian side of the outer town. The vertical extent was recorded as damage to the Upper Levels of the site. By the time the Geoeye image was taken, the landscape had changed. Arable agriculture covered a much smaller section of the site, so this was considered to be the 6th most serious threat recorded in 2009. Most of the area which had been arable agriculture was converted to orchards. These cover a large Section of the lower town and damage the Upper Levels of the site. Due to the size of area covered and vertical extent of the damage, this was the 3rd most significant threat recorded in 2009.

FIGURE B-23: CARCHEMISH (LCP 46) ON 1102 CORONA IMAGE[191]

FIGURE B-24: CARCHEMISH (LCP 46) ON GEOEYE IMAGE[192]

[191] Corona image, 1038-2120df066-66, standard deviation stretch, 22 January 1967

[192] Panchromatic Geoeye, po_3801419_pan_001_1, 10 November 2009

TABLE B-3: DAMAGE EXTENTS AT CARCHEMISH (LCP 46) ON CORONA IMAGE

Significance	Damage Cause	Horizontal Damage Region	Vertical Damage Effect
1	Military Damage	Sectional / Partial	Upper levels damaged
2	Railway	Sectional / Partial	Site destroyed to ground level
3	Arable Agriculture	Sectional / Partial	Upper levels damaged
4	Roads	Intermittent / Fractional	Site slightly dispersed / degraded
5	Arch Excavation	Intermittent / Fractional	Upper levels damaged
6	Development	Peripheral	Site slightly dispersed / degraded
7	Water Erosion	Sectional / Partial	Site slightly dispersed / degraded

TABLE B-4: DAMAGE EXTENTS AT CARCHEMISH (LCP 46) ON GEOEYE IMAGE

Significance	Damage Cause	Horizontal Damage Region	Vertical Damage Effect
1	Military Damage	Sectional / Partial	Upper levels damaged
2	Railway	Sectional / Partial	Site destroyed to ground level
3	Orchards	Sectional / Partial	Upper levels damaged
4	Development	Sectional / Partial	Site heavily dispersed / degraded
5	Bulldozing	Sectional / Partial	Site heavily dispersed / degraded
6	Arable Agriculture	Sectional / Partial	Upper levels damaged
7	Roads	Sectional / Partial	Upper levels damaged
8	Irrigation	Intermittent / Fractional	Upper levels damaged
9	Pits Other	Intermittent / Fractional	Pitted
10	Arch Excavation	Intermittent / Fractional	Upper levels damaged

The 4th most serious threat on Corona was the roads, which are very small, so the horizontal extent recorded is a Fraction of the site is affected. The reflectance pattern suggests it is only a gravel track, so the vertical extent is Site Slightly Degraded. By 2009, several more roads have been built across the site, so the horizontal extent is increased to Sectional damage. Many (if not all) of the roads appear to have been tarmacked, although they are still not large enough to be major thoroughfares. The horizontal extent is increased to reflect the fact that the ensuing road widening and application of tarmac will have damaged the Upper Levels of the site. However, other threats have also increased, so road building is only the 7th most severe threat in 2009.

The 5th most serious damage recorded on Corona was the archaeological excavations conducted by Hogarth and Woolley. These have exposed some parts of the site, so the vertical extent is recorded as Upper Levels damaged, reflecting the inherently destructive nature of excavation.

However, relative to the size of the site, hardly any of it is affected so the horizontal extent is still only a Fraction. The extents of the archaeological excavation damage have not changed in 2009, but several other threats are now worse, so it is the 10th most serious threat (that is, the least serious threat) visible on Geoeye.

The 6th most serious damage threat recorded on Corona was the development, which comes right up to the edge of the outer town walls. The horizontal extent is Peripheral: it affects the edge of the site, and therefore the vertical extent is Site Slightly Degraded. However, by 2009, development has increased markedly, and now covers a portion of the outer town (shown on Figure 8-38, p363). As a result, the significance, horizontal and vertical extents are all increased. Development is the 4th most serious threat recorded on the site. It covers a Section of the site, and – as fieldwork has been completed to study this – it is known to Heavily Degrade the site.

The last threat recorded on Corona – Significance / Severity 7 – was water erosion. The south eastern side of the mound shows a rippled pattern consistent with water damage. This damage is old, but is recorded in the survey notes, and in fact was recorded on a map from 1879 consulted during the survey. To have a complete record of damage, and to reflect the antiquity of the damage, it is recorded on the oldest possible record, even though it is not still on-going. To indicate the fact water damage is not still on-going, or even a likely threat now the Euphrates has been dammed, it is not noted on later records.

Several new threats are also recorded on the 2009 Geoeye. The 5th most serious threat was bulldozing – Figure 8-48, p379, shows a close up of the resulting damage to the outer wall. Fieldwork confirmed the affected horizontal extent was a Section of the site along the outer town wall. Parts of the bulldozed section remained, albeit heavily damaged, so the vertical extent was marked as Site Heavily Degraded. Two irrigation channels were visible in the arable fields to the south east of the site. These were quite small, and so were marked as the 8th threat to the site. The horizontal extent was a Fraction of the site, although the Upper Levels of the outer town were damaged. According to the Conservation Report (Wilkinson and Wilkinson 2010), some small gravel extraction pits were also recorded in the outer town. These were too small to see or evaluate so they were accorded a low Severity (9th) and minimal extents. The horizontal extent of the damage was recorded as Intermittent / Fraction, and the vertical extent was Pitted.

Example 3 – Changes in Horizontal Extent at LCP 66

Examples of the change in horizontal extent from Total damage to Majority damage can be seen in the comparison of Figure B-25 and Figure B-26. In the 1960s, LCP 66 was entirely covered by arable agriculture, but in 2009, this was subdivided into three threats. Although it is unclear from the field visit notes how accurate the site boundary is (Boundary Certainty is Low), the boundary was drawn as part of the field visit and the follow up work, and is used as the guideline. Therefore in 2009, development covers the largest part of the site and causes the most damage. The horizontal extent is Sectional and the vertical damage depth is the Upper Levels. Most of the rest of the site, particularly the edges, is covered by orchards, so these are marked as covering a Section of the site, and damaging the Upper Levels. However, the damage caused by the orchard is subjectively judged to be less severe, and so it is marked as the 2nd threat. Several dirt tracks also cross the site: these cover only a Fraction of the site, and Slightly Degrade the site.

Other Damage Types

No image is given here to show Site Destroyed: this can only be determined from a field visit, either before or after the damage to the site has occurred site. The extent of ground level change, depth of site, and exact type of damage must be known for this to be recorded. As a result, it is almost never determined from imagery without extensive supporting information.

Site Buried is also not shown here. An example of a buried site is discussed in Chapter 6.7.4, and can be seen in Figure 6-57 and Figure 6-58, p258.

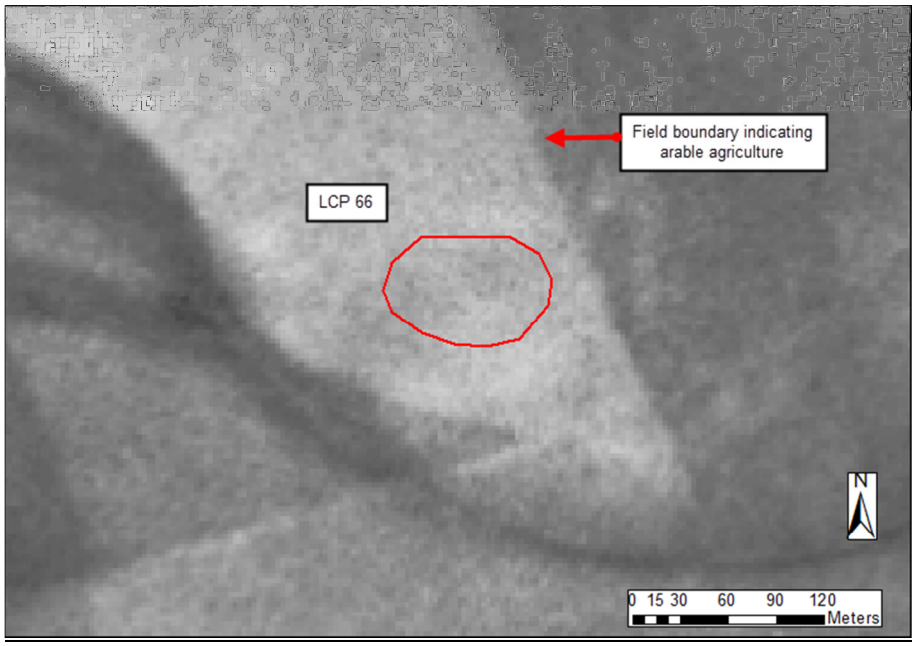


FIGURE B-25: LCP 66 ON 1102 CORONA IMAGE [193]

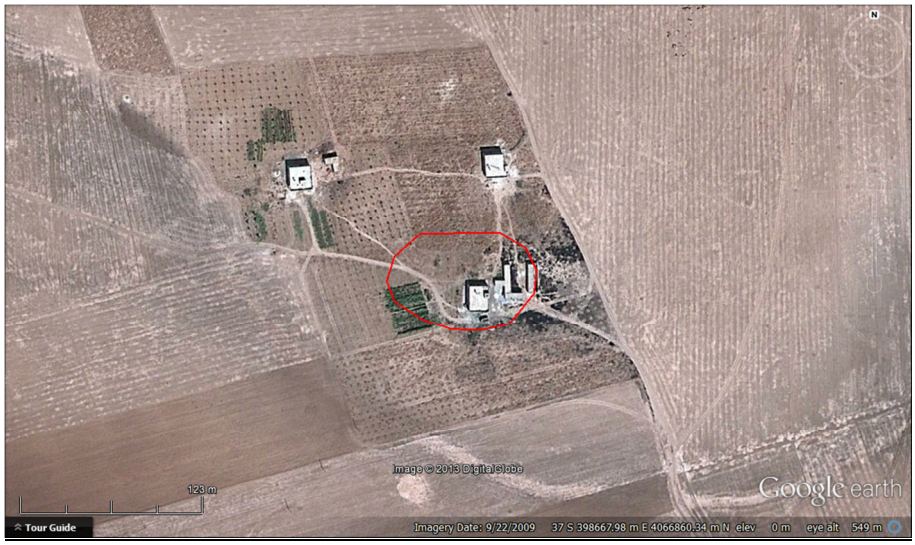


FIGURE B-26: LCP 66 ON 2009 GEOEYE IMAGE[194]

[193] Corona Image, 1102-1025df006-1, 11 December 1967

[194] Geoeye Image, 22 September 2009. Taken from Google Earth 17 February 2013

Appendix C
Field Verification: Soil Samples

During the field visits, I assisted in collecting soil samples to extend the work undertaken by Beck and Galiatsatos in Homs (Beck 2004; Galiatsatos 2004; Wilkinson et al. 2006, discussed in Section 4.4 – Identification of Sites on Satellite Imagery) to the Carchemish area. The goal was to validate their results in one of the selected case study areas, in order to understand how sites appear on imagery. Soil samples were visually analysed using a Munsell Chart and spectrally analysed using a spectroradiometer. Sites in the Tell Beydar area have a distinctive soil colour and are far more visible on imagery than sites in the Carchemish area, where relatively large mounds can be almost invisible, even on the highest quality imagery. As a result, the analysis was conducted on small sites around Carchemish.

Several sites were analysed: all results were similar, so they are illustrated using the data from site LCP 51, (a low tell 2-3m in height), with evidence of Roman, Late Antique and Islamic occupation. The site is hard to see on satellite imagery as it is covered in crops (Figure C-1), although there is a visible difference in soil colour after the field has been harvested (Figure C-2).

A series of soil samples were taken across the site (seen in Figure C-2) and dry and wet Munsell soil chart readings (Table C-1) were taken for each sample (Munsell Color Company 1975). The Munsell chart readings show only a minimal colour difference between the soils, illustrating the site detection difficulties for the human eye.

FIGURE C-1: DIGITALGLOBE IMAGE OF LCP 51

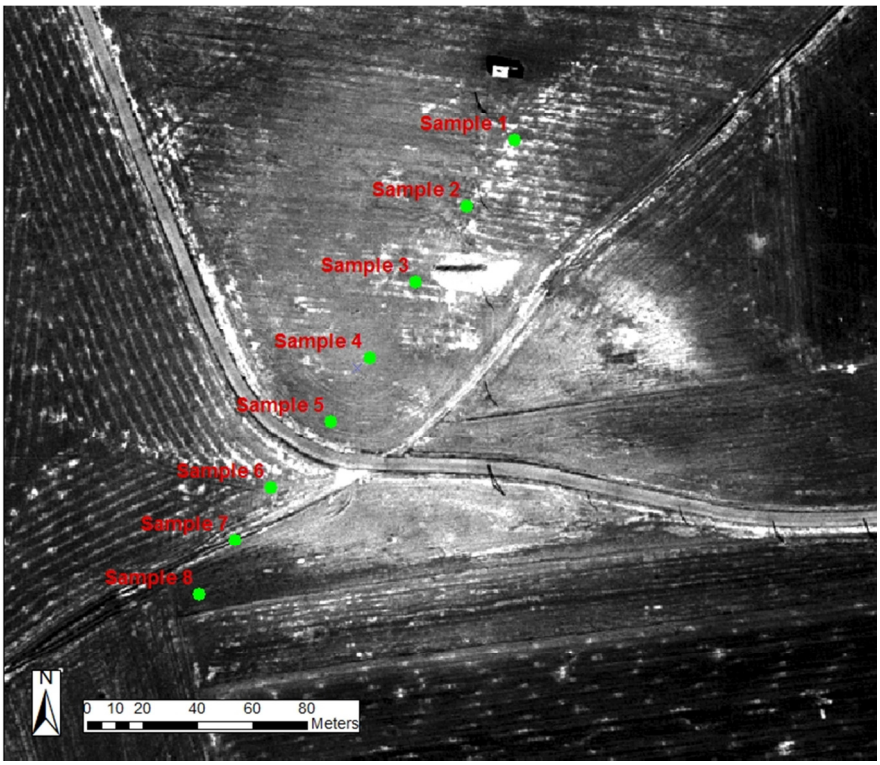


FIGURE C-2: SOIL SAMPLES TAKEN AT LCP 51, NORTH TO SOUTH[195]

[195] Top: DigitalGlobe Image, 27 May 2003. Taken from Google Earth 23 August 2012
Bottom: Panchromatic Geoeye Image, po_3801419_pan_000, standard deviation stretch, 22 September 2009

TABLE C-1: MUNSELL SOIL READINGS

Description	Dry Description	Wet Description
Sample 1	7.5YR 6/4 Light brown	7.5YR 4/4 Brown
Sample 2	10YR 6/4 Light yellowish brown	10YR 4/4 Dark yellowish brown
Sample 3	10YR 5/4 Yellowish brown	10YR 3/4 Dark yellowish brown
Sample 4	7.5YR 5/4 Brown	10YR 4/3 Brown
Sample 5	10YR 5/4 Yellowish brown	10YR 3/6 Dark yellowish brown
Sample 6	7.5YR 5/4 Brown	10YR 3/6 Dark yellowish brown
Sample 7	7.5YR 5/4 Brown	7.5YR 3/4 Dark brown
Sample 8	7.5YR 4/6 Strong brown	7.5YR 3/4 Dark brown

The samples were also analysed under controlled laboratory conditions using a spectroradiometer (ASD FieldSpec3 model) to assess the soil reflectance (as described by Galiatsatos 2004: 166; and Peddle et al. 2001). Laboratory spectroradiometry gives greater control of the results: it examines pure soil, excluding the surface texture, local scattering, effects of absorption by vegetation and other surface artefacts, so any differences in soil brightness are more obvious. The results are plotted in a graph (Figure C-3). The reflectance data show typical soil reflectance properties on and off the site. As the graph shows, in the visible part of the spectrum (400-700 nm) there is very little difference in reflectivity among the samples; at reflected infrared (700-2500 nm) wavelengths, there are differences that can be enhanced through spectral analysis. (Speaking generally, this is also what the standard deviation stretch applied to the image in Figure C-2 is enhancing).

Sample 8 (the southernmost sample, bottom line on the graph) has a slightly lower reflectance than the other samples. It is the only sample taken from the *terra rossa* soil off the site. Samples 1 and 7 were taken at the north and south edges of the site, where it merges with the *terra rossa* soil. They have the lowest reflectance profiles after sample 8, although the difference between them and the other samples is very small. Sample 4, on the other hand, was taken in the middle of the site and has the highest reflectance.

This suggests that reflectance increases slightly across the site, and is lower off-site. Nonetheless, there is very little overall reflectance difference, suggesting that the soils on and off the site have broadly similar mineralogical compositions. In general, regardless of whether they are wet or dry, sites around Carchemish remain hard to see on imagery, even multi-spectral imagery, hindering assessment.

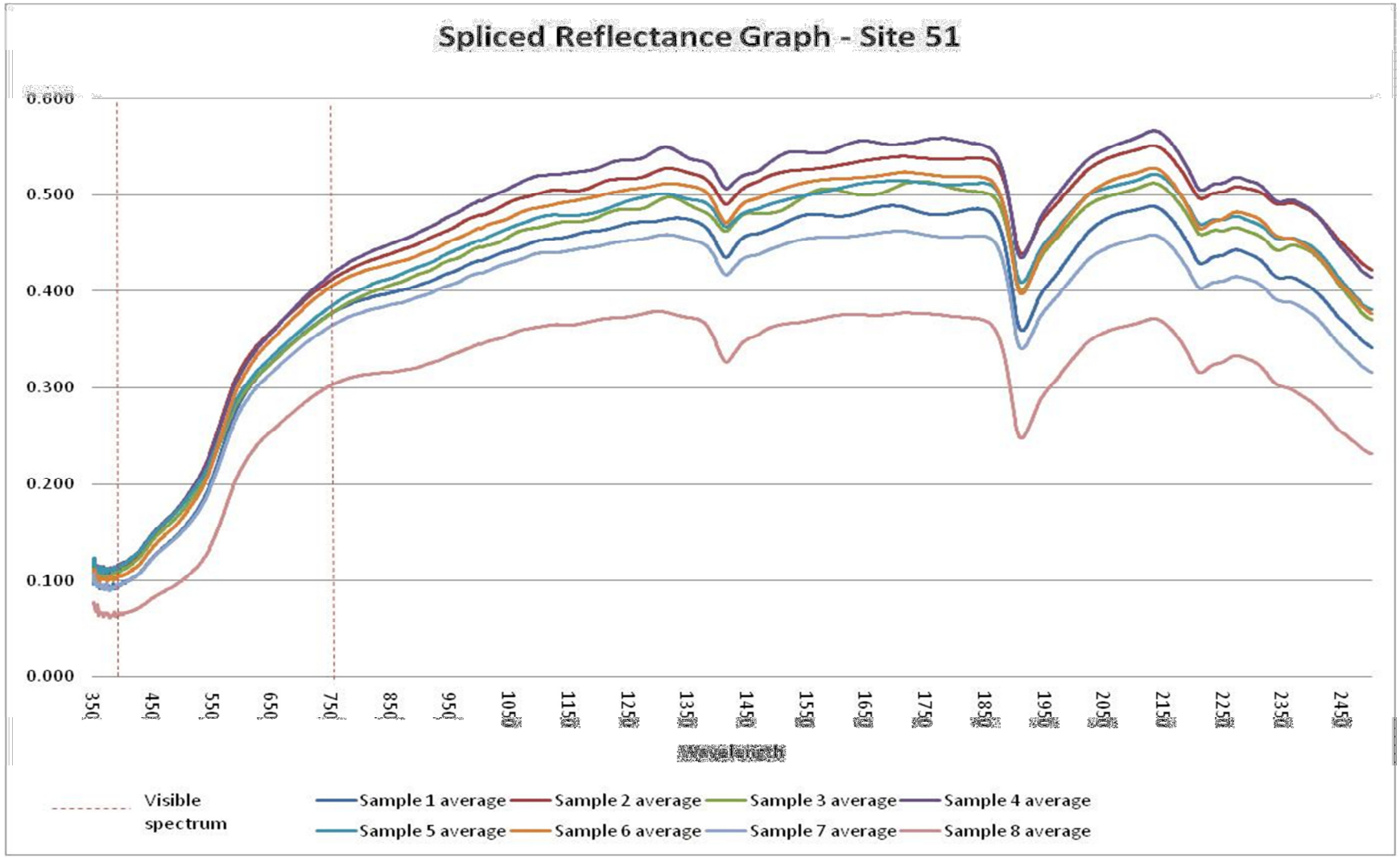


FIGURE C-3: GRAPH OF SOIL SAMPLE REFLECTANCE AT LCP 51

Appendix D
Error Checking

With thanks to Chris Cunliffe for the creation of the functions and formulae.

In total, 161 sites were examined, split into 193 amalgamated sites, and 294 individual site units. Each site was examined on the field visit notes, on between 1 and 4 Corona images, on a SPOT image, on at least one Geoeye image, and 78 sites were also examined on DigitalGlobe. For each site, on each image, the land use was recorded on and around the site, and damage severity, cause, extent, visibility and progression were recorded. Each site unit record therefore consisted of at least 5 sub-records (1 for site information, 1 per image type, and 1 for the field visit record). (Technically each sub-record contained two further sub-divisions for land use on and around the site). Each amalgamated site consisted of a manual compilation of all site unit information. In order to minimise errors in data collection a database was created. Records could then be exported into Excel where formulae were used to check certain conditions. In some cases specialised formulae were created to check certain errors had not occurred. New or particularly complex formulae are detailed below.

- Error checking ensured that each severity was only included once, and that they were sequential.
- Error checking ensured that if certain land uses, such as roads or water bodies were marked as present 'on' a site, they were also present 'around' the site (as they went through the site).
- Error checking confirms that if certain land uses are marked as 'On' a site, there is a damage type to match (#.1 – Damage and Land Uses).
- Error checking ensured that certain damage causes are only listed once per record (#.2 – Listing Damage Once per Site).
- The final check ensured that when sites were amalgamated from their component parts, all damage types and land uses were present in the amalgamation. This necessitated the creation of two new functions in excel, the Amalgamate function, and the Compare function, both of which are detailed in #.3 – Amalgamated Sites and Damage.

To demonstrate this, the error checking used for Tell Beydar is used (Corona, Spot, and Geoeye), although any imagery type can be substituted.

D.1.1 – DAMAGE AND LAND USES:

The first check was to ensure that if a sub-site had a particular land use on it that this land use also appeared in the data as being in proximity to other sub-site within the area. This is done with the following formula, once for each imagery type:

=IF(IN2="y","",CONCATENATE(check(AH2,"H2:H229",$E2,"Bare or Scrub"),check(AI2,"I2:I229",$E2,"Arable"),check(AJ2,"J2:J229",$E2,"Orchard"),check(AL2,"l2:l229",$E2,"Modern Graves"),check(AM2,"m2:m229",$E2,"Modern Structures"),check(AN2,"n2:n229",$E2,"Modern Settlement"),check(AO2,"o2:o229",$E2,"Unploughed"),check(AP2,"p2:p229",$E2,"Ploughed"),check(AQ2,"q2:q229",$E2,"Irrig Channel"),check(AR2,"r2:r229",$E2,"Water Body"),check(AS2,"s2:s229",$E2,"Roads"),check(AT2,"t2:t229",$E2,"Dam Bed"),check(AU2,"u2:u229",$E2,"Arch Excav"),check(AV2,"v2:v229",$E2,"Mudbri Excav"),check(AW2,"w2:w229",$E2,"Looters Holes"),check(AX2,"x2:x229",$E2,"Pits Other"),check(AZ2,"z2:z229",$E2,"Bulldozing"),check(BA2,"AA2:AA229",$E2,"Erosion"),check(BB2,"ab2:ab229",$E2,"Quarry"),check(BC2,"ac2:ac229",$E2,"Structural Decay"),check(BD2,"ad2:ad229",$E2,"Terracing"),check(BF2,"af2:af229",$E2,"Unclassified")))

- The IN column contains a simply Yes/No flag. This code was designed to test against the basic guideline above. However, sometimes it was appropriate to go against the guideline, and so this column is used to hide the responses from this formula on a site-by-site basis.
- Check is a custom written function with the following code:

```
Function Check(RNDValue, ONlist, IDValue, ReturnText)
  Dim OnRange As Range
  Set OnRange = Worksheets("DBLANDUSE").Range(ONlist)
  Dim OnValue As Double
  OnValue =
Application.WorksheetFunction.SumIf(Worksheets("DBLANDUSE").Rang
e("$e$2:$e$229"), IDValue, OnRange)
  If RNDValue = 0 Then
    If OnValue > 0 Then
      Check = ReturnText + ", "
```

```
    Else: Check = ""
    End If
  Else: Check = ""
  End If
End Function
```

- This function takes the arguments RNDValue, ONlist, IDValue and ReturnText which are defined as follows:
    - RNDValue = is a particular land use in the proximity of this site (i.e. listed is RND)
    - ONlist = is the column where all of the instances of this land use being present on a site are listed (i.e. the ON column)
    - IDValue = this is the ID of the site, so that we can be sure that we are only checking subsites that are in proximity to each other
    - ReturnText = is the response should the function prove to be true – this is simply a string describing the land use in question
- The function first defines a new Range variable, called OnRange. This is then set to the value of the column defined by Onlist.
- Next, a new Double variable called OnValue is defined. A SUMIF function is then used to set this variable to the number of times the land use in question is listed as being ON any sub-site with the IDValue.
- We then check to see if RNDValue is, in fact, 0. If it is greater than zero, then this function does not return anything (we are not checking to ensure that land uses that are in the RND list are present in any of the ON lists as there are many instances (where a land use is never present on a site, but is in proximity of several) where this will be the case).
- Assuming RNDValue is equal to 0, we then check to ensure that OnValue is also 0. If it is, then nothing is returned. If it is greater than 0, then this function returns the ReturnText string, i.e. a description of the land use in question.

- Therefore, this formula simply concatenates a list of all of the check results, in order to return a string that lists land uses that do not conform to our guideline. A “y” can be placed in the IN column to hide this output.

D.1.2 - Listing Damage Once Per Site

(N.B. there are cases where this is appropriate, so this is simply a checking solution).

This is done with the following formula:

i. First, it was necessary to identify which damages were present on each site. This was done with the following formula:
=CONCATENATE(IF(COUNTIF($CC2:$CV2, GP$1)>1, "Corona ", ""), IF(COUNTIF($CW2:$EJ2, GP$1)>1, "Spot ", ""), IF(COUNTIF($EK2:$FX2, GP$1)>1, "GeoEye", ""))
    - CC:CV is the damages for Corona, CW:EJ is those found on Spot and EK:FX is those identified on GeoEye
    - This formula simply concatenates a list of which images have the damage in question more than once (one formula per damage cause).

D.1.3 - Amalgamated Sites and Damage

It was necessary to ensure that amalgamated sites included all of the damage types that were present in their sub-sites. This was a several step process.

ii. Firstly, a column was created for each damage type that lists which images have had this damage type identified on them for this site. This information is then returned as a code that uses binary logic to assign a number between 0 and 7 to each damage type (1=Corona, 2=Spot, 4=GeoEye). This formula is:
=TEXT(SUM(IF(COUNTIF($CC2:$CV2, HL$1)>0, 1, 0), IF(COUNTIF($CW2:$EJ2, HL$1)>0, 2, 0), IF(COUNTIF($EK2:$FX2, HL$1)>0, 4, 0)),"0")
    - CC:CV is the range of damages listed on Corona.
    - CW:EJ is the range of damages listed on Spot.
    - EK:FX is the range of damages listed on GeoEye.
    - HL$1 is the damage type in question (in this example, Development).

- As can be seen, this formula sums together 1 (if Corona is true), 2 (if Spot is true) and 4 (if GeoEye is true). It is returned as a string so that it can be concatenated later.

iii. A column was then assigned to hold a code for each site that would combine the codes used in the previous step to create a unique code for each combination of damages and which images they have been identified on. The following formula was used:
=CONCATENATE(HL2,HM2,HN2,HO2,HP2,HQ2,HR2,HS2,HT2,HU2,HV2,HW2,HX2,HY2,HZ2,IA2,IB2,IC2,ID2,IE2)

- HL2, HM2, HN2, etc. are the individual codes used in the previous step, one for each damage type

iv. It was then necessary to filter this information as it was present for more sites than necessary. It was only needed for those sites that were either an amalgamation or were a sub-site of an amalgamation. This was done with the following formula
=IF(G2="x", "Y", IF(COUNTIF(Names, A2)>1, "x", "c"))

- G is a column that denotes those sites which are an amalgamation with an “x”.
- Names is a list of all sites where any site that is neither an amalgamation nor a part of an amalgamation is listed twice.
- Therefore this formula returns “Y” if the site is an amalgamation, “c” if it is part of an amalgamation or “x” if it is neither.

v. A further column is used to do the actual filtering, with the following formula:
=IF(HJ2="x", "", IF2)

- HJ2 is the formula included under step iii.
- IF2 is the formula included under step ii.
- This formula therefore returned a null value for those sites that are neither an amalgamation nor part of one, or the code created in step ii otherwise

vi. Next it is necessary to combine the codes created for those sites that are components of an amalgamation, so that they can then be compared. This is done with the following formula:
=IF(HJ2="Y", IG2, IF(OR(HJ1="Y", HJ1="Amalgamation"), IF(HJ2="c", IG2, IF(HJ2="x", "00000000000000000000")), amalgamate(IF(HJ2="c", IG2, IF(HJ2="x", "00000000000000000000")), IH1))).

- HJ2 is the formula included under step iii. The first part of this formula is, again, checking to see if this is an amalgamation. If so, then it returns IG2, which is the code created in step ii.
- If this site is not an amalgamation, it then checks to see if the site above it is an amalgamation (the potential for the term "Amalgamation" to be present in the data should be ignored – this is purely there for the benefit of the top row, where looking at the site above will return the title row). This is important as it identifies the first component of each amalgamation.
- If this is true, the formula then checks to be sure that the current site is a component – if so, it has identified the first component of the next amalgamation, and so it returned the code from step ii. If not, then it returned a string of 0s. This is not used for anything, but does help to ensure the formula is working correctly.
- If this is false, it means that the current site is a component, but is not the first component of the next amalgamation, and so its code needs to be combined with the code of the site above. This is done using the Amalgamate custom function (to be described shortly). Note that the arguments of the Amalgamate function are the code of the site in question, and the code of the site listed directly above (which may, in the case of large amalgamations, be the result of an Amalgamate function itself).

vii. Finally, a column is created to ensure that the codes from the amalgamation sites match the amalgamated codes from the component sites. This formula is:

=IF(HJ2="Y", IF(IH2=IH1, "Correct", "Problem"), "")

- HJ2 is the column that confirms that the site is an amalgamation (from step iii).
- IH2 is the code of the current site. IH1 is that of the site above (which may be the result of an Amalgamate function).
- This formula simply returns the string "Correct" if the two match, and the string "Problem" if they do not. If the site is not an amalgamation, it returns nothing.

2) The Amalgamate Function.

The code of the function is:

```
Function Amalgamate(Value1, Value2)
  Dim FirstValue(1 To 20)
  Dim SecondValue(1 To 20)
  For counter = 1 To 20
    FirstValue(counter) = Mid(Value1, counter, 1)
    SecondValue(counter) = Mid(Value2, counter, 1)
  Next
  Dim FinalValue(1 To 20)
  For counter = 1 To 20
    FinalValue(counter) = Compare(FirstValue(counter), SecondValue(counter))
  Next
  Amalgamate = Join(FinalValue, "")
End Function
```

- This function takes two arguments – Value1 and Value2. These are strings that take the form of the codes that were created in step ii) of the above error-checking.
- Firstly, the function defines two new arrays, FirstValue and SecondValue. Each of these is defined to contain 20 variables (that take the name FirstValue(1), FirstValue(2), etc.).
- It then begins a counter from 1 to 20 in order to extract the individual numbers from the strings and populate the FirstValue and SecondValue arrays.
- A new array is defined that is called FinalValue – this also has 20 variables.
- The counter is begun again in order to populate FinalValue. This is done by using a custom function called Compare (to be described later) to combine the relevant data from the original arguments (i.e. FinalValue(1) will be a combination of FirstValue(1) and SecondValue(1)).
- Finally, the function creates string from the individual variables within the FinalValue array (the Join function) and returns it.

3) The Compare Function.

   The code of the function is:

```
Function Compare(Value1, Value2)
  Val1 = Val(Value1)
  Val2 = Val(Value2)
  If Val1 = 0 Then
    Compare = Val2
  ElseIf Val2 = 0 Then
    Compare = Val1
  ElseIf Val1 = 1 Then
      Compare = Choose(Val2, 1, 3, 3, 5, 5, 7, 7)
  ElseIf Val1 = 2 Then
      Compare = Choose(Val2, 3, 2, 3, 6, 7, 6, 7)
  ElseIf Val1 = 3 Then
      Compare = Choose(Val2, 3, 3, 3, 7, 7, 7, 7)
  ElseIf Val1 = 4 Then
      Compare = Choose(Val2, 5, 6, 7, 4, 5, 6, 7)
  ElseIf Val1 = 5 Then
      Compare = Choose(Val2, 5, 7, 7, 5, 5, 7, 7)
  ElseIf Val1 = 6 Then
      Compare = Choose(Val2, 7, 6, 7, 6, 7, 6, 7)
  ElseIf Val1 = 7 Then
      Compare = 7
  End If
End Function
```

- This function takes two arguments, Value1 and Value2. As these have been passed from the Amalgamate function, they will be single digit strings, where each digit is a number between 0 and 7.
- Two new variables are created, called Val1 and Val2. These are assigned the values of Value1 and Value2, but are converted to numbers, rather than strings.
- The list of Ifs and Elses then uses the Choose function to return a value as in the table below:

		Value1							
		0	1	2	3	4	5	6	7
Value2	0	0	1	2	3	4	5	6	7
	1	1	1	3	3	5	5	7	7
	2	2	3	2	3	6	7	6	7
	3	3	3	3	3	7	7	7	7
	4	4	5	6	7	4	5	6	7
	5	5	5	7	7	5	5	7	7
	6	6	7	6	7	6	7	6	7
	7	7	7	7	7	7	7	7	7

The numbers have the following meanings:

0.Not present in any image

1.Present in Corona

2.Present in Spot

3.Present in Corona and Spot

4.Present in GeoEye

5.Present in GeoEye and Corona

6.Present in GeoEye and Spot

7.Present in GeoEye, Spot and Corona

Appendix E
Statistical Methods Used

E.1.1 - INTRODUCTION

It can be argued that damage is a subjective concept, particularly when examined through satellite imagery. Furthermore, as discussed extensively in Chapters 2, 3 and 4, it is not always possible to define site extents, and so it becomes extremely difficult to establish exact amounts of a site affected by a particular threat. It is not possible to say with certainty that building has affected twice as much of one site as it has another. It may be that one site is more visible on imagery than another, and so the extent of the site and the damage is clearer. Height is also hard to determine on imagery, and is relevant to the volume of the site which may be damaged. However, it is possible to establish broad categories of extent for vertical and horizontal damage. For example, a fraction of a site is a smaller area than a section of a site, and a threat which destroys the site to ground level is worse than a threat which damages the upper levels (See Methodology Chapter 4.6.5 for all categories and criteria). As a result, wherever possible the data collected in this study is ordinal. The definition of ordinal data is that "while the categories of an ordinal variable can be ordered (or 'ranked'), the amount of difference between the categories is not available." (Fielding and Gilbert 2006: 15).

Ordinal data, however, rarely meets the requirements of normal statistical analysis. Many tests involve assumptions about the distribution of the data: in particular it is usually assumed that the underlying distribution is normal. Whilst a large enough sample size will approximate normality (Siegel and Castellan 1988; The Open University 2009), in this case the sample is too small. Nor can the data be transformed to approach normality. A particular branch of statistical analysis has been developed which can deal with ordinal data, called non-parametric statistics, which is the approach used here. Three tests, detailed here, have been used to look for significant trends within the data. Calculations were performed in SPSS 13 and 19. More information on non-parametric approaches generally, and these tests specifically (including how to calculate them manually), can be found in *M248 Analysing Data* (The Open University 2009) and *Non parametric statistics for the behavioural sciences* (Siegel and Castellan 1988).

E.1.2 - WILCOXON SIGNED RANK TEST

The Wilcoxon signed rank test can indicate if two related samples differ, testing the assumption that there is no difference in the median value of the population. For example, does land use around sites change over time? In this case the related groups would be land use around sites on two sets of imagery, such as Corona and Geoeye. The object under study is the sites, which remain the same so the groups are related: data is collected about them in two different time periods. The difference between each group is calculated for each site, and the differences are then ranked from smallest to largest. The ranks assigned to each group are then summed: if the total for one group is much larger than the other group, then the hypothesis of no difference is rejected (according to pre-established probability distributions).

For example, 3 land uses were recorded in total on TBS 12 Corona, and 4 were recorded on Geoeye. This is a difference of -1. This is calculated for each site. All differences are ranked from smallest to largest, and the ranks for each imagery group are then summed to calculate to test statistic, which is then compared to the established probability distribution for the test statistic.

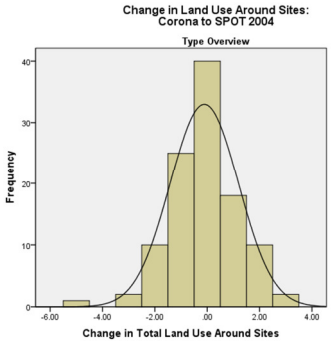
There are certain assumptions underlying the use of the Wilcoxon Signed Rank test:

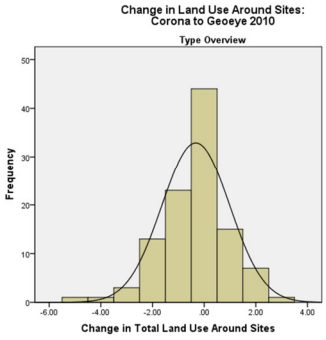
- all values are mutually independent
- the measurement scale is at least interval – in this case it is ordinal
- The data used in the test can be considered to approximate a standard normal distribution as long as the sample size is large enough (the rule of thumb given is $n >= 16$ (The Open University 2009: 69). However, due to the sometimes small samples, such as the number of sites on the river terraces around Carchemish, or on the Hemma Plateau around Beydar, this approximation was not used.
- All differences have the same mean
- The distribution of the differences is symmetrical (if this is the case they will have the same mean). The null distribution of the test statistic is found by "assuming that an absolute difference with a particular rank is just as likely to be associated with a positive difference as with a negative one" (The Open University 2009: 70). The test assumes the median difference of the groups is 0, and tests this: because of this assumption, it is expected that the number of positive differences will be the same as the number of negative differences. It is assumed that the differences can be reasonably modelled by a *symmetrical*

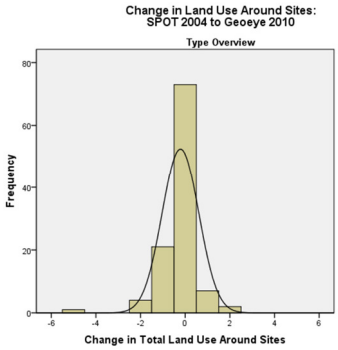
distribution under the null hypothesis of no median difference. If this is not the case, the test is not necessarily valid.

Distributions of for each Wilcoxon signed rank test are displayed here. Graphs are included for Amalgamated sites and Units for the TBS Analysis. As the analysis was only carried out on the Amalgamated sites in the LCP Survey, only those graphs are included for that area. Almost all distributions of are symmetrical: those which are not are bordered in red. Results from tests which do not have a symmetrical distribution should be treated with caution.

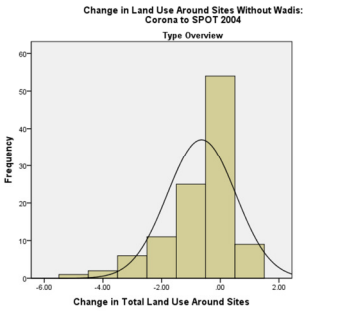
Differences in Total Land Use Around Sites
Tell Beydar Survey: Amalgamated Sites. N=108

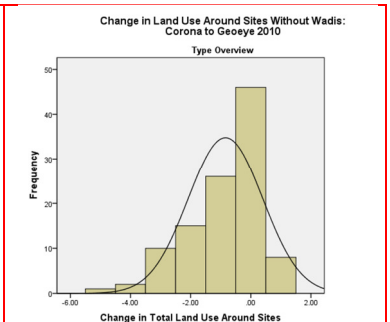


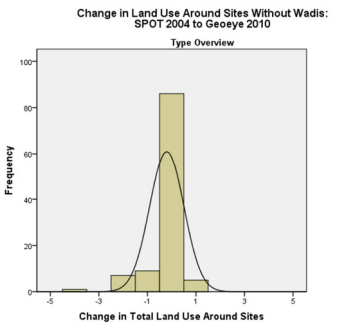




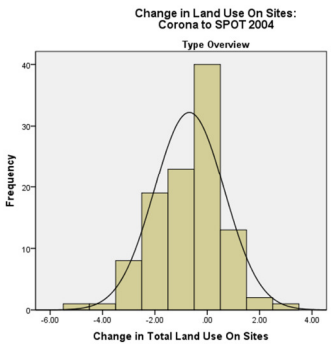
Differences in Total Land Use Around Sites (excluding Wadis)

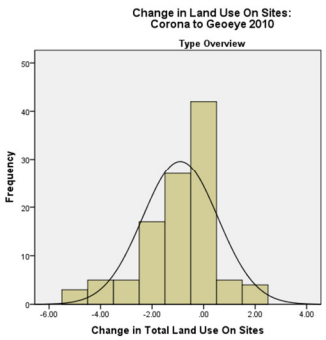


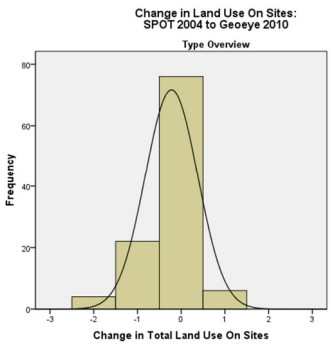




Differences in Total Land Use On Sites

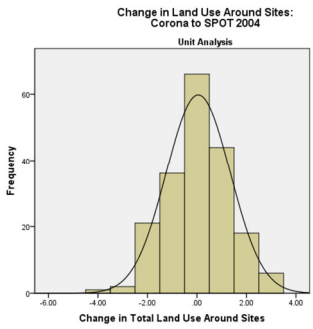


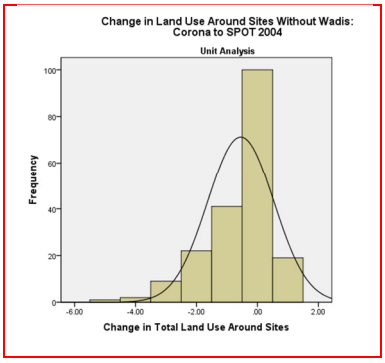


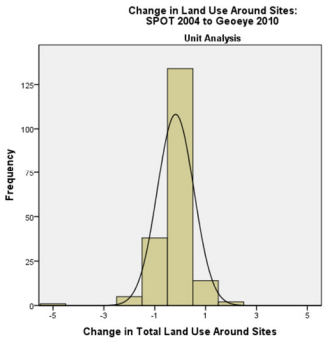


Differences in Total Land Use Around Sites

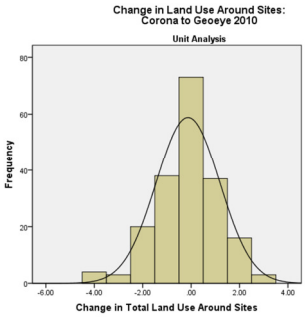
Tell Beydar Survey: Unit Analysis. N=194

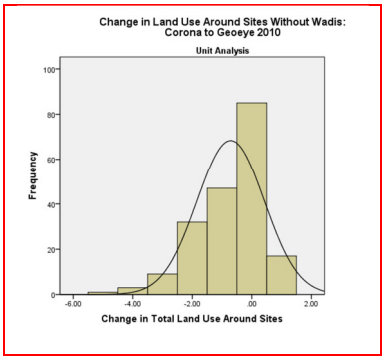


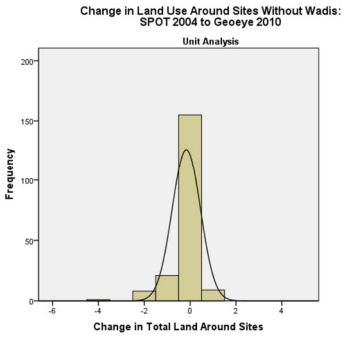




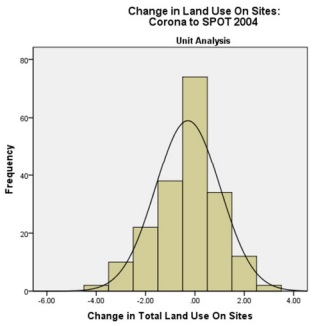
Differences in Total Land Use Around Sites (excluding Wadis)

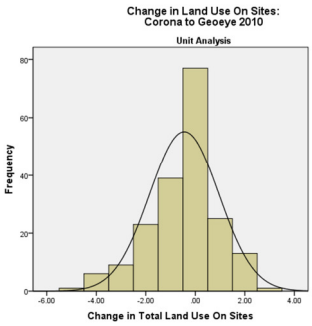


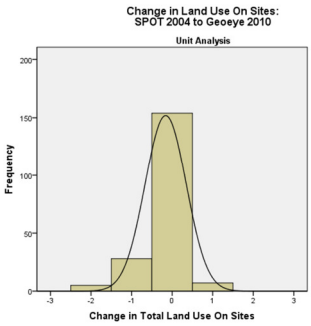




Differences in Total Land Use On Sites



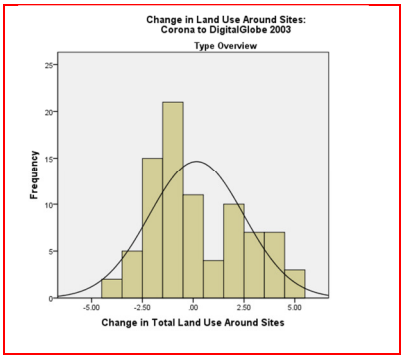


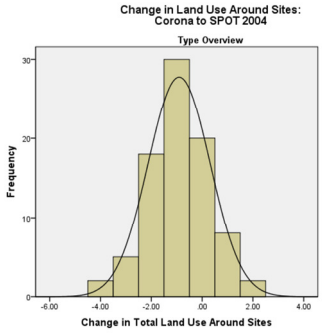


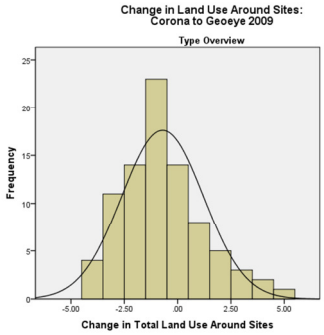
Differences in Total Land Use Around Sites

Land of Carchemish Project: Amalgamated Sites

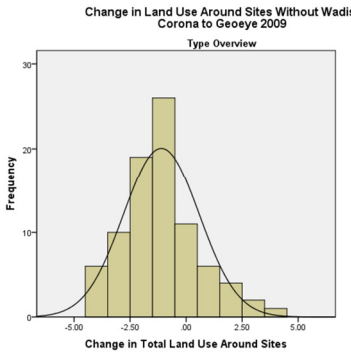
N=61 *N=85* *N=75*



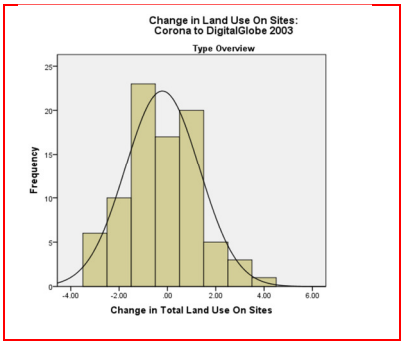


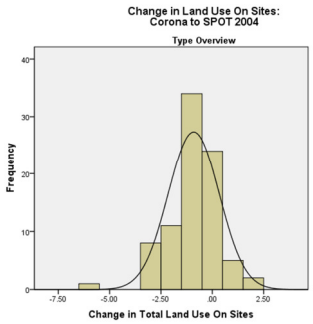


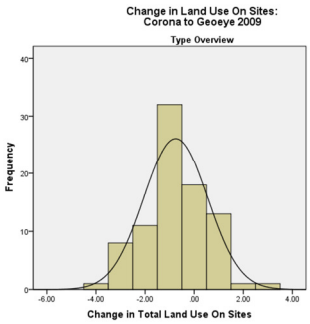
Differences in Total Land Use Around Sites (excluding Wadis)



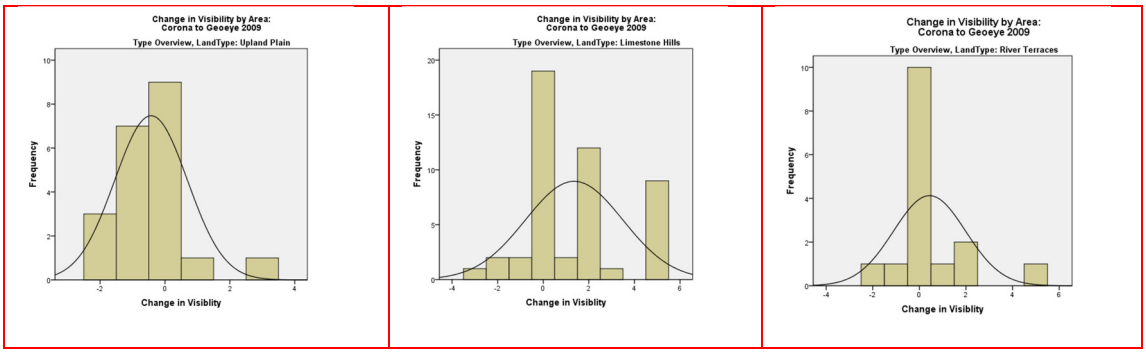
Differences in Total Land Use On Sites







Differences in Visibility by Area



E.1.3 - THE MANN-WHITNEY-U TEST

The Mann-Whitney-U test is similar to the Wilcoxon Signed Rank test, but is applicable when the groups are not related. For example, are tells more visible than low tells? The null hypothesis which is tested is that both groups come from the same population, and therefore have the same mean and distribution (e.g. one group is not more visible than another). There are no assumptions about what the underlying distribution is, only that they are the same. If the null hypothesis is not true, then the two groups can differ in mean and distribution.

All data values are ordered and then assigned a rank, the smallest being given rank 1. The ranks assigned to each group are then summed: if the total for one group is much larger than the other group, then the hypothesis of no difference is rejected (according to pre-established probability distributions) (The Open University 2009).

There are certain assumptions underlying the use of the Mann Whitney test:

- The data are random samples from both populations
- There is independence within samples and mutual independence between samples
- The measurement scale is at least ordinal (which it is)
- The data used in the test can be considered to approximate a standard normal distribution as long as the sample size is large enough (the rule of thumb given is each $n >= 8$ (The Open University 2009: 72), and the number of tied ranks is not too great. However, due to the sometimes small samples, such as the number of sites on the river terraces around Carchemish, or on the Hemma Plateau around Beydar, and the limited range of values, which leads to numerous ties, this approximation was not used.

E.1.4 - THE KRUSKAL-WALLIS TEST

The Kruskal-Wallis test of mean rank tests the null hypothesis that multiple independent groups / populations (at least 3) have identical distributions against the alternative hypothesis that at least two of the samples differ only with respect to location (median), if at all. That is, it tests whether there is a significant difference between multiple groups with respect to one factor, or whether they follow the same pattern. The Kruskal-Wallis test is used in this study to test whether visibility of sites is different on different types of imagery.

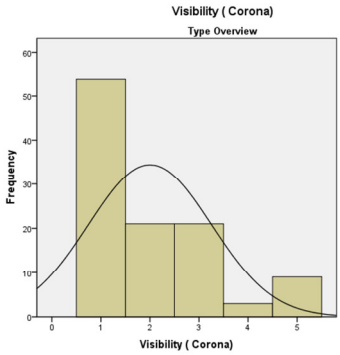
Like the previous tests, it is performed on ranked data, and makes no assumptions about the normality of the data. All data values are ordered and then assigned a rank, the smallest being given rank 1. The ranks assigned to each group are then summed: if the total for one group is much larger than the other group, then the hypothesis of no difference is rejected (according to pre-established probability distributions) (McDonald 2009; Siegel and Castellan 1988).

There are certain assumptions underlying the use of the Kruskal-Wallis test:

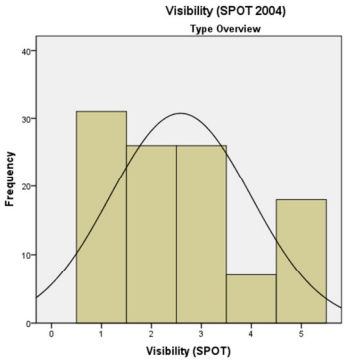
- The observations come from populations with a continuous underlying distribution, therefore the measurements must be at least ordinal data (Siegel and Castellan 1988) (which they are).
- The observations in each group come from populations with the same shape of distribution. If different groups have different distributions, or different variances, the results may be inaccurate (McDonald 2009). The recommended rule of thumb for equal variance is that "if the sample variances differ by a factor of less than about 3, it may be assumed that the assumption of equal variances is not seriously amiss" (The Open University 2009: 32).
  The following graphs show the distributions of the visibility, and the variance of each distribution. As can be seen, there is considerable variability in the different distributions, although the variances can be considered the same. The results should be treated with caution.

Differences in Mean Visibility Between Corona, SPOT and Geoeye
Tell Beydar Survey: Amalgamated Sites. N=108

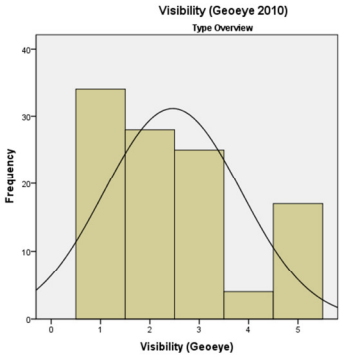
Mean = 2
Variance = 1.570



Mean = 2.58
Variance = 1.965

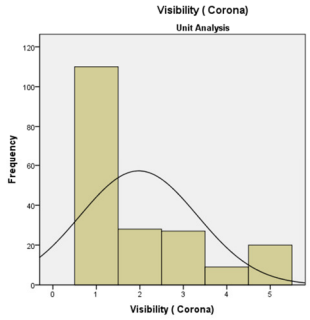


Mean = 2.46
Variance = 1.915

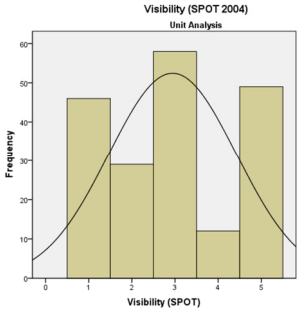


Differences in Mean Visibility Between Corona, SPOT and Geoeye
Tell Beydar Survey: Unit Analysis. N=194

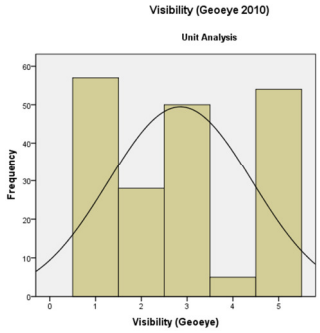
Mean = 1.97
Variance = 1.828



Mean = 2.94
Variance = 2.178

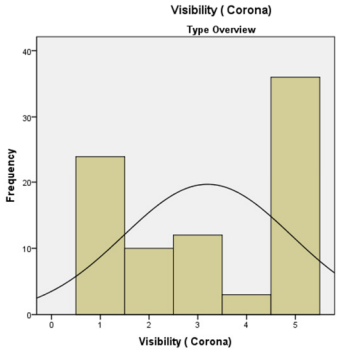


Mean = 2.85
Variance = 2.449

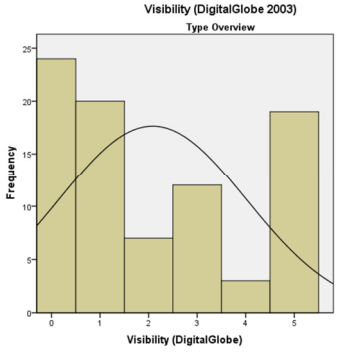


Differences in Mean Visibility Between Corona, DigitalGlobe, SPOT and Geoeye
Land of Carchemish Survey: Amalgamated sites. N=85

Mean = 3.2
Variance = 2.971

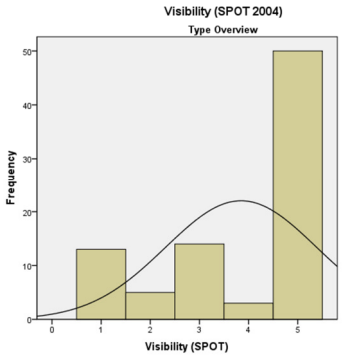


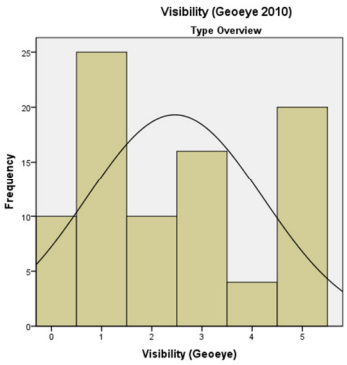
Mean = 2.08
Variance = 3.696



Mean = 2.85
Variance = 2.369

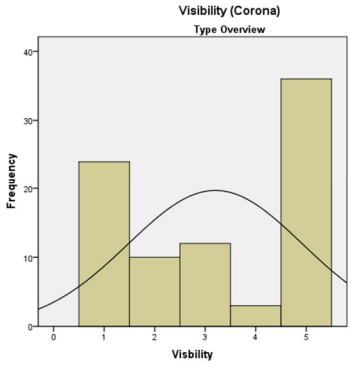
Mean = 2.46
Variance = 3.085



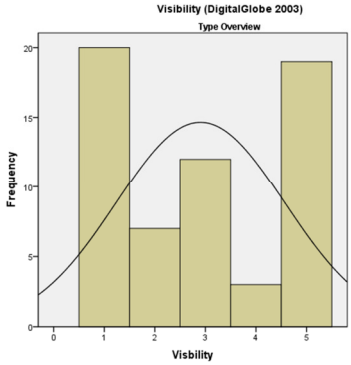


Differences in Mean Visibility Between Corona, DigitalGlobe, SPOT and Geoeye
Land of Carchemish Survey: Amalgamated Sites.

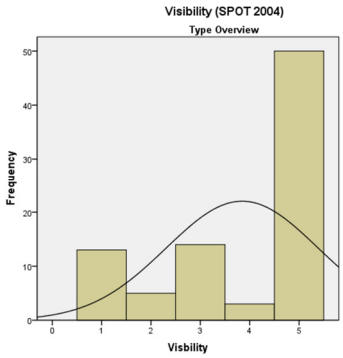
Mean = 3.2, n=85
Variance = 2.971



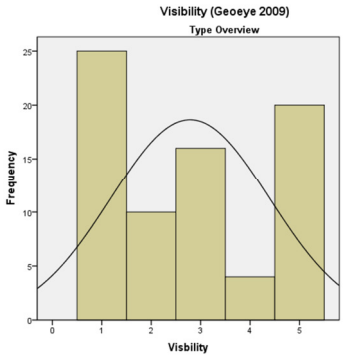
Mean = 2.9, n=61
Variance = 2.757



Mean = 3.85, n=85
Variance = 2.369



Mean = 2.79, n=75
Variance = 2.575



E.1.5 – CAVEATS

Ideally, the data should be composed of a completely random sample of sites which are completely independent of each other. Data collection in archaeological surveys aims to collect a complete record of settlement (or at least as complete as possible): in that sense the data used is not a random sample. The number of sites in each area is too small to use only a sample of them, particularly when broken down further, such as by area or site type. Any bias which is introduced in the data collection is the result of natural and anthropogenic processes which hinder site identification. These processes should affect all sites equally, and if they do not, identifying the differences is one of the aims of this study.

Limitations in data collection methods imposed by permits, and physical, geographical and temporal constraints should also be acknowledged (such as focussing field-walking along wadis in order to maximise identification within a limited timescale). These are unavoidable, but it is hoped that the utilisation of additional identification methods, such as imagery and map analysis, will avoid collection bias.

Appendix F
Reading the Damage Tables

The Tables of data will be listed here for both study regions, along with how to read them. Tables with information from DigitalGlobe imagery are only applicable to the Carchemish Region. In the case of the Land of Carchemish data, not all sites were covered by all images, so some Tables are presented twice. The data is given as a proportion of all the sites for comparability with the Beydar data, and also as a proportion of the sites covered by that imagery type. For simplicity, TBS refers to Tell Beydar Chapter 6, and LCP refers to Land of Carchemish Project Chapter 8.

It should be remembered that in some cases, the SPOT records were used as a proxy for damage which was on the field visit notes, but which was not visible on some imagery. Tables referring to damage witnessed on SPOT should therefore be treated as a record of damage present at a certain point in time (i.e. between the acquisition of SPOT and the field visit), rather than a direct reflection of what was visible on SPOT imagery.

F.5.1 to F.5.3 – Area Overviews and Certainty

- TBS Tables 1-10 and LCP 1-14 present overview data and Certainty data which are self-explanatory. They are mostly count data, with proportions of the totals included.

F.5.4 – Visibility (and Site Location)

Most tables in the visibility section are self-explanatory, except the tables relating to site location. TBS Tables 11 to 16 and LCP 15 - 26 present frequency counts of the Visibility of sites on each image type.

- TBS Tables 17 and 18, and LCP Tables 27 and 28 display the cumulative visibility of sites according to location. The counts in the tables sum the visibility of all sites on all images, and display the counts according to the site location. For example, in the Amalgamated sites analysis in the Tell Beydar Region (Table 17) there are 47 counts of Visible sites on the flood plains. This is totalled from all 3 types of imagery. These counts are intended to examine visibility in different

areas, without the bias of the different resolutions and image acquisition conditions of each set of imagery.

- TBS Tables 19 and 20 and LCP 29 and 30 break these counts down by each image, so, to continue the above example, the 47 counts of 'Visible' on the flood plain are largely from Corona (23 counts). 13 are from SPOT, and 11 are from Geoeye. This shows that sites by the flood plain have become less visible on Geoeye imagery, despite the imagery resolution increase.

F.5.5 – Land Use / Land Cover (on and around sites)

This sections presents counts of land use and land covers on sites, as defined in Methodology Chapter 4.5.4, Table 4-3, p142.

- TBS Tables 31, 34 and 35, and LCP Tables 39, 40, 41, 44, 45 and 46 present counts of land use on and around sites for the Amalgamated site analysis and the Unit analysis. Percentages are the proportion of times that land use appears out of the total number of amalgamated sites / site units.

- TBS Tables 32, 33, 36 and 37 and LCP Tables 42, 43, 47 and 48 shows the frequencies of the total number of land uses around and on each site for each imagery type for the Amalgamated site analysis and the Unit analysis. Percentages are cumulative for each analysis type and each imagery type

F.5.6.1 – Horizontal Damage Trends

This section examines the spread of damage across a site – how extensive the effect is, as defined in Methodology Chapter 4.5.5, Table 4-4, p149. The list of Tables which provide the data are given, and how to interpret them. Specific conclusions will be related to the damage sources and will be discussed in the data analysis.

The following Tables are within the main chapters:

- Tables 6.11 and 6.12 are in the Tell Beydar Chapter 6, and 8.9 is in the Land of Carchemish Chapter 8. (The LCP Unit analysis is in Appendix G: it is Table 75). They show how the horizontal extents of damage affecting sites have changed between the 1960s and when Geoeye was acquired (2009 and 2010). Both numbers and percentages indicate change. The extents of damage in the 1960s form the rows, and the extents in 2009/10 form the columns. This can be read

as follows: for example, on the Tell Beydar Amalgamated Sites Table 6.11, reading across the Peripheral Damage row (i.e. Corona), 13 amalgamated sites continued to experience peripheral damage on Geoeye (23.2% of sites which had experienced peripheral damage on Corona). A further 9 sites which had experienced peripheral damage on Corona now experience Intermittent damage in 2010 (16% of those who had experienced Peripheral damage), and so on. It should be noted that if a site experienced Total damage, i.e. damage all over the site, on Corona but no longer does on Geoeye, it is unlikely to be an improvement. For example, if a site was entirely covered by agriculture, but then an irrigation channel is built through it, it would initially be marked as Total extent, but this would then change to Majority extent for the agriculture and a Section extent would be added to reflect the Irrigation channel.

The following Tables are in Appendix F and Appendix G:

- TBS Tables 38 - 39 and LCP Tables 49 and 50 count the horizontal extents of damage on the different imagery types for amalgamated sites and site units. The percentage counts are the percentage of times that cause is listed on that imagery type; for example, on the Beydar Amalgamated Sites Table 38 on Corona, 9.4% of the damage was total, covering the entirety of the site, whereas on Geoeye 6% of the damage was total, although 20 mounds were affected in both time periods.

- TBS Tables 40 - 45 and LCP 51 – 58 list horizontal extents by Severity (i.e. whether they were primary, secondary, etc.) for each imagery type. Percentages are recorded for both severity and horizontal effect. For example, on the Beydar Amalgamated sites data for Corona (Table 40) 21 sites have Peripheral damage as a primary effect; this is 35.6% of all Peripheral damage (% within horizontal region) and 19.4% of all primary damage (% within severity).

- TBS Tables 46 - 51 and LCP 59 – 66 list the horizontal extent of damage by location on each set of imagery. The percentages are the percentages of all sites in the listed area that are affected by that cause. For example, on the Carchemish Amalgamated sites Table for Corona (Table 59), 6 sites on the upland plain have Peripheral damage, which is 14.6% of all horizontal damage effects on the upland plains for the LCP's amalgamated sites. (In the Tell Beydar region, the numbers are too small to distinguish any meaningful trends: they are included for purposes of comparison with the Land of Carchemish data)

- TBS Tables 52 - 57 and LCP 67 – 74 list the horizontal extent of damage by site type on each set of imagery. In this case the percentages show the extent of damage experienced by the different site types. For example, in the Beydar Amalgamated sites Table of sites on Corona, (Table 52) 33 damage threats affect the Periphery of tells, which is 75% of the damage affecting tells.

F.5.6.2 – VERTICAL DAMAGE TRENDS

This section examines how deeply the different causes of damage affect a site – the vertical depth of effect, as defined in Methodology Chapter 4.5.5, Table 4-5, p152. The list of Tables which provide the data are given and how to interpret them.

The following Tables are within the main chapters:

- Tables 6.13 and 6.14 are in Tell Beydar Chapter 6, and 8.10 are in Land of Carchemish Chapter 8. (The LCP Unit analysis is in Appendix G: it is Table 102). They show how the vertical extents of damage affecting sites have changed between the 1960s and when Geoeye was acquired (2009/2010 respectively). Both numbers and percentages indicate change. The depths of damage in the 1960s form the rows, and the damage depths in 2010 form the columns. This can read as follows: for example, on the Beydar Amalgamated Sites Table 6.5, reading across the Upper Levels Damaged row, the Upper Levels of 76 amalgamated sites continue to be damaged on Geoeye (61.8% of sites with Upper Levels damaged according to Corona imagery). 3 sites whose upper levels were damaged on Corona are now Slightly Dispersed or Degraded in 2010 (a further 2.4% of those whose Upper Levels were marked as damaged originally), and so on.

The following Tables are in Appendix F and Appendix G:

- TBS Tables 58 - 59 and LCP 76 – 77 count the vertical extents of damage on the different imagery types for amalgamated sites and site units. The percentage counts are the percentage of times that cause is listed on that imagery type; for example, on the Beydar Amalgamated Sites Table 58 on Corona, the Upper Levels were damaged on 123 amalgamated sites. This is 57.7% of the damage visible on Corona, whereas on Geoeye the Upper Levels were damaged on 167 amalgamated sites, which is only 50.2% of the damage recorded on Geoeye, where more damage causes, and therefore more damage extents, were recorded.

- TBS Tables 60 - 65 and LCP 78 – 85 list the prevalence of effects by Severity (i.e. whether they were primary, secondary, etc.) for each imagery type. Percentages are recorded for both severity and vertical effect. For example, on the Beydar Amalgamated Sites Table 60 for Corona, 82 amalgamated sites have damage to their Upper Levels as the primary effect: this is 66.7% of all sites types which have their Upper Levels damaged (i.e. % Within Vertical Damage Effect) and 75.9% of all primary damage (% within Severity).

- TBS Tables 66 - 71 and LCP 86 – 93 list the vertical extent of damage by location on each set of imagery. The percentages are the percentages of all sites (not just those in the listed area) that are affected by that cause; for example on the Amalgamated Sites Analysis on Corona (Table 66), the Upper Levels of 3 sites on the basalt plateau are damaged, which is 1.4% of all amalgamated sites. However, the numbers in the Tell Beydar tables are too small to distinguish any meaningful trends: they are included for the purpose of comparison with the LCP data.

- TBS Tables 72 - 77 and LCP 94 – 101 list the vertical extent of damage by site type on each set of imagery. In this case the percentages show the extent of damage experienced by the different site types, so for example, in the Beydar Amalgamated Sites Table 72 for Corona, 22 tells have damage to their Upper Levels, which is 50% of the damage affecting tells.

F.5.6.3 – The Relationship Between Horizontal and Vertical Damage

The following Tables are in Appendix F and Appendix G:

- TBS Tables 78 – 83 and LCP 103 -110 show the relationship between the horizontal extent of the damage and the vertical depth of the damage on the different imagery types. For example, on the Beydar Amalgamated Sites Table 78 on Corona, Peripheral damage left sites Slightly Dispersed / Degraded in 28 cases. This was 47.5% of the cases of Peripheral damage (% Within Horizontal Damage Effect), and 51.9% of cases that were Slightly Degraded (% Within Vertical Damage Effect).

F.5.7 - DAMAGE EFFECTS: ANALYSIS OF DAMAGE SOURCES

The following Tables are within the main chapters:

- Tables 6.15 in the TBS Chapter 6, and 8.11 in the LCP Chapter 8, list how many sites are affected by each damage source for the Amalgamated Sites and the Unit Analysis. (The LCP Unit Analysis is in Appendix G: it is Table 111). Each damage cause is also shown as a percentage of the number of sites it affects. For example, in Table 8.11, 26 of the 85 amalgamated sites are affected by development in the LCP area, which is 30.6% of the amalgamated sites.

The following Tables are in Appendix F and Appendix G:

- TBS Tables 84 - 85 and LCP 112 - 113 count the different damage causes on each imagery type, with percentages given for each imagery type; for example, on the Tell Beydar Amalgamated Sites Table 84, 38% of the damage visible on Corona was caused by agriculture, but agriculture only caused 28.5% of the recorded visible damage on Geoeye.

- TBS Tables 86 - 91 and LCP 114 – 121 list whether the causes were primary, or secondary causes (and so on) by imagery type for amalgamated sites and units. Percentages indicated what proportion of each severity was caused by each damage threat. For example, on the LCP Amalgamated Sites Corona Table 114, development was responsible for 7.1% of the primary damage.

- TBS Tables 92 - 97 and LCP Tables 122 - 129 list the damage causes by location on each set of imagery. The percentages are the percentage of all sites in the listed area that are affected by that cause; for example on the Carchemish Region, Amalgamated Sites Table for Corona imagery (Table 122), 4 sites are affected by development on the upland plain. This is 9.8% of all amalgamated sites in that area. (In the Tell Beydar Region sites can be present in more than one location, no totals are given.) Although the numbers of sites in each location in the Tell Beydar region are too small to analyse they are included for comparability with the Land of Carchemish analysis data.

- TBS Tables 98 - 103 and LCP 130 – 137 list the damage causes by site type on each set of imagery. Percentages show the total number of sites of each type affected and the total number of sites affected by each cause. For example, in the Carchemish Amalgamated Sites Corona Table 130, development affects 10

amalgamated sites: 4 (12.1%) of the 10 are low tells. These 4 low tells account for 40% of sites affected by development.

- TBS Tables 104 - 109 and LCP 138 – 145 show the relationship between damage cause and horizontal damage extent for each image. % Within Damage Cause shows the percentage of extent types affected by that cause. % Within Horizontal Damage Effect shows the percentage of sites experiencing the damage for each horizontal effect; for example, on the Carchemish Amalgamated Sites Table for Corona imagery (Table 138), development was recorded a total of 10 times on amalgamated sites. Of these, 3 times development affected the periphery of a site. This is 30% of the damage extents for development (% Within Damage Cause) and 15% of the threats causing Peripheral Damage (% within Horizontal Damage Effect). This is visualised on graphs within each Chapter – Figures 6.31 – 6.36, and Figures 8.23 – 8.26.

- TBS Tables 110 - 115 and LCP 146 – 153 show the relationships between damage cause and vertical damage (i.e. depth). % within Damage Cause shows the percentage of extent types affected by that cause. % Within Vertical Damage Effect shows the percentage of sites experiencing the damage for each vertical damage effect; for example, on the Beydar Amalgamated Sites on Corona Table (110), development was recorded as damaging the Upper Levels of a site 39 times. This is the total 100% of the damage caused by development (% Within Cause). As it is not possible to see under the houses to see what other damage may have been caused, this is the minimum damage development probably causes. Development is also responsible for 31.7% of damage to the Upper Levels of sites (% within Vertical Damage Effect). This is visualised on graphs within each Chapter – Figures 6.37 – 6.42 and Figures 8.27 – 8.30.

F.5.8 - DAMAGE LEVELS AND SITE STABILITY

- LCP Tables 154 and 155 compare the counts of increasing damage for each image. Percentages given are within each image. For example, on Table 154, No increase is visible for 49 damage threats on DigitalGlobe, which is 29.2% of all threats on DigitalGlobe.

- TBS Tables 116 – 119 and LCP 156 – 161 count the increases in each damage threat, recording when the increase became visible. Tables are given for the Amalgamated site analysis and the Unit analysis. Data recorded from the Corona

imagery is taken to be the benchmark against which later threats are assessed, so no tables are given for Corona imagery. The table show when it could be determined that each threat (counted by cause) has increased, decreased or stayed the same. Increases are recorded in columns which give the name of the time period the increase is visible since. Percentages are the percentage with each damage cause. For example, on TBS Table 116 – Amalgamated Site damage increases on Spot 2004, in the first row of the Corona column, 38 development threats increased in the period between Spot and Corona, which is 76% of all the development threats. A further 8 threats increased since the fields visits were conducted. Note, this is cumulative – the threats which have increased since the period of the field visits are in addition to those identified as increasing since the Corona images were acquired. The most recent data of increase is recorded to try and ascertain if the rate of threat increase is speeding up.

F.5.9 – CASE STUDY DATA

- TBS Tables 120 and 122 show the damage causes for each imagery type on outer towns and TBS Tables 121 and 123 show the damage causes for each imagery type on low mounds, so the two can be compared. Percentages are the percentage damage threat within each imagery type. For example, on TBS Table 120 – Amalgamated Sites Damage Causes on Outer Towns, development was recorded ten times on outer towns, which is 23.3% of the threats on Corona. This can then be compared to TBS Table 121, which shows the same information for low mounds. 18 development threats were recorded on Corona, which is only 15% of threats to low mounds recorded on Corona imagery.

- LCP Table 162 shows the number of damage threats identified on outer towns compared to flat sites on each image type, and gives the average number of threats per site on each image, enabling a more accurate comparison.

- TBS Tables 124 – 126 and LCP 163 – 166 compare counts of damage on lower towns and low mounds, and the percentages of each which are affected on each imagery type. The TBS tables 124-126 and do not provide the percentage counts of each threat as a proportion of the total damage cause.

Appendix G
Ch. 6 Supporting Data:
Damage in the Tell Beydar Survey Area

The numerical ordering of this Appendix matches Chapter 6 for ease of cross referencing. Only sections relating to the main chapter text are included.

6.2 – Overview of the Tell Beydar Area

Table G-1: Site Type by Area (Amalgamated Sites)

		Basalt plateau	Plateau and escarpment	Plain west of Wadi 'Awaidj	Dry plain to east	Plain to north east of Basalt	River or Wadi terrace	Wadi bottom of wadi banks	Flood Plain
Site Type	Tell	0	0	3	3	6	2	8	7
	Tell (Low)	2	3	19	21	15	8	21	22
	Walls	0	3	0	0	0	0	1	0
	Flat Site / Scatter	0	1	0	0	0	1	0	0
	Irregular Structures / Enclosures	1	3	0	0	0	0	0	0

Table G-2: Site Type by Area (Unit Analysis)

		Basalt plateau	Plateau and escarpment	Plain west of Wadi 'Awaidj	Dry plain to east	Plain to north east of Basalt	River or Wadi terrace	Wadi bottom of wadi banks	Flood Plain
Site Type	Tell	0	0	3	3	8	3	8	8
	Tell (Low)	2	3	51	35	27	11	60	41
	Walls	0	4	0	0	0	0	2	0
	Flat Site / Scatter	0	1	2	0	0	1	2	1
	Irregular Structures / Enclosures	1	3	0	0	0	0	0	0

6.3 - CERTAINTY

TABLE G-3: CERTAINTY RATINGS ON CORONA (AMALGAMATED SITES)

	ID Certainty	%	Boundary Certainty	%	Damage Certainty	%	Overall Certainty	%
Definite	66	61.1%	1	.9%	0	.0%	1	.9%
High	21	19.4%	16	14.8%	49	45.4%	42	38.9%
Medium	10	9.3%	12	11.1%	35	32.4%	41	38.0%
Low	8	7.4%	66	61.1%	24	22.2%	24	22.2%
Negligible	3	2.8%	13	12.0%	0	.0%	0	.0%

TABLE G-4: CERTAINTY RATINGS ON SPOT 2004 (AMALGAMATED SITES)

	ID Certainty	%	Boundary Certainty	%	Damage Certainty	%	Overall Certainty	%
Definite	63	58.3%	0	.0%	0	.0%	0	.0%
High	20	18.5%	11	10.2%	34	31.5%	30	27.8%
Medium	12	11.1%	10	9.3%	51	47.2%	51	47.2%
Low	10	9.3%	73	67.6%	23	21.3%	27	25.0%
Negligible	3	2.8%	14	13.0%	0	.0%	0	.0%

TABLE G-5: CERTAINTY RATINGS ON GEOEYE 2010 (AMALGAMATED SITES)

	ID Certainty	%	Boundary Certainty	%	Damage Certainty	%	Overall Certainty	%
Definite	62	57.4%	0	.0%	0	.0%	0	.0%
High	17	15.7%	12	11.1%	37	34.3%	31	28.7%
Medium	17	15.7%	10	9.3%	54	50.0%	54	50.0%
Low	11	10.2%	70	64.8%	17	15.7%	23	21.3%
Negligible	1	.9%	16	14.8%	0	.0%	0	.0%

TABLE G-6: CERTAINTY RATINGS ON CORONA (UNIT ANALYSIS)

	ID Certainty	%	Boundary Certainty	%	Damage Certainty	%	Overall Certainty	%
Definite	117	60.3%	2	1.0%	0	.0%	2	1.0%
High	29	14.9%	19	9.8%	76	39.2%	64	33.0%
Medium	24	12.4%	26	13.4%	67	34.5%	72	37.1%
Low	20	10.3%	117	60.3%	51	26.3%	56	28.9%
Negligible	4	2.1%	30	15.5%	0	.0%	0	.0%

TABLE G-7: CERTAINTY RATINGS ON SPOT 2004 (UNIT ANALYSIS)

	ID Certainty	%	Boundary Certainty	%	Damage Certainty	%	Overall Certainty	%
Definite	98	50.5%	0	.0%	0	.0%	0	.0%
High	28	14.4%	16	8.2%	58	29.9%	46	23.7%
Medium	23	11.9%	12	6.2%	84	43.3%	88	45.4%
Low	41	21.1%	128	66.0%	52	26.8%	60	30.9%
Negligible	4	2.1%	38	19.6%	0	.0%	0	.0%

TABLE G-8: CERTAINTY RATINGS ON GEOEYE 2010 (UNIT ANALYSIS)

	ID Certainty	%	Boundary Certainty	%	Damage Certainty	%	Overall Certainty	%
Definite	93	47.9%	0	.0%	0	.0%	0	.0%
High	19	9.8%	16	8.2%	58	29.9%	47	24.2%
Medium	33	17.0%	10	5.2%	90	46.4%	92	47.4%
Low	48	24.7%	127	65.5%	46	23.7%	55	28.4%
Negligible	1	.5%	41	21.1%	0	.0%	0	.0%

FIGURE G-1: GRAPH OF ID CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)

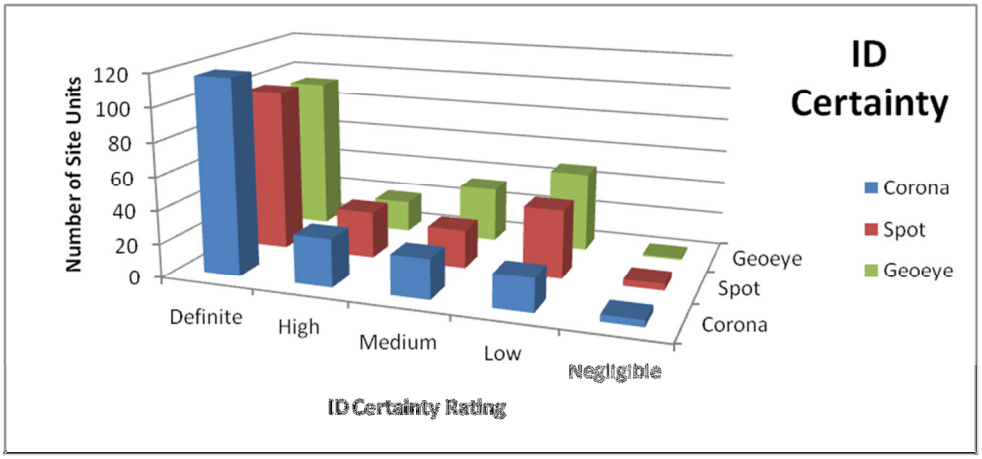


FIGURE G-2: GRAPH OF BOUNDARY CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)

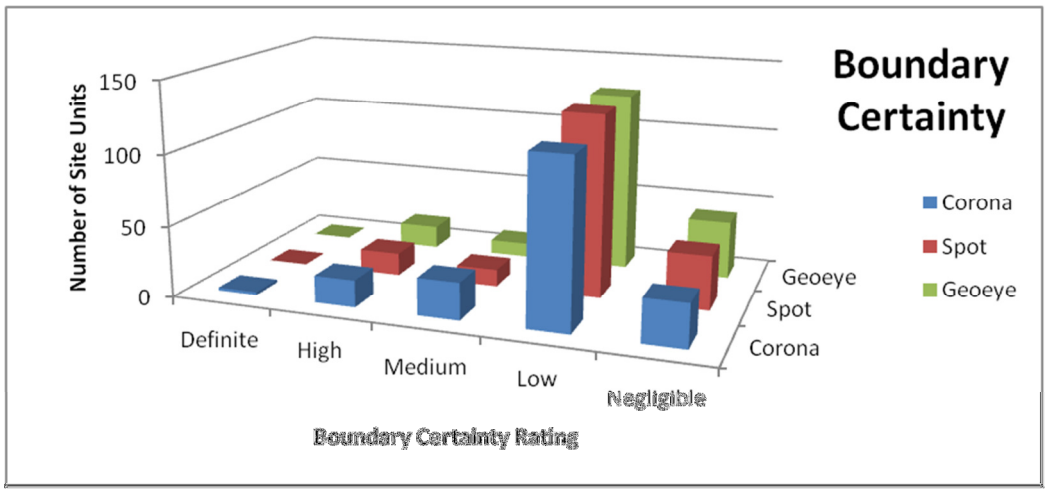


FIGURE G-3: GRAPH OF DAMAGE CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)

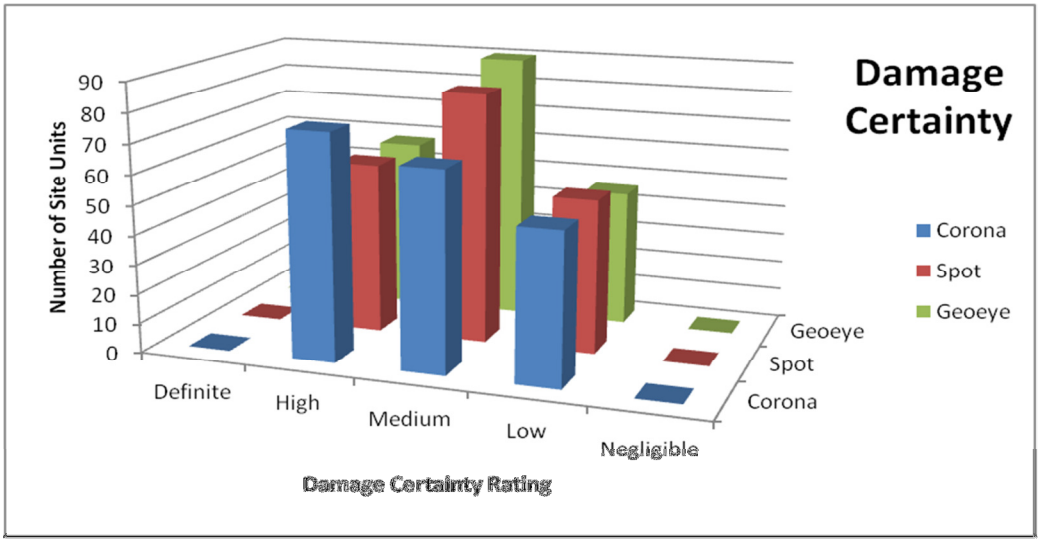
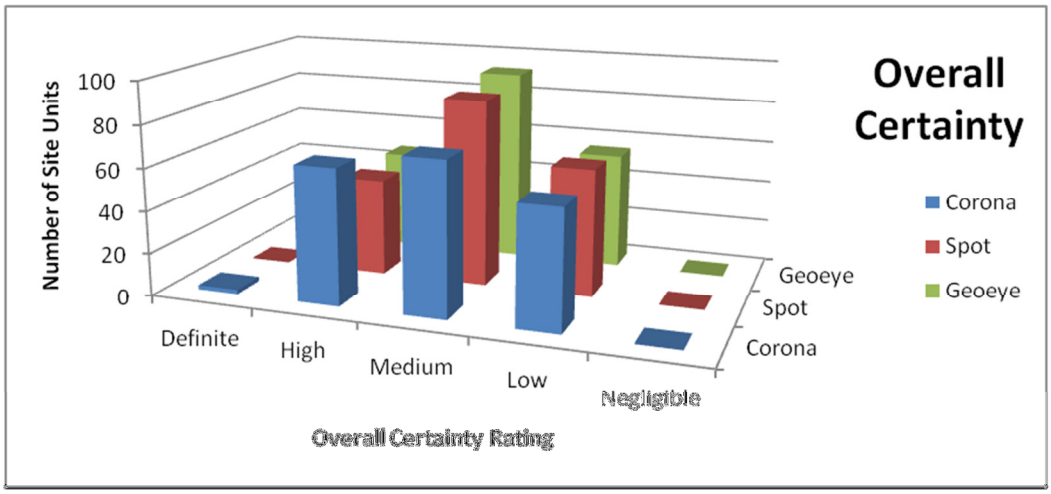


FIGURE G-4: GRAPH OF OVERALL CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)



6.4 - VISIBILITY

6.4.2 – SEASONALITY IN THE TELL BEYDAR AREA

TABLE G-9: PRESENCE OF SOIL COLOUR DIFFERENCE / CROP MARKS (AMALGAMATED SITES)

	Corona	%	Field Visit	%	SPOT 2004	%	Geoeye 2010	%
0	38	35.2%	98	90.7%	30	27.8%	34	31.5%
1	70	64.8%	10	9.3%	78	72.2%	74	68.5%

TABLE G-10: PRESENCE OF SOIL COLOUR DIFFERENCE / CROP MARKS (UNIT ANALYSIS)

	Corona	%	Field Visit	%	SPOT 2004	%	Geoeye 2010	%
0	72	37.1%	172	88.7%	62	32.0%	76	39.2%
1	122	62.9%	22	11.3%	132	68.0%	118	60.8%

1 indicates a soil colour difference or possible crop mark was visible.

0 indicates no soil colour difference or crop mark was visible

6.4.3 - VISIBILITY: AMALGAMATED SITES

TABLE G-11: VISIBILITY OF SITES ON CORONA (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	54	50.0	50.0	50.0
	Partially Visible	21	19.4	19.4	69.4
	Barely Visible	21	19.4	19.4	88.9
	Obscured	3	2.8	2.8	91.7
	Not Visible	9	8.3	8.3	100.0
	Total	108	100.0	100.0	

TABLE G-12: VISIBILITY OF SITES ON SPOT 2004 (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	31	28.7	28.7	28.7
	Partially Visible	26	24.1	24.1	52.8
	Barely Visible	26	24.1	24.1	76.9
	Obscured	7	6.5	6.5	83.3
	Not Visible	18	16.7	16.7	100.0
	Total	108	100.0	100.0	

TABLE G-13: VISIBILITY OF SITES ON GEOEYE 2010 (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	34	31.5	31.5	31.5
	Partially Visible	28	25.9	25.9	57.4
	Barely Visible	25	23.1	23.1	80.6
	Obscured	4	3.7	3.7	84.3
	Not Visible	17	15.7	15.7	100.0
	Total	108	100.0	100.0	

6.4.4 - VISIBILITY: UNIT ANALYSIS

TABLE G-14: VISIBILITY OF SITES ON CORONA (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	110	56.7	56.7	56.7
	Partially Visible	28	14.4	14.4	71.1
	Barely Visible	27	13.9	13.9	85.1
	Obscured	9	4.6	4.6	89.7
	Not Visible	20	10.3	10.3	100.0
	Total	194	100.0	100.0	

TABLE G-15: VISIBILITY OF SITES ON SPOT 2004 (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	46	23.7	23.7	23.7
	Partially Visible	29	14.9	14.9	38.7
	Barely Visible	58	29.9	29.9	68.6
	Obscured	12	6.2	6.2	74.7
	Not Visible	49	25.3	25.3	100.0
	Total	194	100.0	100.0	

TABLE G-16: VISIBILITY OF SITES ON GEOEYE 2010 (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	57	29.4	29.4	29.4
	Partially Visible	28	14.4	14.4	43.8
	Barely Visible	50	25.8	25.8	69.6
	Obscured	5	2.6	2.6	72.2
	Not Visible	54	27.8	27.8	100.0
	Total	194	100.0	100.0	

FIGURE G-5: GRAPH OF VISIBILITY OF SITES ON IMAGERY (UNIT ANALYSIS)

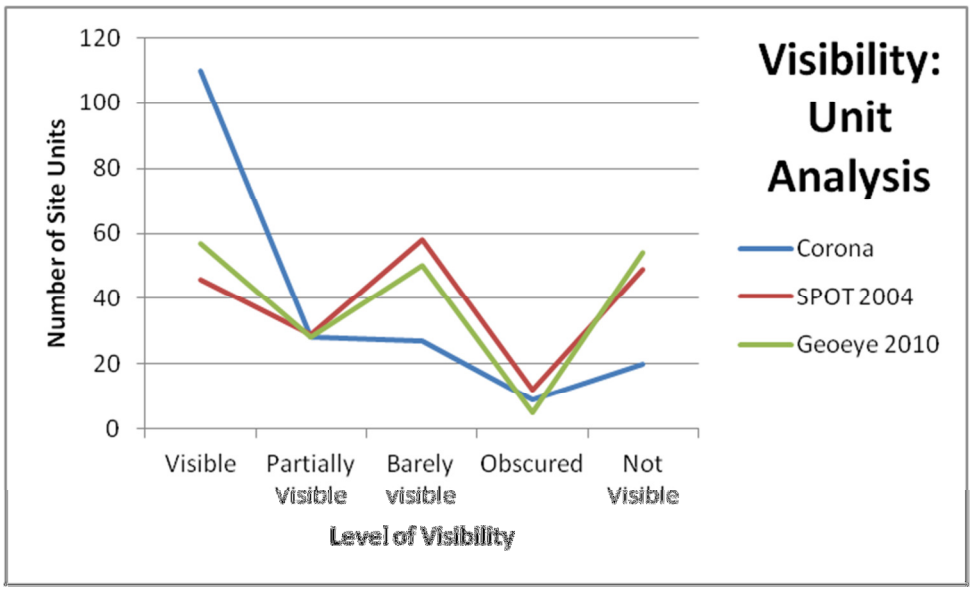
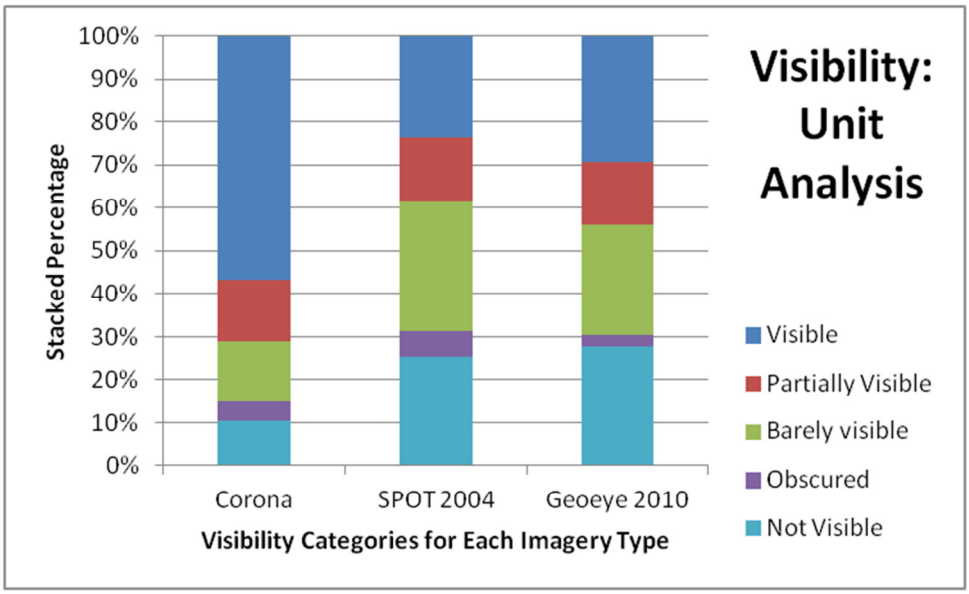


FIGURE G-6: STACKED GRAPH OF VISIBILITY OF SITES ON IMAGERY (UNIT ANALYSIS)



6.4.5 – VISIBILITY: SITE LOCATION

TABLE G-17: VISIBILITY BY SITE LOCATION (TOTAL FOR ALL IMAGERY)(AMALGAMATED SITES)

	Plateau Escarpment	Basalt Plateau	Plain West of Wadi 'Awaidj	Dry Dusty Plain to East	Plain North East of Basalt	River or Wadi Terrace	Wadi Bottom or Banks	Flood Plain
Visible	3	3	20	22	22	11	35	47
Partially Visible	7	3	13	22	20	5	19	11
Barely Visible	4	1	22	18	14	6	22	16
Obscured	0	0	7	2	2	0	3	3
Not Visible	16	2	4	8	5	11	11	10
Total	30	9	66	72	63	33	90	87

TABLE G-18: VISIBILITY BY SITE LOCATION (TOTAL FOR ALL IMAGERY) (UNIT ANALYSIS)

	Plateau Escarpment	Basalt Plateau	Plain West of Wadi 'Awaidj	Dry Dusty Plain to East	Plain North East of Basalt	River or Wadi Terrace	Wadi Bottom or Banks	Flood Plain
Visible	3	6	53	32	40	19	75	78
Partially Visible	7	3	18	26	19	4	23	14
Barely Visible	4	1	46	25	28	9	52	31
Obscured	0	0	10	10	2	0	7	4
Not Visible	19	5	41	21	16	13	59	23
Total	33	15	168	114	105	45	216	150

TABLE G-19: SUMMARY OF VISIBILITY OF LAND TYPES BY IMAGERY (AMALGAMATED SITES)

	Plateau Escarpment	Basalt Plateau	Plain West of Wadi 'Awaidj	Dry Dusty Plain to East	Plain North East of Basalt	River or Wadi Terrace	Wadi Bottom or Banks	Flood Plain
Visible on Corona	0	2	11	9	10	5	16	23
Partially Visible on Corona	3	0	3	8	5	1	5	2
Barely Visible on Corona	1	0	6	6	4	4	6	3
Obscured on Corona	0	0	2	1	0	0	1	0
Not Visible on Corona	6	1	0	0	2	1	2	1
Total	10	3	22	24	21	11	30	29
Visible on SPOT 2004	1	0	3	6	6	3	9	13
Partially Visible on SPOT 2004	1	1	5	6	7	3	6	6
Barely Visible on SPOT 2004	2	1	9	7	5	1	8	4
Obscured on SPOT 2004	0	0	3	1	1	0	2	2
Not Visible on SPOT 2004	6	1	2	4	2	4	5	4
Total	10	3	22	24	21	11	30	29
Visible on Geoeye 2010	2	2	6	7	6	3	10	11
Partially Visible on Geoeye 2010	3	1	5	8	8	1	8	3
Barely Visible on Geoeye 2010	1	0	7	5	5	1	8	9
Obscured on Geoeye 2010	0	0	2	0	1	0	0	1
Not Visible on Geoeye 2010	5	2	2	4	1	6	4	5
Total	11	5	22	24	21	11	30	29

TABLE G-20: SUMMARY OF VISIBILITY OF LAND TYPES BY IMAGERY (UNIT ANALYSIS)

	Plateau Escarpment	Basalt Plateau	Plain West of Wadi 'Awaidj	Dry Dusty Plain to East	Plain North East of Basalt	River or Wadi Terrace	Wadi Bottom or Banks	Flood Plain
Visible on Corona	0	4	32	15	18	8	44	43
Partially Visible on Corona	3	0	5	12	6	1	7	2
Barely Visible on Corona	1	0	9	5	7	5	8	3
Obscured on Corona	0	0	4	4	0	0	3	1
Not Visible on Corona	7	1	6	2	4	1	10	1
Total	11	5	56	38	35	15	72	50
Visible on SPOT 2004	1	0	8	7	10	5	13	18
Partially Visible on SPOT 2004	1	2	6	6	7	3	8	8
Barely Visible on SPOT 2004	2	1	21	12	10	2	24	13
Obscured on SPOT 2004	0	0	4	5	1	0	4	2
Not Visible on SPOT 2004	7	2	17	8	7	5	23	9
Total	11	5	56	38	35	15	72	50
Visible on Geoeye 2010	2	2	13	10	12	6	18	17
Partially Visible on Geoeye 2010	3	1	7	8	6	0	8	4
Barely Visible on Geoeye 2010	1	0	16	8	11	2	20	15
Obscured on Geoeye 2010	0	0	2	1	1	0	0	1
Not Visible on Geoeye 2010	5	2	18	11	5	7	26	13
Total	11	5	56	38	35	15	72	50

FIGURE G-7: GRAPHS OF VISIBILITY OF SITES BY LAND TYPE AND IMAGERY (AMALGAMATED SITES)

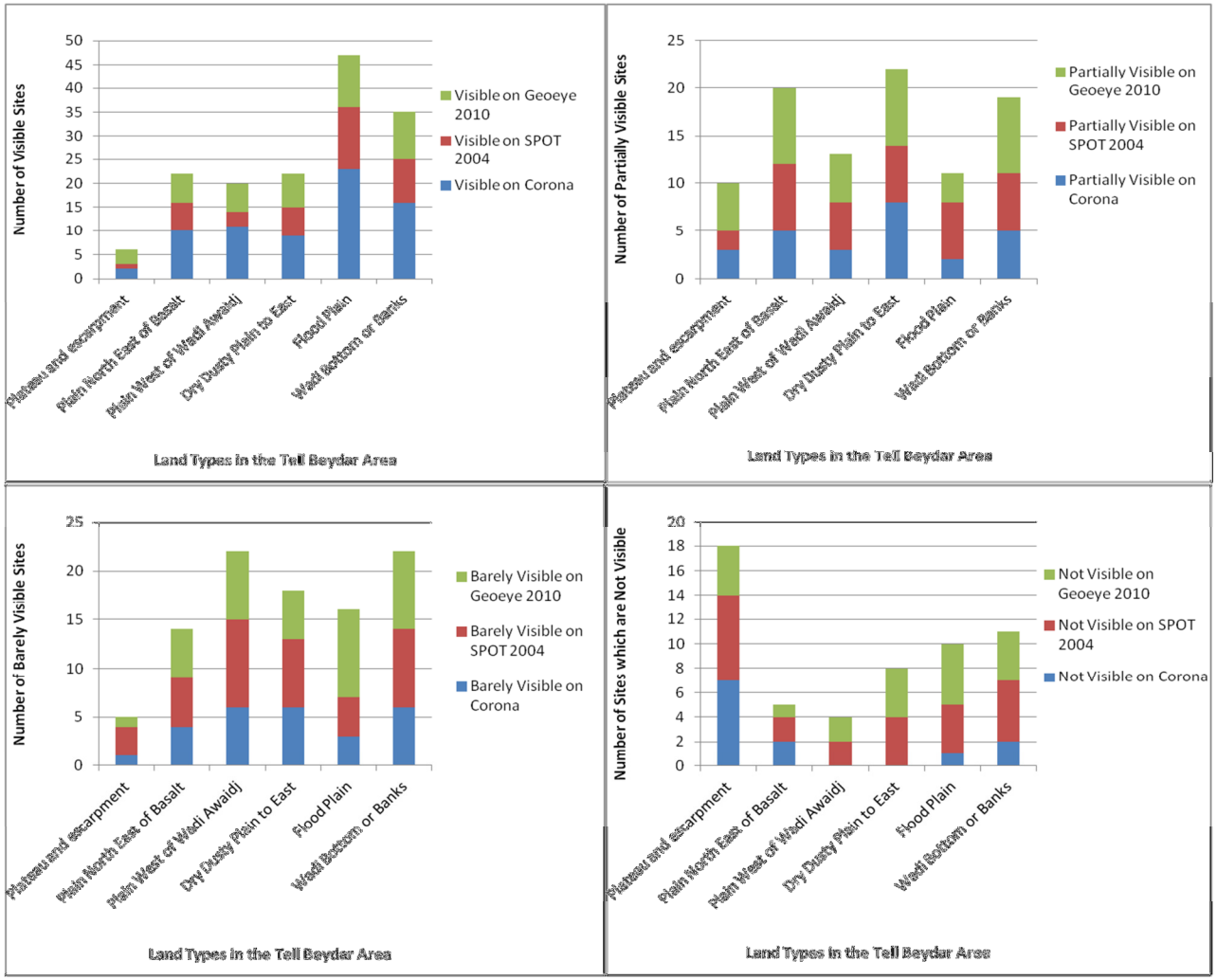


FIGURE G-8: GRAPHS OF VISIBILITY OF SITES BY LAND TYPE AND IMAGERY (UNIT ANALYSIS)

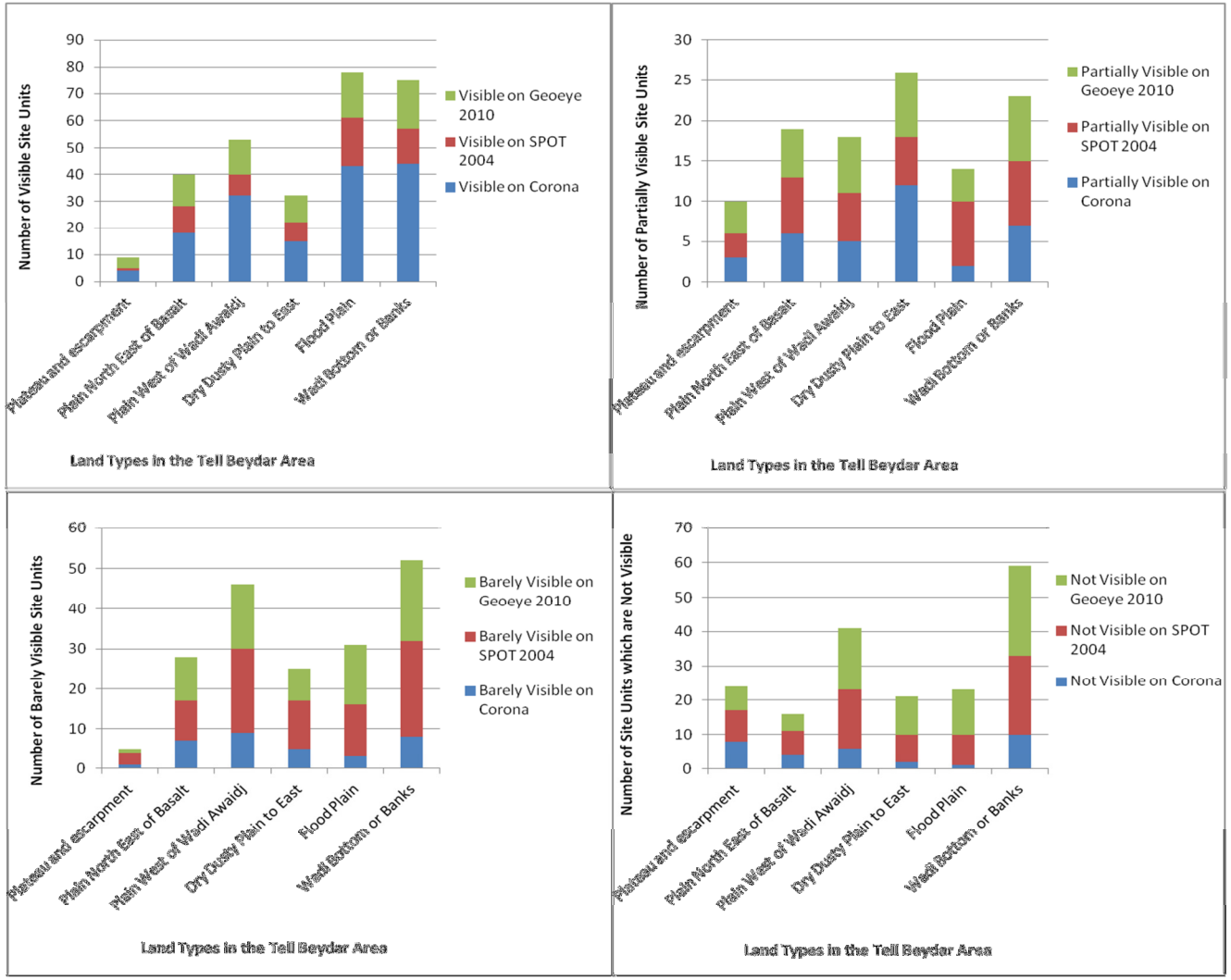


FIGURE G-9: GRAPHS OF VISIBILITY OF SITES BY PERCENTAGE LAND TYPE AND IMAGERY (AMALGAMATED SITES)

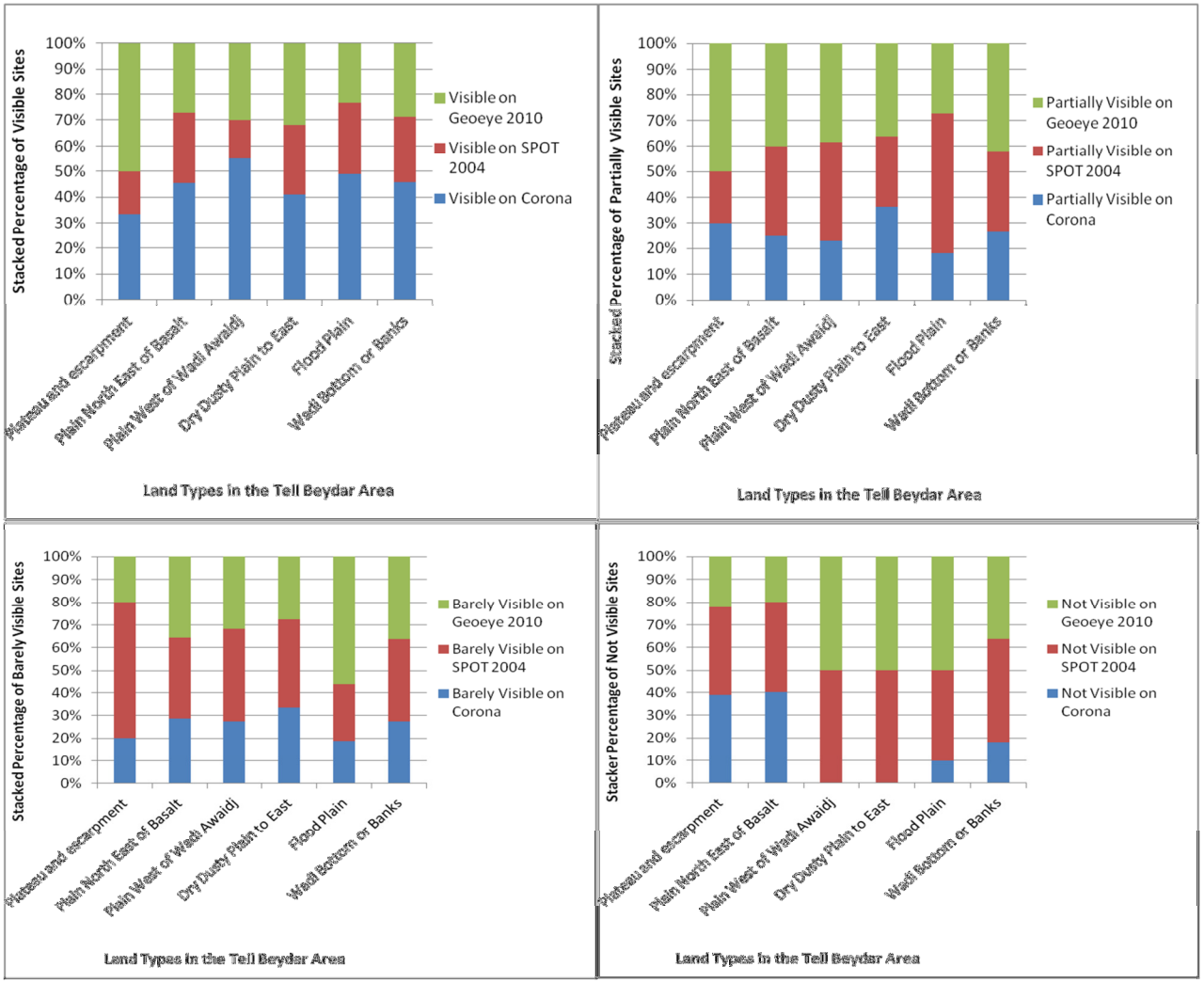


FIGURE G-10: GRAPHS OF VISIBILITY OF SITES BY PERCENTAGE LAND TYPE AND IMAGERY (UNIT ANALYSIS)

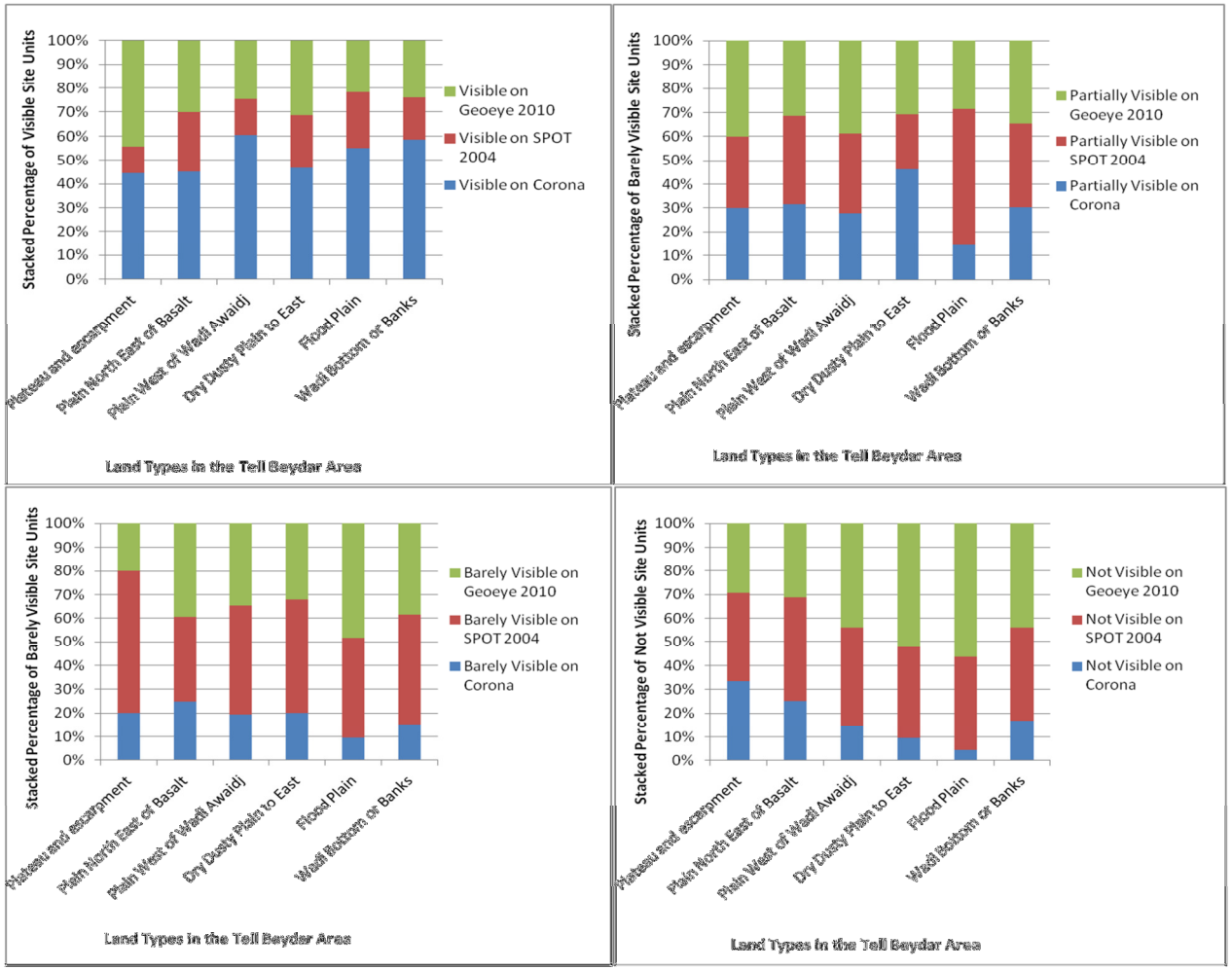


TABLE G-21: VISIBILITY OF SITES ON THE PLAINS (AMALGAMATED SITES)

(Plain to NE of Basalt, West of Wadi 'Awaidj, East of Wadi 'Awaidj. Does not include Flood Plain)

	Corona	SPOT 2004	Geoeye 2010
Visible	30	15	19
Partially Visible	16	18	21
Barely Visible	16	21	17
Obscured	3	5	3
Not Visible	2	8	7

FIGURE G-11: GRAPH OF VISIBILITY OF SITES ON THE PLAINS (AMALGAMATED SITES)

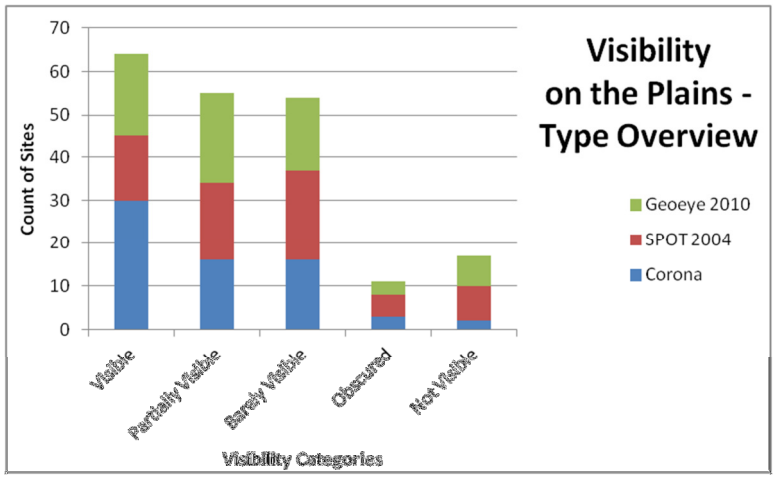


FIGURE G-12: GRAPH OF PERCENTAGE VISIBILITY OF SITES ON THE PLAINS (AMALGAMATED SITES)

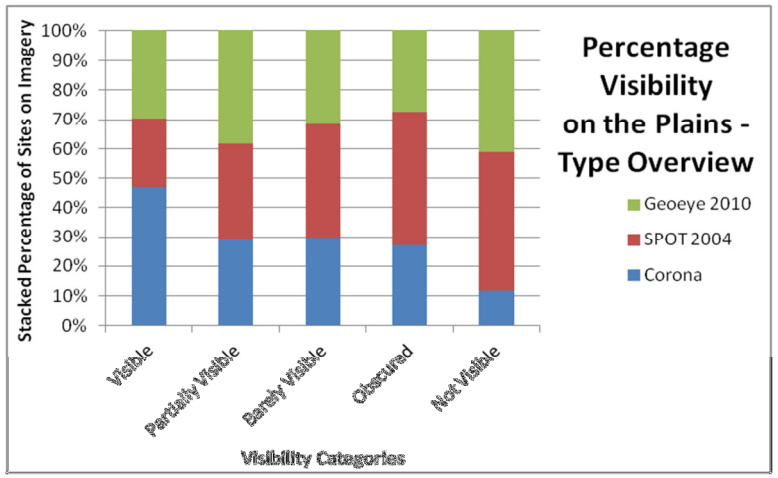


TABLE G-22: VISIBILITY OF SITES ON THE PLAINS (UNIT ANALYSIS)

	Corona	SPOT 2004	Geoeye 2010
Visible	65	25	35
Partially Visible	23	19	21
Barely Visible	21	43	35
Obscured	8	10	4
Not Visible	12	32	34

(Plain to NE of Basalt, West of Wadi Awaidj, East of Wadi Awaidj. Does not include Flood Plain)

FIGURE G-13: GRAPH OF VISIBILITY OF SITES ON THE PLAINS (UNIT ANALYSIS)

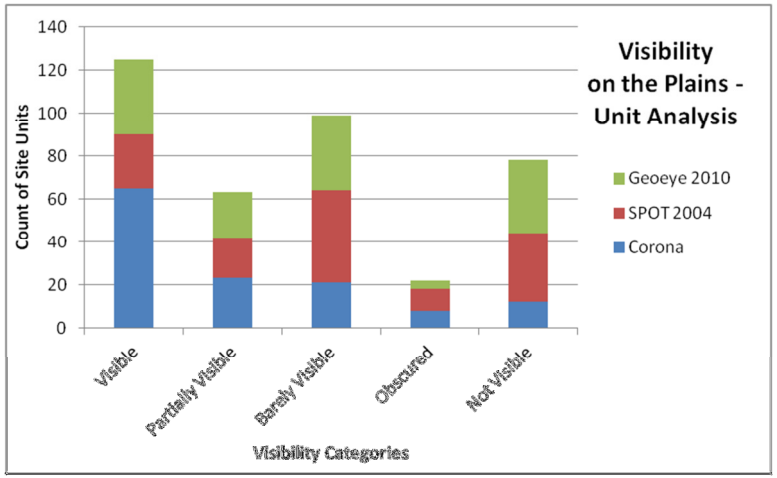


FIGURE G-14: GRAPH OF PERCENTAGE VISIBILITY OF SITES ON THE PLAINS (UNIT ANALYSIS)

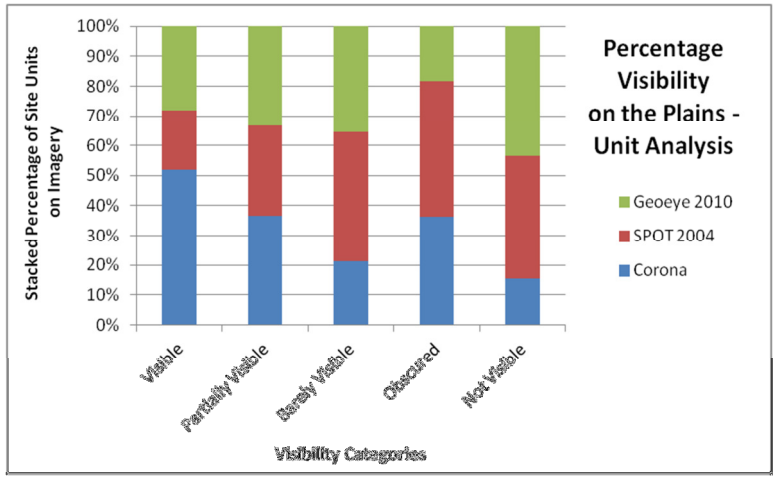


TABLE G-23: VISIBILITY OF SITES BY WATER (AMALGAMATED SITES)

(Wadi Bottom or Banks, Flood Plain, River or Wadi Terrace)

	Corona	SPOT 2004	Geoeye 2010
Visible	65	25	35
Partially Visible	23	19	21
Barely Visible	21	43	35
Obscured	8	10	4
Not Visible	12	32	34

FIGURE G-15: GRAPH OF VISIBILITY OF SITES BY WATER (AMALGAMATED SITES)

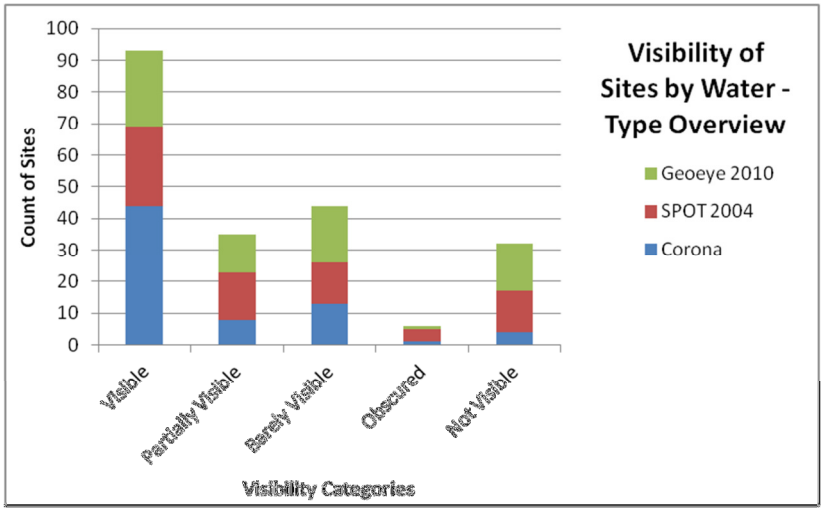


FIGURE G-16: GRAPH OF PERCENTAGE VISIBILITY OF SITES BY WATER (AMALGAMATED SITES)

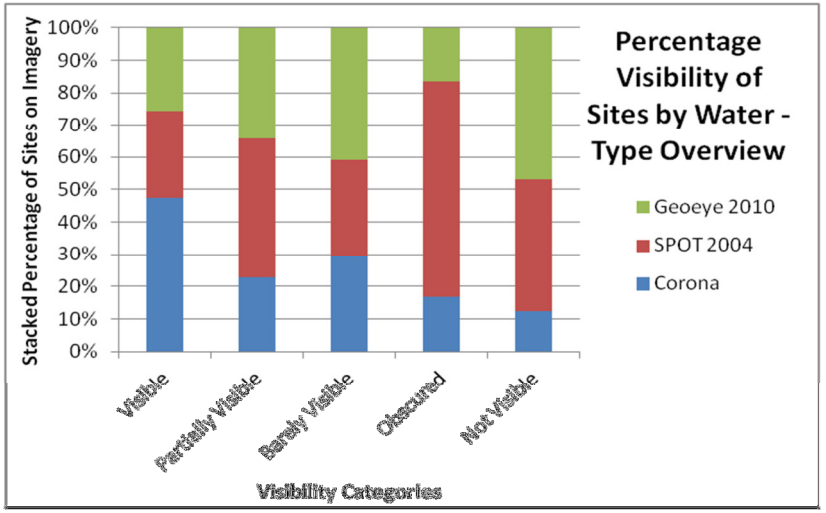


TABLE G-24: VISIBILITY OF SITES BY WATER (UNIT ANALYSIS)

(Wadi Bottom or Banks, Flood Plain, River or Wadi Terrace)

	Corona	SPOT 2004	Geoeye 2010
Visible	95	36	41
Partially Visible	10	19	12
Barely Visible	16	39	37
Obscured	4	6	1
Not Visible	12	37	46

FIGURE G-17: GRAPH OF VISIBILITY OF SITES BY WATER (UNIT ANALYSIS)

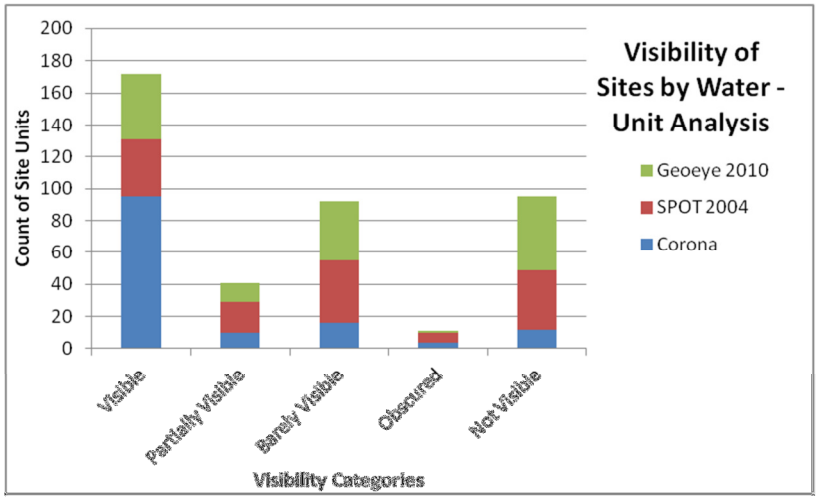
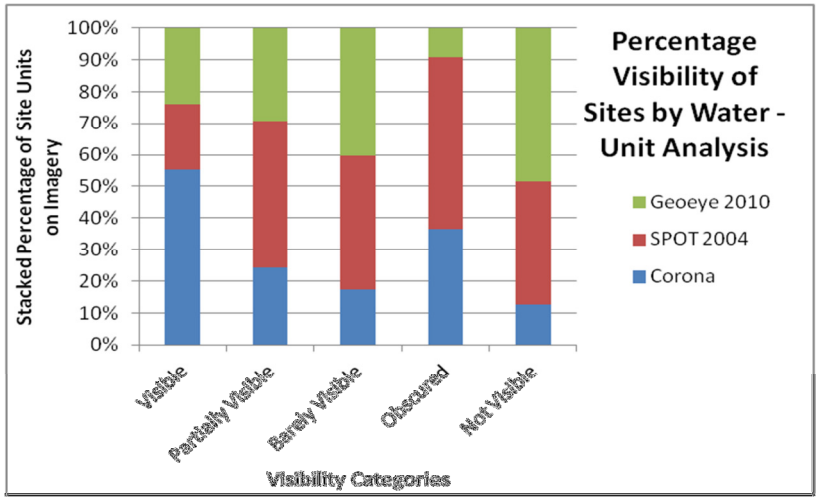


FIGURE G-18: GRAPH OF PERCENTAGE VISIBILITY OF SITES BY WATER (UNIT ANALYSIS)



6.4.6 – *VISIBILITY: SITE TYPE*

TABLE G-25: VISIBILITY BY IMAGE TYPE AND SITE TYPE - CORONA (AMALGAMATED SITES)

			Site_Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Corona_Visibility	Visible	Count	19	35	0	0	0	54
		% within Site_Type	90.5%	44.3%	.0%	.0%	.0%	50.0%
	Partially Visible	Count	1	18	1	0	1	21
		% within Site_Type	4.8%	22.8%	33.3%	.0%	33.3%	19.4%
	Barely Visible	Count	1	19	0	1	0	21
		% within Site_Type	4.8%	24.1%	.0%	50.0%	.0%	19.4%
	Obscured	Count	0	3	0	0	0	3
		% within Site_Type	.0%	3.8%	.0%	.0%	.0%	2.8%
	Not Visible	Count	0	4	2	1	2	9
		% within Site_Type	.0%	5.1%	66.7%	50.0%	66.7%	8.3%
Total		Count	21	79	3	2	3	108
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-26: VISIBILITY BY IMAGE TYPE AND SITE TYPE - SPOT 2004 (AMALGAMATED SITES)

			Site_Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
SPOT_Visibility	Visible	Count	19	11	0	0	1	31
		% within Site_Type	90.5%	13.9%	.0%	.0%	33.3%	28.7%
	Partially Visible	Count	1	24	1	0	0	26
		% within Site_Type	4.8%	30.4%	33.3%	.0%	.0%	24.1%
	Barely Visible	Count	1	24	1	0	0	26
		% within Site_Type	4.8%	30.4%	33.3%	.0%	.0%	24.1%
	Obscured	Count	0	7	0	0	0	7
		% within Site_Type	.0%	8.9%	.0%	.0%	.0%	6.5%
	Not Visible	Count	0	13	1	2	2	18
		% within Site_Type	.0%	16.5%	33.3%	100.0%	66.7%	16.7%
Total		Count	21	79	3	2	3	108
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-27: VISIBILITY BY IMAGE TYPE AND SITE TYPE - GEOEYE 2010 (AMALGAMATED SITES)

			Site_Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Geoeye_Visibility	Visible	Count	19	14	0	0	1	34
		% within Site_Type	90.5%	17.7%	.0%	.0%	33.3%	31.5%
	Partially Visible	Count	1	24	1	0	2	28
		% within Site_Type	4.8%	30.4%	33.3%	.0%	66.7%	25.9%
	Barely Visible	Count	1	24	0	0	0	25
		% within Site_Type	4.8%	30.4%	.0%	.0%	.0%	23.1%
	Obscured	Count	0	4	0	0	0	4
		% within Site_Type	.0%	5.1%	.0%	.0%	.0%	3.7%
	Not Visible	Count	0	13	2	2	0	17
		% within Site_Type	.0%	16.5%	66.7%	100.0%	.0%	15.7%
Total		Count	21	79	3	2	3	108
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-28: VISIBILITY BY IMAGE TYPE AND SITE TYPE - CORONA (UNIT ANALYSIS)

			Site_Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Corona_Visibility	Visible	Count	20	88	0	2	0	110
		% within Site_Type	83.3%	55.7%	.0%	40.0%	.0%	56.7%
	Partially Visible	Count	1	25	1	0	1	28
		% within Site_Type	4.2%	15.8%	25.0%	.0%	33.3%	14.4%
	Barely Visible	Count	3	22	0	2	0	27
		% within Site_Type	12.5%	13.9%	.0%	40.0%	.0%	13.9%
	Obscured	Count	0	9	0	0	0	9
		% within Site_Type	.0%	5.7%	.0%	.0%	.0%	4.6%
	Not Visible	Count	0	14	3	1	2	20
		% within Site_Type	.0%	8.9%	75.0%	20.0%	66.7%	10.3%
Total		Count	24	158	4	5	3	194
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-29: VISIBILITY BY IMAGE TYPE AND SITE TYPE - SPOT 2004 (UNIT ANALYSIS)

			Site_Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
SPOT_Visibility	Visible	Count	21	23	0	1	1	46
		% within Site_Type	87.5%	14.6%	.0%	20.0%	33.3%	23.7%
	Partially Visible	Count	1	27	1	0	0	29
		% within Site_Type	4.2%	17.1%	25.0%	.0%	.0%	14.9%
	Barely Visible	Count	2	54	1	1	0	58
		% within Site_Type	8.3%	34.2%	25.0%	20.0%	.0%	29.9%
	Obscured	Count	0	12	0	0	0	12
		% within Site_Type	.0%	7.6%	.0%	.0%	.0%	6.2%
	Not Visible	Count	0	42	2	3	2	49
		% within Site_Type	.0%	26.6%	50.0%	60.0%	66.7%	25.3%
Total		Count	24	158	4	5	3	194
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-30: VISIBILITY BY IMAGE TYPE AND SITE TYPE - GEOEYE 2010 (UNIT ANALYSIS)

			Site_Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Geoeye_Visibility	Visible	Count	21	34	0	1	1	57
		% within Site_Type	87.5%	21.5%	.0%	20.0%	33.3%	29.4%
	Partially Visible	Count	1	24	1	0	2	28
		% within Site_Type	4.2%	15.2%	25.0%	.0%	66.7%	14.4%
	Barely Visible	Count	2	48	0	0	0	50
		% within Site_Type	8.3%	30.4%	.0%	.0%	.0%	25.8%
	Obscured	Count	0	5	0	0	0	5
		% within Site_Type	.0%	3.2%	.0%	.0%	.0%	2.6%
	Not Visible	Count	0	47	3	4	0	54
		% within Site_Type	.0%	29.7%	75.0%	80.0%	.0%	27.8%
Total		Count	24	158	4	5	3	194
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

6.5 - LAND USE / LAND COVER

6.5.1 – LAND USE / LAND COVER AROUND SITES

TABLE G-31: COUNTS OF LAND USE / LAND COVER AROUND SITES (AMALGAMATED SITES AND UNIT ANALYSIS)

Amalgamated Sites

	Corona - Present	
	Count	%
Bare or Scrub	61	56.5%
Arable	103	95.4%
Orchard	0	.0%
Modern Graves	0	.0%
Modern Structures	4	3.7%
Modern Settlements	51	47.2%
Irrigation Channel	1	.9%
Water Bodies	87	80.6%
Road	72	66.7%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	0	.0%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	0	.0%
(All Pits)	0	.0%
Quarries	0	.0%
Unclassified	26	24.1%

	SPOT 2004 - Present	
	Count	%
Bare or Scrub	47	43.5%
Arable	103	95.4%
Orchard	18	16.7%
Modern Graves	6	5.6%
Modern Structures	15	13.9%
Modern Settlements	46	42.6%
Irrigation Channel	23	21.3%
Water Bodies	32	29.6%
Road	86	79.6%
Dam Reservoir Bed	2	1.9%
Archaeological Excavation	2	1.9%
Mudbrick Excavation	11	10.2%
Looters' Holes	0	.0%
Pits (Other)	0	.0%
(All Pits)	15	13.9%
Quarries	0	.0%
Unclassified	11	10.2%

Unit Analysis

	Corona - Present	
	Count	%
Bare or Scrub	103	53.1%
Arable	184	94.8%
Orchard	0	.0%
Modern Graves	0	.0%
Modern Structures	6	3.1%
Modern Settlements	101	52.1%
Irrigation Channel	1	.5%
Water Bodies	154	79.4%
Road	136	70.1%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	0	.0%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	0	.0%
(All Pits)	0	.0%
Quarries	0	.0%
Unclassified	43	22.2%

	SPOT 2004 - Present	
	Count	%
Bare or Scrub	71	36.6%
Arable	188	96.9%
Orchard	21	10.8%
Modern Graves	12	6.2%
Modern Structures	21	10.8%
Modern Settlements	88	45.4%
Irrigation Channel	33	17.0%
Water Bodies	55	28.4%
Road	162	83.5%
Dam Reservoir Bed	3	1.5%
Archaeological Excavation	3	1.5%
Mudbrick Excavation	18	9.3%
Looters' Holes	0	.0%
Pits (Other)	0	.0%
(All Pits)	28	14.4%
Quarries	0	.0%
Unclassified	16	8.2%

Amalgamated Sites

	Geoeye 2010 - Present	
	Count	%
Bare or Scrub	53	49.1%
Arable	103	95.4%
Orchard	23	21.3%
Modern Graves	7	6.5%
Modern Structures	15	13.9%
Modern Settlements	46	42.6%
Irrigation Channel	26	24.1%
Water Bodies	29	26.9%
Road	86	79.6%
Dam Reservoir Bed	2	1.9%
Archaeological Excavation	2	1.9%
Mudbrick Excavation	14	13.0%
Looters' Holes	1	.9%
Pits (Other)	2	1.9%
(All Pits)	22	20.4%
Quarries	0	.0%
Unclassified	2	1.9%

Unit Analysis

	Geoeye 2010 - Present	
	Count	%
Bare or Scrub	80	41.2%
Arable	186	95.9%
Orchard	27	13.9%
Modern Graves	16	8.2%
Modern Structures	23	11.9%
Modern Settlements	92	47.4%
Irrigation Channel	40	20.6%
Water Bodies	48	24.7%
Road	161	83.0%
Dam Reservoir Bed	3	1.5%
Archaeological Excavation	3	1.5%
Mudbrick Excavation	21	10.8%
Looters' Holes	1	.5%
Pits (Other)	3	1.5%
(All Pits)	39	20.1%
Quarries	0	.0%
Unclassified	3	1.5%

TABLE G-32: FREQUENCY OF NUMBER OF LAND USE / COVER TYPES AROUND EACH SITE (AMALGAMATED SITES)

	Corona Total (Round)		SPOT 2004 Total (Round)		Geoeye 2010 Total (Round)	
	Count	%	Count	%	Count	%
1	1	.9%	6	5.6%	6	5.6%
2	23	21.3%	23	21.3%	17	15.7%
3	30	27.8%	28	25.9%	25	23.1%
4	28	25.9%	24	22.2%	29	26.9%
5	26	24.1%	12	11.1%	14	13.0%
6	0	.0%	10	9.3%	10	9.3%
7	0	.0%	3	2.8%	5	4.6%
8	0	.0%	1	.9%	1	.9%
10	0	.0%	1	.9%	1	.9%

TABLE G-33: FREQUENCY OF NUMBER OF LAND USE / COVER TYPES AROUND EACH SITE (UNIT ANALYSIS)

	Corona Total (Round)		SPOT 2004 Total (Round)		Geoeye 2010 Total (Round)	
	Count	%	Count	%	Count	%
1	4	2.1%	8	4.1%	7	3.6%
2	33	17.0%	42	21.6%	30	15.5%
3	57	29.4%	60	30.9%	58	29.9%
4	56	28.9%	43	22.2%	56	28.9%
5	44	22.7%	23	11.9%	23	11.9%
6	0	.0%	13	6.7%	14	7.2%
7	0	.0%	3	1.5%	4	2.1%
8	0	.0%	1	.5%	0	.0%
9	0	.0%	1	.5%	2	1.0%

6.5.2 – LAND USE / LAND COVER ON SITES

TABLE G-34: COUNT OF LAND USE / LAND COVER ON SITES (AMALGAMATED SITES)

	Corona - Present	
	Count	%
Bare or Scrub	66	61.1%
Arable	80	74.1%
Orchard	0	.0%
Modern Graves	0	.0%
Modern Structures	3	2.8%
Modern Settlements	36	33.3%
Irrigation Channel	1	.9%
Water Bodies	35	32.4%
Road	52	48.1%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	0	.0%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	0	.0%
(All Pits)	0	.0%
Quarries	0	.0%
Unclassified	26	24.1%

	Field Visit - Present	
	Count	%
Bare or Scrub	13	12.0%
Arable	43	39.8%
Orchard	0	.0%
Modern Graves	20	18.5%
Modern Structures	10	9.3%
Modern Settlements	36	33.3%
Irrigation Channel	6	5.6%
Water Bodies	8	7.4%
Road	18	16.7%
Dam Reservoir Bed	1	.9%
Archaeological Excavation	1	.9%
Mudbrick Excavation	13	12.0%
Looters' Holes	1	.9%
Pits (Other)	2	1.9%
(All Pits)	28	25.9%
Quarries	0	.0%
Unclassified	0	.0%

	SPOT 2004 - Present	
	Count	%
Bare or Scrub	57	52.8%
Arable	95	88.0%
Orchard	12	11.1%
Modern Graves	21	19.4%
Modern Structures	15	13.9%
Modern Settlements	37	34.3%
Irrigation Channel	16	14.8%
Water Bodies	10	9.3%
Road	62	57.4%
Dam Reservoir Bed	2	1.9%
Archaeological Excavation	2	1.9%
Mudbrick Excavation	16	14.8%
Looters' Holes	1	.9%
Pits (Other)	1	.9%
(All Pits)	33	30.6%
Quarries	0	.0%
Unclassified	11	10.2%

	Geoeye 2010 - Present	
	Count	%
Bare or Scrub	62	57.4%
Arable	95	88.0%
Orchard	16	14.8%
Modern Graves	24	22.2%
Modern Structures	13	12.0%
Modern Settlements	38	35.2%
Irrigation Channel	18	16.7%
Water Bodies	12	11.1%
Road	67	62.0%
Dam Reservoir Bed	2	1.9%
Archaeological Excavation	2	1.9%
Mudbrick Excavation	18	16.7%
Looters' Holes	1	.9%
Pits (Other)	3	2.8%
(All Pits)	36	33.3%
Quarries	0	.0%
Unclassified	2	1.9%

TABLE G-35: COUNT OF LAND USE / LAND COVER ON SITES (UNIT ANALYSIS)

	Corona - Present	
	Count	%
Bare or Scrub	101	52.1%
Arable	139	71.6%
Orchard	0	.0%
Modern Graves	0	.0%
Modern Structures	3	1.5%
Modern Settlements	45	23.2%
Irrigation Channel	1	.5%
Water Bodies	61	31.4%
Road	74	38.1%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	0	.0%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	0	.0%
(All Pits)	0	.0%
Quarries	0	.0%
Unclassified	43	22.2%

	Field Visit - Present	
	Count	%
Bare or Scrub	15	7.7%
Arable	90	46.4%
Orchard	0	.0%
Modern Graves	20	10.3%
Modern Structures	10	5.2%
Modern Settlements	38	19.6%
Irrigation Channel	6	3.1%
Water Bodies	10	5.2%
Road	25	12.9%
Dam Reservoir Bed	1	.5%
Archaeological Excavation	2	1.0%
Mudbrick Excavation	13	6.7%
Looters' Holes	1	.5%
Pits (Other)	2	1.0%
(All Pits)	31	16.0%
Quarries	0	.0%
Unclassified	0	.0%

	SPOT 2004 - Present	
	Count	%
Bare or Scrub	73	37.6%
Arable	168	86.6%
Orchard	12	6.2%
Modern Graves	21	10.8%
Modern Structures	15	7.7%
Modern Settlements	45	23.2%
Irrigation Channel	18	9.3%
Water Bodies	12	6.2%
Road	93	47.9%
Dam Reservoir Bed	2	1.0%
Archaeological Excavation	3	1.5%
Mudbrick Excavation	16	8.2%
Looters' Holes	1	.5%
Pits (Other)	1	.5%
(All Pits)	35	18.0%
Quarries	0	.0%
Unclassified	16	8.2%

	Geoeye 2010 - Present	
	Count	%
Bare or Scrub	80	41.2%
Arable	169	87.1%
Orchard	16	8.2%
Modern Graves	24	12.4%
Modern Structures	13	6.7%
Modern Settlements	46	23.7%
Irrigation Channel	22	11.3%
Water Bodies	15	7.7%
Road	99	51.0%
Dam Reservoir Bed	2	1.0%
Archaeological Excavation	3	1.5%
Mudbrick Excavation	18	9.3%
Looters' Holes	1	.5%
Pits (Other)	3	1.5%
(All Pits)	38	19.6%
Quarries	0	.0%
Unclassified	3	1.5%

TABLE G-36: FREQUENCY OF NUMBER OF LAND USE / COVER TYPES ON EACH SITE (AMALGAMATED SITES)

	Corona Total (On)		Field Visit Total (On)		SPOT 2004 Total (On)		Geoeye 2010 Total (On)	
	Count	%	Count	%	Count	%	Count	%
0	0	.0%	19	17.6%	0	.0%	0	.0%
1	26	24.1%	42	38.9%	17	15.7%	14	13.0%
2	28	25.9%	22	20.4%	28	25.9%	27	25.0%
3	30	27.8%	19	17.6%	18	16.7%	18	16.7%
4	19	17.6%	4	3.7%	18	16.7%	20	18.5%
5	5	4.6%	1	.9%	18	16.7%	13	12.0%
6	0	.0%	0	.0%	7	6.5%	11	10.2%
7	0	.0%	0	.0%	1	.9%	3	2.8%
8	0	.0%	1	.9%	0	.0%	1	.9%
9	0	.0%	0	.0%	1	.9%	1	.9%

TABLE G-37: FREQUENCY OF NUMBER OF LAND USE / COVER TYPES ON EACH SITE (UNIT ANALYSIS)

	Corona Total (On)		Field Visit Total (On)		SPOT 2004 Total (On)		Geoeye 2010 Total (On)	
	Count	%	Count	%	Count	%	Count	%
0	2	1.0%	43	22.2%	1	.5%	0	.0%
1	61	31.4%	96	49.5%	59	30.4%	50	25.8%
2	59	30.4%	37	19.1%	60	30.9%	64	33.0%
3	49	25.3%	13	6.7%	26	13.4%	30	15.5%
4	17	8.8%	3	1.5%	26	13.4%	25	12.9%
5	6	3.1%	1	.5%	16	8.2%	14	7.2%
6	0	.0%	0	.0%	4	2.1%	6	3.1%
7	0	.0%	1	.5%	1	.5%	3	1.5%
8	0	.0%	0	.0%	1	.5%	2	1.0%

6.6 - DAMAGE ANALYSIS: GENERAL TRENDS

6.6.2 - HORIZONTAL DAMAGE TRENDS

TABLE G-38: HORIZONTAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (AMALGAMATED SITES)

			Horizontal Damage Effect						
			Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Imagery	Corona	Count	26	59	2	79	27	20	213
		% within Imagery	12.2%	27.7%	.9%	37.1%	12.7%	9.4%	100.0%
	SPOT	Count	11	57	45	141	38	22	314
		% within Imagery	3.5%	18.2%	14.3%	44.9%	12.1%	7.0%	100.0%
	Geoeye	Count	8	64	49	151	41	20	333
		% within Imagery	2.4%	19.2%	14.7%	45.3%	12.3%	6.0%	100.0%
Total		Count	45	180	96	371	106	62	860
		% within Imagery	5.2%	20.9%	11.2%	43.1%	12.3%	7.2%	100.0%

TABLE G-39: HORIZONTAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (UNIT ANALYSIS)

			Horizontal Damage Effect						
			Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Imagery	Corona	Count	42	94	2	86	52	50	326
		% within Imagery	12.9%	28.8%	.6%	26.4%	16.0%	15.3%	100.0%
	SPOT	Count	16	89	46	155	52	81	439
		% within Imagery	3.6%	20.3%	10.5%	35.3%	11.8%	18.5%	100.0%
	Geoeye	Count	10	98	54	165	58	76	461
		% within Imagery	2.2%	21.3%	11.7%	35.8%	12.6%	16.5%	100.0%
Total		Count	68	281	102	406	162	207	1226
		% within Imagery	5.5%	22.9%	8.3%	33.1%	13.2%	16.9%	100.0%

TABLE G-40: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON CORONA (AMALGAMATED SITES)

			Severity				
			Primary	Secondary	Tertiary	Quaternary	Total
Horizontal Damage Effect	Unknown	Count	15	3	6	2	26
		% within Horizontal Damage Effect	57.7%	11.5%	23.1%	7.7%	100.0%
		% within Severity	13.9%	4.6%	16.7%	50.0%	12.2%
	Peripheral	Count	21	24	14	0	59
		% within Horizontal Damage Effect	35.6%	40.7%	23.7%	.0%	100.0%
		% within Severity	19.4%	36.9%	38.9%	.0%	27.7%
	Intermittent / fractional	Count	0	0	2	0	2
		% within Horizontal Damage Effect	.0%	.0%	100.0%	.0%	100.0%
		% within Severity	.0%	.0%	5.6%	.0%	.9%
	Sectional / partial	Count	31	33	14	1	79
		% within Horizontal Damage Effect	39.2%	41.8%	17.7%	1.3%	100.0%
		% within Severity	28.7%	50.8%	38.9%	25.0%	37.1%
	Majority / Extensive	Count	22	4	0	1	27
		% within Horizontal Damage Effect	81.5%	14.8%	.0%	3.7%	100.0%
		% within Severity	20.4%	6.2%	.0%	25.0%	12.7%
	Total / wholesale	Count	19	1	0	0	20
		% within Horizontal Damage Effect	95.0%	5.0%	.0%	.0%	100.0%
		% within Severity	17.6%	1.5%	.0%	.0%	9.4%
Total		Count	108	65	36	4	213
		% within Horizontal Damage Effect	50.7%	30.5%	16.9%	1.9%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-41: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON CORONA (UNIT ANALYSIS)

			Severity				
			Primary	Secondary	Tertiary	Quaternary	Total
Horizontal Damage Effect	Unknown	Count	31	8	2	1	42
		% within Horizontal Damage Effect	73.8%	19.0%	4.8%	2.4%	100.0%
		% within Severity	16.0%	8.5%	5.7%	33.3%	12.9%
	Peripheral	Count	30	42	20	2	94
		% within Horizontal Damage Effect	31.9%	44.7%	21.3%	2.1%	100.0%
		% within Severity	15.5%	44.7%	57.1%	66.7%	28.8%
	Intermittent / fractional	Count	0	0	2	0	2
		% within Horizontal Damage Effect	.0%	.0%	100.0%	.0%	100.0%
		% within Severity	.0%	.0%	5.7%	.0%	.6%
	Sectional / partial	Count	33	42	11	0	86
		% within Horizontal Damage Effect	38.4%	48.8%	12.8%	.0%	100.0%
		% within Severity	17.0%	44.7%	31.4%	.0%	26.4%
	Majority / Extensive	Count	50	2	0	0	52
		% within Horizontal Damage Effect	96.2%	3.8%	.0%	.0%	100.0%
		% within Severity	25.8%	2.1%	.0%	.0%	16.0%
	Total / wholesale	Count	50	0	0	0	50
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	100.0%
		% within Severity	25.8%	.0%	.0%	.0%	15.3%
Total		Count	194	94	35	3	326
		% within Horizontal Damage Effect	59.5%	28.8%	10.7%	.9%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-42: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON SPOT 2004 (AMALGAMATED SITES)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Horizontal Damage Effect	Unknown	Count	7	0	0	2	0	1	0	1	11
		% within Horizontal Damage Effect	63.6%	.0%	.0%	18.2%	.0%	9.1%	.0%	9.1%	100.0%
		% within Severity	6.5%	.0%	.0%	5.4%	.0%	25.0%	.0%	50.0%	3.5%
	Peripheral	Count	8	16	16	14	3	0	0	0	57
		% within Horizontal Damage Effect	14.0%	28.1%	28.1%	24.6%	5.3%	.0%	.0%	.0%	100.0%
		% within Severity	7.4%	19.0%	25.4%	37.8%	23.1%	.0%	.0%	.0%	18.2%
	Intermittent / fractional	Count	3	11	10	11	5	1	3	1	45
		% within Horizontal Damage Effect	6.7%	24.4%	22.2%	24.4%	11.1%	2.2%	6.7%	2.2%	100.0%
		% within Severity	2.8%	13.1%	15.9%	29.7%	38.5%	25.0%	100.0%	50.0%	14.3%
	Sectional / partial	Count	48	42	34	10	5	2	0	0	141
		% within Horizontal Damage Effect	34.0%	29.8%	24.1%	7.1%	3.5%	1.4%	.0%	.0%	100.0%
		% within Severity	44.4%	50.0%	54.0%	27.0%	38.5%	50.0%	.0%	.0%	44.9%
	Majority / Extensive	Count	25	11	2	0	0	0	0	0	38
		% within Horizontal Damage Effect	65.8%	28.9%	5.3%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	23.1%	13.1%	3.2%	.0%	.0%	.0%	.0%	.0%	12.1%
	Total / wholesale	Count	17	4	1	0	0	0	0	0	22
		% within Horizontal Damage Effect	77.3%	18.2%	4.5%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	15.7%	4.8%	1.6%	.0%	.0%	.0%	.0%	.0%	7.0%
Total		Count	108	84	63	37	13	4	3	2	314
		% within Horizontal Damage Effect	34.4%	26.8%	20.1%	11.8%	4.1%	1.3%	1.0%	.6%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-43: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON SPOT 2004 (UNIT ANALYSIS)

			Severity							Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	
Horizontal Damage Effect	Unknown	Count	13	1	2	0	0	0	0	16
		% within Horizontal Damage Effect	81.3%	6.3%	12.5%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	6.7%	.8%	2.8%	.0%	.0%	.0%	.0%	3.6%
	Peripheral	Count	12	38	23	14	2	0	0	89
		% within Horizontal Damage Effect	13.5%	42.7%	25.8%	15.7%	2.2%	.0%	.0%	100.0%
		% within Severity	6.2%	29.5%	31.9%	43.8%	25.0%	.0%	.0%	20.3%
	Intermittent / fractional	Count	3	11	14	12	4	0	2	46
		% within Horizontal Damage Effect	6.5%	23.9%	30.4%	26.1%	8.7%	.0%	4.3%	100.0%
		% within Severity	1.5%	8.5%	19.4%	37.5%	50.0%	.0%	100.0%	10.5%
	Sectional / partial	Count	62	53	30	6	2	2	0	155
		% within Horizontal Damage Effect	40.0%	34.2%	19.4%	3.9%	1.3%	1.3%	.0%	100.0%
		% within Severity	32.0%	41.1%	41.7%	18.8%	25.0%	100.0%	.0%	35.3%
	Majority / Extensive	Count	36	15	1	0	0	0	0	52
		% within Horizontal Damage Effect	69.2%	28.8%	1.9%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	18.6%	11.6%	1.4%	.0%	.0%	.0%	.0%	11.8%
	Total / wholesale	Count	68	11	2	0	0	0	0	81
		% within Horizontal Damage Effect	84.0%	13.6%	2.5%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	35.1%	8.5%	2.8%	.0%	.0%	.0%	.0%	18.5%
Total		Count	194	129	72	32	8	2	2	439
		% within Horizontal Damage Effect	44.2%	29.4%	16.4%	7.3%	1.8%	.5%	.5%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-44: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON GEOEYE 2010 (AMALGAMATED SITES)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Horizontal Damage Effect	Unknown	Count	5	0	0	1	1	0	0	1	8
		% within Horizontal Damage Effect	62.5%	.0%	.0%	12.5%	12.5%	.0%	.0%	12.5%	100.0%
		% within Severity	4.6%	.0%	.0%	2.5%	4.5%	.0%	.0%	33.3%	2.4%
	Peripheral	Count	7	14	19	13	7	2	1	1	64
		% within Horizontal Damage Effect	10.9%	21.9%	29.7%	20.3%	10.9%	3.1%	1.6%	1.6%	100.0%
		% within Severity	6.5%	16.5%	29.2%	32.5%	31.8%	28.6%	33.3%	33.3%	19.2%
	Intermittent / fractional	Count	3	10	6	15	8	4	2	1	49
		% within Horizontal Damage Effect	6.1%	20.4%	12.2%	30.6%	16.3%	8.2%	4.1%	2.0%	100.0%
		% within Severity	2.8%	11.8%	9.2%	37.5%	36.4%	57.1%	66.7%	33.3%	14.7%
	Sectional / partial	Count	49	48	36	11	6	1	0	0	151
		% within Horizontal Damage Effect	32.5%	31.8%	23.8%	7.3%	4.0%	.7%	.0%	.0%	100.0%
		% within Severity	45.4%	56.5%	55.4%	27.5%	27.3%	14.3%	.0%	.0%	45.3%
	Majority / Extensive	Count	27	11	3	0	0	0	0	0	41
		% within Horizontal Damage Effect	65.9%	26.8%	7.3%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	25.0%	12.9%	4.6%	.0%	.0%	.0%	.0%	.0%	12.3%
	Total / wholesale	Count	17	2	1	0	0	0	0	0	20
		% within Horizontal Damage Effect	85.0%	10.0%	5.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	15.7%	2.4%	1.5%	.0%	.0%	.0%	.0%	.0%	6.0%
Total		Count	108	85	65	40	22	7	3	3	333
		% within Horizontal Damage Effect	32.4%	25.5%	19.5%	12.0%	6.6%	2.1%	.9%	.9%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-45: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON GEOEYE 2010 (UNIT ANALYSIS)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Horizontal Damage Effect	Unknown	Count	9	0	1	0	0	0	0	0	10
		% within Horizontal Damage Effect	90.0%	.0%	10.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	4.6%	.0%	1.3%	.0%	.0%	.0%	.0%	.0%	2.2%
	Peripheral	Count	11	36	27	14	7	1	1	1	98
		% within Horizontal Damage Effect	11.2%	36.7%	27.6%	14.3%	7.1%	1.0%	1.0%	1.0%	100.0%
		% within Severity	5.7%	27.7%	36.0%	37.8%	38.9%	25.0%	50.0%	100.0%	21.3%
	Intermittent / fractional	Count	3	11	12	16	9	2	1	0	54
		% within Horizontal Damage Effect	5.6%	20.4%	22.2%	29.6%	16.7%	3.7%	1.9%	.0%	100.0%
		% within Severity	1.5%	8.5%	16.0%	43.2%	50.0%	50.0%	50.0%	.0%	11.7%
	Sectional / partial	Count	63	61	31	7	2	1	0	0	165
		% within Horizontal Damage Effect	38.2%	37.0%	18.8%	4.2%	1.2%	.6%	.0%	.0%	100.0%
		% within Severity	32.5%	46.9%	41.3%	18.9%	11.1%	25.0%	.0%	.0%	35.8%
	Majority / Extensive	Count	40	16	2	0	0	0	0	0	58
		% within Horizontal Damage Effect	69.0%	27.6%	3.4%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	20.6%	12.3%	2.7%	.0%	.0%	.0%	.0%	.0%	12.6%
	Total / wholesale	Count	68	6	2	0	0	0	0	0	76
		% within Horizontal Damage Effect	89.5%	7.9%	2.6%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	35.1%	4.6%	2.7%	.0%	.0%	.0%	.0%	.0%	16.5%
Total		Count	194	130	75	37	18	4	2	1	461
		% within Horizontal Damage Effect	42.1%	28.2%	16.3%	8.0%	3.9%	.9%	.4%	.2%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-46: HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON CORONA (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaldj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	20.0%	9	90.0%	2	4.2%	4	8.7%	4	8.5%	8	11.8%	8	13.8%
	Peripheral	3	60.0%	1	10.0%	12	25.0%	8	17.4%	18	38.1%	21	30.9%	16	27.1%
	Intermittent / fractional	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	2	3.4%
	Sectional / partial	0	.0%	0	.0%	20	41.7%	22	47.8%	13	31.0%	28	41.2%	21	35.6%
	Majority / Extensive	0	.0%	0	.0%	8	16.7%	6	13.0%	6	14.3%	8	11.8%	8	13.6%
	Total / wholesale	1	20.0%	0	.0%	6	12.5%	6	13.0%	3	7.1%	3	4.4%	4	6.8%

TABLE G-47: HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON CORONA (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaldj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	9.1%	10	90.9%	9	9.6%	5	7.8%	6	9.7%	16	14.3%	13	15.1%
	Peripheral	7	63.6%	1	9.1%	26	27.7%	12	18.8%	24	38.7%	36	32.2%	24	27.9%
	Intermittent / fractional	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	2	2.3%
	Sectional / partial	0	.0%	0	.0%	22	23.4%	21	32.8%	14	22.6%	32	25.4%	27	31.4%
	Majority / Extensive	0	.0%	0	.0%	18	19.1%	13	20.3%	9	14.5%	23	18.3%	12	14.0%
	Total / wholesale	3	27.3%	0	.0%	19	20.2%	12	18.8%	9	14.5%	15	11.9%	8	9.3%

TABLE G-48: HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON SPOT 2004 (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaldj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	16.7%	7	70.0%	4	5.8%	0	.0%	1	1.5%	5	5.1%	0	.0%
	Peripheral	1	16.7%	3	30.0%	7	10.1%	13	21.3%	14	20.9%	18	18.4%	18	19.8%
	Intermittent / fractional	0	.0%	0	.0%	10	14.5%	5	8.2%	10	14.7%	14	14.3%	16	17.4%
	Sectional / partial	4	66.7%	0	.0%	29	42.0%	31	50.8%	32	47.1%	46	46.9%	39	42.4%
	Majority / Extensive	0	.0%	0	.0%	11	15.9%	8	13.1%	7	10.3%	10	10.2%	13	14.1%
	Total / wholesale	0	.0%	0	.0%	8	11.6%	4	6.6%	4	5.9%	5	5.1%	6	6.5%

TABLE G-49: HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON SPOT 2004 (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaldj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	9.1%	8	72.7%	8	7.3%	0	.0%	1	1.1%	10	6.5%	0	.0%
	Peripheral	5	45.5%	3	27.3%	14	12.7%	22	26.9%	24	26.4%	30	19.6%	22	17.7%
	Intermittent / fractional	0	.0%	0	.0%	10	9.1%	6	7.1%	10	11.0%	14	9.2%	16	12.9%
	Sectional / partial	4	36.4%	0	.0%	35	31.8%	31	38.5%	35	38.5%	52	34.0%	44	35.5%
	Majority / Extensive	0	.0%	0	.0%	14	12.7%	13	15.3%	6	6.6%	16	10.5%	19	15.3%
	Total / wholesale	1	9.1%	0	.0%	29	26.4%	13	15.3%	15	16.5%	31	20.3%	23	18.5%

TABLE G-50: HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON GEOEYE 2010 (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaldj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	5	45.5%	3	4.3%	0	.0%	1	1.3%	4	3.8%	0	.0%
	Peripheral	1	16.7%	1	9.1%	7	10.0%	16	23.2%	17	22.7%	21	20.2%	20	21.1%
	Intermittent / fractional	0	.0%	0	.0%	8	11.4%	7	10.1%	15	20.0%	13	12.5%	16	16.8%
	Sectional / partial	4	66.7%	3	27.3%	33	47.1%	34	49.3%	32	42.7%	50	48.1%	40	42.1%
	Majority / Extensive	1	16.7%	2	18.2%	11	15.7%	7	10.1%	9	12.0%	8	6.7%	13	13.7%
	Total / wholesale	0	.0%	0	.0%	8	11.4%	5	7.2%	1	1.3%	7	6.7%	6	6.3%

TABLE G-51: HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON GEOEYE 2010 (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaldj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	5	50.0%	4	3.8%	0	.0%	1	1.0%	8	3.8%	0	.0%
	Peripheral	5	45.5%	1	8.3%	15	13.4%	24	28.1%	28	28.0%	34	21.3%	25	19.5%
	Intermittent / fractional	0	.0%	0	.0%	9	8.0%	9	9.8%	17	17.0%	14	8.8%	16	12.5%
	Sectional / partial	4	36.4%	3	25.0%	42	37.5%	31	33.7%	34	34.0%	59	36.9%	45	35.2%
	Majority / Extensive	1	9.1%	2	16.7%	14	12.5%	13	14.1%	11	11.0%	15	9.4%	19	14.8%
	Total / wholesale	1	9.1%	0	.0%	28	25.0%	15	16.3%	9	9.0%	32	20.0%	23	18.0%

TABLE G-52: HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON CORONA (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Horizontal Damage Effect	Unknown	Count	2	17	3	1	3	26
		% within Site Type	4.5%	10.6%	100.0%	50.0%	100.0%	12.2%
	Peripheral	Count	33	26	0	0	0	59
		% within Site Type	75.0%	16.1%	.0%	.0%	.0%	27.7%
	Intermittent / fractional	Count	0	2	0	0	0	2
		% within Site Type	.0%	1.2%	.0%	.0%	.0%	.9%
	Sectional / partial	Count	7	72	0	0	0	79
		% within Site Type	15.9%	44.7%	.0%	.0%	.0%	37.1%
	Majority / Extensive	Count	2	25	0	0	0	27
		% within Site Type	4.5%	15.5%	.0%	.0%	.0%	12.7%
	Total / wholesale	Count	0	19	0	1	0	20
		% within Site Type	.0%	11.8%	.0%	50.0%	.0%	9.4%
Total		Count	44	161	3	2	3	213
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-53: HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON CORONA (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Horizontal Damage Effect	Unknown	Count	2	30	4	3	3	42
		% within Site Type	4.2%	11.5%	100.0%	33.3%	100.0%	12.9%
	Peripheral	Count	34	60	0	0	0	94
		% within Site Type	70.8%	22.9%	.0%	.0%	.0%	28.8%
	Intermittent / fractional	Count	0	2	0	0	0	2
		% within Site Type	.0%	.8%	.0%	.0%	.0%	.6%
	Sectional / partial	Count	9	73	0	4	0	86
		% within Site Type	18.8%	27.9%	.0%	44.4%	.0%	26.4%
	Majority / Extensive	Count	3	49	0	0	0	52
		% within Site Type	6.3%	18.7%	.0%	.0%	.0%	16.0%
	Total / wholesale	Count	0	48	0	2	0	50
		% within Site Type	.0%	18.3%	.0%	22.2%	.0%	15.3%
Total		Count	48	262	4	9	3	326
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-54: HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON SPOT 2004 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Horizontal Damage Effect	Unknown	Count	0	6	2	1	2	11
		% within Site Type	.0%	2.7%	66.7%	33.3%	66.7%	3.5%
	Peripheral	Count	26	29	1	0	1	57
		% within Site Type	32.5%	12.9%	33.3%	.0%	33.3%	18.2%
	Intermittent / fractional	Count	20	25	0	0	0	45
		% within Site Type	25.0%	11.1%	.0%	.0%	.0%	14.3%
	Sectional / partial	Count	33	107	0	1	0	141
		% within Site Type	41.3%	47.6%	.0%	33.3%	.0%	44.9%
	Majority / Extensive	Count	0	37	0	1	0	38
		% within Site Type	.0%	16.4%	.0%	33.3%	.0%	12.1%
	Total / wholesale	Count	1	21	0	0	0	22
		% within Site Type	1.3%	9.3%	.0%	.0%	.0%	7.0%
Total		Count	80	225	3	3	3	314
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-55: HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON SPOT 2004

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Horizontal Damage Effect	Unknown	Count	0	10	3	1	2	16
		% within Site Type	.0%	3.0%	75.0%	9.1%	66.7%	3.6%
	Peripheral	Count	28	58	1	1	1	89
		% within Site Type	32.9%	17.3%	25.0%	9.1%	33.3%	20.3%
	Intermittent / fractional	Count	20	25	0	1	0	46
		% within Site Type	23.5%	7.4%	.0%	9.1%	.0%	10.5%
	Sectional / partial	Count	34	116	0	5	0	155
		% within Site Type	40.0%	34.5%	.0%	45.5%	.0%	35.3%
	Majority / Extensive	Count	0	51	0	1	0	52
		% within Site Type	.0%	15.2%	.0%	9.1%	.0%	11.8%
	Total / wholesale	Count	3	76	0	2	0	81
		% within Site Type	3.5%	22.6%	.0%	18.2%	.0%	18.5%
Total		Count	85	336	4	11	3	439
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-56: HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON GEOEYE 2010 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Horizontal Damage Effect	Unknown	Count	0	5	1	1	1	8
		% within Site Type	.0%	2.2%	25.0%	33.3%	33.3%	2.4%
	Peripheral	Count	33	30	0	0	1	64
		% within Site Type	36.3%	12.9%	.0%	.0%	33.3%	19.2%
	Intermittent / fractional	Count	23	26	0	0	0	49
		% within Site Type	25.3%	11.2%	.0%	.0%	.0%	14.7%
	Sectional / partial	Count	34	114	2	1	0	151
		% within Site Type	37.4%	49.1%	50.0%	33.3%	.0%	45.3%
	Majority / Extensive	Count	0	38	1	1	1	41
		% within Site Type	.0%	16.4%	25.0%	33.3%	33.3%	12.3%
	Total / wholesale	Count	1	19	0	0	0	20
		% within Site Type	1.1%	8.2%	.0%	.0%	.0%	6.0%
Total		Count	91	232	4	3	3	333
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-57: HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON GEOEYE 2010 (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Horizontal Damage Effect	Unknown	Count	0	6	2	1	1	10
		% within Site Type	.0%	1.7%	40.0%	9.1%	33.3%	2.2%
	Peripheral	Count	35	61	0	1	1	98
		% within Site Type	36.5%	17.6%	.0%	9.1%	33.3%	21.3%
	Intermittent / fractional	Count	23	30	0	1	0	54
		% within Site Type	24.0%	8.7%	.0%	9.1%	.0%	11.7%
	Sectional / partial	Count	35	123	2	5	0	165
		% within Site Type	36.5%	35.5%	40.0%	45.5%	.0%	35.8%
	Majority / Extensive	Count	0	55	1	1	1	58
		% within Site Type	.0%	15.9%	20.0%	9.1%	33.3%	12.6%
	Total / wholesale	Count	3	71	0	2	0	76
		% within Site Type	3.1%	20.5%	.0%	18.2%	.0%	16.5%
Total		Count	96	346	5	11	3	461
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

6.6.3 – VERTICAL DAMAGE TRENDS

TABLE G-58: VERTICAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (AMALGAMATED SITES)

			Imagery			Total
			Corona	SPOT	Geoeye	
Vertical Damage Effect	Unknown	Count	28	13	9	50
		% within Imagery	13.1%	4.1%	2.7%	5.8%
	Site buried	Count	0	2	2	4
		% within Imagery	.0%	.6%	.6%	.5%
	Pitted	Count	0	18	21	39
		% within Imagery	.0%	5.7%	6.3%	4.5%
	Site slightly dispersed / degraded	Count	54	36	40	130
		% within Imagery	25.4%	11.5%	12.0%	15.1%
	Upper levels damaged	Count	123	160	167	450
		% within Imagery	57.7%	51.0%	50.2%	52.3%
	Site heavily dispersed / degraded	Count	8	46	54	108
		% within Imagery	3.8%	14.6%	16.2%	12.6%
	Site destroyed to ground level	Count	0	30	29	59
		% within Imagery	.0%	9.6%	8.7%	6.9%
	Site destroyed	Count	0	9	11	20
		% within Imagery	.0%	2.9%	3.3%	2.3%
Total		Count	213	314	333	860
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-59: VERTICAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (UNIT ANALYSIS)

			Imagery			Total
			Corona	SPOT	Geoeye	
Vertical Damage Effect	Unknown	Count	44	18	11	73
		% within Imagery	13.5%	4.1%	2.4%	6.0%
	Site buried	Count	0	2	2	4
		% within Imagery	.0%	.5%	.4%	.3%
	Pitted	Count	0	18	21	39
		% within Imagery	.0%	4.1%	4.6%	3.2%
	Site slightly dispersed / degraded	Count	79	56	64	199
		% within Imagery	24.2%	12.8%	13.9%	16.2%
	Upper levels damaged	Count	191	232	241	664
		% within Imagery	58.6%	52.8%	52.3%	54.2%
	Site heavily dispersed / degraded	Count	12	66	74	152
		% within Imagery	3.7%	15.0%	16.1%	12.4%
	Site destroyed to ground level	Count	0	36	35	71
		% within Imagery	.0%	8.2%	7.6%	5.8%
	Site destroyed	Count	0	11	13	24
		% within Imagery	.0%	2.5%	2.8%	2.0%
Total		Count	326	439	461	1226
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-60: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON CORONA (AMALGAMATED SITES)

			Severity				
			Primary	Secondary	Tertiary	Quaternary	Total
Vertical Damage Effect	Unknown	Count	15	4	7	2	28
		% within Vertical Damage Effect	53.6%	14.3%	25.0%	7.1%	100.0%
		% within Severity	13.9%	6.2%	19.4%	50.0%	13.1%
	Site slightly dispersed / degraded	Count	8	27	18	1	54
		% within Vertical Damage Effect	14.8%	50.0%	33.3%	1.9%	100.0%
		% within Severity	7.4%	41.5%	50.0%	25.0%	25.4%
	Upper levels damaged	Count	82	31	9	1	123
		% within Vertical Damage Effect	66.7%	25.2%	7.3%	.8%	100.0%
		% within Severity	75.9%	47.7%	25.0%	25.0%	57.7%
	Site heavily dispersed / degraded	Count	3	3	2	0	8
		% within Vertical Damage Effect	37.5%	37.5%	25.0%	.0%	100.0%
		% within Severity	2.8%	4.6%	5.6%	.0%	3.8%
Total		Count	108	65	36	4	213
		% within Vertical Damage Effect	50.7%	30.5%	16.9%	1.9%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-61: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON CORONA (UNIT ANALYSIS)

			Severity				
			Primary	Secondary	Tertiary	Quaternary	Total
Vertical Damage Effect	Unknown	Count	31	9	3	1	44
		% within Vertical Damage Effect	70.5%	20.5%	6.8%	2.3%	100.0%
		% within Severity	16.0%	9.6%	8.6%	33.3%	13.5%
	Site slightly dispersed / degraded	Count	15	46	16	2	79
		% within Vertical Damage Effect	19.0%	58.2%	20.3%	2.5%	100.0%
		% within Severity	7.7%	48.9%	45.7%	66.7%	24.2%
	Upper levels damaged	Count	144	34	13	0	191
		% within Vertical Damage Effect	75.4%	17.8%	6.8%	.0%	100.0%
		% within Severity	74.2%	36.2%	37.1%	.0%	58.6%
	Site heavily dispersed / degraded	Count	4	5	3	0	12
		% within Vertical Damage Effect	33.3%	41.7%	25.0%	.0%	100.0%
		% within Severity	2.1%	5.3%	8.6%	.0%	3.7%
Total		Count	194	94	35	3	326
		% within Vertical Damage Effect	59.5%	28.8%	10.7%	.9%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-62: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON SPOT 2004 (AMALGAMATED SITES)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Vertical Damage Effect	Unknown	Count	8	0	1	2	0	1	0	1	13
		% within Vertical Damage Effect	61.5%	.0%	7.7%	15.4%	.0%	7.7%	.0%	7.7%	100.0%
		% within Severity	7.4%	.0%	1.6%	5.4%	.0%	25.0%	.0%	50.0%	4.1%
	Site buried	Count	1	0	1	0	0	0	0	0	2
		% within Vertical Damage Effect	50.0%	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	.9%	.0%	1.6%	.0%	.0%	.0%	.0%	.0%	.6%
	Pitted	Count	1	3	6	4	1	3	0	0	18
		% within Vertical Damage Effect	5.6%	16.7%	33.3%	22.2%	5.6%	16.7%	.0%	.0%	100.0%
		% within Severity	.9%	3.6%	9.5%	10.8%	7.7%	75.0%	.0%	.0%	5.7%
	Site slightly dispersed / degraded	Count	0	13	12	8	3	0	0	0	36
		% within Vertical Damage Effect	.0%	36.1%	33.3%	22.2%	8.3%	.0%	.0%	.0%	100.0%
		% within Severity	.0%	15.5%	19.0%	21.6%	23.1%	.0%	.0%	.0%	11.5%
	Upper levels damaged	Count	60	40	30	19	8	0	3	0	160
		% within Vertical Damage Effect	37.5%	25.0%	18.8%	11.9%	5.0%	.0%	1.9%	.0%	100.0%
		% within Severity	55.6%	47.6%	47.6%	51.4%	61.5%	.0%	100.0%	.0%	51.0%
	Site heavily dispersed / degraded	Count	10	22	11	2	0	0	0	1	46
		% within Vertical Damage Effect	21.7%	47.8%	23.9%	4.3%	.0%	.0%	.0%	2.2%	100.0%
		% within Severity	9.3%	26.2%	17.5%	5.4%	.0%	.0%	.0%	50.0%	14.6%
	Site destroyed to ground level	Count	21	6	2	0	1	0	0	0	30
		% within Vertical Damage Effect	70.0%	20.0%	6.7%	.0%	3.3%	.0%	.0%	.0%	100.0%
		% within Severity	19.4%	7.1%	3.2%	.0%	7.7%	.0%	.0%	.0%	9.6%
	Site destroyed	Count	7	0	0	2	0	0	0	0	9
		% within Vertical Damage Effect	77.8%	.0%	.0%	22.2%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	6.5%	.0%	.0%	5.4%	.0%	.0%	.0%	.0%	2.9%
Total		Count	108	84	63	37	13	4	3	2	314
		% within Vertical Damage Effect	34.4%	26.8%	20.1%	11.8%	4.1%	1.3%	1.0%	.6%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-63: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON SPOT 2004 (UNIT ANALYSIS)

			Severity							Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	
Vertical Damage Effect	Unknown	Count	14	1	3	0	0	0	0	18
		% within Vertical Damage Effect	77.8%	5.6%	16.7%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	7.2%	.8%	4.2%	.0%	.0%	.0%	.0%	4.1%
	Site buried	Count	1	1	0	0	0	0	0	2
		% within Vertical Damage Effect	50.0%	50.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	.5%	.8%	.0%	.0%	.0%	.0%	.0%	.5%
	Pitted	Count	1	7	7	2	0	1	0	18
		% within Vertical Damage Effect	5.6%	38.9%	38.9%	11.1%	.0%	5.6%	.0%	100.0%
		% within Severity	.5%	5.4%	9.7%	6.3%	.0%	50.0%	.0%	4.1%
	Site slightly dispersed / degraded	Count	0	29	19	6	2	0	0	56
		% within Vertical Damage Effect	.0%	51.8%	33.9%	10.7%	3.6%	.0%	.0%	100.0%
		% within Severity	.0%	22.5%	26.4%	18.8%	25.0%	.0%	.0%	12.8%
	Upper levels damaged	Count	118	55	32	19	6	1	1	232
		% within Vertical Damage Effect	50.9%	23.7%	13.8%	8.2%	2.6%	.4%	.4%	100.0%
		% within Severity	60.8%	42.6%	44.4%	59.4%	75.0%	50.0%	50.0%	52.8%
	Site heavily dispersed / degraded	Count	25	29	9	2	0	0	1	66
		% within Vertical Damage Effect	37.9%	43.9%	13.6%	3.0%	.0%	.0%	1.5%	100.0%
		% within Severity	12.9%	22.5%	12.5%	6.3%	.0%	.0%	50.0%	15.0%
	Site destroyed to ground level	Count	27	7	1	1	0	0	0	36
		% within Vertical Damage Effect	75.0%	19.4%	2.8%	2.8%	.0%	.0%	.0%	100.0%
		% within Severity	13.9%	5.4%	1.4%	3.1%	.0%	.0%	.0%	8.2%
	Site destroyed	Count	8	0	1	2	0	0	0	11
		% within Vertical Damage Effect	72.7%	.0%	9.1%	18.2%	.0%	.0%	.0%	100.0%
		% within Severity	4.1%	.0%	1.4%	6.3%	.0%	.0%	.0%	2.5%
Total		Count	194	129	72	32	8	2	2	439
		% within Vertical Damage Effect	44.2%	29.4%	16.4%	7.3%	1.8%	.5%	.5%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-64: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON GEOEYE 2010 (AMALGAMATED SITES)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Vertical Damage Effect	Unknown	Count	5	0	1	1	1	0	0	1	9
		% within Vertical Damage Effect	55.6%	.0%	11.1%	11.1%	11.1%	.0%	.0%	11.1%	100.0%
		% within Severity	4.6%	.0%	1.5%	2.5%	4.5%	.0%	.0%	33.3%	2.7%
	Site buried	Count	1	0	1	0	0	0	0	0	2
		% within Vertical Damage Effect	50.0%	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	.9%	.0%	1.5%	.0%	.0%	.0%	.0%	.0%	.6%
	Pitted	Count	1	2	5	6	5	2	0	0	21
		% within Vertical Damage Effect	4.8%	9.5%	23.8%	28.6%	23.8%	9.5%	.0%	.0%	100.0%
		% within Severity	.9%	2.4%	7.7%	15.0%	22.7%	28.6%	.0%	.0%	6.3%
	Site slightly dispersed / degraded	Count	0	10	18	7	4	1	0	0	40
		% within Vertical Damage Effect	.0%	25.0%	45.0%	17.5%	10.0%	2.5%	.0%	.0%	100.0%
		% within Severity	.0%	11.8%	27.7%	17.5%	18.2%	14.3%	.0%	.0%	12.0%
	Upper levels damaged	Count	60	40	30	21	9	3	3	1	167
		% within Vertical Damage Effect	35.9%	24.0%	18.0%	12.6%	5.4%	1.8%	1.8%	.6%	100.0%
		% within Severity	55.6%	47.1%	46.2%	52.5%	40.9%	42.9%	100.0%	33.3%	50.2%
	Site heavily dispersed / degraded	Count	14	25	8	4	2	0	0	1	54
		% within Vertical Damage Effect	25.9%	46.3%	14.8%	7.4%	3.7%	.0%	.0%	1.9%	100.0%
		% within Severity	13.0%	29.4%	12.3%	10.0%	9.1%	.0%	.0%	33.3%	16.2%
	Site destroyed to ground level	Count	19	7	2	0	1	0	0	0	29
		% within Vertical Damage Effect	65.5%	24.1%	6.9%	.0%	3.4%	.0%	.0%	.0%	100.0%
		% within Severity	17.6%	8.2%	3.1%	.0%	4.5%	.0%	.0%	.0%	8.7%
	Site destroyed	Count	8	1	0	1	0	1	0	0	11
		% within Vertical Damage Effect	72.7%	9.1%	.0%	9.1%	.0%	9.1%	.0%	.0%	100.0%
		% within Severity	7.4%	1.2%	.0%	2.5%	.0%	14.3%	.0%	.0%	3.3%
Total		Count	108	85	65	40	22	7	3	3	333
		% within Vertical Damage Effect	32.4%	25.5%	19.5%	12.0%	6.6%	2.1%	.9%	.9%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-65: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON GEOEYE 2010 (UNIT ANALYSIS)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Vertical Damage Effect	Unknown	Count	9	0	2	0	0	0	0	0	11
		% within Vertical Damage Effect	81.8%	.0%	18.2%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	4.6%	.0%	2.7%	.0%	.0%	.0%	.0%	.0%	2.4%
	Site buried	Count	1	1	0	0	0	0	0	0	2
		% within Vertical Damage Effect	50.0%	50.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	.5%	.8%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
	Pitted	Count	2	4	7	5	3	0	0	0	21
		% within Vertical Damage Effect	9.5%	19.0%	33.3%	23.8%	14.3%	.0%	.0%	.0%	100.0%
		% within Severity	1.0%	3.1%	9.3%	13.5%	16.7%	.0%	.0%	.0%	4.6%
	Site slightly dispersed / degraded	Count	0	29	24	6	5	0	0	0	64
		% within Vertical Damage Effect	.0%	45.3%	37.5%	9.4%	7.8%	.0%	.0%	.0%	100.0%
		% within Severity	.0%	22.3%	32.0%	16.2%	27.8%	.0%	.0%	.0%	13.9%
	Upper levels damaged	Count	121	54	33	20	8	3	1	1	241
		% within Vertical Damage Effect	50.2%	22.4%	13.7%	8.3%	3.3%	1.2%	.4%	.4%	100.0%
		% within Severity	62.4%	41.5%	44.0%	54.1%	44.4%	75.0%	50.0%	100.0%	52.3%
	Site heavily dispersed / degraded	Count	27	33	7	4	2	0	1	0	74
		% within Vertical Damage Effect	36.5%	44.6%	9.5%	5.4%	2.7%	.0%	1.4%	.0%	100.0%
		% within Severity	13.9%	25.4%	9.3%	10.8%	11.1%	.0%	50.0%	.0%	16.1%
	Site destroyed to ground level	Count	25	8	1	1	0	0	0	0	35
		% within Vertical Damage Effect	71.4%	22.9%	2.9%	2.9%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	12.9%	6.2%	1.3%	2.7%	.0%	.0%	.0%	.0%	7.6%
	Site destroyed	Count	9	1	1	1	0	1	0	0	13
		% within Vertical Damage Effect	69.2%	7.7%	7.7%	7.7%	.0%	7.7%	.0%	.0%	100.0%
		% within Severity	4.6%	.8%	1.3%	2.7%	.0%	25.0%	.0%	.0%	2.8%
Total		Count	194	130	75	37	18	4	2	1	461
		% within Vertical Damage Effect	42.1%	28.2%	16.3%	8.0%	3.9%	.9%	.4%	.2%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-66: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON CORONA (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	20.0%	9	90.0%	3	6.3%	4	8.7%	4	8.5%	6	13.2%	6	13.6%
	Site buried	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Pitted	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Site slightly dispersed / degraded	1	20.0%	0	.0%	11	22.9%	13	28.3%	9	21.4%	17	25.0%	13	32.2%
	Upper levels damaged	3	60.0%	1	10.0%	34	70.8%	29	63.0%	28	66.0%	39	57.4%	28	44.1%
	Site heavily dispersed / degraded	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	3	4.4%	5	10.2%
	Site destroyed to ground level	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Site destroyed	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

TABLE G-67: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON CORONA (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	5	45.5%	3	4.3%	1	1.4%	1	1.3%	5	4.8%	0	.0%
	Site buried	0	.0%	0	.0%	1	1.4%	0	.0%	0	.0%	0	.0%	1	1.1%
	Pitted	1	16.7%	0	.0%	4	5.7%	7	10.1%	7	9.3%	9	8.7%	2	2.1%
	Site slightly dispersed / degraded	1	16.7%	0	.0%	8	11.4%	10	14.5%	7	9.3%	13	12.5%	14	14.7%
	Upper levels damaged	2	33.3%	1	9.1%	34	48.6%	43	62.3%	44	58.7%	49	47.1%	39	41.1%
	Site heavily dispersed / degraded	2	33.3%	2	18.2%	10	14.3%	5	7.2%	8	10.7%	16	15.4%	27	28.4%
	Site destroyed to ground level	0	.0%	0	.0%	10	14.3%	2	2.9%	7	9.3%	9	8.7%	9	9.5%
	Site destroyed	0	.0%	3	27.3%	0	.0%	1	1.4%	1	1.3%	3	2.9%	3	3.2%

TABLE G-68: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON SPOT 2004 (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	16.7%	8	80.0%	4	5.8%	1	1.8%	1	1.5%	6	8.1%	0	.0%
	Site buried	0	.0%	0	.0%	1	1.4%	0	.0%	0	.0%	0	.0%	1	1.1%
	Pitted	1	16.7%	0	.0%	4	5.8%	4	8.8%	5	7.4%	7	7.1%	2	2.2%
	Site slightly dispersed / degraded	1	16.7%	0	.0%	6	8.7%	10	16.4%	6	8.8%	13	13.3%	12	13.0%
	Upper levels damaged	2	33.3%	1	10.0%	35	50.7%	40	65.8%	40	58.8%	42	46.0%	40	43.5%
	Site heavily dispersed / degraded	1	16.7%	0	.0%	9	13.0%	3	4.9%	8	11.8%	13	13.3%	24	26.1%
	Site destroyed to ground level	0	.0%	0	.0%	10	14.5%	2	3.3%	7	10.3%	10	10.2%	10	10.9%
	Site destroyed	0	.0%	1	10.0%	0	.0%	1	1.6%	1	1.5%	3	3.1%	3	3.3%

TABLE G-69: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON SPOT 2004 (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain			
		Count		Count		Count		Count		Count		Count		0		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	9.1%	9	81.8%	8	7.3%	1	1.2%	1	1.1%	11	7.2%	18	5.7%	0	.0%
	Site buried	0	.0%	0	.0%	1	.9%	0	.0%	0	.0%	0	.0%	1	.3%	1	.8%
	Pitted	1	9.1%	0	.0%	4	3.6%	4	4.7%	5	5.5%	7	4.6%	16	5.1%	2	1.6%
	Site slightly dispersed / degraded	2	18.2%	0	.0%	9	8.2%	16	18.8%	9	9.9%	19	12.4%	37	11.7%	19	15.3%
	Upper levels damaged	6	54.5%	1	9.1%	65	59.1%	51	60.0%	52	57.1%	82	53.6%	175	55.6%	57	46.0%
	Site heavily dispersed / degraded	1	9.1%	0	.0%	13	11.8%	9	10.6%	13	14.3%	20	13.1%	37	11.7%	29	23.4%
	Site destroyed to ground level	0	.0%	0	.0%	10	9.1%	3	3.5%	10	11.0%	10	6.5%	24	7.6%	12	9.7%
	Site destroyed	0	.0%	1	9.1%	0	.0%	1	1.2%	1	1.1%	4	2.6%	7	2.2%	4	3.2%

TABLE G-70: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON GEOEYE 2010 (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	5	45.5%	3	4.3%	1	1.4%	1	1.3%	5	4.8%	0	.0%
	Site buried	0	.0%	0	.0%	1	1.4%	0	.0%	0	.0%	0	.0%	1	1.1%
	Pitted	1	16.7%	0	.0%	4	5.7%	7	10.1%	7	9.3%	9	8.7%	2	2.1%
	Site slightly dispersed / degraded	1	16.7%	0	.0%	8	11.4%	10	14.5%	7	9.3%	13	12.5%	14	14.7%
	Upper levels damaged	2	33.3%	1	9.1%	34	48.6%	43	62.3%	44	58.7%	49	47.1%	39	41.1%
	Site heavily dispersed / degraded	2	33.3%	2	18.2%	10	14.3%	5	7.2%	8	10.7%	16	15.4%	27	28.4%
	Site destroyed to ground level	0	.0%	0	.0%	10	14.3%	2	2.9%	7	9.3%	9	8.7%	9	9.5%
	Site destroyed	0	.0%	3	27.3%	0	.0%	1	1.4%	1	1.3%	3	2.9%	3	3.2%

TABLE G-71: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON GEOEYE 2010 (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	6	50.0%	4	3.6%	1	1.1%	1	1.0%	7	4.4%	0	.0%
	Site buried	0	.0%	0	.0%	1	.9%	0	.0%	0	.0%	0	.0%	1	.8%
	Pitted	1	9.1%	0	.0%	4	3.6%	7	7.6%	7	7.0%	9	5.6%	2	1.6%
	Site slightly dispersed / degraded	2	18.2%	0	.0%	12	10.7%	17	18.5%	12	12.0%	21	13.1%	21	16.4%
	Upper levels damaged	6	54.5%	1	8.3%	65	58.0%	53	57.6%	58	58.0%	85	53.1%	56	43.8%
	Site heavily dispersed / degraded	2	18.2%	2	16.7%	16	14.3%	11	12.0%	11	11.0%	25	15.6%	32	25.0%
	Site destroyed to ground level	0	.0%	0	.0%	10	8.9%	2	2.2%	10	10.0%	9	5.6%	12	9.4%
	Site destroyed	0	.0%	3	25.0%	0	.0%	1	1.1%	1	1.0%	4	2.5%	4	3.1%

TABLE G-72: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON CORONA (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Vertical Damage Effect	Unknown	Count	2	19	3	1	3	28
		% within Site Type	4.5%	11.8%	100.0%	50.0%	100.0%	13.1%
	Site slightly dispersed / degraded	Count	17	37	0	0	0	54
		% within Site Type	38.6%	23.0%	.0%	.0%	.0%	25.4%
	Upper levels damaged	Count	22	100	0	1	0	123
		% within Site Type	50.0%	62.1%	.0%	50.0%	.0%	57.7%
	Site heavily dispersed / degraded	Count	3	5	0	0	0	8
		% within Site Type	6.8%	3.1%	.0%	.0%	.0%	3.8%
Total		Count	44	161	3	2	3	213
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-73: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON CORONA (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Vertical Damage Effect	Unknown	Count	2	32	4	3	3	44
		% within Site Type	4.2%	12.2%	100.0%	33.3%	100.0%	13.5%
	Site slightly dispersed / degraded	Count	19	59	0	1	0	79
		% within Site Type	39.6%	22.5%	.0%	11.1%	.0%	24.2%
	Upper levels damaged	Count	24	163	0	4	0	191
		% within Site Type	50.0%	62.2%	.0%	44.4%	.0%	58.6%
	Site heavily dispersed / degraded	Count	3	8	0	1	0	12
		% within Site Type	6.3%	3.1%	.0%	11.1%	.0%	3.7%
Total		Count	48	262	4	9	3	326
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-74: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON SPOT 2004 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Vertical Damage Effect	Unknown	Count	0	7	2	1	3	13
		% within Site Type	.0%	3.1%	66.7%	33.3%	100.0%	4.1%
	Site buried	Count	0	2	0	0	0	2
		% within Site Type	.0%	.9%	.0%	.0%	.0%	.6%
	Pitted	Count	7	11	0	0	0	18
		% within Site Type	8.8%	4.9%	.0%	.0%	.0%	5.7%
	Site slightly dispersed / degraded	Count	7	29	0	0	0	36
		% within Site Type	8.8%	12.9%	.0%	.0%	.0%	11.5%
	Upper levels damaged	Count	44	116	0	0	0	160
		% within Site Type	55.0%	51.6%	.0%	.0%	.0%	51.0%
	Site heavily dispersed / degraded	Count	15	30	0	1	0	46
		% within Site Type	18.8%	13.3%	.0%	33.3%	.0%	14.6%
	Site destroyed to ground level	Count	6	24	0	0	0	30
		% within Site Type	7.5%	10.7%	.0%	.0%	.0%	9.6%
	Site destroyed	Count	1	6	1	1	0	9
		% within Site Type	1.3%	2.7%	33.3%	33.3%	.0%	2.9%
Total		Count	80	225	3	3	3	314
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-75: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON SPOT 2004 (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Vertical Damage Effect	Unknown	Count	0	11	3	1	3	18
		% within Site Type	.0%	3.3%	75.0%	9.1%	100.0%	4.1%
	Site buried	Count	0	2	0	0	0	2
		% within Site Type	.0%	.6%	.0%	.0%	.0%	.5%
	Pitted	Count	7	11	0	0	0	18
		% within Site Type	8.2%	3.3%	.0%	.0%	.0%	4.1%
	Site slightly dispersed / degraded	Count	8	47	0	1	0	56
		% within Site Type	9.4%	14.0%	.0%	9.1%	.0%	12.8%
	Upper levels damaged	Count	47	182	0	3	0	232
		% within Site Type	55.3%	54.2%	.0%	27.3%	.0%	52.8%
	Site heavily dispersed / degraded	Count	16	46	0	4	0	66
		% within Site Type	18.8%	13.7%	.0%	36.4%	.0%	15.0%
	Site destroyed to ground level	Count	6	29	0	1	0	36
		% within Site Type	7.1%	8.6%	.0%	9.1%	.0%	8.2%
	Site destroyed	Count	1	8	1	1	0	11
		% within Site Type	1.2%	2.4%	25.0%	9.1%	.0%	2.5%
Total		Count	85	336	4	11	3	439
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-76: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON GEOEYE 2010 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Vertical Damage Effect	Unknown	Count	0	6	1	1	1	9
		% within Site Type	.0%	2.6%	25.0%	33.3%	33.3%	2.7%
	Site buried	Count	0	2	0	0	0	2
		% within Site Type	.0%	.9%	.0%	.0%	.0%	.6%
	Pitted	Count	8	13	0	0	0	21
		% within Site Type	8.8%	5.6%	.0%	.0%	.0%	6.3%
	Site slightly dispersed / degraded	Count	11	29	0	0	0	40
		% within Site Type	12.1%	12.5%	.0%	.0%	.0%	12.0%
	Upper levels damaged	Count	45	122	0	0	0	167
		% within Site Type	49.5%	52.6%	.0%	.0%	.0%	50.2%
	Site heavily dispersed / degraded	Count	22	29	1	1	1	54
		% within Site Type	24.2%	12.5%	25.0%	33.3%	33.3%	16.2%
	Site destroyed to ground level	Count	4	25	0	0	0	29
		% within Site Type	4.4%	10.8%	.0%	.0%	.0%	8.7%
	Site destroyed	Count	1	6	2	1	1	11
		% within Site Type	1.1%	2.6%	50.0%	33.3%	33.3%	3.3%
Total		Count	91	232	4	3	3	333
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-77: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON GEOEYE 2010 (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Vertical Damage Effect	Unknown	Count	0	7	2	1	1	11
		% within Site Type	.0%	2.0%	40.0%	9.1%	33.3%	2.4%
	Site buried	Count	0	2	0	0	0	2
		% within Site Type	.0%	.6%	.0%	.0%	.0%	.4%
	Pitted	Count	8	13	0	0	0	21
		% within Site Type	8.3%	3.8%	.0%	.0%	.0%	4.6%
	Site slightly dispersed / degraded	Count	12	51	0	1	0	64
		% within Site Type	12.5%	14.7%	.0%	9.1%	.0%	13.9%
	Upper levels damaged	Count	48	190	0	3	0	241
		% within Site Type	50.0%	54.9%	.0%	27.3%	.0%	52.3%
	Site heavily dispersed / degraded	Count	22	46	1	4	1	74
		% within Site Type	22.9%	13.3%	20.0%	36.4%	33.3%	16.1%
	Site destroyed to ground level	Count	5	29	0	1	0	35
		% within Site Type	5.2%	8.4%	.0%	9.1%	.0%	7.6%
	Site destroyed	Count	1	8	2	1	1	13
		% within Site Type	1.0%	2.3%	40.0%	9.1%	33.3%	2.8%
Total		Count	96	346	5	11	3	461
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

6.6.4 - THE RELATIONSHIP BETWEEN HORIZONTAL AND VERTICAL DAMAGE EXTENTS

And

6.6.5 - MOST AFFECTED / UNAFFECTED SITES

TABLE G-78: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON CORONA (AMALGAMATED SITES)

			Vertical Damage Effect				
			Unknown	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Total
Horizontal Damage Effect	Unknown	Count	26	0	0	0	26
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	92.9%	.0%	.0%	.0%	12.2%
	Peripheral	Count	2	28	28	1	59
		% within Horizontal Damage Effect	3.4%	47.5%	47.5%	1.7%	100.0%
		% within Vertical Damage Effect	7.1%	51.9%	22.8%	12.5%	27.7%
	Intermittent / fractional	Count	0	1	1	0	2
		% within Horizontal Damage Effect	.0%	50.0%	50.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	1.9%	.8%	.0%	.9%
	Sectional / partial	Count	0	24	48	7	79
		% within Horizontal Damage Effect	.0%	30.4%	60.8%	8.9%	100.0%
		% within Vertical Damage Effect	.0%	44.4%	39.0%	87.5%	37.1%
	Majority / Extensive	Count	0	1	26	0	27
		% within Horizontal Damage Effect	.0%	3.7%	96.3%	.0%	100.0%
		% within Vertical Damage Effect	.0%	1.9%	21.1%	.0%	12.7%
	Total / wholesale	Count	0	0	20	0	20
		% within Horizontal Damage Effect	.0%	.0%	100.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	16.3%	.0%	9.4%
Total		Count	28	54	123	8	213
		% within Horizontal Damage Effect	13.1%	25.4%	57.7%	3.8%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-79: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON CORONA (UNIT ANALYSIS)

			Vertical Damage Effect				
			Unknown	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Total
Horizontal Damage Effect	Unknown	Count	42	0	0	0	42
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	95.5%	.0%	.0%	.0%	12.9%
	Peripheral	Count	2	44	45	3	94
		% within Horizontal Damage Effect	2.1%	46.8%	47.9%	3.2%	100.0%
		% within Vertical Damage Effect	4.5%	55.7%	23.6%	25.0%	28.8%
	Intermittent / fractional	Count	0	1	1	0	2
		% within Horizontal Damage Effect	.0%	50.0%	50.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	1.3%	.5%	.0%	.6%
	Sectional / partial	Count	0	33	44	9	86
		% within Horizontal Damage Effect	.0%	38.4%	51.2%	10.5%	100.0%
		% within Vertical Damage Effect	.0%	41.8%	23.0%	75.0%	26.4%
	Majority / Extensive	Count	0	1	51	0	52
		% within Horizontal Damage Effect	.0%	1.9%	98.1%	.0%	100.0%
		% within Vertical Damage Effect	.0%	1.3%	26.7%	.0%	16.0%
	Total / wholesale	Count	0	0	50	0	50
		% within Horizontal Damage Effect	.0%	.0%	100.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	26.2%	.0%	15.3%
Total		Count	44	79	191	12	326
		% within Horizontal Damage Effect	13.5%	24.2%	58.6%	3.7%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-80: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON SPOT 2004 (AMALGAMATED SITES)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	11	0	0	0	0	0	0	0	11
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	84.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.5%
	Peripheral	Count	2	0	0	14	33	3	2	3	57
		% within Horizontal Damage Effect	3.5%	.0%	.0%	24.6%	57.9%	5.3%	3.5%	5.3%	100.0%
		% within Vertical Damage Effect	15.4%	.0%	.0%	38.9%	20.6%	6.5%	6.7%	33.3%	18.2%
	Intermittent / fractional	Count	0	0	7	3	25	10	0	0	45
		% within Horizontal Damage Effect	.0%	.0%	15.6%	6.7%	55.6%	22.2%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	38.9%	8.3%	15.6%	21.7%	.0%	.0%	14.3%
	Sectional / partial	Count	0	1	11	19	61	19	24	6	141
		% within Horizontal Damage Effect	.0%	.7%	7.8%	13.5%	43.3%	13.5%	17.0%	4.3%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	61.1%	52.8%	38.1%	41.3%	80.0%	66.7%	44.9%
	Majority / Extensive	Count	0	0	0	0	27	9	2	0	38
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	71.1%	23.7%	5.3%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	16.9%	19.6%	6.7%	.0%	12.1%
	Total / wholesale	Count	0	1	0	0	14	5	2	0	22
		% within Horizontal Damage Effect	.0%	4.5%	.0%	.0%	63.6%	22.7%	9.1%	.0%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	8.8%	10.9%	6.7%	.0%	7.0%
Total		Count	13	2	18	36	160	46	30	9	314
		% within Horizontal Damage Effect	4.1%	.6%	5.7%	11.5%	51.0%	14.6%	9.6%	2.9%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-81: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON SPOT 2004 (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	16	0	0	0	0	0	0	0	16
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	88.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
	Peripheral	Count	2	0	0	29	46	6	2	4	89
		% within Horizontal Damage Effect	2.2%	.0%	.0%	32.6%	51.7%	6.7%	2.2%	4.5%	100.0%
		% within Vertical Damage Effect	11.1%	.0%	.0%	51.8%	19.8%	9.1%	5.6%	36.4%	20.3%
	Intermittent / fractional	Count	0	0	7	3	26	10	0	0	46
		% within Horizontal Damage Effect	.0%	.0%	15.2%	6.5%	56.5%	21.7%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	38.9%	5.4%	11.2%	15.2%	.0%	.0%	10.5%
	Sectional / partial	Count	0	1	10	24	68	20	25	7	155
		% within Horizontal Damage Effect	.0%	.6%	6.5%	15.5%	43.9%	12.9%	16.1%	4.5%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	55.6%	42.9%	29.3%	30.3%	69.4%	63.6%	35.3%
	Majority / Extensive	Count	0	0	0	0	41	9	2	0	52
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	78.8%	17.3%	3.8%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	17.7%	13.6%	5.6%	.0%	11.8%
	Total / wholesale	Count	0	1	1	0	51	21	7	0	81
		% within Horizontal Damage Effect	.0%	1.2%	1.2%	.0%	63.0%	25.9%	8.6%	.0%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	5.6%	.0%	22.0%	31.8%	19.4%	.0%	18.5%
Total		Count	18	2	18	56	232	66	36	11	439
		% within Horizontal Damage Effect	4.1%	.5%	4.1%	12.8%	52.8%	15.0%	8.2%	2.5%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-82: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON GEOEYE 2010 (AMALGAMATED SITES)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	8	0	0	0	0	0	0	0	8
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	88.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.4%
	Peripheral	Count	1	0	1	19	35	3	2	3	64
		% within Horizontal Damage Effect	1.6%	.0%	1.6%	29.7%	54.7%	4.7%	3.1%	4.7%	100.0%
		% within Vertical Damage Effect	11.1%	.0%	4.8%	47.5%	21.0%	5.6%	6.9%	27.3%	19.2%
	Intermittent / fractional	Count	0	0	9	2	28	10	0	0	49
		% within Horizontal Damage Effect	.0%	.0%	18.4%	4.1%	57.1%	20.4%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	42.9%	5.0%	16.8%	18.5%	.0%	.0%	14.7%
	Sectional / partial	Count	0	1	10	19	65	25	23	8	151
		% within Horizontal Damage Effect	.0%	.7%	6.6%	12.6%	43.0%	16.6%	15.2%	5.3%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	47.6%	47.5%	38.9%	46.3%	79.3%	72.7%	45.3%
	Majority / Extensive	Count	0	0	1	0	27	11	2	0	41
		% within Horizontal Damage Effect	.0%	.0%	2.4%	.0%	65.9%	26.8%	4.9%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	4.8%	.0%	16.2%	20.4%	6.9%	.0%	12.3%
	Total / wholesale	Count	0	1	0	0	12	5	2	0	20
		% within Horizontal Damage Effect	.0%	5.0%	.0%	.0%	60.0%	25.0%	10.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	7.2%	9.3%	6.9%	.0%	6.0%
Total		Count	9	2	21	40	167	54	29	11	333
		% within Horizontal Damage Effect	2.7%	.6%	6.3%	12.0%	50.2%	16.2%	8.7%	3.3%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-83: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON GEOEYE 2010 (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	10	0	0	0	0	0	0	0	10
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	90.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.2%
	Peripheral	Count	1	0	1	36	47	7	2	4	98
		% within Horizontal Damage Effect	1.0%	.0%	1.0%	36.7%	48.0%	7.1%	2.0%	4.1%	100.0%
		% within Vertical Damage Effect	9.1%	.0%	4.8%	56.3%	19.5%	9.5%	5.7%	30.8%	21.3%
	Intermittent / fractional	Count	0	0	9	2	33	10	0	0	54
		% within Horizontal Damage Effect	.0%	.0%	16.7%	3.7%	61.1%	18.5%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	42.9%	3.1%	13.7%	13.5%	.0%	.0%	11.7%
	Sectional / partial	Count	0	1	10	26	70	26	23	9	165
		% within Horizontal Damage Effect	.0%	.6%	6.1%	15.8%	42.4%	15.8%	13.9%	5.5%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	47.6%	40.6%	29.0%	35.1%	65.7%	69.2%	35.8%
	Majority / Extensive	Count	0	0	1	0	40	15	2	0	58
		% within Horizontal Damage Effect	.0%	.0%	1.7%	.0%	69.0%	25.9%	3.4%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	4.8%	.0%	16.6%	20.3%	5.7%	.0%	12.6%
	Total / wholesale	Count	0	1	0	0	51	16	8	0	76
		% within Horizontal Damage Effect	.0%	1.3%	.0%	.0%	67.1%	21.1%	10.5%	.0%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	21.2%	21.6%	22.9%	.0%	16.5%
Total		Count	11	2	21	64	241	74	35	13	461
		% within Horizontal Damage Effect	2.4%	.4%	4.6%	13.9%	52.3%	16.1%	7.6%	2.8%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

6.7 - DAMAGE EFFECTS: ANALYSIS OF DAMAGE SOURCES

TABLE G-84: TOTAL NUMBER AND PERCENTAGE OF DAMAGE CAUSES BY IMAGERY TYPE (AMALGAMATED SITES)

			Imagery			
			Corona	SPOT	Geoeye	Total
Damage Cause	Development	Count	39	50	49	138
		% within Imagery	18.3%	15.9%	14.7%	16.0%
	Arable agriculture	Count	80	95	95	270
		% within Imagery	37.6%	30.3%	28.5%	31.4%
	Orchards	Count	0	12	16	28
		% within Imagery	.0%	3.8%	4.8%	3.3%
	Irrigation Channels	Count	1	16	18	35
		% within Imagery	.5%	5.1%	5.4%	4.1%
	Roads	Count	52	62	67	181
		% within Imagery	24.4%	19.7%	20.1%	21.0%
	Bulldozing	Count	0	18	21	39
		% within Imagery	.0%	5.7%	6.3%	4.5%
	Water Erosion	Count	14	5	5	24
		% within Imagery	6.6%	1.6%	1.5%	2.8%
	Visitor Erosion	Count	0	0	1	1
		% within Imagery	.0%	.0%	.3%	.1%
	Looting	Count	0	1	1	2
		% within Imagery	.0%	.3%	.3%	.2%
	Mudbrick Pits	Count	0	16	18	34
		% within Imagery	.0%	5.1%	5.4%	4.0%
	Cuts	Count	0	4	4	8
		% within Imagery	.0%	1.3%	1.2%	.9%
	Grave Pits	Count	0	21	24	45
		% within Imagery	.0%	6.7%	7.2%	5.2%
	Pits (Other)	Count	0	1	3	4
		% within Imagery	.0%	.3%	.9%	.5%
	Natural Erosion	Count	1	2	2	5
		% within Imagery	.5%	.6%	.6%	.6%
	Unknown	Count	26	11	9	46
		% within Imagery	12.2%	3.5%	2.7%	5.3%
Total		Count	213	314	333	860
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-85: TOTAL NUMBER AND PERCENTAGE OF DAMAGE CAUSES BY IMAGERY TYPE (UNIT ANALYSIS)

			Imagery			
			Corona	SPOT	Geoeye	Total
Damage Cause	Development	Count	48	58	58	164
		% within Imagery	14.7%	13.2%	12.6%	13.4%
	Arable agriculture	Count	139	168	169	476
		% within Imagery	42.6%	38.3%	36.7%	38.8%
	Orchards	Count	0	12	16	28
		% within Imagery	.0%	2.7%	3.5%	2.3%
	Irrigation Channels	Count	1	18	22	41
		% within Imagery	.3%	4.1%	4.8%	3.3%
	Roads	Count	74	93	99	266
		% within Imagery	22.7%	21.2%	21.5%	21.7%
	Bulldozing	Count	0	22	25	47
		% within Imagery	.0%	5.0%	5.4%	3.8%
	Water Erosion	Count	20	6	7	33
		% within Imagery	6.1%	1.4%	1.5%	2.7%
	Visitor Erosion	Count	0	0	1	1
		% within Imagery	.0%	.0%	.2%	.1%
	Looting	Count	0	1	1	2
		% within Imagery	.0%	.2%	.2%	.2%
	Mudbrick Pits	Count	0	16	18	34
		% within Imagery	.0%	3.6%	3.9%	2.8%
	Cuts	Count	0	4	4	8
		% within Imagery	.0%	.9%	.9%	.7%
	Grave Pits	Count	0	21	24	45
		% within Imagery	.0%	4.8%	5.2%	3.7%
	Pits (Other)	Count	0	1	3	4
		% within Imagery	.0%	.2%	.7%	.3%
	Natural Erosion	Count	2	3	3	8
		% within Imagery	.6%	.7%	.7%	.7%
	Unknown	Count	42	16	11	69
		% within Imagery	12.9%	3.6%	2.4%	5.6%
Total		Count	326	439	461	1226
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-86: DAMAGE CAUSES BY SEVERITY ON CORONA (AMALGAMATED SITES)

			Severity				
			Primary	Secondary	Tertiary	Quaternary	Total
Damage Cause	Development	Count	30	5	4	0	39
		% within Severity	27.8%	7.7%	11.1%	.0%	18.3%
	Arable agriculture	Count	54	21	5	0	80
		% within Severity	50.0%	32.3%	13.9%	.0%	37.6%
	Irrigation Channels	Count	1	0	0	0	1
		% within Severity	.9%	.0%	.0%	.0%	.5%
	Roads	Count	5	31	16	0	52
		% within Severity	4.6%	47.7%	44.4%	.0%	24.4%
	Water Erosion	Count	3	5	5	1	14
		% within Severity	2.8%	7.7%	13.9%	25.0%	6.6%
	Natural Erosion	Count	0	0	0	1	1
		% within Severity	.0%	.0%	.0%	25.0%	.5%
	Unknown	Count	15	3	6	2	26
		% within Severity	13.9%	4.6%	16.7%	50.0%	12.2%
Total		Count	108	65	36	4	213
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-87: DAMAGE CAUSES BY SEVERITY ON CORONA (UNIT ANALYSIS)

			Severity				
			Primary	Secondary	Tertiary	Quaternary	Total
Damage Cause	Development	Count	33	8	7	0	48
		% within Severity	17.0%	8.5%	20.0%	.0%	14.7%
	Arable agriculture	Count	114	17	7	1	139
		% within Severity	58.8%	18.1%	20.0%	33.3%	42.6%
	Irrigation Channels	Count	1	0	0	0	1
		% within Severity	.5%	.0%	.0%	.0%	.3%
	Roads	Count	10	51	12	1	74
		% within Severity	5.2%	54.3%	34.3%	33.3%	22.7%
	Water Erosion	Count	4	10	6	0	20
		% within Severity	2.1%	10.6%	17.1%	.0%	6.1%
	Natural Erosion	Count	1	0	1	0	2
		% within Severity	.5%	.0%	2.9%	.0%	.6%
	Unknown	Count	31	8	2	1	42
		% within Severity	16.0%	8.5%	5.7%	33.3%	12.9%
Total		Count	194	94	35	3	326
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-88: DAMAGE CAUSES BY SEVERITY ON SPOT 2004 (AMALGAMATED SITES)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Damage Cause	Development	Count	20	15	10	3	2	0	0	0	50
		% within Severity	18.5%	17.9%	15.9%	8.1%	15.4%	.0%	.0%	.0%	15.9%
	Arable agriculture	Count	48	29	12	5	1	0	0	0	95
		% within Severity	44.4%	34.5%	19.0%	13.5%	7.7%	.0%	.0%	.0%	30.3%
	Orchards	Count	0	1	4	2	3	0	2	0	12
		% within Severity	.0%	1.2%	6.3%	5.4%	23.1%	.0%	66.7%	.0%	3.8%
	Irrigation Channels	Count	7	4	3	2	0	0	0	0	16
		% within Severity	6.5%	4.8%	4.8%	5.4%	.0%	.0%	.0%	.0%	5.1%
	Roads	Count	4	22	23	12	1	0	0	0	62
		% within Severity	3.7%	26.2%	36.5%	32.4%	7.7%	.0%	.0%	.0%	19.7%
	Bulldozing	Count	16	2	0	0	0	0	0	0	18
		% within Severity	14.8%	2.4%	.0%	.0%	.0%	.0%	.0%	.0%	5.7%
	Water Erosion	Count	2	3	0	0	0	0	0	0	5
		% within Severity	1.9%	3.6%	.0%	.0%	.0%	.0%	.0%	.0%	1.6%
	Looting	Count	0	0	1	0	0	0	0	0	1
		% within Severity	.0%	.0%	1.6%	.0%	.0%	.0%	.0%	.0%	.3%
	Mudbrick Pits	Count	2	3	2	7	0	0	1	1	16
		% within Severity	1.9%	3.6%	3.2%	18.9%	.0%	.0%	33.3%	50.0%	5.1%
	Cuts	Count	1	1	0	0	2	0	0	0	4
		% within Severity	.9%	1.2%	.0%	.0%	15.4%	.0%	.0%	.0%	1.3%
	Grave Pits	Count	1	3	8	4	2	3	0	0	21
		% within Severity	.9%	3.6%	12.7%	10.8%	15.4%	75.0%	.0%	.0%	6.7%
	Pits (Other)	Count	0	1	0	0	0	0	0	0	1
		% within Severity	.0%	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.3%
	Natural Erosion	Count	0	0	0	0	2	0	0	0	2
		% within Severity	.0%	.0%	.0%	.0%	15.4%	.0%	.0%	.0%	.6%
	Unknown	Count	7	0	0	2	0	1	0	1	11
		% within Severity	6.5%	.0%	.0%	5.4%	.0%	25.0%	.0%	50.0%	3.5%
Total		Count	108	84	63	37	13	4	3	2	314
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-89: DAMAGE CAUSES BY SEVERITY ON SPOT 2004 (UNIT ANALYSIS)

			Severity							
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	Total
Damage Cause	Development	Count	26	17	10	5	0	0	0	58
		% within Severity	13.4%	13.2%	13.9%	15.6%	.0%	.0%	.0%	13.2%
	Arable agriculture	Count	111	38	13	5	1	0	0	168
		% within Severity	57.2%	29.5%	18.1%	15.6%	12.5%	.0%	.0%	38.3%
	Orchards	Count	0	3	3	2	4	0	0	12
		% within Severity	.0%	2.3%	4.2%	6.3%	50.0%	.0%	.0%	2.7%
	Irrigation Channels	Count	8	6	2	2	0	0	0	18
		% within Severity	4.1%	4.7%	2.8%	6.3%	.0%	.0%	.0%	4.1%
	Roads	Count	9	45	30	8	1	0	0	93
		% within Severity	4.6%	34.9%	41.7%	25.0%	12.5%	.0%	.0%	21.2%
	Bulldozing	Count	20	2	0	0	0	0	0	22
		% within Severity	10.3%	1.6%	.0%	.0%	.0%	.0%	.0%	5.0%
	Water Erosion	Count	2	4	0	0	0	0	0	6
		% within Severity	1.0%	3.1%	.0%	.0%	.0%	.0%	.0%	1.4%
	Looting	Count	0	0	1	0	0	0	0	1
		% within Severity	.0%	.0%	1.4%	.0%	.0%	.0%	.0%	.2%
	Mudbrick Pits	Count	2	3	2	7	0	0	2	16
		% within Severity	1.0%	2.3%	2.8%	21.9%	.0%	.0%	100.0%	3.6%
	Cuts	Count	1	1	0	1	1	0	0	4
		% within Severity	.5%	.8%	.0%	3.1%	12.5%	.0%	.0%	.9%
	Grave Pits	Count	2	7	9	2	0	1	0	21
		% within Severity	1.0%	5.4%	12.5%	6.3%	.0%	50.0%	.0%	4.8%
	Pits (Other)	Count	0	1	0	0	0	0	0	1
		% within Severity	.0%	.8%	.0%	.0%	.0%	.0%	.0%	.2%
	Natural Erosion	Count	0	1	0	0	1	1	0	3
		% within Severity	.0%	.8%	.0%	.0%	12.5%	50.0%	.0%	.7%
	Unknown	Count	13	1	2	0	0	0	0	16
		% within Severity	6.7%	.8%	2.8%	.0%	.0%	.0%	.0%	3.6%
Total		Count	194	129	72	32	8	2	2	439
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-90: DAMAGE CAUSES BY SEVERITY ON GEOEYE 2010 (AMALGAMATED SITES)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Damage Cause	Development	Count	20	11	11	4	0	2	0	1	49
		% within Severity	18.5%	12.9%	16.9%	10.0%	.0%	28.6%	.0%	33.3%	14.7%
	Arable agriculture	Count	46	30	11	5	3	0	0	0	95
		% within Severity	42.6%	35.3%	16.9%	12.5%	13.6%	.0%	.0%	.0%	28.5%
	Orchards	Count	1	3	3	3	3	0	3	0	16
		% within Severity	.9%	3.5%	4.6%	7.5%	13.6%	.0%	100.0%	.0%	4.8%
	Irrigation Channels	Count	7	4	4	2	0	1	0	0	18
		% within Severity	6.5%	4.7%	6.2%	5.0%	.0%	14.3%	.0%	.0%	5.4%
	Roads	Count	3	21	29	10	4	0	0	0	67
		% within Severity	2.8%	24.7%	44.6%	25.0%	18.2%	.0%	.0%	.0%	20.1%
	Bulldozing	Count	20	1	0	0	0	0	0	0	21
		% within Severity	18.5%	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	6.3%
	Water Erosion	Count	2	3	0	0	0	0	0	0	5
		% within Severity	1.9%	3.5%	.0%	.0%	.0%	.0%	.0%	.0%	1.5%
	Visitor Erosion	Count	0	1	0	0	0	0	0	0	1
		% within Severity	.0%	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.3%
	Looting	Count	0	1	0	0	0	0	0	0	1
		% within Severity	.0%	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.3%
	Mudbrick Pits	Count	2	4	0	7	2	2	0	1	18
		% within Severity	1.9%	4.7%	.0%	17.5%	9.1%	28.6%	.0%	33.3%	5.4%
	Cuts	Count	0	2	0	1	1	0	0	0	4
		% within Severity	.0%	2.4%	.0%	2.5%	4.5%	.0%	.0%	.0%	1.2%
	Grave Pits	Count	1	3	7	6	5	2	0	0	24
		% within Severity	.9%	3.5%	10.8%	15.0%	22.7%	28.6%	.0%	.0%	7.2%
	Pits (Other)	Count	0	1	0	1	1	0	0	0	3
		% within Severity	.0%	1.2%	.0%	2.5%	4.5%	.0%	.0%	.0%	.9%
	Natural Erosion	Count	0	0	0	0	2	0	0	0	2
		% within Severity	.0%	.0%	.0%	.0%	9.1%	.0%	.0%	.0%	.6%
	Unknown	Count	6	0	0	1	1	0	0	1	9
		% within Severity	5.6%	.0%	.0%	2.5%	4.5%	.0%	.0%	33.3%	2.7%
Total		Count	108	85	65	40	22	7	3	3	333
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-91: DAMAGE CAUSES BY SEVERITY ON GEOEYE 2010 (UNIT ANALYSIS)

			Severity								
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	Total
Damage Cause	Development	Count	26	14	10	6	1	0	0	1	58
		% within Severity	13.4%	10.8%	13.3%	16.2%	5.6%	.0%	.0%	100.0%	12.6%
	Arable agriculture	Count	110	39	13	4	3	0	0	0	169
		% within Severity	56.7%	30.0%	17.3%	10.8%	16.7%	.0%	.0%	.0%	36.7%
	Orchards	Count	3	2	3	3	4	0	1	0	16
		% within Severity	1.5%	1.5%	4.0%	8.1%	22.2%	.0%	50.0%	.0%	3.5%
	Irrigation Channels	Count	8	7	5	1	0	1	0	0	22
		% within Severity	4.1%	5.4%	6.7%	2.7%	.0%	25.0%	.0%	.0%	4.8%
	Roads	Count	7	47	34	8	3	0	0	0	99
		% within Severity	3.6%	36.2%	45.3%	21.6%	16.7%	.0%	.0%	.0%	21.5%
	Bulldozing	Count	24	1	0	0	0	0	0	0	25
		% within Severity	12.4%	.8%	.0%	.0%	.0%	.0%	.0%	.0%	5.4%
	Water Erosion	Count	2	5	0	0	0	0	0	0	7
		% within Severity	1.0%	3.8%	.0%	.0%	.0%	.0%	.0%	.0%	1.5%
	Visitor Erosion	Count	0	1	0	0	0	0	0	0	1
		% within Severity	.0%	.8%	.0%	.0%	.0%	.0%	.0%	.0%	.2%
	Looting	Count	0	1	0	0	0	0	0	0	1
		% within Severity	.0%	.8%	.0%	.0%	.0%	.0%	.0%	.0%	.2%
	Mudbrick Pits	Count	2	4	0	7	2	2	1	0	18
		% within Severity	1.0%	3.1%	.0%	18.9%	11.1%	50.0%	50.0%	.0%	3.9%
	Cuts	Count	0	2	0	2	0	0	0	0	4
		% within Severity	.0%	1.5%	.0%	5.4%	.0%	.0%	.0%	.0%	.9%
	Grave Pits	Count	2	5	9	5	3	0	0	0	24
		% within Severity	1.0%	3.8%	12.0%	13.5%	16.7%	.0%	.0%	.0%	5.2%
	Pits (Other)	Count	0	1	0	1	1	0	0	0	3
		% within Severity	.0%	.8%	.0%	2.7%	5.6%	.0%	.0%	.0%	.7%
	Natural Erosion	Count	0	1	0	0	1	1	0	0	3
		% within Severity	.0%	.8%	.0%	.0%	5.6%	25.0%	.0%	.0%	.7%
	Unknown	Count	10	0	1	0	0	0	0	0	11
		% within Severity	5.2%	.0%	1.3%	.0%	.0%	.0%	.0%	.0%	2.4%
Total		Count	194	130	75	37	18	4	2	1	461
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-92: DAMAGE CAUSES BY LOCATION ON CORONA (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi ?waidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain			
		Count		Count		Count		Count		Count		Count		0		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Damage Cause	Development	1	20.0%	0	.0%	11	22.9%	9	19.6%	9	19.0%	14	20.9%	30	18.5%	9	15.3%
	Arable agriculture	2	40.0%	1	10.0%	20	41.7%	21	45.7%	17	40.5%	23	33.8%	62	40.3%	19	33.5%
	Orchards	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Irrigation Channels	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.7%
	Roads	1	20.0%	0	.0%	12	25.0%	11	23.9%	13	31.0%	17	25.0%	37	24.0%	15	25.4%
	Mineral Extraction	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Military Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Building	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Water Erosion	0	.0%	0	.0%	3	6.3%	1	2.2%	0	.0%	5	6.8%	7	4.5%	7	11.3%
	Visitor Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Looting	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Dumping Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Grave Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Pits (Other)	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Natural Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.7%
	Railway	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	20.0%	9	90.0%	2	4.2%	4	8.7%	4	9.5%	8	11.8%	18	11.7%	8	13.6%
	No Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

TABLE G-93: DAMAGE CAUSES BY LOCATION ON CORONA (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Damage Cause	Development	3	27.3%	0	.0%	17	18.1%	9	14.3%	10	18.1%	18	14.3%	10	11.6%
	Arable agriculture	4	36.4%	1	9.1%	44	46.8%	31	49.2%	26	46.8%	52	41.3%	29	33.7%
	Orchards	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Irrigation Channels	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.2%
	Roads	3	27.3%	0	.0%	20	21.3%	17	27.0%	17	27.4%	30	23.8%	19	22.1%
	Mineral Extraction	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Military Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Bulldozing	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Water Erosion	0	.0%	0	.0%	4	4.3%	1	1.6%	0	.0%	8	6.3%	12	14.0%
	Visitor Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Looting	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Dumping Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Grave Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Pits (Other)	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Natural Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	2	2.3%
	Railway	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	9.1%	10	90.9%	9	9.6%	5	7.9%	6	9.7%	18	14.3%	13	15.1%
	No Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

TABLE G-94: DAMAGE CAUSES BY LOCATION ON SPOT 2004 (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awalij		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Damage Cause	Development	1	16.7%	0	.0%	10	14.5%	12	19.7%	13	19.1%	17	17.3%	13	14.1%
	Arable agriculture	2	33.3%	3	30.0%	21	30.4%	23	37.7%	18	26.5%	28	28.5%	28	30.4%
	Orchards	0	.0%	0	.0%	4	5.8%	1	1.6%	3	4.4%	4	4.1%	3	3.3%
	Irrigation Channels	0	.0%	0	.0%	2	2.9%	3	4.9%	2	2.9%	4	4.1%	7	7.6%
	Roads	1	16.7%	0	.0%	13	18.8%	15	24.6%	14	20.6%	21	21.4%	17	18.5%
	Mineral Extraction	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Military Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Bulldozing	0	.0%	0	.0%	6	8.7%	1	1.6%	4	5.9%	6	6.1%	6	6.5%
	Water Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%	5	5.4%
	Visitor Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Looting	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	2	2.9%	2	3.3%	6	8.8%	4	4.1%	6	6.5%
	Dumping Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	2	2.9%	0	.0%	1	1.5%	2	2.0%	1	1.1%
	Grave Pits	1	16.7%	0	.0%	5	7.2%	4	6.6%	5	8.0%	7	7.1%	3	3.3%
	Pits (Other)	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.1%
	Natural Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	2	2.2%
	Railway	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	16.7%	7	70.0%	4	5.8%	0	.0%	1	1.5%	5	5.1%	0	.0%
	No Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

TABLE G-95: DAMAGE CAUSES BY LOCATION ON SPOT 2004 (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi Awaldj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Damage Cause	Development	2	18.2%	0	.0%	12	10.9%	15	17.6%	15	16.5%	19	12.4%	14	11.3%
	Arable agriculture	4	36.4%	3	27.3%	49	43.8%	35	41.2%	31	34.1%	61	39.9%	47	37.9%
	Orchards	0	.0%	0	.0%	4	3.6%	1	1.2%	3	3.3%	4	2.6%	3	2.4%
	Irrigation Channels	0	.0%	0	.0%	2	1.8%	3	3.5%	2	2.2%	5	3.3%	8	6.5%
	Roads	3	27.3%	0	.0%	21	19.1%	24	28.2%	20	22.0%	33	21.6%	24	19.4%
	Mineral Extraction	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Military Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Bulldozing	0	.0%	0	.0%	6	5.5%	1	1.2%	6	6.6%	6	3.9%	8	6.5%
	Water Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	.7%	6	4.8%
	Wellor Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Looting	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	.7%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	2	1.8%	2	2.4%	6	6.6%	4	2.6%	6	4.8%
	Dumping Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	2	1.8%	0	.0%	1	1.1%	2	1.3%	1	.8%
	Grave Pits	1	9.1%	0	.0%	5	4.5%	4	4.7%	6	6.6%	7	4.6%	3	2.4%
	Pits (Other)	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	.8%
	Natural Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	3	2.4%
	Railway	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	1	9.1%	8	72.7%	8	7.3%	0	.0%	1	1.1%	10	6.5%	0	.0%
	No Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

TABLE G-96: DAMAGE CAUSES BY LOCATION ON GEOEYE 2010 (AMALGAMATED SITES)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi Awaidj		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Damage Cause	Development	1	16.7%	0	.0%	10	14.3%	12	17.4%	13	17.3%	16	15.4%	12	12.6%
	Arable agriculture	3	50.0%	4	36.4%	21	30.0%	23	33.3%	18	24.0%	28	26.9%	27	28.4%
	Orchards	0	.0%	0	.0%	5	7.1%	1	1.4%	4	5.3%	5	4.8%	5	5.3%
	Irrigation Channels	0	.0%	0	.0%	2	2.9%	3	4.3%	4	5.3%	4	3.8%	7	7.4%
	Roads	1	16.7%	0	.0%	14	20.0%	17	24.6%	15	20.0%	23	22.1%	18	18.9%
	Mineral Extraction	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Military Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Bulldozing	0	.0%	0	.0%	7	10.0%	2	2.9%	4	5.3%	7	6.7%	7	7.4%
	Water Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%	6	6.3%
	Visitor Erosion	0	.0%	1	9.1%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Looting	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	1.0%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	2	2.9%	4	5.8%	6	8.0%	5	4.8%	6	6.3%
	Dumping Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	2	2.9%	0	.0%	1	1.3%	2	1.9%	1	1.1%
	Grave Pits	1	16.7%	0	.0%	4	5.7%	7	10.1%	7	9.3%	10	9.6%	4	4.2%
	Pits (Other)	0	.0%	0	.0%	0	.0%	0	.0%	2	2.7%	0	.0%	1	1.1%
	Natural Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	2	2.1%
	Railway	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	6	54.5%	3	4.3%	0	.0%	1	1.3%	4	3.8%	0	.0%
	No Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

TABLE G-97: DAMAGE CAUSES BY LOCATION ON GEOEYE 2010 (UNIT ANALYSIS)

		Basalt plateau		Plateau and escarpment		Plain west of Wadi 'Awaiij		Dry plain to east		Plain to north east of basalt		Wadi bottom or wadi banks		Flood plain	
		Count		Count		Count		Count		Count		Count		Count	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
Damage Cause	Development	2	18.2%	0	.0%	12	10.7%	15	16.3%	16	16.0%	18	11.3%	13	10.2%
	Arable agriculture	5	45.5%	4	33.3%	51	45.5%	34	37.0%	30	30.0%	63	39.4%	46	35.9%
	Orchards	0	.0%	0	.0%	5	4.5%	1	1.1%	4	4.0%	5	3.1%	5	3.9%
	Irrigation Channels	0	.0%	0	.0%	2	1.8%	3	3.3%	6	6.0%	5	3.1%	8	6.3%
	Roads	3	27.3%	0	.0%	23	20.5%	26	28.3%	21	21.0%	36	22.5%	25	19.5%
	Mineral Extraction	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Military Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Bulldozing	0	.0%	0	.0%	7	6.3%	2	2.2%	6	6.0%	7	4.4%	9	7.0%
	Water Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	2	1.3%	7	5.5%
	Visitor Erosion	0	.0%	1	8.3%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Looting	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	1	.6%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	2	1.8%	4	4.3%	6	6.0%	5	3.1%	6	4.7%
	Dumping Pits	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	2	1.8%	0	.0%	1	1.0%	2	1.3%	1	.8%
	Grave Pits	1	9.1%	0	.0%	4	3.6%	7	7.6%	7	7.0%	10	6.3%	4	3.1%
	Pits (Other)	0	.0%	0	.0%	0	.0%	0	.0%	2	2.0%	0	.0%	1	.8%
	Natural Erosion	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	3	2.3%
	Railway	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	7	58.3%	4	3.6%	0	.0%	1	1.0%	6	3.8%	0	.0%
	No Damage	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%	0	.0%

TABLE G-98: DAMAGE CAUSES BY SITE TYPE ON CORONA (AMALGAMATED SITES)

Imagery				Site Type					Total
				Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	
Corona	Damage Cause	Development	Count	11	28	0	0	0	39
			% within Damage Cause	28.2%	71.8%	.0%	.0%	.0%	100.0%
			% within Site Type	25.0%	17.4%	.0%	.0%	.0%	18.3%
		Arable agriculture	Count	14	65	0	1	0	80
			% within Damage Cause	17.5%	81.3%	.0%	1.3%	.0%	100.0%
			% within Site Type	31.8%	40.4%	.0%	50.0%	.0%	37.6%
		Irrigation Channels	Count	0	1	0	0	0	1
			% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
			% within Site Type	.0%	.6%	.0%	.0%	.0%	.5%
		Roads	Count	12	40	0	0	0	52
			% within Damage Cause	23.1%	76.9%	.0%	.0%	.0%	100.0%
			% within Site Type	27.3%	24.8%	.0%	.0%	.0%	24.4%
		Water Erosion	Count	4	10	0	0	0	14
			% within Damage Cause	28.6%	71.4%	.0%	.0%	.0%	100.0%
			% within Site Type	9.1%	6.2%	.0%	.0%	.0%	6.6%
		Natural Erosion	Count	1	0	0	0	0	1
			% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
			% within Site Type	2.3%	.0%	.0%	.0%	.0%	.5%
		Unknown	Count	2	17	3	1	3	26
			% within Damage Cause	7.7%	65.4%	11.5%	3.8%	11.5%	100.0%
			% within Site Type	4.5%	10.6%	100.0%	50.0%	100.0%	12.2%
	Total		Count	44	161	3	2	3	213
			% within Damage Cause	20.7%	75.6%	1.4%	.9%	1.4%	100.0%
			% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-99: DAMAGE CAUSES BY SITE TYPE ON CORONA (UNIT ANALYSIS)

Imagery				Site Type					Total
				Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	
Corona	Damage Cause	Development	Count	11	36	0	1	0	48
			% within Damage Cause	22.9%	75.0%	.0%	2.1%	.0%	100.0%
			% within Site Type	22.9%	13.7%	.0%	11.1%	.0%	14.7%
		Arable agriculture	Count	16	120	0	3	0	139
			% within Damage Cause	11.5%	86.3%	.0%	2.2%	.0%	100.0%
			% within Site Type	33.3%	45.8%	.0%	33.3%	.0%	42.6%
		Irrigation Channels	Count	0	1	0	0	0	1
			% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
			% within Site Type	.0%	.4%	.0%	.0%	.0%	.3%
		Roads	Count	13	60	0	1	0	74
			% within Damage Cause	17.6%	81.1%	.0%	1.4%	.0%	100.0%
			% within Site Type	27.1%	22.9%	.0%	11.1%	.0%	22.7%
		Water Erosion	Count	4	15	0	1	0	20
			% within Damage Cause	20.0%	75.0%	.0%	5.0%	.0%	100.0%
			% within Site Type	8.3%	5.7%	.0%	11.1%	.0%	6.1%
		Natural Erosion	Count	2	0	0	0	0	2
			% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
			% within Site Type	4.2%	.0%	.0%	.0%	.0%	.6%
		Unknown	Count	2	30	4	3	3	42
			% within Damage Cause	4.8%	71.4%	9.5%	7.1%	7.1%	100.0%
			% within Site Type	4.2%	11.5%	100.0%	33.3%	100.0%	12.9%
	Total		Count	48	262	4	9	3	326
			% within Damage Cause	14.7%	80.4%	1.2%	2.8%	.9%	100.0%
			% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-100: DAMAGE CAUSES BY SITE TYPE ON SPOT 2004 (AMALGAMATED SITES)

		Site Type					Total
		Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	
Development	Count	15	35	0	0	0	50
	% within Damage Cause	30.0%	70.0%	.0%	.0%	.0%	100.0%
	% within Site Type	18.8%	15.6%	.0%	.0%	.0%	15.9%
Arable agriculture	Count	20	72	1	1	1	95
	% within Damage Cause	21.1%	75.8%	1.1%	1.1%	1.1%	100.0%
	% within Site Type	25.0%	32.0%	33.3%	33.3%	33.3%	30.3%
Orchards	Count	2	10	0	0	0	12
	% within Damage Cause	16.7%	83.3%	.0%	.0%	.0%	100.0%
	% within Site Type	2.5%	4.4%	.0%	.0%	.0%	3.8%
Irrigation Channels	Count	2	13	0	1	0	16
	% within Damage Cause	12.5%	81.3%	.0%	6.3%	.0%	100.0%
	% within Site Type	2.5%	5.8%	.0%	33.3%	.0%	5.1%
Roads	Count	12	50	0	0	0	62
	% within Damage Cause	19.4%	80.6%	.0%	.0%	.0%	100.0%
	% within Site Type	15.0%	22.2%	.0%	.0%	.0%	19.7%
Bulldozing	Count	5	13	0	0	0	18
	% within Damage Cause	27.8%	72.2%	.0%	.0%	.0%	100.0%
	% within Site Type	6.3%	5.8%	.0%	.0%	.0%	5.7%
Water Erosion	Count	1	4	0	0	0	5
	% within Damage Cause	20.0%	80.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.3%	1.8%	.0%	.0%	.0%	1.6%
Looting	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.4%	.0%	.0%	.0%	.3%
Mudbrick Pits	Count	10	6	0	0	0	16
	% within Damage Cause	62.5%	37.5%	.0%	.0%	.0%	100.0%
	% within Site Type	12.5%	2.7%	.0%	.0%	.0%	5.1%
Cuts	Count	3	1	0	0	0	4
	% within Damage Cause	75.0%	25.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.8%	.4%	.0%	.0%	.0%	1.3%
Grave Pits	Count	8	13	0	0	0	21
	% within Damage Cause	38.1%	61.9%	.0%	.0%	.0%	100.0%
	% within Site Type	10.0%	5.8%	.0%	.0%	.0%	6.7%
Pits (Other)	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.4%	.0%	.0%	.0%	.3%
Natural Erosion	Count	2	0	0	0	0	2
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.5%	.0%	.0%	.0%	.0%	.6%
Unknown	Count	0	6	2	1	2	11
	% within Damage Cause	.0%	54.5%	18.2%	9.1%	18.2%	100.0%
	% within Site Type	.0%	2.7%	66.7%	33.3%	66.7%	3.5%
	Count	80	225	3	3	3	314
	% within Damage Cause	25.5%	71.7%	1.0%	1.0%	1.0%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-101: DAMAGE CAUSES BY SITE TYPE ON SPOT 2004 (UNIT ANALYSIS)

		Site Type					
		Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Development	Count	16	41	0	1	0	58
	% within Damage Cause	27.6%	70.7%	.0%	1.7%	.0%	100.0%
	% within Site Type	18.8%	12.2%	.0%	9.1%	.0%	13.2%
Arable agriculture	Count	22	140	1	4	1	168
	% within Damage Cause	13.1%	83.3%	.6%	2.4%	.6%	100.0%
	% within Site Type	25.9%	41.7%	25.0%	36.4%	33.3%	38.3%
Orchards	Count	2	9	0	1	0	12
	% within Damage Cause	16.7%	75.0%	.0%	8.3%	.0%	100.0%
	% within Site Type	2.4%	2.7%	.0%	9.1%	.0%	2.7%
Irrigation Channels	Count	2	15	0	1	0	18
	% within Damage Cause	11.1%	83.3%	.0%	5.6%	.0%	100.0%
	% within Site Type	2.4%	4.5%	.0%	9.1%	.0%	4.1%
Roads	Count	13	79	0	1	0	93
	% within Damage Cause	14.0%	84.9%	.0%	1.1%	.0%	100.0%
	% within Site Type	15.3%	23.5%	.0%	9.1%	.0%	21.2%
Bulldozing	Count	5	17	0	0	0	22
	% within Damage Cause	22.7%	77.3%	.0%	.0%	.0%	100.0%
	% within Site Type	5.9%	5.1%	.0%	.0%	.0%	5.0%
Water Erosion	Count	1	4	0	1	0	6
	% within Damage Cause	16.7%	66.7%	.0%	16.7%	.0%	100.0%
	% within Site Type	1.2%	1.2%	.0%	9.1%	.0%	1.4%
Looting	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.3%	.0%	.0%	.0%	.2%
Mudbrick Pits	Count	10	6	0	0	0	16
	% within Damage Cause	62.5%	37.5%	.0%	.0%	.0%	100.0%
	% within Site Type	11.8%	1.8%	.0%	.0%	.0%	3.6%
Cuts	Count	3	0	0	1	0	4
	% within Damage Cause	75.0%	.0%	.0%	25.0%	.0%	100.0%
	% within Site Type	3.5%	.0%	.0%	9.1%	.0%	.9%
Grave Pits	Count	8	13	0	0	0	21
	% within Damage Cause	38.1%	61.9%	.0%	.0%	.0%	100.0%
	% within Site Type	9.4%	3.9%	.0%	.0%	.0%	4.8%
Pits (Other)	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.3%	.0%	.0%	.0%	.2%
Natural Erosion	Count	3	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.5%	.0%	.0%	.0%	.0%	.7%
Unknown	Count	0	10	3	1	2	16
	% within Damage Cause	.0%	62.5%	18.8%	6.3%	12.5%	100.0%
	% within Site Type	.0%	3.0%	75.0%	9.1%	66.7%	3.6%
	Count	85	336	4	11	3	439
	% within Damage Cause	19.4%	76.5%	.9%	2.5%	.7%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-102: DAMAGE CAUSES BY SITE TYPE ON GEOEYE 2010 (AMALGAMATED SITES)

		Site Type					
		Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Development	Count	14	35	0	0	0	49
	% within Damage Cause	28.6%	71.4%	.0%	.0%	.0%	100.0%
	% within Site Type	15.4%	15.1%	.0%	.0%	.0%	14.7%
Arable agriculture	Count	20	71	1	1	2	95
	% within Damage Cause	21.1%	74.7%	1.1%	1.1%	2.1%	100.0%
	% within Site Type	22.0%	30.6%	25.0%	33.3%	66.7%	28.5%
Orchards	Count	4	12	0	0	0	16
	% within Damage Cause	25.0%	75.0%	.0%	.0%	.0%	100.0%
	% within Site Type	4.4%	5.2%	.0%	.0%	.0%	4.8%
Irrigation Channels	Count	2	15	0	1	0	18
	% within Damage Cause	11.1%	83.3%	.0%	5.6%	.0%	100.0%
	% within Site Type	2.2%	6.5%	.0%	33.3%	.0%	5.4%
Roads	Count	16	51	0	0	0	67
	% within Damage Cause	23.9%	76.1%	.0%	.0%	.0%	100.0%
	% within Site Type	17.6%	22.0%	.0%	.0%	.0%	20.1%
Bulldozing	Count	7	14	0	0	0	21
	% within Damage Cause	33.3%	66.7%	.0%	.0%	.0%	100.0%
	% within Site Type	7.7%	6.0%	.0%	.0%	.0%	6.3%
Water Erosion	Count	1	4	0	0	0	5
	% within Damage Cause	20.0%	80.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.1%	1.7%	.0%	.0%	.0%	1.5%
Visitor Erosion	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	25.0%	.0%	.0%	.3%
Looting	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.4%	.0%	.0%	.0%	.3%
Mudbrick Pits	Count	11	7	0	0	0	18
	% within Damage Cause	61.1%	38.9%	.0%	.0%	.0%	100.0%
	% within Site Type	12.1%	3.0%	.0%	.0%	.0%	5.4%
Cuts	Count	3	1	0	0	0	4
	% within Damage Cause	75.0%	25.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.3%	.4%	.0%	.0%	.0%	1.2%
Grave Pits	Count	11	13	0	0	0	24
	% within Damage Cause	45.8%	54.2%	.0%	.0%	.0%	100.0%
	% within Site Type	12.1%	5.6%	.0%	.0%	.0%	7.2%
Pits (Other)	Count	0	3	0	0	0	3
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	1.3%	.0%	.0%	.0%	.9%
Natural Erosion	Count	2	0	0	0	0	2
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.2%	.0%	.0%	.0%	.0%	.6%
Unknown	Count	0	5	2	1	1	9
	% within Damage Cause	.0%	55.6%	22.2%	11.1%	11.1%	100.0%
	% within Site Type	.0%	2.2%	50.0%	33.3%	33.3%	2.7%
	Count	91	232	4	3	3	333
	% within Damage Cause	27.3%	69.7%	1.2%	.9%	.9%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-103: DAMAGE CAUSES BY SITE TYPE ON GEOEYE 2010 (UNIT ANALYSIS)

		Site Type					
		Tell	Tell (Low)	Walls	Flat Site / Scatter	Irregular Stuctures / Enclosures	Total
Development	Count	15	42	0	1	0	58
	% within Damage Cause	25.9%	72.4%	.0%	1.7%	.0%	100.0%
	% within Site Type	15.6%	12.1%	.0%	9.1%	.0%	12.6%
Arable agriculture	Count	22	140	1	4	2	169
	% within Damage Cause	13.0%	82.8%	.6%	2.4%	1.2%	100.0%
	% within Site Type	22.9%	40.5%	20.0%	36.4%	66.7%	36.7%
Orchards	Count	4	11	0	1	0	16
	% within Damage Cause	25.0%	68.8%	.0%	6.3%	.0%	100.0%
	% within Site Type	4.2%	3.2%	.0%	9.1%	.0%	3.5%
Irrigation Channels	Count	2	19	0	1	0	22
	% within Damage Cause	9.1%	86.4%	.0%	4.5%	.0%	100.0%
	% within Site Type	2.1%	5.5%	.0%	9.1%	.0%	4.8%
Roads	Count	17	81	0	1	0	99
	% within Damage Cause	17.2%	81.8%	.0%	1.0%	.0%	100.0%
	% within Site Type	17.7%	23.4%	.0%	9.1%	.0%	21.5%
Bulldozing	Count	7	18	0	0	0	25
	% within Damage Cause	28.0%	72.0%	.0%	.0%	.0%	100.0%
	% within Site Type	7.3%	5.2%	.0%	.0%	.0%	5.4%
Water Erosion	Count	1	5	0	1	0	7
	% within Damage Cause	14.3%	71.4%	.0%	14.3%	.0%	100.0%
	% within Site Type	1.0%	1.4%	.0%	9.1%	.0%	1.5%
Visitor Erosion	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	20.0%	.0%	.0%	.2%
Looting	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.3%	.0%	.0%	.0%	.2%
Mudbrick Pits	Count	11	7	0	0	0	18
	% within Damage Cause	61.1%	38.9%	.0%	.0%	.0%	100.0%
	% within Site Type	11.5%	2.0%	.0%	.0%	.0%	3.9%
Cuts	Count	3	0	0	1	0	4
	% within Damage Cause	75.0%	.0%	.0%	25.0%	.0%	100.0%
	% within Site Type	3.1%	.0%	.0%	9.1%	.0%	.9%
Grave Pits	Count	11	13	0	0	0	24
	% within Damage Cause	45.8%	54.2%	.0%	.0%	.0%	100.0%
	% within Site Type	11.5%	3.8%	.0%	.0%	.0%	5.2%
Pits (Other)	Count	0	3	0	0	0	3
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.9%	.0%	.0%	.0%	.7%
Natural Erosion	Count	3	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.1%	.0%	.0%	.0%	.0%	.7%
Unknown	Count	0	6	3	1	1	11
	% within Damage Cause	.0%	54.5%	27.3%	9.1%	9.1%	100.0%
	% within Site Type	.0%	1.7%	60.0%	9.1%	33.3%	2.4%
	Count	96	346	5	11	3	461
	% within Damage Cause	20.8%	75.1%	1.1%	2.4%	.7%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-104: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON CORONA (AMALGAMATED SITES)

			Horizontal Damage Effect						
			Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Damage Cause	Development	Count	0	11	0	22	4	2	39
		% within Damage Cause	.0%	28.2%	.0%	56.4%	10.3%	5.1%	100.0%
		% within Horizontal Damage Effect	.0%	18.6%	.0%	27.8%	14.8%	10.0%	18.3%
	Arable agriculture	Count	0	21	1	18	22	18	80
		% within Damage Cause	.0%	26.3%	1.3%	22.5%	27.5%	22.5%	100.0%
		% within Horizontal Damage Effect	.0%	35.6%	50.0%	22.8%	81.5%	90.0%	37.6%
	Irrigation Channels	Count	0	0	0	1	0	0	1
		% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	.0%	.0%	1.3%	.0%	.0%	.5%
	Roads	Count	0	21	1	30	0	0	52
		% within Damage Cause	.0%	40.4%	1.9%	57.7%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	35.6%	50.0%	38.0%	.0%	.0%	24.4%
	Water Erosion	Count	0	6	0	8	0	0	14
		% within Damage Cause	.0%	42.9%	.0%	57.1%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	10.2%	.0%	10.1%	.0%	.0%	6.6%
	Natural Erosion	Count	0	0	0	0	1	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	3.7%	.0%	.5%
	Unknown	Count	26	0	0	0	0	0	26
		% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	12.2%
Total		Count	26	59	2	79	27	20	213
		% within Damage Cause	12.2%	27.7%	.9%	37.1%	12.7%	9.4%	100.0%
		% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-105: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON CORONA (UNIT ANALYSIS)

			Horizontal Damage Effect						
			Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Damage Cause	Development	Count	0	18	0	15	9	6	48
		% within Damage Cause	.0%	37.5%	.0%	31.3%	18.8%	12.5%	100.0%
		% within Horizontal Damage Effect	.0%	19.1%	.0%	17.4%	17.3%	12.0%	14.7%
	Arable agriculture	Count	0	33	1	19	42	44	139
		% within Damage Cause	.0%	23.7%	.7%	13.7%	30.2%	31.7%	100.0%
		% within Horizontal Damage Effect	.0%	35.1%	50.0%	22.1%	80.8%	88.0%	42.6%
	Irrigation Channels	Count	0	0	0	1	0	0	1
		% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	.0%	.0%	1.2%	.0%	.0%	.3%
	Roads	Count	0	34	1	39	0	0	74
		% within Damage Cause	.0%	45.9%	1.4%	52.7%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	36.2%	50.0%	45.3%	.0%	.0%	22.7%
	Water Erosion	Count	0	9	0	11	0	0	20
		% within Damage Cause	.0%	45.0%	.0%	55.0%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	9.6%	.0%	12.8%	.0%	.0%	6.1%
	Natural Erosion	Count	0	0	0	1	1	0	2
		% within Damage Cause	.0%	.0%	.0%	50.0%	50.0%	.0%	100.0%
		% within Horizontal Damage Effect	.0%	.0%	.0%	1.2%	1.9%	.0%	.6%
	Unknown	Count	42	0	0	0	0	0	42
		% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	12.9%
Total		Count	42	94	2	86	52	50	326
		% within Damage Cause	12.9%	28.8%	.6%	26.4%	16.0%	15.3%	100.0%
		% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-106: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (AMALGAMATED SITES)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	10	9	22	9	0	50
	% within Damage Cause	.0%	20.0%	18.0%	44.0%	18.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	17.5%	20.0%	15.6%	23.7%	.0%	15.9%
Arable agriculture	Count	0	19	0	30	27	19	95
	% within Damage Cause	.0%	20.0%	.0%	31.6%	28.4%	20.0%	100.0%
	% within Horizontal Damage Effect	.0%	33.3%	.0%	21.3%	71.1%	86.4%	30.3%
Orchards	Count	0	1	7	4	0	0	12
	% within Damage Cause	.0%	8.3%	58.3%	33.3%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.8%	15.6%	2.8%	.0%	.0%	3.8%
Irrigation Channels	Count	0	5	0	11	0	0	16
	% within Damage Cause	.0%	31.3%	.0%	68.8%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	8.8%	.0%	7.8%	.0%	.0%	5.1%
Roads	Count	0	21	1	40	0	0	62
	% within Damage Cause	.0%	33.9%	1.6%	64.5%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	36.8%	2.2%	28.4%	.0%	.0%	19.7%
Bulldozing	Count	0	0	1	13	2	2	18
	% within Damage Cause	.0%	.0%	5.6%	72.2%	11.1%	11.1%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	9.2%	5.3%	9.1%	5.7%
Water Erosion	Count	0	1	0	3	0	1	5
	% within Damage Cause	.0%	20.0%	.0%	60.0%	.0%	20.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.8%	.0%	2.1%	.0%	4.5%	1.6%
Looting	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	.0%	.0%	.0%	.3%
Mudbrick Pits	Count	0	0	15	1	0	0	16
	% within Damage Cause	.0%	.0%	93.8%	6.3%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	33.3%	.7%	.0%	.0%	5.1%
Cuts	Count	0	0	0	4	0	0	4
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.8%	.0%	.0%	1.3%
Grave Pits	Count	0	0	9	12	0	0	21
	% within Damage Cause	.0%	.0%	42.9%	57.1%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	20.0%	8.5%	.0%	.0%	6.7%
Pits (Other)	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	.0%	.0%	.0%	.3%
Natural Erosion	Count	0	0	1	1	0	0	2
	% within Damage Cause	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	.7%	.0%	.0%	.6%
Unknown	Count	11	0	0	0	0	0	11
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	3.5%
	Count	11	57	45	141	38	22	314
	% within Damage Cause	3.5%	18.2%	14.3%	44.9%	12.1%	7.0%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-107: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (UNIT ANALYSIS)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	16	11	17	13	1	58
	% within Damage Cause	.0%	27.6%	19.0%	29.3%	22.4%	1.7%	100.0%
	% within Horizontal Damage Effect	.0%	18.0%	23.9%	11.0%	25.0%	1.2%	13.2%
Arable agriculture	Count	0	26	0	34	37	71	168
	% within Damage Cause	.0%	15.5%	.0%	20.2%	22.0%	42.3%	100.0%
	% within Horizontal Damage Effect	.0%	29.2%	.0%	21.9%	71.2%	87.7%	38.3%
Orchards	Count	0	1	7	4	0	0	12
	% within Damage Cause	.0%	8.3%	58.3%	33.3%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.1%	15.2%	2.6%	.0%	.0%	2.7%
Irrigation Channels	Count	0	6	0	12	0	0	18
	% within Damage Cause	.0%	33.3%	.0%	66.7%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	6.7%	.0%	7.7%	.0%	.0%	4.1%
Roads	Count	0	39	1	53	0	0	93
	% within Damage Cause	.0%	41.9%	1.1%	57.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	43.8%	2.2%	34.2%	.0%	.0%	21.2%
Bulldozing	Count	0	0	1	12	2	7	22
	% within Damage Cause	.0%	.0%	4.5%	54.5%	9.1%	31.8%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	7.7%	3.8%	8.6%	5.0%
Water Erosion	Count	0	1	0	4	0	1	6
	% within Damage Cause	.0%	16.7%	.0%	66.7%	.0%	16.7%	100.0%
	% within Horizontal Damage Effect	.0%	1.1%	.0%	2.6%	.0%	1.2%	1.4%
Looting	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	.0%	.0%	.0%	.2%
Mudbrick Pits	Count	0	0	15	1	0	0	16
	% within Damage Cause	.0%	.0%	93.8%	6.3%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	32.6%	.6%	.0%	.0%	3.6%
Cuts	Count	0	0	0	4	0	0	4
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.6%	.0%	.0%	.9%
Grave Pits	Count	0	0	8	12	0	1	21
	% within Damage Cause	.0%	.0%	38.1%	57.1%	.0%	4.8%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	17.4%	7.7%	.0%	1.2%	4.8%
Pits (Other)	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	.0%	.0%	.0%	.2%
Natural Erosion	Count	0	0	1	2	0	0	3
	% within Damage Cause	.0%	.0%	33.3%	66.7%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.2%	1.3%	.0%	.0%	.7%
Unknown	Count	16	0	0	0	0	0	16
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	3.6%
	Count	16	89	46	155	52	81	439
	% within Damage Cause	3.6%	20.3%	10.5%	35.3%	11.8%	18.5%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-108: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2010 (AMALGAMATED SITES)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	12	8	20	9	0	49
	% within Damage Cause	.0%	24.5%	16.3%	40.8%	18.4%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	18.8%	16.3%	13.2%	22.0%	.0%	14.7%
Arable agriculture	Count	0	14	0	36	28	17	95
	% within Damage Cause	.0%	14.7%	.0%	37.9%	29.5%	17.9%	100.0%
	% within Horizontal Damage Effect	.0%	21.9%	.0%	23.8%	68.3%	85.0%	28.5%
Orchards	Count	0	4	7	5	0	0	16
	% within Damage Cause	.0%	25.0%	43.8%	31.3%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	6.3%	14.3%	3.3%	.0%	.0%	4.8%
Irrigation Channels	Count	0	5	1	12	0	0	18
	% within Damage Cause	.0%	27.8%	5.6%	66.7%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	7.8%	2.0%	7.9%	.0%	.0%	5.4%
Roads	Count	0	26	0	41	0	0	67
	% within Damage Cause	.0%	38.8%	.0%	61.2%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	40.6%	.0%	27.2%	.0%	.0%	20.1%
Bulldozing	Count	0	0	0	17	2	2	21
	% within Damage Cause	.0%	.0%	.0%	81.0%	9.5%	9.5%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	11.3%	4.9%	10.0%	6.3%
Water Erosion	Count	0	1	0	3	0	1	5
	% within Damage Cause	.0%	20.0%	.0%	60.0%	.0%	20.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.6%	.0%	2.0%	.0%	5.0%	1.5%
Visitor Erosion	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.7%	.0%	.0%	.3%
Looting	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.0%	.0%	.0%	.0%	.3%
Mudbrick Pits	Count	0	1	16	1	0	0	18
	% within Damage Cause	.0%	5.6%	88.9%	5.6%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.6%	32.7%	.7%	.0%	.0%	5.4%
Cuts	Count	0	0	1	3	0	0	4
	% within Damage Cause	.0%	.0%	25.0%	75.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.0%	2.0%	.0%	.0%	1.2%
Grave Pits	Count	0	1	11	11	1	0	24
	% within Damage Cause	.0%	4.2%	45.8%	45.8%	4.2%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.6%	22.4%	7.3%	2.4%	.0%	7.2%
Pits (Other)	Count	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	6.1%	.0%	.0%	.0%	.9%
Natural Erosion	Count	0	0	1	1	0	0	2
	% within Damage Cause	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.0%	.7%	.0%	.0%	.6%
Unknown	Count	8	0	0	0	1	0	9
	% within Damage Cause	88.9%	.0%	.0%	.0%	11.1%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	2.4%	.0%	2.7%
	Count	8	64	49	151	41	20	333
	% within Damage Cause	2.4%	19.2%	14.7%	45.3%	12.3%	6.0%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-109: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2010 (UNIT ANALYSIS)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	19	10	15	13	1	58
	% within Damage Cause	.0%	32.8%	17.2%	25.9%	22.4%	1.7%	100.0%
	% within Horizontal Damage Effect	.0%	19.4%	18.5%	9.1%	22.4%	1.3%	12.6%
Arable agriculture	Count	0	21	1	41	40	66	169
	% within Damage Cause	.0%	12.4%	.6%	24.3%	23.7%	39.1%	100.0%
	% within Horizontal Damage Effect	.0%	21.4%	1.9%	24.8%	69.0%	86.8%	36.7%
Orchards	Count	0	4	7	4	1	0	16
	% within Damage Cause	.0%	25.0%	43.8%	25.0%	6.3%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	4.1%	13.0%	2.4%	1.7%	.0%	3.5%
Irrigation Channels	Count	0	6	3	13	0	0	22
	% within Damage Cause	.0%	27.3%	13.6%	59.1%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	6.1%	5.6%	7.9%	.0%	.0%	4.8%
Roads	Count	0	44	0	55	0	0	99
	% within Damage Cause	.0%	44.4%	.0%	55.6%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	44.9%	.0%	33.3%	.0%	.0%	21.5%
Bulldozing	Count	0	0	0	15	2	8	25
	% within Damage Cause	.0%	.0%	.0%	60.0%	8.0%	32.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	9.1%	3.4%	10.5%	5.4%
Water Erosion	Count	0	2	0	4	0	1	7
	% within Damage Cause	.0%	28.6%	.0%	57.1%	.0%	14.3%	100.0%
	% within Horizontal Damage Effect	.0%	2.0%	.0%	2.4%	.0%	1.3%	1.5%
Visitor Erosion	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.6%	.0%	.0%	.2%
Looting	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	1.9%	.0%	.0%	.0%	.2%
Mudbrick Pits	Count	0	1	16	1	0	0	18
	% within Damage Cause	.0%	5.6%	88.9%	5.6%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.0%	29.6%	.6%	.0%	.0%	3.9%
Cuts	Count	0	0	1	3	0	0	4
	% within Damage Cause	.0%	.0%	25.0%	75.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	1.9%	1.8%	.0%	.0%	.9%
Grave Pits	Count	0	1	11	11	1	0	24
	% within Damage Cause	.0%	4.2%	45.8%	45.8%	4.2%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	1.0%	20.4%	6.7%	1.7%	.0%	5.2%
Pits (Other)	Count	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	5.6%	.0%	.0%	.0%	.7%
Natural Erosion	Count	0	0	1	2	0	0	3
	% within Damage Cause	.0%	.0%	33.3%	66.7%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	1.9%	1.2%	.0%	.0%	.7%
Unknown	Count	10	0	0	0	1	0	11
	% within Damage Cause	90.9%	.0%	.0%	.0%	9.1%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	1.7%	.0%	2.4%
	Count	10	98	54	165	58	76	461
	% within Damage Cause	2.2%	21.3%	11.7%	35.8%	12.6%	16.5%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-110: VERTICAL EXTENT OF DAMAGE BY CAUSE ON CORONA (AMALGAMATED SITES)

			Vertical Damage Effect				
			Unknown	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Total
Damage Cause	Development	Count	0	0	39	0	39
		% within Damage Cause	.0%	.0%	100.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	31.7%	.0%	18.3%
	Arable agriculture	Count	0	7	73	0	80
		% within Damage Cause	.0%	8.8%	91.3%	.0%	100.0%
		% within Vertical Damage Effect	.0%	13.0%	59.3%	.0%	37.6%
	Irrigation Channels	Count	0	0	1	0	1
		% within Damage Cause	.0%	.0%	100.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.8%	.0%	.5%
	Roads	Count	0	43	9	0	52
		% within Damage Cause	.0%	82.7%	17.3%	.0%	100.0%
		% within Vertical Damage Effect	.0%	79.6%	7.3%	.0%	24.4%
	Water Erosion	Count	2	3	1	8	14
		% within Damage Cause	14.3%	21.4%	7.1%	57.1%	100.0%
		% within Vertical Damage Effect	7.1%	5.6%	.8%	100.0%	6.6%
	Natural Erosion	Count	0	1	0	0	1
		% within Damage Cause	.0%	100.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	1.9%	.0%	.0%	.5%
	Unknown	Count	26	0	0	0	26
		% within Damage Cause	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	92.9%	.0%	.0%	.0%	12.2%
Total		Count	28	54	123	8	213
		% within Damage Cause	13.1%	25.4%	57.7%	3.8%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-111: VERTICAL EXTENT OF DAMAGE BY CAUSE ON CORONA (UNIT ANALYSIS)

			Vertical Damage Effect				
			Unknown	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Total
Damage Cause	Development	Count	0	0	48	0	48
		% within Damage Cause	.0%	.0%	100.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	25.1%	.0%	14.7%
	Arable agriculture	Count	0	11	128	0	139
		% within Damage Cause	.0%	7.9%	92.1%	.0%	100.0%
		% within Vertical Damage Effect	.0%	13.9%	67.0%	.0%	42.6%
	Irrigation Channels	Count	0	0	1	0	1
		% within Damage Cause	.0%	.0%	100.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.5%	.0%	.3%
	Roads	Count	0	62	12	0	74
		% within Damage Cause	.0%	83.8%	16.2%	.0%	100.0%
		% within Vertical Damage Effect	.0%	78.5%	6.3%	.0%	22.7%
	Water Erosion	Count	2	4	2	12	20
		% within Damage Cause	10.0%	20.0%	10.0%	60.0%	100.0%
		% within Vertical Damage Effect	4.5%	5.1%	1.0%	100.0%	6.1%
	Natural Erosion	Count	0	2	0	0	2
		% within Damage Cause	.0%	100.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	2.5%	.0%	.0%	.6%
	Unknown	Count	42	0	0	0	42
		% within Damage Cause	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	95.5%	.0%	.0%	.0%	12.9%
Total		Count	44	79	191	12	326
		% within Damage Cause	13.5%	24.2%	58.6%	3.7%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-112: VERTICAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (AMALGAMATED SITES)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Damage Cause	Development	Count	1	0	0	1	47	0	1	0	50
		% within Damage Cause	2.0%	.0%	.0%	2.0%	94.0%	.0%	2.0%	.0%	100.0%
		% within Vertical Damage Effect	7.7%	.0%	.0%	2.8%	29.4%	.0%	3.3%	.0%	15.9%
	Arable agriculture	Count	1	0	0	0	64	29	0	1	95
		% within Damage Cause	1.1%	.0%	.0%	.0%	67.4%	30.5%	.0%	1.1%	100.0%
		% within Vertical Damage Effect	7.7%	.0%	.0%	.0%	40.0%	63.0%	.0%	11.1%	30.3%
	Orchards	Count	0	0	0	0	12	0	0	0	12
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	7.5%	.0%	.0%	.0%	3.8%
	Irrigation Channels	Count	0	1	0	0	5	0	2	8	16
		% within Damage Cause	.0%	6.3%	.0%	.0%	31.3%	.0%	12.5%	50.0%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	3.1%	.0%	6.7%	88.9%	5.1%
	Roads	Count	0	0	0	33	19	1	9	0	62
		% within Damage Cause	.0%	.0%	.0%	53.2%	30.6%	1.6%	14.5%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	91.7%	11.9%	2.2%	30.0%	.0%	19.7%
	Bulldozing	Count	0	0	0	0	0	1	17	0	18
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	5.6%	94.4%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	2.2%	56.7%	.0%	5.7%
	Water Erosion	Count	0	1	0	0	0	4	0	0	5
		% within Damage Cause	.0%	20.0%	.0%	.0%	.0%	80.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	8.7%	.0%	.0%	1.6%
	Looting	Count	0	0	0	0	1	0	0	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.6%	.0%	.0%	.0%	.3%
	Mudbrick Pits	Count	0	0	0	0	7	9	0	0	16
		% within Damage Cause	.0%	.0%	.0%	.0%	43.8%	56.3%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	4.4%	19.6%	.0%	.0%	5.1%
	Cuts	Count	0	0	0	0	2	1	1	0	4
		% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	25.0%	25.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.3%	2.2%	3.3%	.0%	1.3%
	Grave Pits	Count	0	0	18	1	2	0	0	0	21
		% within Damage Cause	.0%	.0%	85.7%	4.8%	9.5%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	100.0%	2.8%	1.3%	.0%	.0%	.0%	6.7%
	Pits (Other)	Count	0	0	0	0	0	1	0	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	2.2%	.0%	.0%	.3%
	Natural Erosion	Count	0	0	0	1	1	0	0	0	2
		% within Damage Cause	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	2.8%	.6%	.0%	.0%	.0%	.6%
	Unknown	Count	11	0	0	0	0	0	0	0	11
		% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	84.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.5%
Total		Count	13	2	18	36	160	46	30	9	314
		% within Damage Cause	4.1%	.6%	5.7%	11.5%	51.0%	14.6%	9.6%	2.9%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-113: VERTICAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Damage Cause	Development	Count	1	0	0	1	54	1	1	0	58
		% within Damage Cause	1.7%	.0%	.0%	1.7%	93.1%	1.7%	1.7%	.0%	100.0%
		% within Vertical Damage Effect	5.6%	.0%	.0%	1.8%	23.3%	1.5%	2.8%	.0%	13.2%
	Arable agriculture	Count	1	0	0	0	119	47	0	1	168
		% within Damage Cause	.6%	.0%	.0%	.0%	70.8%	28.0%	.0%	.6%	100.0%
		% within Vertical Damage Effect	5.6%	.0%	.0%	.0%	51.3%	71.2%	.0%	9.1%	38.3%
	Orchards	Count	0	0	0	0	12	0	0	0	12
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	5.2%	.0%	.0%	.0%	2.7%
	Irrigation Channels	Count	0	1	0	0	5	0	2	10	18
		% within Damage Cause	.0%	5.6%	.0%	.0%	27.8%	.0%	11.1%	55.6%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	2.2%	.0%	5.6%	90.9%	4.1%
	Roads	Count	0	0	0	53	28	1	11	0	93
		% within Damage Cause	.0%	.0%	.0%	57.0%	30.1%	1.1%	11.8%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	94.6%	12.1%	1.5%	30.6%	.0%	21.2%
	Bulldozing	Count	0	0	0	0	0	1	21	0	22
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	4.5%	95.5%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	1.5%	58.3%	.0%	5.0%
	Water Erosion	Count	0	1	0	0	0	5	0	0	6
		% within Damage Cause	.0%	16.7%	.0%	.0%	.0%	83.3%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	7.6%	.0%	.0%	1.4%
	Looting	Count	0	0	0	0	1	0	0	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.2%
	Mudbrick Pits	Count	0	0	0	0	7	9	0	0	16
		% within Damage Cause	.0%	.0%	.0%	.0%	43.8%	56.3%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	3.0%	13.6%	.0%	.0%	3.6%
	Cuts	Count	0	0	0	0	2	1	1	0	4
		% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	25.0%	25.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.9%	1.5%	2.8%	.0%	.9%
	Grave Pits	Count	0	0	18	1	2	0	0	0	21
		% within Damage Cause	.0%	.0%	85.7%	4.8%	9.5%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	100.0%	1.8%	.9%	.0%	.0%	.0%	4.8%
	Pits (Other)	Count	0	0	0	0	0	1	0	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	1.5%	.0%	.0%	.2%
	Natural Erosion	Count	0	0	0	1	2	0	0	0	3
		% within Damage Cause	.0%	.0%	.0%	33.3%	66.7%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	1.8%	.9%	.0%	.0%	.0%	.7%
	Unknown	Count	16	0	0	0	0	0	0	0	16
		% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	88.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
Total		Count	18	2	18	56	232	66	36	11	439
		% within Damage Cause	4.1%	.5%	4.1%	12.8%	52.8%	15.0%	8.2%	2.5%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-114: VERTICAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2010 (AMALGAMATED SITES)

		Vertical Damage Effect								
		Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Development	Count	1	0	0	3	44	1	0	0	49
	% within Damage Cause	2.0%	.0%	.0%	6.1%	89.8%	2.0%	.0%	.0%	100.0%
	% within Vertical Damage Effe	11.1%	.0%	.0%	7.5%	26.3%	1.9%	.0%	.0%	14.7%
Arable agriculture	Count	0	0	0	1	63	29	0	2	95
	% within Damage Cause	.0%	.0%	.0%	1.1%	66.3%	30.5%	.0%	2.1%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	2.5%	37.7%	53.7%	.0%	18.2%	28.5%
Orchards	Count	0	0	0	0	16	0	0	0	16
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	.0%	9.6%	.0%	.0%	.0%	4.8%
Irrigation Channels	Count	0	1	0	0	7	0	2	8	18
	% within Damage Cause	.0%	5.6%	.0%	.0%	38.9%	.0%	11.1%	44.4%	100.0%
	% within Vertical Damage Effe	.0%	50.0%	.0%	.0%	4.2%	.0%	6.9%	72.7%	5.4%
Roads	Count	0	0	0	34	21	2	10	0	67
	% within Damage Cause	.0%	.0%	.0%	50.7%	31.3%	3.0%	14.9%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	85.0%	12.6%	3.7%	34.5%	.0%	20.1%
Bulldozing	Count	0	0	0	0	0	5	16	0	21
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	23.8%	76.2%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	.0%	.0%	9.3%	55.2%	.0%	6.3%
Water Erosion	Count	0	1	0	0	0	4	0	0	5
	% within Damage Cause	.0%	20.0%	.0%	.0%	.0%	80.0%	.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	50.0%	.0%	.0%	.0%	7.4%	.0%	.0%	1.5%
Visitor Erosion	Count	0	0	0	0	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	.0%	.0%	.0%	.0%	9.1%	.3%
Looting	Count	0	0	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	.0%	.6%	.0%	.0%	.0%	.3%
Mudbrick Pits	Count	0	0	0	0	9	9	0	0	18
	% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	.0%	5.4%	16.7%	.0%	.0%	5.4%
Cuts	Count	0	0	0	0	1	2	1	0	4
	% within Damage Cause	.0%	.0%	.0%	.0%	25.0%	50.0%	25.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	.0%	.6%	3.7%	3.4%	.0%	1.2%
Grave Pits	Count	0	0	20	1	3	0	0	0	24
	% within Damage Cause	.0%	.0%	83.3%	4.2%	12.5%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	95.2%	2.5%	1.8%	.0%	.0%	.0%	7.2%
Pits (Other)	Count	0	0	1	0	1	1	0	0	3
	% within Damage Cause	.0%	.0%	33.3%	.0%	33.3%	33.3%	.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	4.8%	.0%	.6%	1.9%	.0%	.0%	.9%
Natural Erosion	Count	0	0	0	1	1	0	0	0	2
	% within Damage Cause	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effe	.0%	.0%	.0%	2.5%	.6%	.0%	.0%	.0%	.6%
Unknown	Count	8	0	0	0	0	1	0	0	9
	% within Damage Cause	88.9%	.0%	.0%	.0%	.0%	11.1%	.0%	.0%	100.0%
	% within Vertical Damage Effe	88.9%	.0%	.0%	.0%	.0%	1.9%	.0%	.0%	2.7%
	Count	9	2	21	40	167	54	29	11	333
	% within Damage Cause	2.7%	.6%	6.3%	12.0%	50.2%	16.2%	8.7%	3.3%	100.0%
	% within Vertical Damage Effe	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE G-115: VERTICAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2010 (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Damage Cause	Development	Count	1	0	0	4	51	1	1	0	58
		% within Damage Cause	1.7%	.0%	.0%	6.9%	87.9%	1.7%	1.7%	.0%	100.0%
		% within Vertical Damage Eff	9.1%	.0%	.0%	6.3%	21.2%	1.4%	2.9%	.0%	12.6%
	Arable agriculture	Count	0	0	0	2	118	47	0	2	169
		% within Damage Cause	.0%	.0%	.0%	1.2%	69.8%	27.8%	.0%	1.2%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	3.1%	49.0%	63.5%	.0%	15.4%	36.7%
	Orchards	Count	0	0	0	0	16	0	0	0	16
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	.0%	6.6%	.0%	.0%	.0%	3.5%
	Irrigation Channels	Count	0	1	0	0	9	0	2	10	22
		% within Damage Cause	.0%	4.5%	.0%	.0%	40.9%	.0%	9.1%	45.5%	100.0%
		% within Vertical Damage Eff	.0%	50.0%	.0%	.0%	3.7%	.0%	5.7%	76.9%	4.8%
	Roads	Count	0	0	0	56	30	2	11	0	99
		% within Damage Cause	.0%	.0%	.0%	56.6%	30.3%	2.0%	11.1%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	87.5%	12.4%	2.7%	31.4%	.0%	21.5%
	Bulldozing	Count	0	0	0	0	0	5	20	0	25
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	20.0%	80.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	.0%	.0%	6.8%	57.1%	.0%	5.4%
	Water Erosion	Count	0	1	0	0	0	6	0	0	7
		% within Damage Cause	.0%	14.3%	.0%	.0%	.0%	85.7%	.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	50.0%	.0%	.0%	.0%	8.1%	.0%	.0%	1.5%
	Visitor Erosion	Count	0	0	0	0	0	0	0	1	1
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.7%	.2%
	Looting	Count	0	0	0	0	1	0	0	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.2%
	Mudbrick Pits	Count	0	0	0	0	9	9	0	0	18
		% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	.0%	3.7%	12.2%	.0%	.0%	3.9%
	Cuts	Count	0	0	0	0	1	2	1	0	4
		% within Damage Cause	.0%	.0%	.0%	.0%	25.0%	50.0%	25.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	.0%	.4%	2.7%	2.9%	.0%	.9%
	Grave Pits	Count	0	0	20	1	3	0	0	0	24
		% within Damage Cause	.0%	.0%	83.3%	4.2%	12.5%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	95.2%	1.6%	1.2%	.0%	.0%	.0%	5.2%
	Pits (Other)	Count	0	0	1	0	1	1	0	0	3
		% within Damage Cause	.0%	.0%	33.3%	.0%	33.3%	33.3%	.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	4.8%	.0%	.4%	1.4%	.0%	.0%	.7%
	Natural Erosion	Count	0	0	0	1	2	0	0	0	3
		% within Damage Cause	.0%	.0%	.0%	33.3%	66.7%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Eff	.0%	.0%	.0%	1.6%	.8%	.0%	.0%	.0%	.7%
	Unknown	Count	10	0	0	0	0	1	0	0	11
		% within Damage Cause	90.9%	.0%	.0%	.0%	.0%	9.1%	.0%	.0%	100.0%
		% within Vertical Damage Eff	90.9%	.0%	.0%	.0%	.0%	1.4%	.0%	.0%	2.4%
Total		Count	11	2	21	64	241	74	35	13	461
		% within Damage Cause	2.4%	.4%	4.6%	13.9%	52.3%	16.1%	7.6%	2.8%	100.0%
		% within Vertical Damage Eff	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

6.8 - Damage Levels and Site Stability

Table G-116: Damage Increase by Cause on SPOT 2004 (Amalgamated Sites)

			Damage Increasing					
			Corona	Field Visit	Lessening	No increase	Unknown	Total
Damage Cause	Development	Count	38	8	1	1	2	50
		% within Damage Cause	76.0%	16.0%	2.0%	2.0%	4.0%	100.0%
	Arable agriculture	Count	82	6	0	3	4	95
		% within Damage Cause	86.3%	6.3%	.0%	3.2%	4.2%	100.0%
	Orchards	Count	10	2	0	0	0	12
		% within Damage Cause	83.3%	16.7%	.0%	.0%	.0%	100.0%
	Irrigation Channels	Count	12	4	0	0	0	16
		% within Damage Cause	75.0%	25.0%	.0%	.0%	.0%	100.0%
	Roads	Count	33	3	0	22	4	62
		% within Damage Cause	53.2%	4.8%	.0%	35.5%	6.5%	100.0%
	Bulldozing	Count	11	5	0	0	2	18
		% within Damage Cause	61.1%	27.8%	.0%	.0%	11.1%	100.0%
	Water Erosion	Count	0	1	0	0	4	5
		% within Damage Cause	.0%	20.0%	.0%	.0%	80.0%	100.0%
	Looting	Count	0	0	0	1	0	1
		% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	100.0%
	Mudbrick Pits	Count	1	0	0	0	15	16
		% within Damage Cause	6.3%	.0%	.0%	.0%	93.8%	100.0%
	Cuts	Count	3	0	0	0	1	4
		% within Damage Cause	75.0%	.0%	.0%	.0%	25.0%	100.0%
	Grave Pits	Count	0	0	0	1	20	21
		% within Damage Cause	.0%	.0%	.0%	4.8%	95.2%	100.0%
	Pits (Other)	Count	1	0	0	0	0	1
		% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	Natural Erosion	Count	0	0	0	1	1	2
		% within Damage Cause	.0%	.0%	.0%	50.0%	50.0%	100.0%
	Unknown	Count	0	0	0	0	11	11
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	100.0%
Total		Count	191	29	1	29	64	314
		% within Damage Cause	60.8%	9.2%	.3%	9.2%	20.4%	100.0%

TABLE G-117: DAMAGE INCREASE BY CAUSE ON SPOT 2004 (UNIT ANALYSIS)

			Damage Increasing					
			Corona	Field Visit	Lessening	No increase	Unknown	Total
Damage Cause	Development	Count	43	8	1	4	2	58
		% within Damage Cause	74.1%	13.8%	1.7%	6.9%	3.4%	100.0%
	Arable agriculture	Count	144	8	1	9	6	168
		% within Damage Cause	85.7%	4.8%	.6%	5.4%	3.6%	100.0%
	Orchards	Count	10	2	0	0	0	12
		% within Damage Cause	83.3%	16.7%	.0%	.0%	.0%	100.0%
	Irrigation Channels	Count	14	4	0	0	0	18
		% within Damage Cause	77.8%	22.2%	.0%	.0%	.0%	100.0%
	Roads	Count	43	4	0	39	7	93
		% within Damage Cause	46.2%	4.3%	.0%	41.9%	7.5%	100.0%
	Bulldozing	Count	11	8	0	0	3	22
		% within Damage Cause	50.0%	36.4%	.0%	.0%	13.6%	100.0%
	Water Erosion	Count	0	1	0	0	5	6
		% within Damage Cause	.0%	16.7%	.0%	.0%	83.3%	100.0%
	Looting	Count	0	0	0	1	0	1
		% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	100.0%
	Mudbrick Pits	Count	1	0	0	0	15	16
		% within Damage Cause	6.3%	.0%	.0%	.0%	93.8%	100.0%
	Cuts	Count	3	0	0	0	1	4
		% within Damage Cause	75.0%	.0%	.0%	.0%	25.0%	100.0%
	Grave Pits	Count	0	0	0	1	20	21
		% within Damage Cause	.0%	.0%	.0%	4.8%	95.2%	100.0%
	Pits (Other)	Count	1	0	0	0	0	1
		% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	Natural Erosion	Count	0	0	0	2	1	3
		% within Damage Cause	.0%	.0%	.0%	66.7%	33.3%	100.0%
	Unknown	Count	0	0	0	0	16	16
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	100.0%
Total		Count	270	35	2	56	76	439
		% within Damage Cause	61.5%	8.0%	.5%	12.8%	17.3%	100.0%

TABLE G-118: DAMAGE INCREASE BY CAUSE ON GEOEYE 2010 (AMALGAMATED SITES)

			Damage Increasing						
			Corona	Field Visit	Lessening	No increase	SPOT	Unknown	Total
Damage Cause	Development	Count	27	8	4	3	6	1	49
		% within Damage Cause	55.1%	16.3%	8.2%	6.1%	12.2%	2.0%	100.0%
	Arable agriculture	Count	50	6	2	2	32	3	95
		% within Damage Cause	52.6%	6.3%	2.1%	2.1%	33.7%	3.2%	100.0%
	Orchards	Count	9	1	0	0	6	0	16
		% within Damage Cause	56.3%	6.3%	.0%	.0%	37.5%	.0%	100.0%
	Irrigation Channels	Count	13	3	0	0	0	2	18
		% within Damage Cause	72.2%	16.7%	.0%	.0%	.0%	11.1%	100.0%
	Roads	Count	28	2	0	23	8	6	67
		% within Damage Cause	41.8%	3.0%	.0%	34.3%	11.9%	9.0%	100.0%
	Bulldozing	Count	9	6	0	0	4	2	21
		% within Damage Cause	42.9%	28.6%	.0%	.0%	19.0%	9.5%	100.0%
	Water Erosion	Count	0	1	0	0	0	4	5
		% within Damage Cause	.0%	20.0%	.0%	.0%	.0%	80.0%	100.0%
	Visitor Erosion	Count	0	0	0	0	1	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	Looting	Count	0	0	0	1	0	0	1
		% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	Mudbrick Pits	Count	1	0	0	0	0	17	18
		% within Damage Cause	5.6%	.0%	.0%	.0%	.0%	94.4%	100.0%
	Cuts	Count	3	0	0	0	0	1	4
		% within Damage Cause	75.0%	.0%	.0%	.0%	.0%	25.0%	100.0%
	Grave Pits	Count	0	1	0	1	0	22	24
		% within Damage Cause	.0%	4.2%	.0%	4.2%	.0%	91.7%	100.0%
	Pits (Other)	Count	0	0	0	0	0	3	3
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
	Natural Erosion	Count	0	0	0	1	0	1	2
		% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	50.0%	100.0%
	Unknown	Count	0	0	0	0	0	9	9
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Total		Count	140	28	6	31	57	71	333
		% within Damage Cause	42.0%	8.4%	1.8%	9.3%	17.1%	21.3%	100.0%

TABLE G-119: DAMAGE INCREASE BY CAUSE ON GEOEYE 2010 (UNIT ANALYSIS)

			Damage Increasing						
			Corona	Field Visit	Lessening	No increase	SPOT	Unknown	Total
Damage Cause	Development	Count	32	8	5	7	5	1	58
		% within Damage Cause	55.2%	13.8%	8.6%	12.1%	8.6%	1.7%	100.0%
	Arable agriculture	Count	81	11	5	6	63	3	169
		% within Damage Cause	47.9%	6.5%	3.0%	3.6%	37.3%	1.8%	100.0%
	Orchards	Count	9	1	0	0	6	0	16
		% within Damage Cause	56.3%	6.3%	.0%	.0%	37.5%	.0%	100.0%
	Irrigation Channels	Count	15	3	0	0	0	4	22
		% within Damage Cause	68.2%	13.6%	.0%	.0%	.0%	18.2%	100.0%
	Roads	Count	35	5	0	41	10	8	99
		% within Damage Cause	35.4%	5.1%	.0%	41.4%	10.1%	8.1%	100.0%
	Bulldozing	Count	11	7	0	0	4	3	25
		% within Damage Cause	44.0%	28.0%	.0%	.0%	16.0%	12.0%	100.0%
	Water Erosion	Count	0	1	0	0	0	6	7
		% within Damage Cause	.0%	14.3%	.0%	.0%	.0%	85.7%	100.0%
	Visitor Erosion	Count	0	0	0	0	1	0	1
		% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	Looting	Count	0	0	0	1	0	0	1
		% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	Mudbrick Pits	Count	1	0	0	0	0	17	18
		% within Damage Cause	5.6%	.0%	.0%	.0%	.0%	94.4%	100.0%
	Cuts	Count	3	0	0	0	0	1	4
		% within Damage Cause	75.0%	.0%	.0%	.0%	.0%	25.0%	100.0%
	Grave Pits	Count	0	1	0	1	0	22	24
		% within Damage Cause	.0%	4.2%	.0%	4.2%	.0%	91.7%	100.0%
	Pits (Other)	Count	0	0	0	0	0	3	3
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
	Natural Erosion	Count	0	0	0	2	0	1	3
		% within Damage Cause	.0%	.0%	.0%	66.7%	.0%	33.3%	100.0%
	Unknown	Count	0	0	0	0	0	11	11
		% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Total		Count	187	37	10	58	89	80	461
		% within Damage Cause	40.6%	8.0%	2.2%	12.6%	19.3%	17.4%	100.0%

6.9 – CASE STUDIES

6.9.2 - CASE STUDY: OUTER TOWNS

TABLE G-120: DAMAGE CAUSES BY IMAGERY ON OUTER TOWNS (AMALGAMATED SITES)

			Imagery			
			Corona	SPOT	Geoeye	Total
Damage Cause	Development	Count	10	10	10	30
		% within Imagery	23.3%	15.6%	15.6%	17.5%
	Arable agriculture	Count	15	16	16	47
		% within Imagery	34.9%	25.0%	25.0%	27.5%
	Orchards	Count	0	6	7	13
		% within Imagery	.0%	9.4%	10.9%	7.6%
	Irrigation Channels	Count	0	2	2	4
		% within Imagery	.0%	3.1%	3.1%	2.3%
	Roads	Count	12	14	14	40
		% within Imagery	27.9%	21.9%	21.9%	23.4%
	Bulldozing	Count	0	4	4	8
		% within Imagery	.0%	6.3%	6.3%	4.7%
	Water Erosion	Count	2	0	0	2
		% within Imagery	4.7%	.0%	.0%	1.2%
	Mudbrick Pits	Count	0	4	4	8
		% within Imagery	.0%	6.3%	6.3%	4.7%
	Cuts	Count	0	2	2	4
		% within Imagery	.0%	3.1%	3.1%	2.3%
	Grave Pits	Count	0	3	3	6
		% within Imagery	.0%	4.7%	4.7%	3.5%
	Unknown	Count	4	3	2	9
		% within Imagery	9.3%	4.7%	3.1%	5.3%
Total		Count	43	64	64	171
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-121: DAMAGE CAUSES BY IMAGERY ON LOW MOUNDS (AMALGAMATED SITES)

			Imagery			Total
			Corona	SPOT	Geoeye	
Damage Cause	Development	Count	18	26	26	70
		% within Imagery	15.0%	15.5%	14.8%	15.1%
	Arable agriculture	Count	51	57	56	164
		% within Imagery	42.5%	33.9%	31.8%	35.3%
	Orchards	Count	0	4	6	10
		% within Imagery	.0%	2.4%	3.4%	2.2%
	Irrigation Channels	Count	1	11	13	25
		% within Imagery	.8%	6.5%	7.4%	5.4%
	Roads	Count	29	37	38	104
		% within Imagery	24.2%	22.0%	21.6%	22.4%
	Bulldozing	Count	0	10	11	21
		% within Imagery	.0%	6.0%	6.3%	4.5%
	Water Erosion	Count	8	4	4	16
		% within Imagery	6.7%	2.4%	2.3%	3.4%
	Looting	Count	0	1	1	2
		% within Imagery	.0%	.6%	.6%	.4%
	Mudbrick Pits	Count	0	3	4	7
		% within Imagery	.0%	1.8%	2.3%	1.5%
	Grave Pits	Count	0	11	11	22
		% within Imagery	.0%	6.5%	6.3%	4.7%
	Pits (Other)	Count	0	1	3	4
		% within Imagery	.0%	.6%	1.7%	.9%
	Unknown	Count	13	3	3	19
		% within Imagery	10.8%	1.8%	1.7%	4.1%
Total		Count	120	168	176	464
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-122: DAMAGE CAUSES BY IMAGERY ON OUTER TOWNS (UNIT ANALYSIS)

			Imagery			
			Corona	SPOT	Geoeye	Total
Damage Cause	Development	Count	10	8	8	26
		% within Imagery	12.3%	8.1%	8.1%	9.3%
	Arable agriculture	Count	37	45	47	129
		% within Imagery	45.7%	45.5%	47.5%	46.2%
	Orchards	Count	0	2	3	5
		% within Imagery	.0%	2.0%	3.0%	1.8%
	Irrigation Channels	Count	0	3	3	6
		% within Imagery	.0%	3.0%	3.0%	2.2%
	Roads	Count	20	21	22	63
		% within Imagery	24.7%	21.2%	22.2%	22.6%
	Bulldozing	Count	0	5	5	10
		% within Imagery	.0%	5.1%	5.1%	3.6%
	Water Erosion	Count	3	0	0	3
		% within Imagery	3.7%	.0%	.0%	1.1%
	Mudbrick Pits	Count	0	4	4	8
		% within Imagery	.0%	4.0%	4.0%	2.9%
	Cuts	Count	0	1	1	2
		% within Imagery	.0%	1.0%	1.0%	.7%
	Grave Pits	Count	0	3	3	6
		% within Imagery	.0%	3.0%	3.0%	2.2%
	Unknown	Count	11	7	3	21
		% within Imagery	13.6%	7.1%	3.0%	7.5%
Total		Count	81	99	99	279
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-123: DAMAGE CAUSES BY IMAGERY ON LOW MOUNDS (UNIT ANALYSIS)

			Imagery			Total
			Corona	SPOT	Geoeye	
Damage Cause	Development	Count	26	34	35	95
		% within Imagery	14.2%	13.9%	13.7%	13.9%
	Arable agriculture	Count	84	96	94	274
		% within Imagery	45.9%	39.3%	36.9%	40.2%
	Orchards	Count	0	7	9	16
		% within Imagery	.0%	2.9%	3.5%	2.3%
	Irrigation Channels	Count	1	12	16	29
		% within Imagery	.5%	4.9%	6.3%	4.3%
	Roads	Count	41	59	60	160
		% within Imagery	22.4%	24.2%	23.5%	23.5%
	Bulldozing	Count	0	13	14	27
		% within Imagery	.0%	5.3%	5.5%	4.0%
	Water Erosion	Count	12	4	5	21
		% within Imagery	6.6%	1.6%	2.0%	3.1%
	Looting	Count	0	1	1	2
		% within Imagery	.0%	.4%	.4%	.3%
	Mudbrick Pits	Count	0	3	4	7
		% within Imagery	.0%	1.2%	1.6%	1.0%
	Grave Pits	Count	0	11	11	22
		% within Imagery	.0%	4.5%	4.3%	3.2%
	Pits (Other)	Count	0	1	3	4
		% within Imagery	.0%	.4%	1.2%	.6%
	Unknown	Count	19	3	3	25
		% within Imagery	10.4%	1.2%	1.2%	3.7%
Total		Count	183	244	255	682
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE G-124: DAMAGE CAUSES ON OUTER TOWNS VS. LOW MOUNDS ON CORONA (AMALGAMATED SITES)

Corona	Count		% Affected	
Cause	**Lower Town**	**Low Mounds**	**Lower Town**	**Low Mounds**
Development	10	18	62.5	28.13
Arable agriculture	15	51	93.75	79.69
Orchards	0	0	0	0.00
Irrigation Channels	0	1	0	1.56
Roads	12	29	75	45.31
Bulldozing	0	0	0	0.00
Water Erosion	2	8	12.5	12.50
Looting	0	0	0	0.00
Mudbrick Pits	0	0	0	0.00
Cuts	0	0	0	0.00
Grave Pits	0	0	0	0.00
Pits (Other)	0	0	0	0.00
Unknown	4	13	25	20.31

TABLE G-125: DAMAGE CAUSES ON OUTER TOWNS VS. LOW MOUNDS ON SPOT 2004 (AMALGAMATED SITES)

SPOT	Count		% Affected	
Cause	**Lower Town**	**Low Mounds**	**Lower Town**	**Low Mounds**
Development	10	26	62.5	40.63
Arable agriculture	16	57	100	89.06
Orchards	6	4	37.5	6.25
Irrigation Channels	2	11	12.5	17.19
Roads	14	37	87.5	57.81
Bulldozing	4	10	25	15.63
Water Erosion	0	4	0	6.25
Looting	0	1	0	1.56
Mudbrick Pits	4	3	25	4.69
Cuts	2	0	12.5	0.00
Grave Pits	3	11	18.75	17.19
Pits (Other)	0	1	0	1.56
Unknown	3	3	18.75	4.69

TABLE G-126: DAMAGE CAUSES ON OUTER TOWNS VS. LOW MOUNDS ON GEOEYE 2010 (AMALGAMATED SITES)

Geoeye 2010	Count		% Affected	
Cause	**Lower Town**	**Low Mounds**	**Lower Town**	**Low Mounds**
Development	10	26	62.5	40.63
Arable agriculture	16	56	100	87.50
Orchards	7	6	43.75	9.38
Irrigation Channels	2	13	12.5	20.31
Roads	14	38	87.5	59.38
Bulldozing	4	11	25	17.19
Water Erosion	0	4	0	6.25
Looting	0	1	0	1.56
Mudbrick Pits	4	4	25	6.25
Cuts	2	0	12.5	0.00
Grave Pits	3	11	18.75	17.19
Pits (Other)	0	3	0	4.69
Unknown	2	3	12.5	4.69

Appendix H
Ch. 9 Supporting Data:
Damage in the Land of Carchemish Survey Area

The numerical ordering of this Appendix is designed to match Chapter 8 for ease of cross referencing the tables. Only sections which relate to the main chapter text are included.

8.2 – Overview of the Land of Carchemish Area

Table H-1: Number of Sites in Each Area by Analysis Type

	Upland Plain	River / Terrace	Limestone Bluffs
Total Sites (78)	30	13	45
	25.6%	16.7%	57.7%
Amalgamated Sites (85)	21	16	48
	24.7%	18.8%	56.5%
Site Units (100)	22	16	62
	22.0%	16.0%	62.0%

Table H-2: Site Type by Area (Amalgamated Sites)

Table H-3: Site Type by Area (Unit Analysis)

		Upland Plain	River / Wadi Terrace	Limestone Bluffs	Upland Plain	River / Wadi Terrace	Limestone Bluffs
		1	1	1	1	1	1
		Count	Count	Count	Count	Count	Count
Site_Type	Tell	4	5	9	4	5	10
	Tell (Low)	6	2	11	7	2	14
	Walls	0	0	0	0	0	0
	Flat Site / Scatter	10	7	20	10	7	28
	Irregular Structures / Enclosures	0	0	0	0	0	0
	Building(s)	0	2	3	0	2	3
	Tombs / Cairns	0	0	0	0	0	1
	Field System	0	0	0	0	0	0
	Multiple	1	0	5	1	0	8

8.3 – CERTAINTY

8.3.1 – CERTAINTY: AMALGAMATED SITES AND UNITS

Certainty: Amalgamated Site Analysis

TABLE H-4: CERTAINTY RATINGS ON CORONA (AMALGAMATED SITES)

	Corona ID Certainty		Corona Boundary Certainty		Corona Damage Certainty		Corona Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	36	42.4%	2	2.4%	0	.0%	0	.0%
High	20	23.5%	18	21.2%	15	17.6%	14	16.5%
Medium	15	17.6%	14	16.5%	24	28.2%	25	29.4%
Low	14	16.5%	34	40.0%	42	49.4%	45	52.9%
Negligible	0	.0%	17	20.0%	4	4.7%	1	1.2%
Not Applicable	0	.0%	0	.0%	0	.0%	0	.0%
Total	85	100.0%	85	100.0%	85	100.0%	85	100.0%

TABLE H-5: CERTAINTY RATINGS ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

	DigitalGlobe ID Certainty		DigitalGlobe Boundary Certainty		DigitalGlobe Damage Certainty		DigitalGlobe Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	33	38.8%	2	2.4%	0	.0%	0	.0%
High	15	17.6%	14	16.5%	25	29.4%	22	25.9%
Medium	6	7.1%	9	10.6%	24	28.2%	27	31.8%
Low	7	8.2%	25	29.4%	12	14.1%	12	14.1%
Negligible	0	.0%	11	12.9%	0	.0%	0	.0%
Not Applicable	24	28.2%	24	28.2%	24	28.2%	24	28.2%
Total	85	100.0%	85	100.0%	85	100.0%	85	100.0%

TABLE H-6: CERTAINTY RATINGS ON SPOT 2004 (AMALGAMATED SITES)

	Spot ID Certainty		Spot Boundary Certainty		Spot Damage Certainty		Spot Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	29	34.1%	2	2.4%	0	.0%	0	.0%
High	28	32.9%	13	15.3%	6	7.1%	7	8.2%
Medium	17	20.0%	15	17.6%	17	20.0%	15	17.6%
Low	11	12.9%	32	37.6%	60	70.6%	63	74.1%
Negligible	0	.0%	23	27.1%	2	2.4%	0	.0%
Not Applicable	0	.0%	0	.0%	0	.0%	0	.0%
Total	85	100.0%	85	100.0%	85	100.0%	85	100.0%

TABLE H-7: CERTAINTY RATINGS ON GEOEYE 2009 (AMALGAMATED SITES)

	Geoeye ID Certainty		Geoeye Boundary Certainty		Geoeye Damage Certainty		Geoeye Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	44	51.8%	2	2.4%	0	.0%	0	.0%
High	17	20.0%	19	22.4%	32	37.6%	30	35.3%
Medium	6	7.1%	9	10.6%	29	34.1%	31	36.5%
Low	8	9.4%	34	40.0%	14	16.5%	14	16.5%
Negligible	0	.0%	11	12.9%	0	.0%	0	.0%
Not Applicable	10	11.8%	10	11.8%	10	11.8%	10	11.8%
Total	85	100.0%	85	100.0%	85	100.0%	85	100.0%

TABLE H-8: CERTAINTY RATINGS ON FIELD VISITS (AMALGAMATED SITES)

	Field Visit ID Certainty		Field Visit Boundary Certainty		Field Visit Damage Certainty		Field Visit Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	80	94.1%	1	1.2%	1	1.2%	1	1.2%
High	3	3.5%	29	34.1%	49	57.6%	46	54.1%
Medium	0	.0%	24	28.2%	16	18.8%	20	23.5%
Low	1	1.2%	22	25.9%	18	21.2%	17	20.0%
Negligible	0	.0%	8	9.4%	0	.0%	0	.0%
Not Applicable	1	1.2%	1	1.2%	1	1.2%	1	1.2%
Total	85	100.0%	85	100.0%	85	100.0%	85	100.0%

Certainty: Unit Analysis

TABLE H-9: CERTAINTY RATINGS ON CORONA (UNIT ANALYSIS)

	Corona ID Certainty		Corona Boundary Certainty		Corona Damage Certainty		Corona Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	38	38.0%	2	2.0%	0	.0%	0	.0%
High	21	21.0%	19	19.0%	15	15.0%	14	14.0%
Medium	24	24.0%	16	16.0%	26	26.0%	27	27.0%
Low	17	17.0%	42	42.0%	49	49.0%	56	56.0%
Negligible	0	.0%	21	21.0%	10	10.0%	3	3.0%
Not Applicable	0	.0%	0	.0%	0	.0%	0	.0%
Total	100	100.0%	100	100.0%	100	100.0%	100	100.0%

TABLE H-10: CERTAINTY RATINGS ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

	DigitalGlobe ID Certainty		DigitalGlobe Boundary Certainty		DigitalGlobe Damage Certainty		DigitalGlobe Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	37	37.0%	2	2.0%	0	.0%	0	.0%
High	14	14.0%	16	16.0%	26	26.0%	22	22.0%
Medium	11	11.0%	10	10.0%	27	27.0%	31	31.0%
Low	7	7.0%	28	28.0%	16	16.0%	16	16.0%
Negligible	0	.0%	12	12.0%	0	.0%	0	.0%
Not Applicable	31	31.0%	31	31.0%	31	31.0%	31	31.0%
Total	100	100.0%	100	100.0%	100	100.0%	100	100.0%

TABLE H-11: CERTAINTY RATINGS ON SPOT 2004 (UNIT ANALYSIS)

	Spot ID Certainty		Spot Boundary Certainty		Spot Damage Certainty		Spot Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	29	29.0%	2	2.0%	0	.0%	0	.0%
High	37	37.0%	14	14.0%	6	6.0%	7	7.0%
Medium	21	21.0%	14	14.0%	18	18.0%	16	16.0%
Low	13	13.0%	46	46.0%	70	70.0%	75	75.0%
Negligible	0	.0%	24	24.0%	6	6.0%	2	2.0%
Not Applicable	0	.0%	0	.0%	0	.0%	0	.0%
Total	100	100.0%	100	100.0%	100	100.0%	100	100.0%

TABLE H-12: CERTAINTY RATINGS ON GEOEYE 2009 (UNIT ANALYSIS)

	Geoeye ID Certainty		Geoeye Boundary Certainty		Geoeye Damage Certainty		Geoeye Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	48	48.0%	2	2.0%	0	.0%	0	.0%
High	17	17.0%	20	20.0%	35	35.0%	33	33.0%
Medium	11	11.0%	11	11.0%	32	32.0%	34	34.0%
Low	8	8.0%	40	40.0%	17	17.0%	17	17.0%
Negligible	0	.0%	11	11.0%	0	.0%	0	.0%
Not Applicable	16	16.0%	16	16.0%	16	16.0%	16	16.0%
Total	100	100.0%	100	100.0%	100	100.0%	100	100.0%

TABLE H-13: CERTAINTY RATINGS ON FIELD VISITS (UNIT ANALYSIS)

	Field Visit ID Certainty		Field Visit Boundary Certainty		Field Visit Damage Certainty		Field Visit Overall Certainty	
	Count	%	Count	%	Count	%	Count	%
Definite	95	95.0%	1	1.0%	1	1.0%	1	1.0%
High	3	3.0%	35	35.0%	55	55.0%	52	52.0%
Medium	0	.0%	28	28.0%	20	20.0%	24	24.0%
Low	1	1.0%	25	25.0%	23	23.0%	22	22.0%
Negligible	0	.0%	10	10.0%	0	.0%	0	.0%
Not Applicable	1	1.0%	1	1.0%	1	1.0%	1	1.0%
Total	100	100.0%	100	100.0%	100	100.0%	100	100.0%

FIGURE H-1: GRAPH OF ID CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)

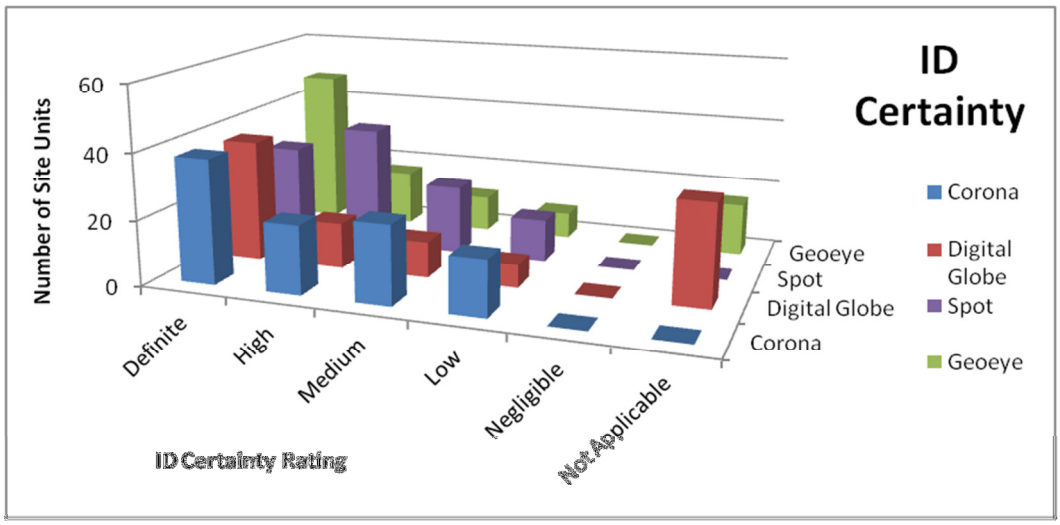


FIGURE H-2: GRAPH OF BOUNDARY CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)

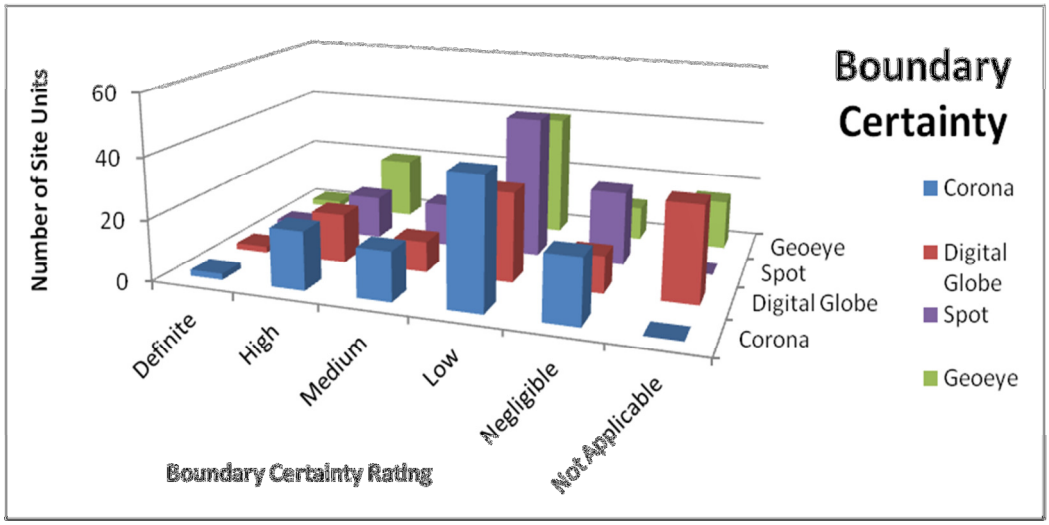


FIGURE H-3: GRAPH OF DAMAGE CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)

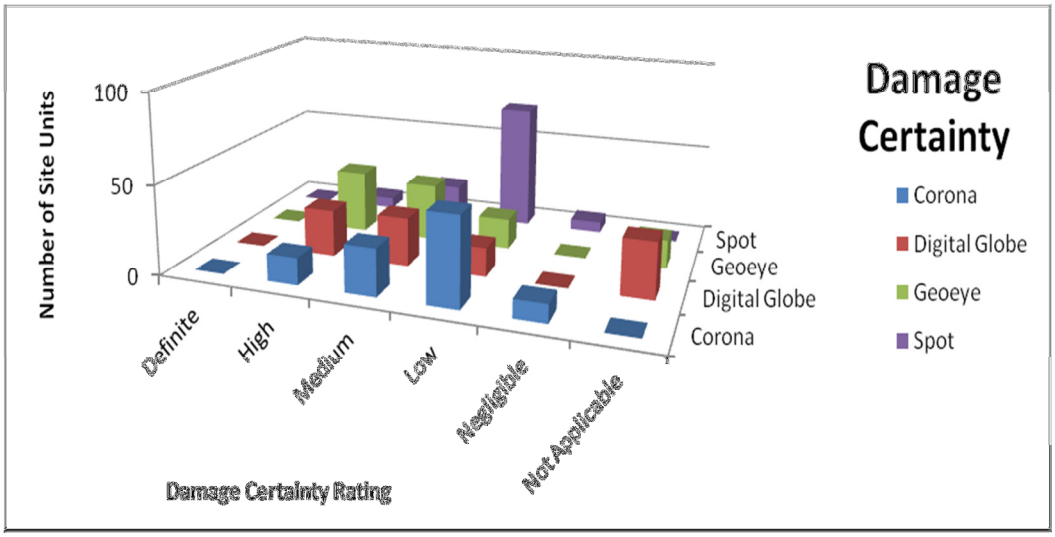
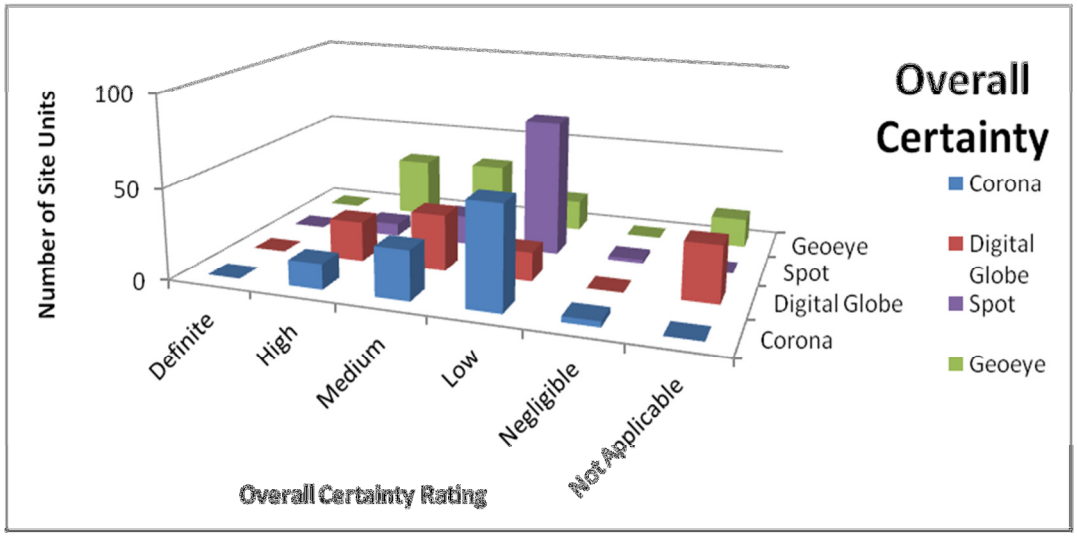


FIGURE H-4: GRAPH OF OVERALL CERTAINTY RATINGS ON IMAGERY (UNIT ANALYSIS)



8.3.2 – A NOTE ON GENERALISATIONS AND HEIGHT

TABLE H-14: CERTAINTY OF HEIGHT REMAINING (UNIT ANALYSIS)

Does Height Remain?	Number of sites on Corona	Number of sites on Field Visits	Number of sites on DigitalGlobe 2003	Number of sites on SPOT 2004	Number of sites on Geoeye 2009
Certain	43 (43.0%)	43 (43.0%)	31 (42.5%)	42 (42.0%)	34 (40.0%)
Uncertain	4 (4.0%)	3 (3.0%)	3 (4.1%)	4 (4.0%)	9 (10.6%)
Flat Site	53 (53.3%)	54 (54.0%)	39 (53.4%)	54 (54.0%)	42 (49.4%)
Not Applicable	*0/100*	*0/100*	*27/100*	*0/100*	*15/100*

Percentages are of sites covered by the imagery, to allow comparisons between the images

8.4 - VISIBILITY

8.4.3 - VISIBILITY: AMALGAMATED SITES AND UNIT ANALYSIS

The Not Applicable category indicates sites which are not covered by the imagery.

Visibility: Amalgamated Sites

TABLE H-15: VISIBILITY OF SITES ON CORONA (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	24	28.2	28.2	28.2
	Partially Visible	10	11.8	11.8	40.0
	Barely Visible	12	14.1	14.1	54.1
	Obscured	3	3.5	3.5	57.6
	Not Visible	36	42.4	42.4	100.0
	Total	85	100.0	100.0	

TABLE H-16: VISIBILITY OF ALL SITES ON DIGITALGLOBE (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	24	28.2	28.2	28.2
	Visible	20	23.5	23.5	51.8
	Partially Visible	7	8.2	8.2	60.0
	Barely Visible	12	14.1	14.1	74.1
	Obscured	3	3.5	3.5	77.6
	Not Visible	19	22.4	22.4	100.0
	Total	85	100.0	100.0	

TABLE H-17: VISIBILITY OF SITES COVERED BY DIGITALGLOBE (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	20	32.8	32.8	32.8
	Partially Visible	7	11.5	11.5	44.3
	Barely Visible	12	19.7	19.7	63.9
	Obscured	3	4.9	4.9	68.9
	Not Visible	19	31.1	31.1	100.0
	Total	61	100.0	100.0	

TABLE H-18: VISIBILITY OF SITES ON SPOT 2004 (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	13	15.3	15.3	15.3
	Partially Visible	5	5.9	5.9	21.2
	Barely Visible	14	16.5	16.5	37.6
	Obscured	3	3.5	3.5	41.2
	Not Visible	50	58.8	58.8	100.0
	Total	85	100.0	100.0	

TABLE H-19: VISIBILITY OF ALL SITES ON GEOEYE 2009 (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	10	11.8	11.8	11.8
	Visible	25	29.4	29.4	41.2
	Partially Visible	10	11.8	11.8	52.9
	Barely Visible	16	18.8	18.8	71.8
	Obscured	4	4.7	4.7	76.5
	Not Visible	20	23.5	23.5	100.0
	Total	85	100.0	100.0	

TABLE H-20: VISIBILITY OF ALL SITES COVERED BY GEOEYE 2009 (AMALGAMATED SITES)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	25	33.3	33.3	33.3
	Partially Visible	10	13.3	13.3	46.7
	Barely Visible	16	21.3	21.3	68.0
	Obscured	4	5.3	5.3	73.3
	Not Visible	20	26.7	26.7	100.0
	Total	75	100.0	100.0	

Visibility: Unit Analysis

TABLE H-21: VISIBILITY OF SITES ON CORONA (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	25	25.0	25.0	25.0
	Partially Visible	10	10.0	10.0	35.0
	Barely Visible	13	13.0	13.0	48.0
	Obscured	4	4.0	4.0	52.0
	Not Visible	48	48.0	48.0	100.0
	Total	100	100.0	100.0	

TABLE H-22: VISIBILITY OF ALL SITES ON DIGITALGLOBE (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	31	31.0	31.0	31.0
	Visible	22	22.0	22.0	53.0
	Partially Visible	6	6.0	6.0	59.0
	Barely Visible	12	12.0	12.0	71.0
	Obscured	5	5.0	5.0	76.0
	Not Visible	24	24.0	24.0	100.0
	Total	100	100.0	100.0	

TABLE H-23: VISIBILITY OF SITES COVERED BY DIGITALGLOBE (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	22	31.9	31.9	31.9
	Partially Visible	6	8.7	8.7	40.6
	Barely Visible	12	17.4	17.4	58.0
	Obscured	5	7.2	7.2	65.2
	Not Visible	24	34.8	34.8	100.0
	Total	69	100.0	100.0	

TABLE H-24: VISIBILITY OF SITES ON SPOT 2004 (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	13	13.0	13.0	13.0
	Partially Visible	4	4.0	4.0	17.0
	Barely Visible	18	18.0	18.0	35.0
	Obscured	3	3.0	3.0	38.0
	Not Visible	62	62.0	62.0	100.0
	Total	100	100.0	100.0	

TABLE H-25: VISIBILITY OF ALL SITES ON GEOEYE 2009 (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	16	16.0	16.0	16.0
	Visible	26	26.0	26.0	42.0
	Partially Visible	9	9.0	9.0	51.0
	Barely Visible	18	18.0	18.0	69.0
	Obscured	6	6.0	6.0	75.0
	Not Visible	25	25.0	25.0	100.0
	Total	100	100.0	100.0	

TABLE H-26: VISIBILITY OF SITES COVERED BY GEOEYE 2009 (UNIT ANALYSIS)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Visible	26	31.0	31.0	31.0
	Partially Visible	9	10.7	10.7	41.7
	Barely Visible	18	21.4	21.4	63.1
	Obscured	6	7.1	7.1	70.2
	Not Visible	25	29.8	29.8	100.0
	Total	84	100.0	100.0	

FIGURE H-5: GRAPH OF VISIBILITY OF SITES ON IMAGERY (UNIT ANALYSIS)

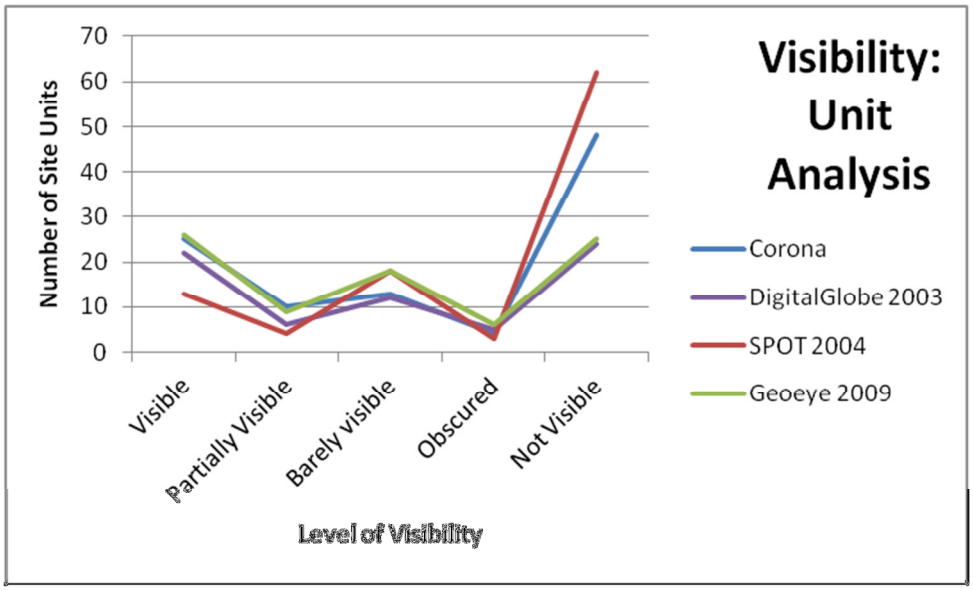
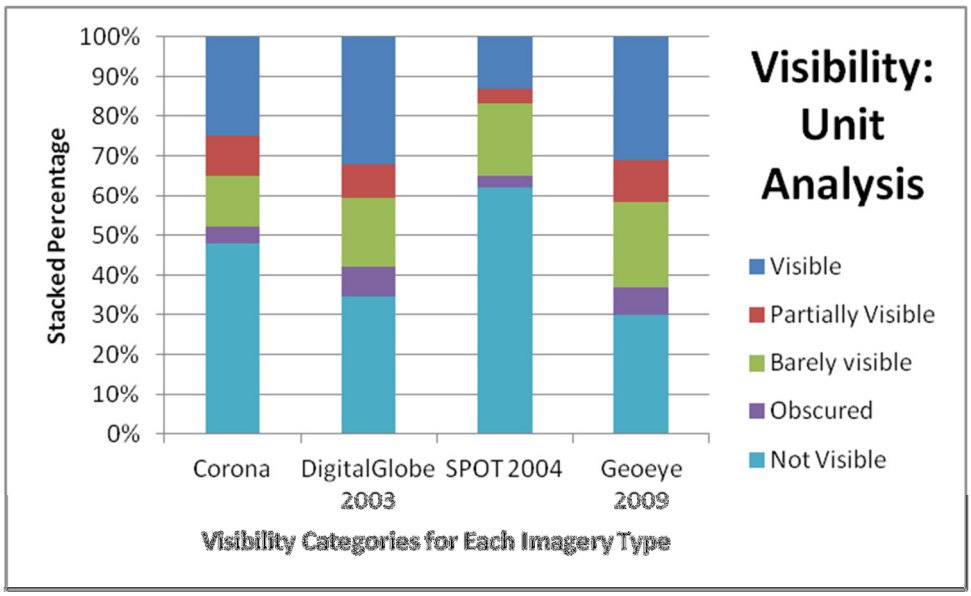


FIGURE H-6: STACKED GRAPH OF VISIBILITY OF SITES ON IMAGERY (UNIT ANALYSIS)



8.4.4 - VISIBILITY: SITE LOCATION

TABLE H-27: VISIBILITY BY SITE LOCATION (TOTAL FOR ALL IMAGERY) (AMALGAMATED SITES)

	Upland Plain	River / Wadi Terrace	Limestone Hills	Total
Visible	23	23	36	82
Partially Visible	17	2	13	32
Barely Visible	20	6	28	54
Obscured	8	3	2	13
Not Visible	14	27	84	125
Total	82	61	163	306

TABLE H-28: UNIT ANALYSIS - VISIBILITY BY SITE LOCATION (TOTAL FOR ALL IMAGERY) (UNIT ANALYSIS)

	Upland Plain	River / Wadi Terrace	Limestone Hills	Total
Visible	23	23	40	86
Partially Visible	16	2	11	29
Barely Visible	23	6	32	61
Obscured	8	3	7	18
Not Visible	15	27	117	159
Total	85	61	207	353

FIGURE H-7: GRAPH OF VISIBILITY BY LAND TYPE (UNIT ANALYSIS)

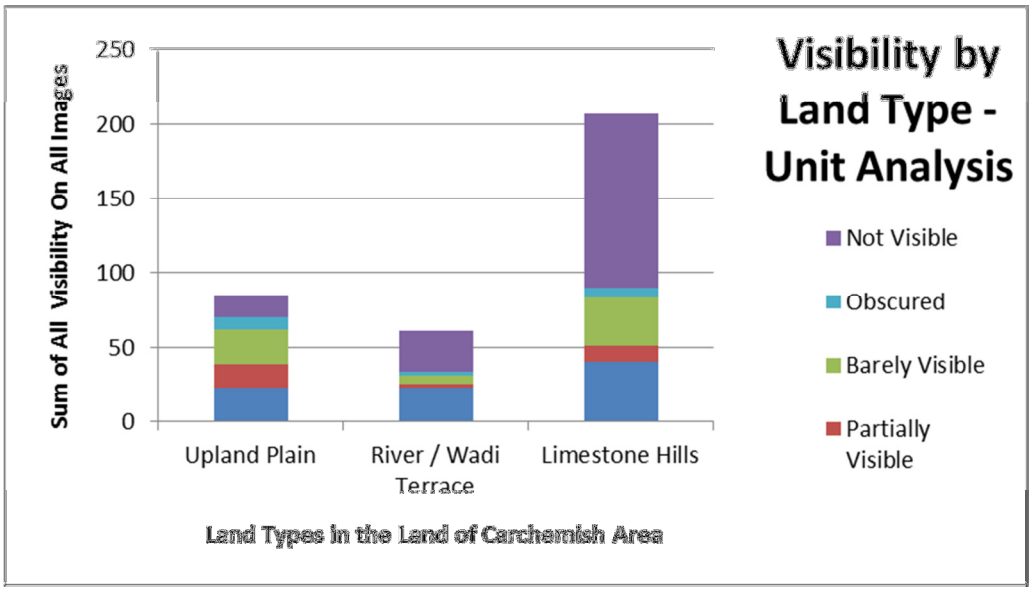


FIGURE H-8: GRAPH OF PERCENTAGE VISIBILITY BY LAND TYPE (UNIT ANALYSIS)

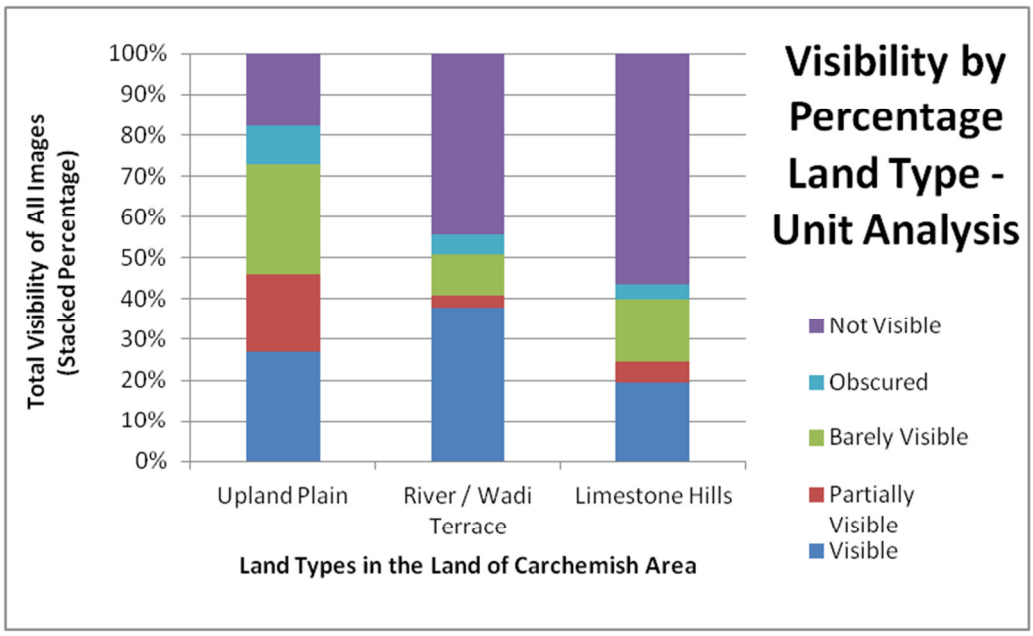


TABLE H-29: SUMMARY OF VISIBILITY OF LAND TYPES BY IMAGERY (AMALGAMATED SITES)

	Upland Plain	River / Wadi Terraces	Limestone Hills
Visible on Corona	9	7	8
Partially Visible on Corona	6	0	4
Barely Visible on Corona	1	1	10
Obscured on Corona	2	0	1
Not Visible on Corona	3	8	25
Total	21	16	48
Visible on DigitalGlobe 2003	5	5	10
Partially Visible on DigitalGlobe 2003	3	1	3
Barely Visible on DigitalGlobe 2003	5	1	6
Obscured on DigitalGlobe 2003	2	1	0
Not Visible on DigitalGlobe 2003	4	6	9
Total	19	14	28
Visible on SPOT 2004	5	5	3
Partially Visible on SPOT 2004	3	0	2
Barely Visible on SPOT 2004	6	2	6
Obscured on SPOT 2004	2	1	0
Not Visible on SPOT 2004	5	8	37
Total	21	16	48
Visible on Geoeye 2009	4	6	15
Partially Visible on Geoeye 2009	5	1	4
Barely Visible on Geoeye 2009	8	2	6
Obscured on Geoeye 2009	2	1	1
Not Visible on Geoeye 2009	2	5	13
Total	21	15	39

TABLE H-30: SUMMARY OF VISIBILITY OF LAND TYPES BY IMAGERY (UNIT ANALYSIS)

	Upland Plain	River / Wadi Terraces	Limestone Hills
Visible on Corona	9	7	9
Partially Visible on Corona	6	0	4
Barely Visible on Corona	2	1	10
Obscured on Corona	2	0	2
Not Visible on Corona	3	8	37
Total	22	16	62
Visible on DigitalGlobe 2003	5	5	12
Partially Visible on DigitalGlobe 2003	3	1	2
Barely Visible on DigitalGlobe 2003	5	1	6
Obscured on DigitalGlobe 2003	2	1	2
Not Visible on DigitalGlobe 2003	4	6	14
Total	19	14	36
Visible on SPOT 2004	5	5	3
Partially Visible on SPOT 2004	3	0	1
Barely Visible on SPOT 2004	7	2	9
Obscured on SPOT 2004	2	1	0
Not Visible on SPOT 2004	5	8	49
Total	22	16	62
Visible on Geoeye 2009	4	6	16
Partially Visible on Geoeye 2009	4	1	4
Barely Visible on Geoeye 2009	9	2	7
Obscured on Geoeye 2009	2	1	3
Not Visible on Geoeye 2009	3	5	17
Total	22	15	47

FIGURE H-9: GRAPHS OF VISIBILITY OF SITES BY LAND TYPE (AMALGAMATED SITES)

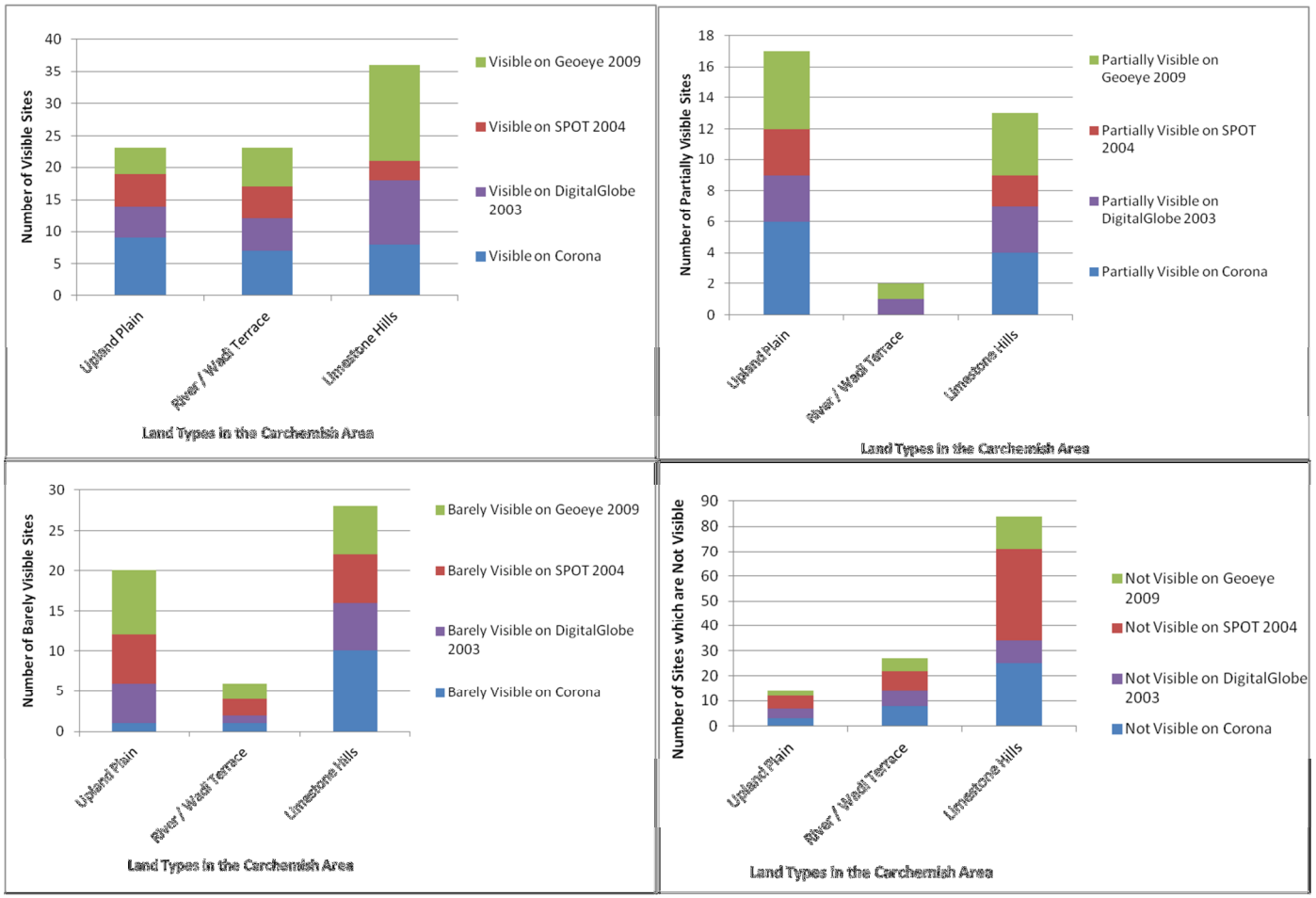


FIGURE H-10: GRAPHS OF VISIBILITY OF SITES BY PERCENTAGE LAND TYPE (AMALGAMATED SITES)

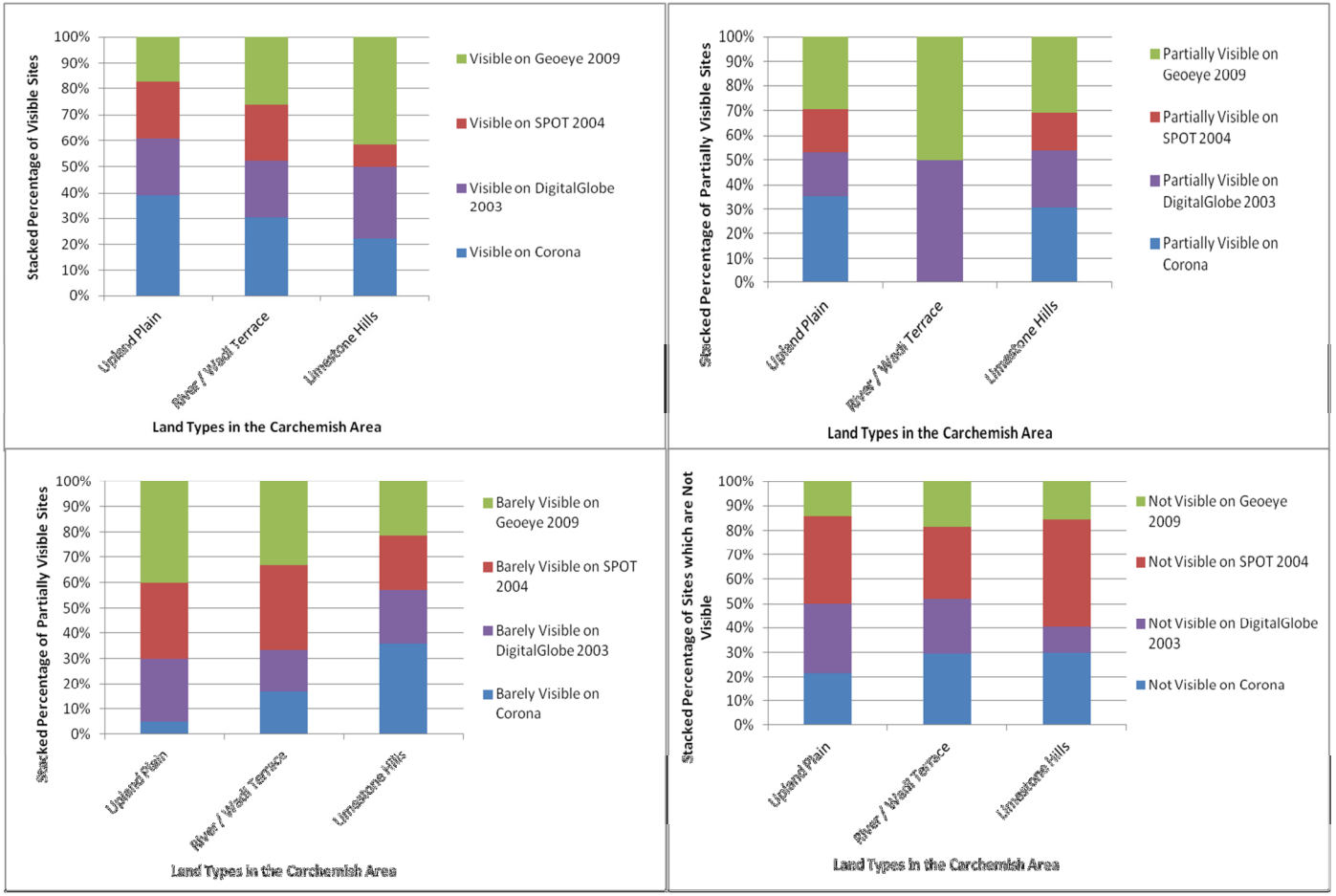


FIGURE H-11: GRAPHS OF VISIBILITY OF SITES BY LAND TYPE (UNIT ANALYSIS)

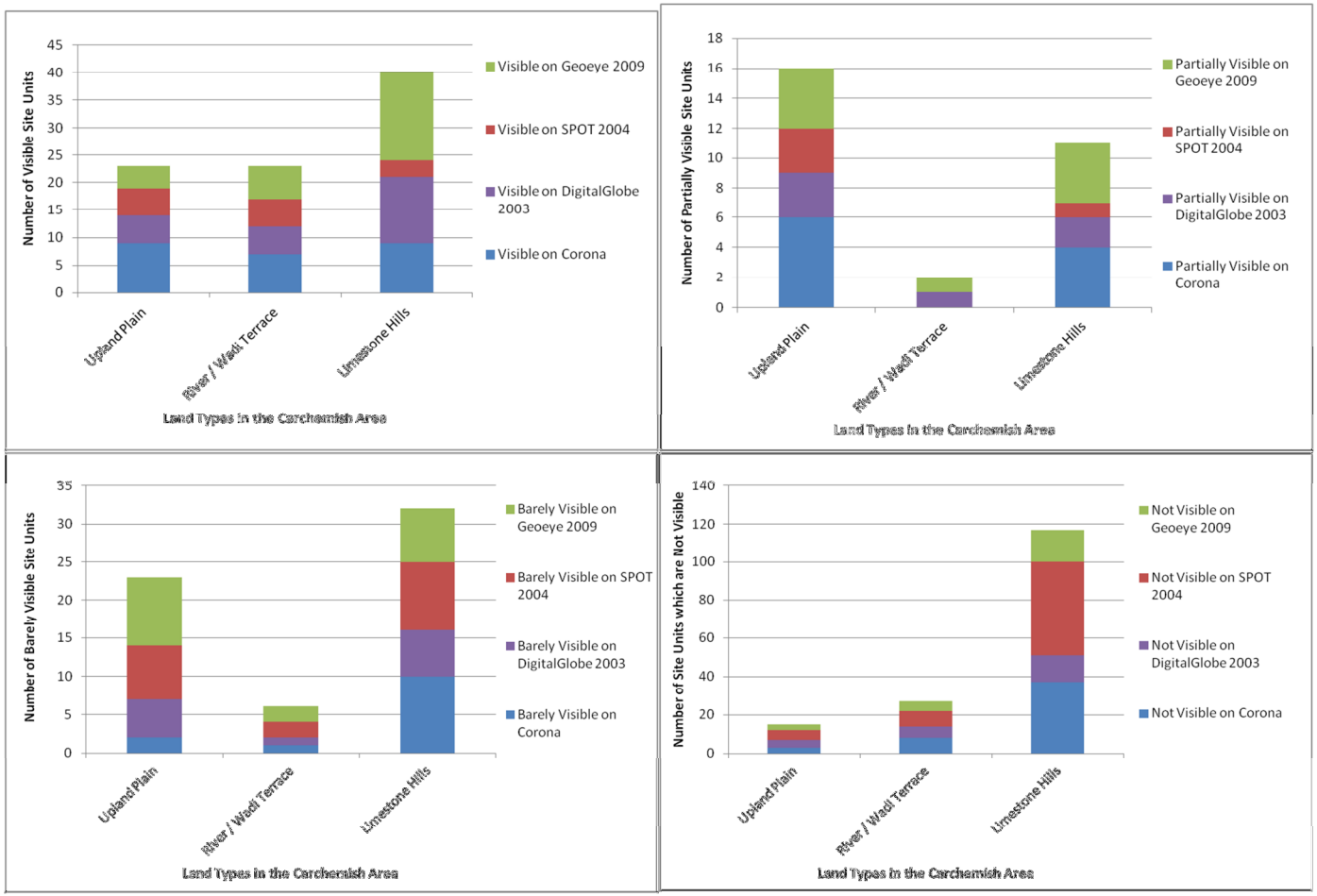
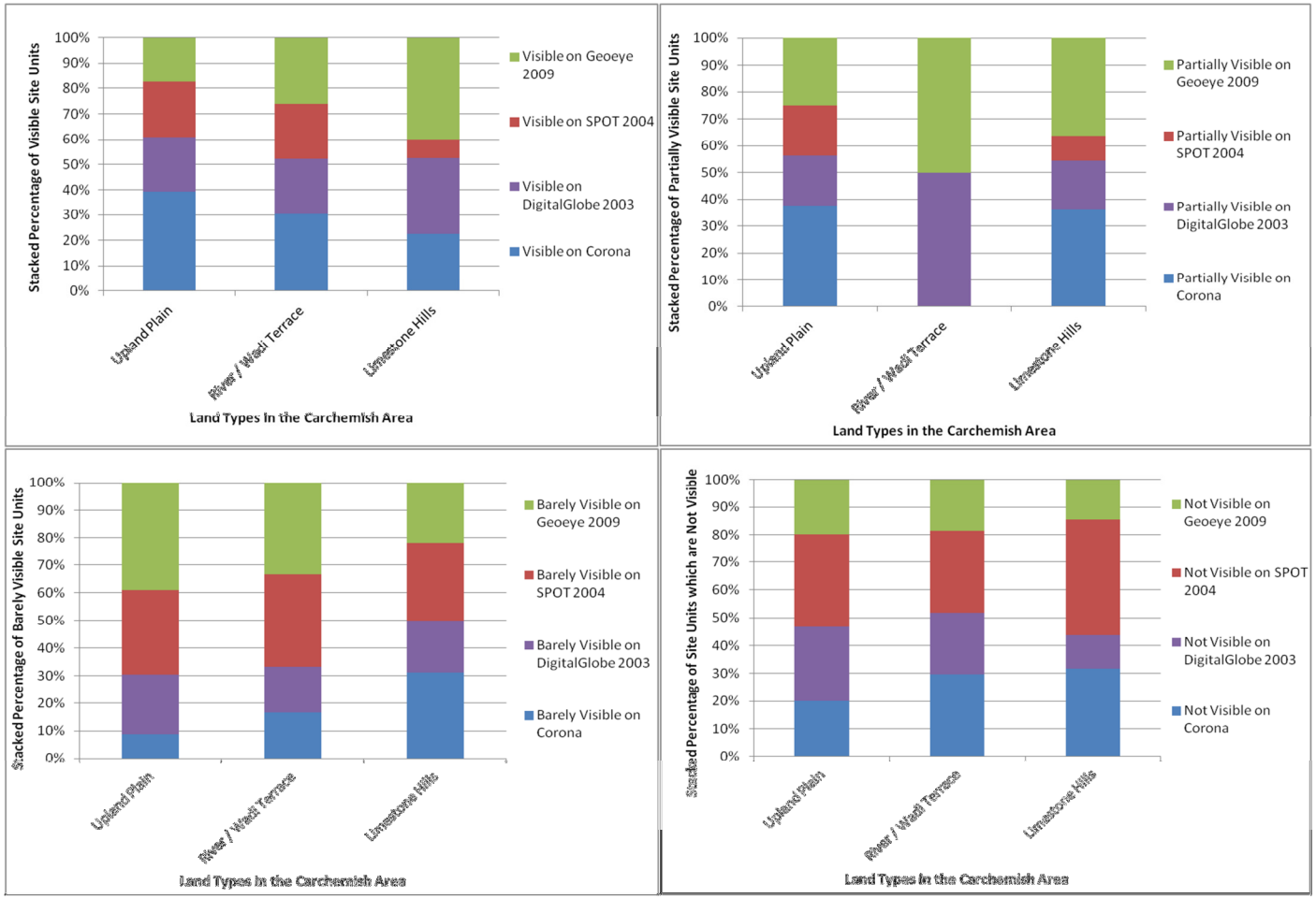


FIGURE H-12: GRAPHS OF VISIBILITY OF SITES BY PERCENTAGE LAND TYPE (UNIT ANALYSIS)



8.4.4 - VISIBILITY: SITE TYPE

TABLE H-31: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON CORONA (AMALGAMATED SITES)

			Site_Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Visibility (Corona)	Visible	Count	14	4	5	0	1	24
		% within Site_Type	77.8%	21.1%	13.5%	.0%	16.7%	28.2%
	Partially Visible	Count	2	2	6	0	0	10
		% within Site_Type	11.1%	10.5%	16.2%	.0%	.0%	11.8%
	Barely Visible	Count	2	5	3	2	0	12
		% within Site_Type	11.1%	26.3%	8.1%	40.0%	.0%	14.1%
	Obscured	Count	0	2	1	0	0	3
		% within Site_Type	.0%	10.5%	2.7%	.0%	.0%	3.5%
	Not Visible	Count	0	6	22	3	5	36
		% within Site_Type	.0%	31.6%	59.5%	60.0%	83.3%	42.4%
Total		Count	18	19	37	5	6	85
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-32: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

			Site_Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Visibility (DigitalGlobe)	Not Applicable	Count	4	6	10	3	1	24
		% within Site_Type	22.2%	31.6%	27.0%	60.0%	16.7%	28.2%
	Visible	Count	13	2	3	1	1	20
		% within Site_Type	72.2%	10.5%	8.1%	20.0%	16.7%	23.5%
	Partially Visible	Count	1	3	2	0	1	7
		% within Site_Type	5.6%	15.8%	5.4%	.0%	16.7%	8.2%
	Barely Visible	Count	0	4	6	1	1	12
		% within Site_Type	.0%	21.1%	16.2%	20.0%	16.7%	14.1%
	Obscured	Count	0	1	2	0	0	3
		% within Site_Type	.0%	5.3%	5.4%	.0%	.0%	3.5%
	Not Visible	Count	0	3	14	0	2	19
		% within Site_Type	.0%	15.8%	37.8%	.0%	33.3%	22.4%
Total		Count	18	19	37	5	6	85
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-33: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON SPOT 2004 (AMALGAMATED SITES)

			Site_Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Visibility (SPOT)	Visible	Count	10	1	2	0	0	13
		% within Site_Type	55.6%	5.3%	5.4%	.0%	.0%	15.3%
	Partially Visible	Count	2	3	0	0	0	5
		% within Site_Type	11.1%	15.8%	.0%	.0%	.0%	5.9%
	Barely Visible	Count	4	3	6	1	0	14
		% within Site_Type	22.2%	15.8%	16.2%	20.0%	.0%	16.5%
	Obscured	Count	0	1	2	0	0	3
		% within Site_Type	.0%	5.3%	5.4%	.0%	.0%	3.5%
	Not Visible	Count	2	11	27	4	6	50
		% within Site_Type	11.1%	57.9%	73.0%	80.0%	100.0%	58.8%
Total		Count	18	19	37	5	6	85
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-34: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON GEOEYE 2009 (AMALGAMATED SITES)

			Site_Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Visibility (Geoeye)	Not Applicable	Count	0	2	5	2	1	10
		% within Site_Type	.0%	10.5%	13.5%	40.0%	16.7%	11.8%
	Visible	Count	17	3	2	2	1	25
		% within Site_Type	94.4%	15.8%	5.4%	40.0%	16.7%	29.4%
	Partially Visible	Count	0	6	3	0	1	10
		% within Site_Type	.0%	31.6%	8.1%	.0%	16.7%	11.8%
	Barely Visible	Count	1	3	9	1	2	16
		% within Site_Type	5.6%	15.8%	24.3%	20.0%	33.3%	18.8%
	Obscured	Count	0	2	2	0	0	4
		% within Site_Type	.0%	10.5%	5.4%	.0%	.0%	4.7%
	Not Visible	Count	0	3	16	0	1	20
		% within Site_Type	.0%	15.8%	43.2%	.0%	16.7%	23.5%
Total		Count	18	19	37	5	6	85
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-35: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON CORONA (UNIT ANALYSIS)

			Site_Type						
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Visibility (Corona)	Visible	Count	15	4	5	0	0	1	25
		% within Site_Type	78.9%	17.4%	11.1%	.0%	.0%	14.3%	25.0%
	Partially Visible	Count	2	2	6	0	0	0	10
		% within Site_Type	10.5%	8.7%	13.3%	.0%	.0%	.0%	10.0%
	Barely Visible	Count	2	6	3	2	0	0	13
		% within Site_Type	10.5%	26.1%	6.7%	40.0%	.0%	.0%	13.0%
	Obscured	Count	0	3	1	0	0	0	4
		% within Site_Type	.0%	13.0%	2.2%	.0%	.0%	.0%	4.0%
	Not Visible	Count	0	8	30	3	1	6	48
		% within Site_Type	.0%	34.8%	66.7%	60.0%	100.0%	85.7%	48.0%
Total		Count	19	23	45	5	1	7	100
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-36: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

			Site_Type						
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Visibility (DigitalGlobe)	Not Applicable	Count	4	8	15	3	1	0	31
		% within Site_Type	21.1%	34.8%	33.3%	60.0%	100.0%	.0%	31.0%
	Visible	Count	14	3	3	1	0	1	22
		% within Site_Type	73.7%	13.0%	6.7%	20.0%	.0%	14.3%	22.0%
	Partially Visible	Count	1	2	2	0	0	1	6
		% within Site_Type	5.3%	8.7%	4.4%	.0%	.0%	14.3%	6.0%
	Barely Visible	Count	0	4	5	1	0	2	12
		% within Site_Type	.0%	17.4%	11.1%	20.0%	.0%	28.6%	12.0%
	Obscured	Count	0	2	3	0	0	0	5
		% within Site_Type	.0%	8.7%	6.7%	.0%	.0%	.0%	5.0%
	Not Visible	Count	0	4	17	0	0	3	24
		% within Site_Type	.0%	17.4%	37.8%	.0%	.0%	42.9%	24.0%
Total		Count	19	23	45	5	1	7	100
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-37: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON SPOT 2004 (UNIT ANALYSIS)

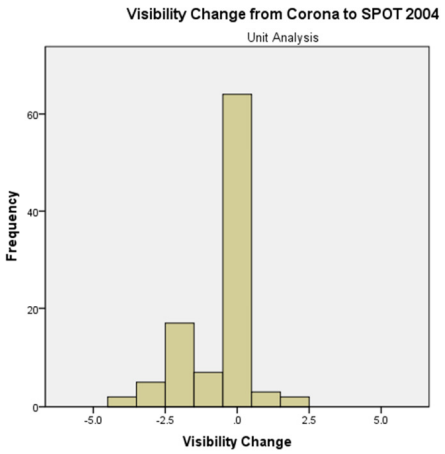
			Site_Type						
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Visibility (SPOT)	Visible	Count	10	1	2	0	0	0	13
		% within Site_Type	52.6%	4.3%	4.4%	.0%	.0%	.0%	13.0%
	Partially Visible	Count	1	3	0	0	0	0	4
		% within Site_Type	5.3%	13.0%	.0%	.0%	.0%	.0%	4.0%
	Barely Visible	Count	6	5	8	1	0	0	18
		% within Site_Type	31.6%	21.7%	13.3%	20.0%	.0%	.0%	18.0%
	Obscured	Count	0	1	2	0	0	0	3
		% within Site_Type	.0%	4.3%	4.4%	.0%	.0%	.0%	3.0%
	Not Visible	Count	2	13	35	4	1	7	62
		% within Site_Type	10.5%	56.5%	77.8%	80.0%	100.0%	100.0%	62.0%
Total		Count	19	23	45	5	1	7	100
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

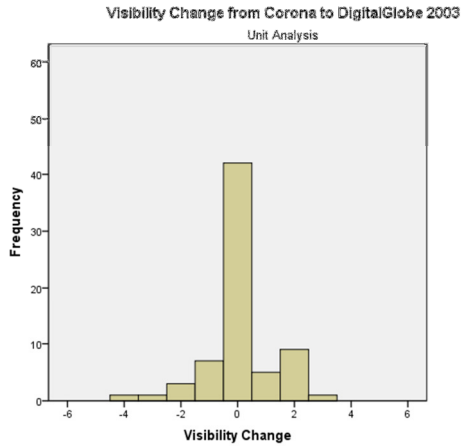
TABLE H-38: VISIBILITY BY IMAGE TYPE AND SITE TYPE ON GEOEYE 2009 (UNIT ANALYSIS)

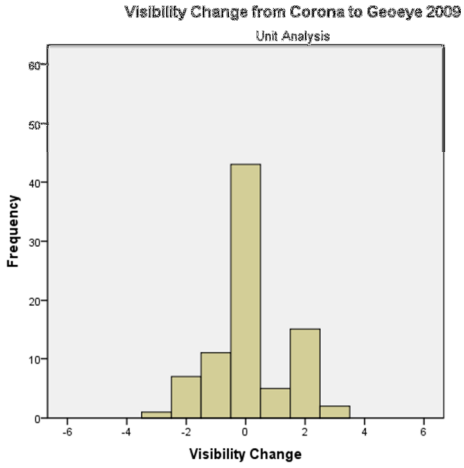
			Site_Type						
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Visibility (Geoeye)	Not Applicable	Count	0	3	10	2	1	0	16
		% within Site_Type	.0%	13.0%	22.2%	40.0%	100.0%	.0%	16.0%
	Visible	Count	18	3	2	2	0	1	26
		% within Site_Type	94.7%	13.0%	4.4%	40.0%	.0%	14.3%	26.0%
	Partially Visible	Count	0	5	3	0	0	1	9
		% within Site_Type	.0%	21.7%	6.7%	.0%	.0%	14.3%	9.0%
	Barely Visible	Count	1	4	9	1	0	3	18
		% within Site_Type	5.3%	17.4%	20.0%	20.0%	.0%	42.9%	18.0%
	Obscured	Count	0	3	3	0	0	0	6
		% within Site_Type	.0%	13.0%	6.7%	.0%	.0%	.0%	6.0%
	Not Visible	Count	0	5	18	0	0	2	25
		% within Site_Type	.0%	21.7%	40.0%	.0%	.0%	28.6%	25.0%
Total		Count	19	23	45	5	1	7	100
		% within Site_Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

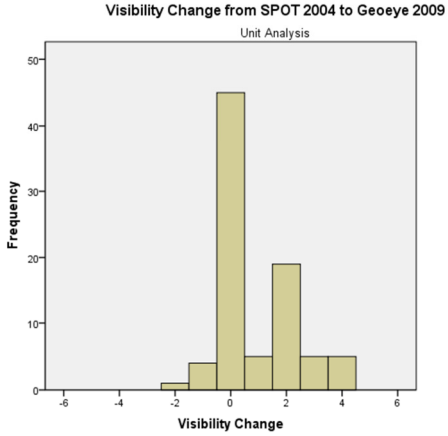
8.4.6 – VISIBILITY CHANGE

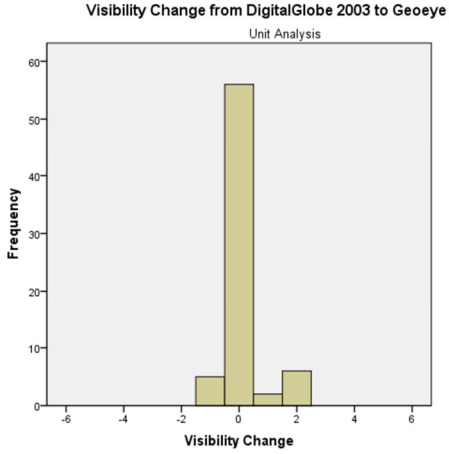
FIGURE H-13: GRAPHS OF CHANGE IN VISIBILITY OF SITES BETWEEN CORONA, DIGITALGLOBE 2003, SPOT 2004 AND GEOEYE 2009 (UNIT ANALYSIS)











8.5 - LAND USE / LAND COVER

8.5.1 – LAND USE / LAND COVER AROUND SITES

TABLE H-39: COUNT OF LAND USE / LAND COVER AROUND SITES (AMALGAMATED SITES)

	Corona - Present	
	Count	Row
Bare or Scrub	52	61.2%
Arable	67	78.8%
Orchard	2	2.4%
Modern Graves	1	1.2%
Modern Structures	3	3.5%
Modern Settlements	31	36.5%
Irrigation Channel	2	2.4%
Water Bodies	76	89.4%
Roads / Tracks	67	78.8%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	2.4%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	2	2.4%
(All Pits)	2	2.4%
Quarries	0	.0%
Unclassified	29	34.1%

	DigitalGlobe - Present	
	Count	%
Bare or Scrub	27	44.3%
Arable	55	90.2%
Orchard	32	52.5%
Modern Graves	12	19.7%
Modern Structures	22	36.1%
Modern Settlements	30	49.2%
Irrigation Channel	6	9.8%
Water Bodies	35	57.4%
Roads / Tracks	56	91.8%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	3.3%
Mudbrick Excavation	0	.0%
Looters' Holes	7	11.5%
Pits (Other)	3	4.9%
(All Pits)	9	14.8%
Quarries	4	6.6%
Unclassified	0	.0%

	SPOT 2004 - Present	
	Count	Row
Bare or Scrub	42	49.4%
Arable	75	88.2%
Orchard	41	48.2%
Modern Graves	16	18.8%
Modern Structures	22	25.9%
Modern Settlements	36	42.4%
Irrigation Channel	6	7.1%
Water Bodies	54	63.5%
Roads / Tracks	75	88.2%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	3	3.5%
Mudbrick Excavation	0	.0%
Looters' Holes	6	7.1%
Pits (Other)	2	2.4%
(All Pits)	10	11.8%
Quarries	4	4.7%
Unclassified	16	18.8%

	Geoeye 2009 - Present	
	Count	%
Bare or Scrub	31	41.3%
Arable	69	92.0%
Orchard	49	65.3%
Modern Graves	14	18.7%
Modern Structures	28	37.3%
Modern Settlements	34	45.3%
Irrigation Channel	5	6.7%
Water Bodies	42	56.0%
Roads / Tracks	71	94.7%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	3	4.0%
Mudbrick Excavation	0	.0%
Looters' Holes	9	12.0%
Pits (Other)	6	8.0%
(All Pits)	14	18.7%
Quarries	4	5.3%
Unclassified	0	.0%

TABLE H-40: AMALGAMATED SITES AND UNIT ANALYSIS - COUNT OF LAND USE / LAND COVER AROUND SITES FOR FIELD VISITS

	Field Visit - Present	
	Count	Row
Bare or Scrub	29	34.1%
Arable	51	60.0%
Orchard	22	25.9%
Modern Graves	7	8.2%
Modern Structures	6	7.1%
Modern Settlements	33	38.8%
Irrigation Channel	0	.0%
Water Bodies	63	74.1%
Roads / Tracks	50	58.8%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	1	1.2%
Mudbrick Excavation	0	.0%
Looters' Holes	3	3.5%
Pits (Other)	3	3.5%
(All Pits)	7	8.2%
Quarries	5	5.9%
Unclassified	1	1.2%

	Field Visit - Present	
	Count	Row
Bare or Scrub	34	34.0%
Arable	60	60.0%
Orchard	30	30.0%
Modern Graves	16	16.0%
Modern Structures	11	11.0%
Modern Settlements	37	37.0%
Irrigation Channel	0	.0%
Water Bodies	77	77.0%
Roads / Tracks	63	63.0%
Dam Reservoir Bed	1	1.0%
Archaeological Excavation	1	1.0%
Mudbrick Excavation	0	.0%
Looters' Holes	13	13.0%
Pits (Other)	3	3.0%
(All Pits)	14	14.0%
Quarries	7	7.0%
Unclassified	0	.0%

TABLE H-41: AMALGAMATED SITES AND UNIT ANALYSIS - COUNT OF LAND USE / LAND COVER AROUND SITES

	Corona - Present	
	Count	Row
Bare or Scrub	67	67.0%
Arable	72	72.0%
Orchard	2	2.0%
Modern Graves	1	1.0%
Modern Structures	3	3.0%
Modern Settlements	34	34.0%
Irrigation Channel	2	2.0%
Water Bodies	90	90.0%
Roads / Tracks	80	80.0%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	2.0%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	2	2.0%
(All Pits)	2	2.0%
Quarries	0	.0%
Unclassified	42	42.0%

	DigitalGlobe - Present	
	Count	%
Bare or Scrub	34	49.3%
Arable	59	85.5%
Orchard	34	49.3%
Modern Graves	17	24.6%
Modern Structures	24	34.8%
Modern Settlements	34	49.3%
Irrigation Channel	6	8.7%
Water Bodies	42	60.9%
Roads / Tracks	64	92.8%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	2.9%
Mudbrick Excavation	0	.0%
Looters' Holes	13	18.8%
Pits (Other)	3	4.3%
(All Pits)	15	21.7%
Quarries	6	8.7%
Unclassified	0	.0%

	SPOT 2004 - Present	
	Count	Row
Bare or Scrub	55	55.0%
Arable	85	85.0%
Orchard	50	50.0%
Modern Graves	25	25.0%
Modern Structures	27	27.0%
Modern Settlements	40	40.0%
Irrigation Channel	6	6.0%
Water Bodies	67	67.0%
Roads / Tracks	90	90.0%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	3	3.0%
Mudbrick Excavation	0	.0%
Looters' Holes	16	16.0%
Pits (Other)	2	2.0%
(All Pits)	20	20.0%
Quarries	6	6.0%
Unclassified	23	23.0%

	Geoeye 2009 - Present	
	Count	%
Bare or Scrub	38	45.2%
Arable	74	88.1%
Orchard	54	64.3%
Modern Graves	19	22.6%
Modern Structures	30	35.7%
Modern Settlements	38	45.2%
Irrigation Channel	5	6.0%
Water Bodies	49	58.3%
Roads / Tracks	80	95.2%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	3	3.6%
Mudbrick Excavation	0	.0%
Looters' Holes	16	19.0%
Pits (Other)	8	9.5%
(All Pits)	19	22.6%
Quarries	6	7.1%
Unclassified	0	.0%

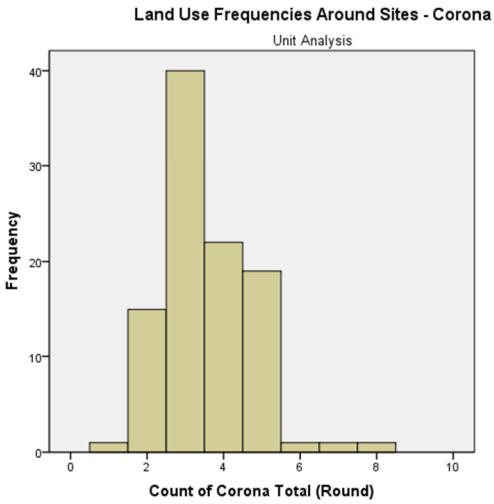
TABLE H-42: FREQUENCIES OF LAND USE / COVER TYPES AROUND EACH SITE (AMALGAMATED SITES)

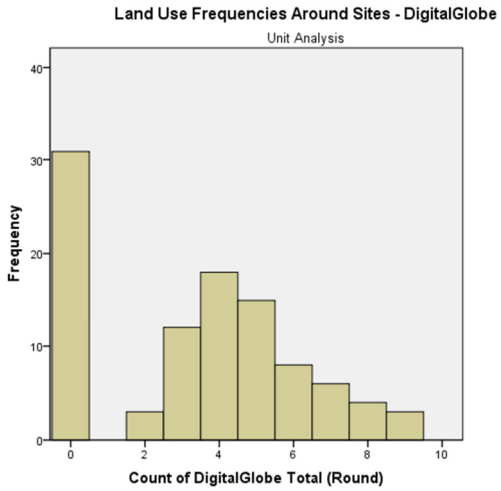
	Corona Total (Around)		DigitalGlobe 2003 Total (Around)		SPOT 2004 Total (Around)		Geoeye 2009 Total (Around)	
	Count	%	Count	%	Count	%	Count	%
0	0	0.0%	24	28.2%	0	0%	10	12%
1	1	1.2%	0	0.0%	0	0%	1	1%
2	13	15.3%	3	3.5%	6	7%	1	1%
3	31	36.5%	12	14.1%	18	21%	15	18%
4	21	24.7%	16	18.8%	25	29%	18	21%
5	16	18.8%	13	15.3%	17	20%	18	21%
6	1	1.2%	7	8.2%	11	13%	11	13%
7	1	1.2%	5	5.9%	3	4%	4	5%
8	1	1.2%	2	2.4%	1	1%	3	4%
9	0	0.0%	3	3.5%	4	5%	3	4%
10	0	0.0%	0	0.0%	0	0%	1	1%

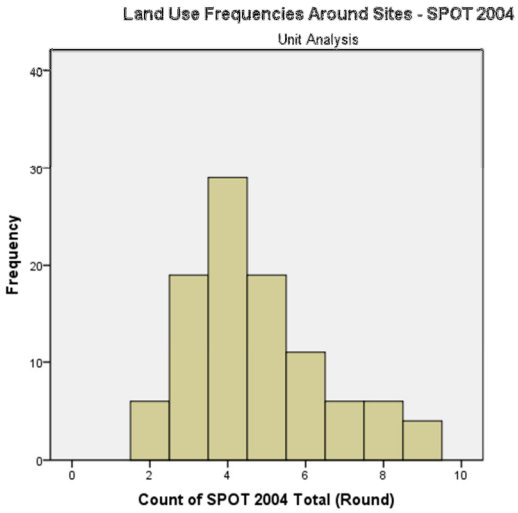
TABLE H-43: FREQUENCIES OF LAND USE / COVER TYPES AROUND EACH SITE (UNIT ANALYSIS)

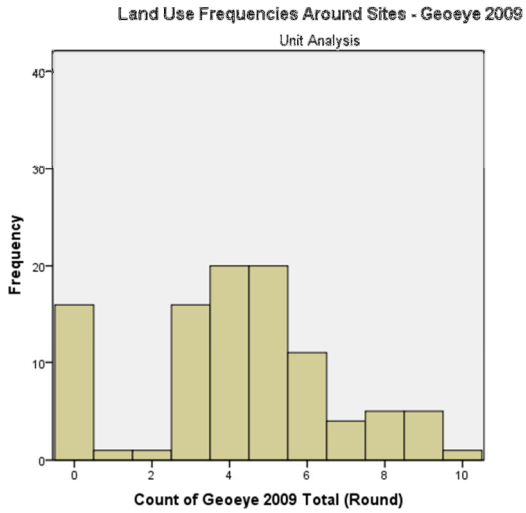
	Corona Total (Around)		DigitalGlobe 2003 Total (Around)		SPOT 2004 Total (Around)		Geoeye 2009 Total (Around)	
	Count	%	Count	%	Count	%	Count	%
0	0	0.0%	31	31.0%	0	0.0%	16	16.0%
1	1	1.0%	0	0.0%	0	0.0%	1	1.0%
2	15	15.0%	3	3.0%	6	6.0%	1	1.0%
3	40	40.0%	12	12.0%	19	19.0%	16	16.0%
4	22	22.0%	18	18.0%	29	29.0%	20	20.0%
5	19	19.0%	15	15.0%	19	19.0%	20	20.0%
6	1	1.0%	8	8.0%	11	11.0%	11	11.0%
7	1	1.0%	6	6.0%	6	6.0%	4	4.0%
8	1	1.0%	4	4.0%	6	6.0%	5	5.0%
9	0	0.0%	3	3.0%	4	4.0%	5	5.0%
10	0	0.0%	0	0.0%	0	0.0%	1	1.0%

FIGURE H-14: GRAPHS OF FREQUENCIES OF LAND USE / LAND COVER AROUND SITES BY IMAGERY (UNIT ANALYSIS)









8.5.2 – LAND USE / LAND COVER ON SITES

TABLE H-44: COUNT OF LAND USE / LAND COVER ON SITES (AMALGAMATED SITES)

	Corona - Present	
	Count	Row
Bare or Scrub	56	65.9%
Arable	49	57.6%
Orchard	2	2.4%
Modern Graves	1	1.2%
Modern Structures	1	1.2%
Modern Settlements	9	10.6%
Irrigation Channel	0	.0%
Water Bodies	15	17.6%
Roads / Tracks	29	34.1%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	2.4%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	1	1.2%
(All Pits)	1	1.2%
Quarries	1	1.2%
Unclassified	37	43.5%

	DigitalGlobe - Present	
	Count	%
Bare or Scrub	27	44.3%
Arable	44	72.1%
Orchard	17	27.9%
Modern Graves	6	9.8%
Modern Structures	12	19.7%
Modern Settlements	9	14.8%
Irrigation Channel	5	8.2%
Water Bodies	9	14.8%
Roads / Tracks	34	55.7%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	4	6.6%
Mudbrick Excavation	0	.0%
Looters' Holes	9	14.8%
Pits (Other)	5	8.2%
(All Pits)	17	27.9%
Quarries	3	4.9%
Unclassified	1	1.6%

	SPOT 2004 - Present	
	Count	Row
Bare or Scrub	45	52.9%
Arable	57	67.1%
Orchard	22	25.9%
Modern Graves	10	11.8%
Modern Structures	14	16.5%
Modern Settlements	12	14.1%
Irrigation Channel	5	5.9%
Water Bodies	13	15.3%
Roads / Tracks	40	47.1%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	4	4.7%
Mudbrick Excavation	0	.0%
Looters' Holes	12	14.1%
Pits (Other)	6	7.1%
(All Pits)	19	22.4%
Quarries	3	3.5%
Unclassified	20	23.5%

	Geoeye 2009 - Present	
	Count	%
Bare or Scrub	31	41.3%
Arable	56	74.7%
Orchard	25	33.3%
Modern Graves	9	12.0%
Modern Structures	13	17.3%
Modern Settlements	11	14.7%
Irrigation Channel	3	4.0%
Water Bodies	9	12.0%
Roads / Tracks	42	56.0%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	4	5.3%
Mudbrick Excavation	0	.0%
Looters' Holes	12	16.0%
Pits (Other)	12	16.0%
(All Pits)	27	36.0%
Quarries	3	4.0%
Unclassified	0	.0%

TABLE H-45: AMALGAMATED SITES AND UNIT ANALYSIS - COUNT OF LAND USE / LAND COVER ON SITES FOR FIELD VISITS

	Field Visit - Present	
	Count	Row
Bare or Scrub	29	34.1%
Arable	45	52.9%
Orchard	20	23.5%
Grazed	0	.0%
Modern Structures	5	5.9%
Modern Settlements	12	14.1%
Irrigation Channel	0	.0%
Water Bodies	12	14.1%
Roads / Tracks	22	25.9%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	2.4%
Mudbrick Excavation	0	.0%
Looters' Holes	13	15.3%
Pits (Other)	9	10.6%
(All Pits)	24	28.2%
Quarries	3	3.5%
Unclassified	1	1.2%

	Field Visit - Present	
	Count	Row
Bare or Scrub	32	32.0%
Arable	49	49.0%
Orchard	21	21.0%
Grazed	0	.0%
Modern Structures	6	6.0%
Modern Settlements	13	13.0%
Irrigation Channel	0	.0%
Water Bodies	13	13.0%
Roads / Tracks	26	26.0%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	2.0%
Mudbrick Excavation	0	.0%
Looters' Holes	14	14.0%
Pits (Other)	9	9.0%
(All Pits)	24	24.0%
Quarries	3	3.0%
Unclassified	0	.0%

TABLE H-46: COUNT OF LAND USE / LAND COVER ON SITES (UNIT ANALYSIS)

	Corona - Present	
	Count	Row
Bare or Scrub	68	68.0%
Arable	54	54.0%
Orchard	2	2.0%
Modern Graves	1	1.0%
Modern Structures	1	1.0%
Modern Settlements	10	10.0%
Irrigation Channel	0	.0%
Water Bodies	15	15.0%
Roads / Tracks	31	31.0%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	2	2.0%
Mudbrick Excavation	0	.0%
Looters' Holes	0	.0%
Pits (Other)	1	1.0%
(All Pits)	1	1.0%
Quarries	1	1.0%
Unclassified	48	48.0%

	DigitalGlobe - Present	
	Count	%
Bare or Scrub	33	47.8%
Arable	45	65.2%
Orchard	17	24.6%
Modern Graves	7	10.1%
Modern Structures	12	17.4%
Modern Settlements	10	14.5%
Irrigation Channel	5	7.2%
Water Bodies	11	15.8%
Roads / Tracks	37	53.6%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	4	5.8%
Mudbrick Excavation	0	.0%
Looters' Holes	10	14.5%
Pits (Other)	5	7.2%
(All Pits)	19	27.5%
Quarries	3	4.3%
Unclassified	1	1.4%

	SPOT 2004 - Present	
	Count	Row
Bare or Scrub	53	53.0%
Arable	61	61.0%
Orchard	24	24.0%
Modern Graves	11	11.0%
Modern Structures	14	14.0%
Modern Settlements	13	13.0%
Irrigation Channel	5	5.0%
Water Bodies	15	15.0%
Roads / Tracks	46	46.0%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	4	4.0%
Mudbrick Excavation	0	.0%
Looters' Holes	13	13.0%
Pits (Other)	6	6.0%
(All Pits)	21	21.0%
Quarries	3	3.0%
Unclassified	25	25.0%

	Geoeye 2009 - Present	
	Count	%
Bare or Scrub	37	44.0%
Arable	58	69.0%
Orchard	25	29.8%
Modern Graves	10	11.9%
Modern Structures	13	15.5%
Modern Settlements	12	14.3%
Irrigation Channel	3	3.6%
Water Bodies	11	13.1%
Roads / Tracks	45	53.6%
Dam Reservoir Bed	0	.0%
Archaeological Excavation	4	4.8%
Mudbrick Excavation	0	.0%
Looters' Holes	13	15.5%
Pits (Other)	12	14.3%
(All Pits)	29	34.5%
Quarries	3	3.6%
Unclassified	0	.0%

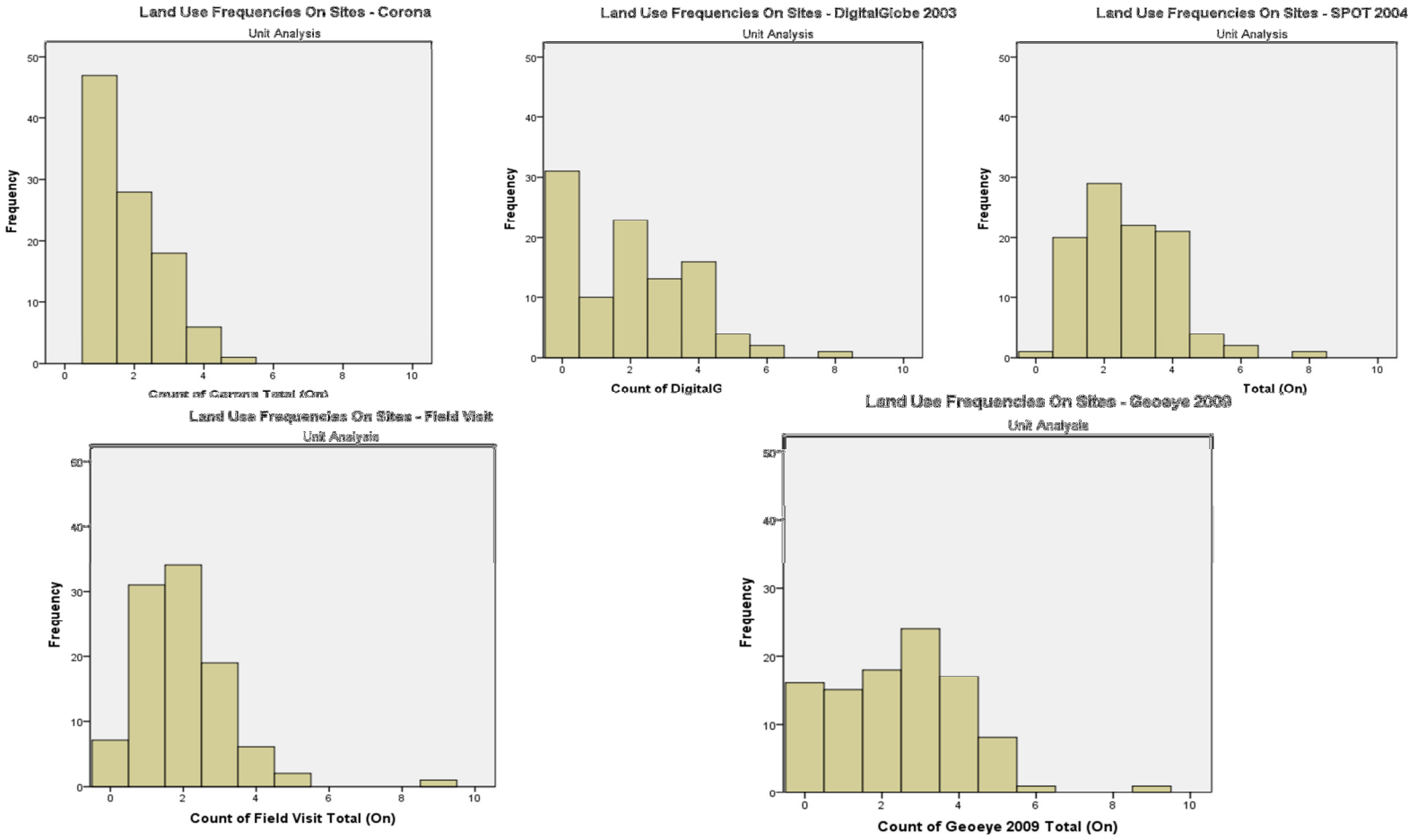
TABLE H-47: FREQUENCIES OF LAND USE / COVER TYPES ON EACH SITE (AMALGAMATED SITES)

	Corona Total (On)		DigitalGlobe 2003 Total (On)		SPOT 2004 Total (On)		Field Visit Total (On)		Geoeye 2009 Total (On)	
	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.0%	24	28.2%	1	1.2%	5	5.9%	10	11.8%
1	36	42.4%	7	8.2%	12	14.1%	24	28.2%	11	12.9%
2	25	29.4%	21	24.7%	27	31.8%	30	35.3%	16	18.8%
3	17	20.0%	11	12.9%	19	22.4%	16	18.8%	23	27.1%
4	6	7.1%	13	15.3%	17	20.0%	5	5.9%	13	15.3%
5	1	1.2%	6	7.1%	5	5.9%	3	3.5%	9	10.6%
6	0	0.0%	2	2.4%	2	1.2%	0	0.0%	2	2.4%
7	0	0.0%	0	0.0%	1	1.2%	1	1.2%	0	0.0%
8	0	0.0%	0	0.0%	1	1.2%	0	0.0%	0	0.0%
9	0	0.0%	1	1.2%	0	0.0%	1	1.2%	1	1.2%

TABLE H-48: FREQUENCIES OF NUMBER OF LAND USE / COVER TYPES ON EACH SITE (UNIT ANALYSIS)

	Corona Total (On)		DigitalGlobe 2003 Total (On)		SPOT 2004 Total (On)		Field Visit Total (On)		Geoeye 2009 Total (On)	
	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.0%	31	31.0%	1	1.0%	7	7.0%	16	16.0%
1	47	47.0%	10	10.0%	20	20.0%	31	31.0%	15	15.0%
2	28	28.0%	23	23.0%	29	29.0%	34	34.0%	18	18.0%
3	18	18.0%	13	13.0%	22	12.0%	19	19.0%	24	24.0%
4	6	6.0%	16	16.0%	21	21.0%	6	6.0%	17	17.0%
5	1	1.0%	4	4.0%	4	4.0%	2	2.0%	8	8.0%
6	0	0.0%	2	2.0%	2	2.0%	0	0.0%	1	1.0%
7	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
8	0	0.0%	0	0.0%	1	1.0%	0	0.0%	0	0.0%
9	0	0.0%	1	3.0%	0	0.0%	1	1.0%	1	1.0%

FIGURE H-15: GRAPHS OF FREQUENCIES OF LAND USE / LAND COVER ON SITES (UNIT ANALYSIS)



8.6 - DAMAGE ANALYSIS: GENERAL TRENDS

8.6.2 – HORIZONTAL DAMAGE TRENDS

TABLE H-49: HORIZONTAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (AMALGAMATED SITES)

			Horizontal Damage Effect						Total
			Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	
Imagery	Corona	Count	38	20	15	39	21	13	146
		% within Imagery	26.0%	13.7%	10.3%	26.7%	14.4%	8.9%	100.0%
	DigitalGlobe	Count	4	17	42	73	25	7	168
		% within Imagery	2.4%	10.1%	25.0%	43.5%	14.9%	4.2%	100.0%
	SPOT	Count	18	28	44	94	30	6	220
		% within Imagery	8.2%	11.9%	20.0%	42.7%	13.6%	3.6%	100.0%
	Geoeye	Count	3	25	54	96	35	11	224
		% within Imagery	1.3%	11.2%	24.1%	42.8%	15.6%	4.9%	100.0%
Total		Count	63	88	155	302	111	39	758
		% within Imagery	8.3%	11.6%	20.4%	39.8%	14.6%	5.1%	100.0%

TABLE H-50: HORIZONTAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (UNIT ANALYSIS)

			Horizontal Damage Effect						Total
			Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	
Imagery	Corona	Count	50	23	15	40	22	15	165
		% within Imagery	30.3%	13.9%	9.1%	24.2%	13.3%	9.1%	100.0%
	DigitalGlobe	Count	4	18	43	73	28	9	175
		% within Imagery	2.3%	10.3%	24.6%	41.7%	16.0%	4.6%	100.0%
	SPOT	Count	19	30	44	97	34	12	236
		% within Imagery	8.1%	12.7%	18.6%	41.1%	14.4%	5.1%	100.0%
	Geoeye	Count	3	26	56	94	40	13	232
		% within Imagery	1.3%	11.2%	24.1%	40.5%	17.2%	5.6%	100.0%
Total		Count	76	97	158	304	125	48	808
		% within Imagery	9.4%	12.0%	19.6%	37.6%	15.5%	5.9%	100.0%

FIGURE H-16: GRAPH OF EXTENT OF HORIZONTAL DAMAGE BY IMAGERY (UNIT ANALYSIS)

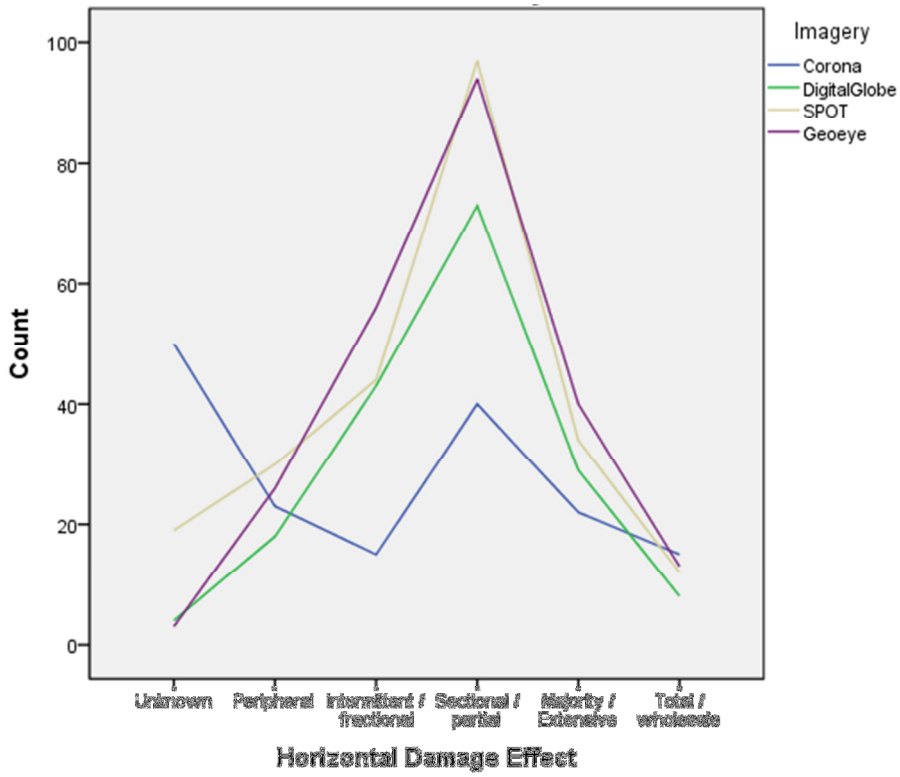


TABLE H-51: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON CORONA (AMALGAMATED SITES)

			Severity					Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	
Horizontal Damage Effect	Unknown	Count	28	7	3	0	0	38
		% within Horizontal Damage Effect	73.7%	18.4%	7.9%	.0%	.0%	100.0%
		% within Severity	32.9%	17.1%	20.0%	.0%	.0%	26.0%
	Peripheral	Count	5	10	3	1	1	20
		% within Horizontal Damage Effect	25.0%	50.0%	15.0%	5.0%	5.0%	100.0%
		% within Severity	5.9%	24.4%	20.0%	33.3%	50.0%	13.7%
	Intermittent / fractional	Count	2	7	4	2	0	15
		% within Horizontal Damage Effect	13.3%	46.7%	26.7%	13.3%	.0%	100.0%
		% within Severity	2.4%	17.1%	26.7%	66.7%	.0%	10.3%
	Sectional / partial	Count	20	14	4	0	1	39
		% within Horizontal Damage Effect	51.3%	35.9%	10.3%	.0%	2.6%	100.0%
		% within Severity	23.5%	34.1%	26.7%	.0%	50.0%	26.7%
	Majority / Extensive	Count	17	3	1	0	0	21
		% within Horizontal Damage Effect	81.0%	14.3%	4.8%	.0%	.0%	100.0%
		% within Severity	20.0%	7.3%	6.7%	.0%	.0%	14.4%
	Total / wholesale	Count	13	0	0	0	0	13
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	15.3%	.0%	.0%	.0%	.0%	8.9%
Total		Count	85	41	15	3	2	146
		% within Horizontal Damage Effect	58.2%	28.1%	10.3%	2.1%	1.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-52: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON CORONA (UNIT ANALYSIS)

			Severity					
			Primary	Secondary	Tertiary	Quaternary	Quinary	Total
Horizontal Damage Effect	Unknown	Count	38	10	2	0	0	50
		% within Horizontal Damage Effect	76.0%	20.0%	4.0%	.0%	.0%	100.0%
		% within Severity	38.0%	22.7%	12.5%	.0%	.0%	30.3%
	Peripheral	Count	5	11	5	1	1	23
		% within Horizontal Damage Effect	21.7%	47.8%	21.7%	4.3%	4.3%	100.0%
		% within Severity	5.0%	25.0%	31.3%	33.3%	50.0%	13.9%
	Intermittent / fractional	Count	3	6	4	2	0	15
		% within Horizontal Damage Effect	20.0%	40.0%	26.7%	13.3%	.0%	100.0%
		% within Severity	3.0%	13.6%	25.0%	66.7%	.0%	9.1%
	Sectional / partial	Count	21	14	4	0	1	40
		% within Horizontal Damage Effect	52.5%	35.0%	10.0%	.0%	2.5%	100.0%
		% within Severity	21.0%	31.8%	25.0%	.0%	50.0%	24.2%
	Majority / Extensive	Count	18	3	1	0	0	22
		% within Horizontal Damage Effect	81.8%	13.6%	4.5%	.0%	.0%	100.0%
		% within Severity	18.0%	6.8%	6.3%	.0%	.0%	13.3%
	Total / wholesale	Count	15	0	0	0	0	15
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	15.0%	.0%	.0%	.0%	.0%	9.1%
Total		Count	100	44	16	3	2	165
		% within Horizontal Damage Effect	60.6%	26.7%	9.7%	1.8%	1.2%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-53: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Horizontal Damage Effect	Unknown	Count	1	1	1	0	1	0	0	0	4
		% within Horizontal Damage Effect	25.0%	25.0%	25.0%	.0%	25.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.8%	2.0%	3.2%	.0%	25.0%	.0%	.0%	.0%	2.4%
	Peripheral	Count	1	7	6	3	0	0	0	0	17
		% within Horizontal Damage Effect	5.9%	41.2%	35.3%	17.6%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.8%	14.0%	19.4%	18.8%	.0%	.0%	.0%	.0%	10.1%
	Intermittent / fractional	Count	6	10	12	8	2	3	2	0	42
		% within Horizontal Damage Effect	11.9%	23.8%	28.6%	19.0%	4.8%	7.1%	4.8%	.0%	100.0%
		% within Severity	8.2%	20.0%	38.7%	50.0%	50.0%	100.0%	100.0%	.0%	25.0%
	Sectional / partial	Count	26	27	12	4	1	0	0	1	73
		% within Horizontal Damage Effect	35.6%	37.0%	16.4%	5.5%	1.4%	.0%	.0%	1.4%	100.0%
		% within Severity	45.9%	54.0%	38.7%	25.0%	25.0%	.0%	.0%	100.0%	43.5%
	Majority / Extensive	Count	19	5	0	1	0	0	0	0	25
		% within Horizontal Damage Effect	76.0%	20.0%	.0%	4.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	31.1%	10.0%	.0%	6.3%	.0%	.0%	.0%	.0%	14.9%
	Total / wholesale	**Count**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
		% within Horizontal Damage Effect	**100.0%**	**.0%**	**.0%**	**.0%**	**.0%**	**.0%**	**.0%**	**.0%**	**100.0%**
		% within Severity	11.5%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.2%
Total		Count	61	50	31	16	4	3	2	1	168
		% within Horizontal Damage Effect	36.3%	29.8%	18.5%	9.5%	2.4%	1.8%	1.2%	.6%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-54: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Horizontal Damage Effect	Unknown	Count	3	0	1	0	0	0	0	0	4
		% within Horizontal Damage Effect	75.0%	.0%	25.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	4.3%	.0%	3.2%	.0%	.0%	.0%	.0%	.0%	2.3%
	Peripheral	Count	1	8	6	3	0	0	0	0	18
		% within Horizontal Damage Effect	5.6%	44.4%	33.3%	16.7%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.4%	15.4%	19.4%	21.4%	.0%	.0%	.0%	.0%	10.3%
	Intermittent / fractional	Count	8	12	12	7	2	3	2	0	43
		% within Horizontal Damage Effect	11.6%	27.9%	27.9%	16.3%	4.7%	7.0%	4.7%	.0%	100.0%
		% within Severity	7.2%	23.1%	38.7%	50.0%	66.7%	100.0%	100.0%	.0%	24.6%
	Sectional / partial	Count	29	27	12	3	1	0	0	1	73
		% within Horizontal Damage Effect	39.7%	37.0%	16.4%	4.1%	1.4%	.0%	.0%	1.4%	100.0%
		% within Severity	42.0%	51.9%	38.7%	21.4%	33.3%	.0%	.0%	100.0%	41.7%
	Majority / Extensive	Count	23	5	0	1	0	0	0	0	29
		% within Horizontal Damage Effect	79.3%	17.2%	.0%	3.4%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	33.3%	9.6%	.0%	7.1%	.0%	.0%	.0%	.0%	16.6%
	Total / wholesale	Count	8	0	0	0	0	0	0	0	8
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	11.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.6%
Total		Count	69	52	31	14	3	3	2	1	175
		% within Horizontal Damage Effect	39.4%	29.7%	17.7%	8.0%	1.7%	1.7%	1.1%	.6%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-55: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON SPOT 2004(AMALGAMATED SITES)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Horizontal Damage Effect	Unknown	Count	7	5	2	3	1	0	0	0	18
		% within Horizontal Damage Effect	38.9%	27.8%	11.1%	16.7%	5.6%	.0%	.0%	.0%	100.0%
		% within Severity	6.2%	7.8%	5.4%	15.8%	20.0%	.0%	.0%	.0%	8.2%
	Peripheral	Count	3	9	10	3	0	0	1	0	26
		% within Horizontal Damage Effect	11.5%	34.6%	38.5%	11.5%	.0%	.0%	3.8%	.0%	100.0%
		% within Severity	3.6%	13.8%	27.0%	16.8%	.0%	.0%	33.3%	.0%	11.8%
	Intermittent / fractional	Count	8	13	8	8	3	4	2	0	44
		% within Horizontal Damage Effect	13.6%	29.5%	18.2%	18.2%	6.8%	9.1%	4.5%	.0%	100.0%
		% within Severity	7.1%	19.7%	21.8%	42.1%	60.0%	100.0%	66.7%	.0%	20.0%
	Sectional / partial	Count	37	34	17	4	1	0	0	1	94
		% within Horizontal Damage Effect	39.4%	36.2%	18.1%	4.3%	1.1%	.0%	.0%	1.1%	100.0%
		% within Severity	43.5%	51.5%	45.9%	21.1%	20.0%	.0%	.0%	100.0%	42.7%
	Majority / Extensive	Count	24	5	0	1	0	0	0	0	30
		% within Horizontal Damage Effect	80.0%	16.7%	.0%	3.3%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	28.2%	7.6%	.0%	5.3%	.0%	.0%	.0%	.0%	13.6%
	Total / wholesale	Count	8	0	0	0	0	0	0	0	8
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	9.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
Total		Count	85	66	37	19	5	4	3	1	220
		% within Horizontal Damage Effect	38.6%	30.0%	16.8%	8.6%	2.3%	1.8%	1.4%	.5%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-56: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON SPOT 2004 (UNIT ANALYSIS)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Horizontal Damage Effect	Unknown	Count	12	4	1	2	0	0	0	0	19
		% within Horizontal Damage Effect	63.2%	21.1%	5.3%	10.5%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	12.0%	5.7%	2.6%	11.1%	.0%	.0%	.0%	.0%	8.1%
	Peripheral	Count	4	10	13	3	0	0	0	0	30
		% within Horizontal Damage Effect	13.3%	33.3%	43.3%	10.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	4.0%	14.3%	33.3%	16.7%	.0%	.0%	.0%	.0%	12.7%
	Intermittent / fractional	Count	7	13	9	8	2	3	2	0	44
		% within Horizontal Damage Effect	15.9%	29.5%	20.5%	18.2%	4.5%	6.8%	4.5%	.0%	100.0%
		% within Severity	7.0%	18.8%	23.1%	44.4%	66.7%	100.0%	100.0%	.0%	18.6%
	Sectional / partial	Count	39	36	16	4	1	0	0	1	97
		% within Horizontal Damage Effect	40.2%	37.1%	16.5%	4.1%	1.0%	.0%	.0%	1.0%	100.0%
		% within Severity	38.0%	51.4%	41.0%	22.2%	33.3%	.0%	.0%	100.0%	41.1%
	Majority / Extensive	**Count**	**26**	**7**	**0**	**1**	**0**	**0**	**0**	**0**	**34**
		% within Horizontal Damage Effect	**76.5%**	**20.6%**	**.0%**	**2.9%**	**.0%**	**.0%**	**.0%**	**.0%**	**100.0%**
		% within Severity	26.0%	10.0%	.0%	5.6%	.0%	.0%	.0%	.0%	14.4%
	Total / wholesale	Count	12	0	0	0	0	0	0	0	12
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	12.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.1%
Total		Count	100	70	39	18	3	3	2	1	236
		% within Horizontal Damage Effect	42.4%	29.7%	16.5%	7.6%	1.3%	1.3%	.8%	.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-57: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON GEOEYE 2009(AMALGAMATED SITES)

			Severity									Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	9	
Horizontal Damage Effect	Unknown	Count	1	1	0	0	1	0	0	0	0	3
		% within Horizontal Damage Effect	33.3%	33.3%	.0%	.0%	33.3%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.3%	1.5%	.0%	.0%	14.3%	.0%	.0%	.0%	.0%	1.3%
	Peripheral	Count	0	9	11	5	0	0	0	0	0	25
		% within Horizontal Damage Effect	.0%	36.0%	44.0%	20.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	.0%	13.8%	22.9%	22.7%	.0%	.0%	.0%	.0%	.0%	11.2%
	Intermittent / fractional	Count	8	12	15	12	3	3	1	1	1	54
		% within Horizontal Damage Effect	11.1%	22.2%	27.8%	22.2%	5.6%	5.6%	1.9%	1.9%	1.9%	100.0%
		% within Severity	8.0%	18.5%	31.3%	54.5%	42.9%	100.0%	50.0%	100.0%	100.0%	24.1%
	Sectional / partial	Count	36	32	20	4	3	0	1	0	0	96
		% within Horizontal Damage Effect	37.5%	33.3%	20.8%	4.2%	3.1%	.0%	1.0%	.0%	.0%	100.0%
		% within Severity	48.0%	49.2%	41.7%	18.2%	42.9%	.0%	50.0%	.0%	.0%	42.9%
	Majority / Extensive	Count	21	11	2	1	0	0	0	0	0	35
		% within Horizontal Damage Effect	60.0%	31.4%	5.7%	2.9%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	28.0%	16.9%	4.2%	4.5%	.0%	.0%	.0%	.0%	.0%	15.6%
	Total / wholesale	Count	11	0	0	0	0	0	0	0	0	11
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	14.7%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.9%
Total		Count	75	65	48	22	7	3	2	1	1	224
		% within Horizontal Damage Effect	33.5%	29.0%	21.4%	9.8%	3.1%	1.3%	.9%	.4%	.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-58: SEVERITY OF HORIZONTAL EXTENT OF DAMAGE ON GEOEYE 2009 (UNIT ANALYSIS)

			Severity									
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	9	Total
Horizontal Damage Effect	Unknown	Count	3	0	0	0	0	0	0	0	0	3
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Peripheral	Count	0	9	12	5	0	0	0	0	0	26
		% within Horizontal Damage Effect	.0%	34.6%	46.2%	19.2%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	.0%	13.4%	24.5%	25.0%	.0%	.0%	.0%	.0%	.0%	11.2%
	Intermittent / fractional	Count	7	14	16	10	3	3	1	1	1	56
		% within Horizontal Damage Effect	12.5%	25.0%	28.6%	17.9%	5.4%	5.4%	1.8%	1.8%	1.8%	100.0%
		% within Severity	8.3%	20.9%	32.7%	50.0%	60.0%	100.0%	50.0%	100.0%	100.0%	24.1%
	Sectional / partial	Count	37	32	19	4	2	0	1	0	0	94
		% within Horizontal Damage Effect	39.4%	34.0%	20.1%	4.3%	2.1%	.0%	1.1%	.0%	.0%	100.0%
		% within Severity	44.0%	47.8%	38.7%	20.0%	40.0%	.0%	50.0%	.0%	.0%	40.5%
	Majority / Extensive	Count	24	12	3	1	0	0	0	0	0	40
		% within Horizontal Damage Effect	60.0%	30.0%	7.5%	2.5%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	28.6%	17.9%	6.1%	5.0%	.0%	.0%	.0%	.0%	.0%	17.2%
	Total / wholesale	Count	13	0	0	0	0	0	0	0	0	13
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	15.5%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.6%
Total		Count	84	67	49	20	5	3	2	1	1	232
		% within Horizontal Damage Effect	36.2%	28.9%	21.1%	8.6%	2.2%	1.3%	.9%	.4%	.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-59: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON CORONA (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	3	8.8%	35	49.3%
	Peripheral	6	14.6%	6	17.6%	8	11.3%
	Intermittent / fractional	4	9.8%	6	17.6%	5	7.0%
	Sectional / partial	16	39.0%	11	32.4%	12	16.9%
	Majority / Extensive	10	24.4%	6	17.6%	5	7.0%
	Total / wholesale	5	12.2%	2	5.9%	6	8.5%

TABLE H-60: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON CORONA (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	3	8.8%	47	52.8%
	Peripheral	6	14.3%	6	17.6%	11	12.4%
	Intermittent / fractional	4	9.5%	6	17.6%	5	5.6%
	Sectional / partial	16	38.1%	11	32.4%	13	14.6%
	Majority / Extensive	10	23.8%	6	17.6%	6	6.7%
	Total / wholesale	6	14.3%	2	5.9%	7	7.9%

TABLE H-61: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	1	1.9%	3	4.6%
	Peripheral	3	5.9%	3	5.8%	11	16.9%
	Intermittent / fractional	11	21.6%	15	28.8%	16	24.6%
	Sectional / partial	25	49.0%	25	48.1%	23	35.4%
	Majority / Extensive	10	19.6%	8	15.4%	7	10.8%
	Total / wholesale	2	3.9%	0	.0%	5	7.7%

TABLE H-62: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	1	1.9%	3	4.2%
	Peripheral	3	5.9%	3	5.8%	12	16.7%
	Intermittent / fractional	11	21.6%	15	28.8%	17	23.6%
	Sectional / partial	25	49.0%	25	48.1%	23	31.9%
	Majority / Extensive	10	19.6%	8	15.4%	11	15.3%
	Total / wholesale	2	3.9%	0	.0%	6	8.3%

TABLE H-63: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON SPOT 2004 (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	2	3.5%	16	14.8%
	Peripheral	5	9.1%	4	7.0%	17	15.7%
	Intermittent / fractional	11	20.0%	15	26.3%	18	16.7%
	Sectional / partial	26	47.3%	29	50.9%	39	36.1%
	Majority / Extensive	11	20.0%	7	12.3%	12	11.1%
	Total / wholesale	2	3.6%	0	.0%	6	5.6%

TABLE H-64: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON SPOT 2004 (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	2	3.5%	17	13.8%
	Peripheral	5	8.9%	4	7.0%	21	17.1%
	Intermittent / fractional	11	19.6%	15	26.3%	18	14.6%
	Sectional / partial	26	46.4%	29	50.9%	42	34.1%
	Majority / Extensive	11	19.6%	7	12.3%	16	13.0%
	Total / wholesale	3	5.4%	0	.0%	9	7.3%

TABLE H-65: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON GEOEYE 2009 (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within area	Count	% within area	Count	% within area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	0	.0%	3	3.0%
	Peripheral	3	5.0%	4	6.3%	18	18.0%
	Intermittent / fractional	18	28.7%	20	31.3%	18	18.0%
	Sectional / partial	29	48.3%	32	50.0%	35	35.0%
	Majority / Extensive	8	13.3%	8	12.5%	19	19.0%
	Total / wholesale	4	6.7%	0	.0%	7	7.0%

TABLE H-66: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY LOCATION ON GEOEYE 2009 (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within area	Count	% within area	Count	% within area
Horizontal Damage Effect	None	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	0	.0%	3	2.8%
	Peripheral	3	4.8%	4	6.3%	19	17.8%
	Intermittent / fractional	18	28.2%	20	31.3%	20	18.7%
	Sectional / partial	29	47.5%	32	50.0%	33	30.8%
	Majority / Extensive	8	13.1%	8	12.5%	24	22.4%
	Total / wholesale	5	8.2%	0	.0%	8	7.5%

TABLE H-67: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON CORONA (AMALGAMATED SITES)

			Site Type					Total
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	
Horizontal Damage Effect	Unknown	Count	8	9	13	5	5	38
		% within Site Type	18.7%	27.3%	21.7%	71.4%	50.0%	26.0%
	Peripheral	Count	10	6	4	0	0	20
		% within Site Type	27.8%	18.2%	6.7%	.0%	.0%	13.7%
	Intermittent / fractional	Count	6	2	6	0	1	15
		% within Site Type	16.7%	6.1%	10.0%	.0%	10.0%	10.3%
	Sectional / partial	Count	9	9	16	2	3	39
		% within Site Type	25.0%	27.3%	26.7%	28.6%	30.0%	26.7%
	Majority / Extensive	Count	4	6	10	0	1	21
		% within Site Type	11.1%	18.2%	16.7%	.0%	10.0%	14.4%
	Total / wholesale	Count	1	1	11	0	0	13
		% within Site Type	2.8%	3.0%	18.3%	.0%	.0%	8.9%
Total		Count	36	33	60	7	10	146
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-68: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON CORONA (UNIT ANALYSIS)

			Site Type						Total
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	
Horizontal Damage Effect	Unknown	Count	7	10	21	5	1	6	50
		% within Site Type	18.9%	26.3%	29.6%	71.4%	100.0%	54.5%	30.3%
	Peripheral	Count	10	7	5	0	0	1	23
		% within Site Type	27.0%	18.4%	7.0%	.0%	.0%	9.1%	13.9%
	Intermittent / fractional	Count	6	3	6	0	0	0	15
		% within Site Type	16.2%	7.9%	8.5%	.0%	.0%	.0%	9.1%
	Sectional / partial	Count	9	8	18	2	0	3	40
		% within Site Type	24.3%	21.1%	25.4%	28.6%	.0%	27.3%	24.2%
	Majority / Extensive	Count	4	7	10	0	0	1	22
		% within Site Type	10.8%	18.4%	14.1%	.0%	.0%	9.1%	13.3%
	Total / wholesale	Count	1	3	11	0	0	0	15
		% within Site Type	2.7%	7.9%	15.5%	.0%	.0%	.0%	9.1%
Total		Count	37	38	71	7	1	11	165
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-69: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Horizontal Damage Effect	Unknown	Count	1	0	1	1	1	4
		% within Site Type	2.1%	.0%	1.3%	25.0%	9.1%	2.4%
	Peripheral	Count	6	4	7	0	0	17
		% within Site Type	12.8%	12.9%	9.3%	.0%	.0%	10.1%
	Intermittent / fractional	Count	15	7	17	0	3	42
		% within Site Type	31.9%	22.6%	22.7%	.0%	27.3%	25.0%
	Sectional / partial	Count	21	12	32	3	5	73
		% within Site Type	44.7%	38.7%	42.7%	75.0%	45.5%	43.5%
	Majority / Extensive	Count	4	7	13	0	1	25
		% within Site Type	8.5%	22.6%	17.3%	.0%	9.1%	14.9%
	Total / wholesale	Count	0	1	5	0	1	7
		% within Site Type	.0%	3.2%	6.7%	.0%	9.1%	4.2%
Total		Count	47	31	75	4	11	168
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-70: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Horizontal Damage Effect	Unknown	Count	1	0	1	1	1	4
		% within Site Type	2.1%	.0%	1.3%	25.0%	7.7%	2.3%
	Peripheral	Count	6	5	7	0	0	18
		% within Site Type	12.8%	14.7%	9.1%	.0%	.0%	10.3%
	Intermittent / fractional	Count	14	8	16	0	5	43
		% within Site Type	29.8%	23.5%	20.8%	.0%	38.5%	24.6%
	Sectional / partial	Count	22	10	34	3	4	73
		% within Site Type	46.8%	29.4%	44.2%	75.0%	30.8%	41.7%
	Majority / Extensive	Count	4	9	14	0	2	29
		% within Site Type	8.5%	26.5%	18.2%	.0%	15.4%	16.6%
	Total / wholesale	Count	0	2	5	0	1	8
		% within Site Type	.0%	5.9%	6.5%	.0%	7.7%	4.6%
Total		Count	47	34	77	4	13	175
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-71: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON SPOT 2004 (AMALGAMATED SITES)

			Site Type					
			Tall	Tall (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Horizontal Damage Effect	Unknown	Count	2	3	6	4	3	18
		% within Site Type	3.9%	6.8%	6.3%	36.4%	17.6%	8.2%
	Peripheral	Count	11	5	9	0	1	26
		% within Site Type	20.8%	11.4%	9.5%	.0%	5.9%	11.8%
	Intermittent / fractional	Count	14	7	18	0	5	44
		% within Site Type	26.4%	15.9%	18.9%	.0%	29.4%	20.0%
	Sectional / partial	Count	22	18	41	7	6	94
		% within Site Type	41.5%	40.9%	43.2%	63.6%	35.3%	42.7%
	Majority / Extensive	Count	4	8	16	0	2	30
		% within Site Type	7.5%	18.2%	16.8%	.0%	11.8%	13.6%
	Total / wholesale	Count	0	3	5	0	0	8
		% within Site Type	.0%	6.8%	5.3%	.0%	.0%	3.6%
Total		Count	53	44	95	11	17	220
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-72: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON SPOT 2004 (UNIT ANALYSIS)

			Site Type						
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Horizontal Damage Effect	Unknown	Count	2	4	7	4	0	2	19
		% within Site Type	3.8%	8.3%	6.3%	36.4%	.0%	16.7%	8.1%
	Peripheral	Count	11	6	13	0	0	0	30
		% within Site Type	20.8%	12.5%	11.7%	.0%	.0%	.0%	12.7%
	Intermittent / fractional	Count	13	8	18	0	0	5	44
		% within Site Type	24.5%	16.7%	16.2%	.0%	.0%	41.7%	18.6%
	Sectional / partial	Count	23	17	47	7	0	3	97
		% within Site Type	43.4%	35.4%	42.3%	63.6%	.0%	25.0%	41.1%
	Majority / Extensive	Count	4	9	20	0	0	2	34
		% within Site Type	7.5%	18.7%	18.0%	.0%	.0%	16.7%	14.4%
	Total / wholesale	Count	0	5	6	0	1	0	12
		% within Site Type	.0%	10.4%	5.4%	.0%	100.0%	.0%	5.1%
Total		Count	53	48	111	11	1	12	236
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-73: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON GEOEYE 2009 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Horizontal Damage Effect	Unknown	Count	1	0	1	0	1	3
		% within Site Type	1.5%	.0%	1.1%	.0%	6.7%	1.3%
	Peripheral	Count	11	6	7	0	1	25
		% within Site Type	16.7%	13.0%	7.9%	.0%	6.7%	11.2%
	Intermittent / fractional	Count	22	8	19	1	4	54
		% within Site Type	33.3%	17.4%	21.3%	12.5%	26.7%	24.1%
	Sectional / partial	Count	26	19	38	5	8	96
		% within Site Type	39.4%	41.3%	42.7%	62.5%	53.3%	42.9%
	Majority / Extensive	Count	6	10	17	1	1	35
		% within Site Type	9.1%	21.7%	19.1%	12.5%	6.7%	15.6%
	Total / wholesale	Count	0	3	7	1	0	11
		% within Site Type	.0%	6.5%	7.9%	12.5%	.0%	4.9%
Total		Count	66	46	89	8	15	224
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-74: NUMBER AND PERCENTAGE OF HORIZONTAL EXTENT OF DAMAGE BY SITE TYPE ON GEOEYE 2009 (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Horizontal Damage Effect	Unknown	Count	1	0	1	0	1	3
		% within Site Type	1.5%	.0%	1.1%	.0%	6.3%	1.3%
	Peripheral	Count	11	7	8	0	0	26
		% within Site Type	16.7%	14.0%	8.7%	.0%	.0%	11.2%
	Intermittent / fractional	Count	22	9	18	1	6	56
		% within Site Type	33.3%	18.0%	19.6%	12.5%	37.5%	24.1%
	Sectional / partial	Count	26	17	40	4	7	94
		% within Site Type	39.4%	34.0%	43.5%	50.0%	43.8%	40.5%
	Majority / Extensive	Count	6	12	18	2	2	40
		% within Site Type	9.1%	24.0%	19.6%	25.0%	12.5%	17.2%
	Total / wholesale	Count	0	5	7	1	0	13
		% within Site Type	.0%	10.0%	7.6%	12.5%	.0%	5.6%
Total		Count	66	50	92	8	16	232
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-75: CHANGE IN HORIZONTAL EXTENT FROM THE 1960S TO 2009 (UNIT ANALYSIS)

			Horizontal Effect (Geoeye)						
			Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Horizontal Effect (Corona)	Unknown	Count	1	2	4	10	6	5	28
		% within Horizontal Effect (Corona)	3.6%	7.1%	14.3%	35.7%	21.4%	17.9%	100.0%
	Peripheral	Count	0	4	4	10	1	0	19
		% within Horizontal Effect (Corona)	.0%	21.1%	21.1%	52.6%	5.3%	.0%	100.0%
	Intermittent / fractional	Count	0	1	3	9	1	0	14
		% within Horizontal Effect (Corona)	.0%	7.1%	21.4%	64.3%	7.1%	.0%	100.0%
	Sectional / partial	Count	0	2	4	25	6	1	38
		% within Horizontal Effect (Corona)	.0%	5.3%	10.5%	65.8%	15.8%	2.6%	100.0%
	Majority / Extensive	Count	0	0	0	9	10	1	20
		% within Horizontal Effect (Corona)	.0%	.0%	.0%	45.0%	50.0%	5.0%	100.0%
	Total / wholesale	Count	0	0	0	6	3	4	13
		% within Horizontal Effect (Corona)	.0%	.0%	.0%	46.2%	23.1%	30.8%	100.0%
Total		Count	1	9	15	69	27	11	132
		% within Horizontal Effect (Corona)	.8%	6.8%	11.4%	52.3%	20.5%	8.3%	100.0%

8.6.3 – VERTICAL DAMAGE TRENDS

TABLE H-76: VERTICAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (AMALGAMATED SITES)

			Imagery				Total
			Corona	DigitalGlobe	SPOT	Geoeye	
Vertical Damage Effect	Unknown	Count	38	4	19	3	64
		% within Imagery	26.0%	2.4%	8.6%	1.3%	8.4%
	Site buried	Count	2	2	2	2	8
		% within Imagery	1.4%	1.2%	.9%	.9%	1.1%
	Pitted	Count	1	2	2	4	9
		% within Imagery	.7%	1.2%	.9%	1.8%	1.2%
	Site slightly dispersed / degraded	Count	36	33	38	40	145
		% within Imagery	24.7%	19.8%	18.4%	17.9%	19.1%
	Upper levels damaged	Count	55	94	116	123	388
		% within Imagery	37.7%	56.0%	52.7%	54.9%	51.2%
	Site heavily dispersed / degraded	Count	8	22	30	35	95
		% within Imagery	5.5%	13.1%	13.6%	15.6%	12.5%
	Site destroyed to ground level	Count	2	7	9	13	31
		% within Imagery	1.4%	4.2%	4.1%	5.8%	4.1%
	Site destroyed	Count	4	4	6	4	18
		% within Imagery	2.7%	2.4%	2.7%	1.8%	2.4%
Total		Count	146	168	220	224	758
		% within Imagery	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-77: VERTICAL EXTENT OF DAMAGE FOR ALL IMAGERY TYPES (UNIT ANALYSIS)

			Imagery				Total
			Corona	DigitalGlobe	SPOT	Geoeye	
Vertical Damage Effect	Unknown	Count	50	4	20	3	77
		% within Imagery	30.3%	2.3%	8.5%	1.3%	9.5%
	Site buried	Count	2	2	2	2	8
		% within Imagery	1.2%	1.1%	.8%	.9%	1.0%
	Pitted	Count	1	2	2	4	9
		% within Imagery	.6%	1.1%	.8%	1.7%	1.1%
	Site slightly dispersed / degraded	Count	38	37	39	43	156
		% within Imagery	23.0%	21.1%	16.6%	18.5%	19.3%
	Upper levels damaged	Count	60	96	128	127	411
		% within Imagery	36.4%	54.9%	54.2%	54.7%	50.9%
	Site heavily dispersed / degraded	Count	8	23	31	36	98
		% within Imagery	4.8%	13.1%	13.1%	15.5%	12.1%
	Site destroyed to ground level	Count	2	7	9	13	31
		% within Imagery	1.2%	4.0%	3.8%	5.6%	3.8%
	Site destroyed	Count	4	4	6	4	18
		% within Imagery	2.4%	2.3%	2.5%	1.7%	2.2%
Total		Count	165	175	236	232	808
		% within Imagery	100.0%	100.0%	100.0%	100.0%	100.0%

FIGURE H-17: GRAPH OF EXTENT OF VERTICAL DAMAGE BY IMAGERY (UNIT ANALYSIS)

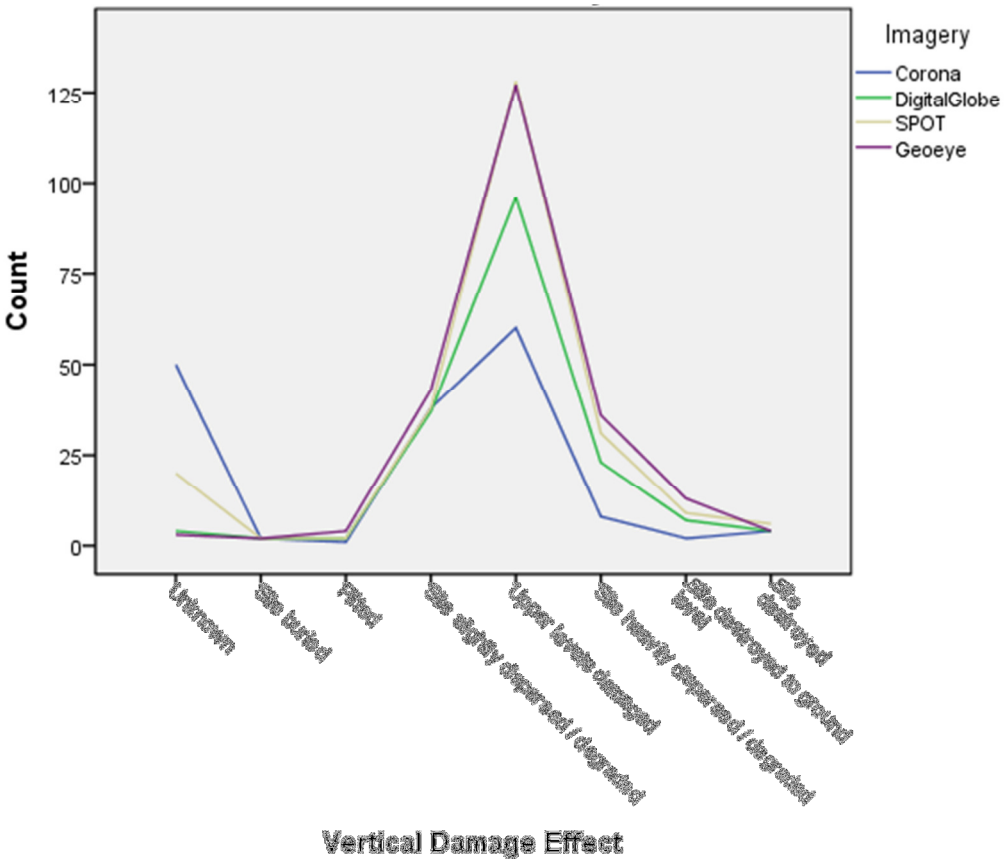


TABLE H-78: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON CORONA (AMALGAMATED SITES)

			Severity					
			Primary	Secondary	Tertiary	Quaternary	Quinary	Total
Vertical Damage Effect	Unknown	Count	28	7	3	0	0	38
		% within Vertical Damage Effect	73.7%	18.4%	7.9%	.0%	.0%	100.0%
		% within Severity	32.9%	17.1%	20.0%	.0%	.0%	26.0%
	Site buried	Count	0	1	0	0	1	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	50.0%	100.0%
		% within Severity	.0%	2.4%	.0%	.0%	50.0%	1.4%
	Fitted	Count	1	0	0	0	0	1
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.2%	.0%	.0%	.0%	.0%	.7%
	Site slightly dispersed / degraded	Count	6	19	10	0	1	36
		% within Vertical Damage Effect	16.7%	52.8%	27.8%	.0%	2.8%	100.0%
		% within Severity	7.1%	46.3%	66.7%	.0%	50.0%	24.7%
	Upper levels damaged	Count	42	8	2	3	0	55
		% within Vertical Damage Effect	76.4%	14.5%	3.6%	5.5%	.0%	100.0%
		% within Severity	49.4%	19.5%	13.3%	100.0%	.0%	37.7%
	Site heavily dispersed / degraded	Count	3	5	0	0	0	8
		% within Vertical Damage Effect	37.5%	62.5%	.0%	.0%	.0%	100.0%
		% within Severity	3.5%	12.2%	.0%	.0%	.0%	5.5%
	Site destroyed to ground level	Count	2	0	0	0	0	2
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.4%	.0%	.0%	.0%	.0%	1.4%
	Site destroyed	Count	3	1	0	0	0	4
		% within Vertical Damage Effect	75.0%	25.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.5%	2.4%	.0%	.0%	.0%	2.7%
Total		Count	85	41	15	3	2	146
		% within Vertical Damage Effect	58.2%	28.1%	10.3%	2.1%	1.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-79: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON CORONA (UNIT ANALYSIS)

			Severity					
			Primary	Secondary	Tertiary	Quaternary	Quinary	Total
Vertical Damage Effect	Unknown	Count	38	10	2	0	0	50
		% within Vertical Damage Effect	76.0%	20.0%	4.0%	.0%	.0%	100.0%
		% within Severity	38.0%	22.7%	12.5%	.0%	.0%	30.3%
	Site buried	Count	0	1	0	0	1	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	50.0%	100.0%
		% within Severity	.0%	2.3%	.0%	.0%	50.0%	1.2%
	Pitted	Count	1	0	0	0	0	1
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.0%	.0%	.0%	.0%	.0%	.6%
	Site slightly dispersed / degraded	Count	8	19	10	0	1	38
		% within Vertical Damage Effect	21.1%	50.0%	26.3%	.0%	2.6%	100.0%
		% within Severity	8.0%	43.2%	62.5%	.0%	50.0%	23.0%
	Upper levels damaged	Count	45	9	4	3	0	60
		% within Vertical Damage Effect	75.0%	13.3%	6.7%	5.0%	.0%	100.0%
		% within Severity	45.0%	18.2%	25.0%	100.0%	.0%	36.4%
	Site heavily dispersed / degraded	Count	3	5	0	0	0	8
		% within Vertical Damage Effect	37.5%	62.5%	.0%	.0%	.0%	100.0%
		% within Severity	3.0%	11.4%	.0%	.0%	.0%	4.8%
	Site destroyed to ground level	Count	2	0	0	0	0	2
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.0%	.0%	.0%	.0%	.0%	1.2%
	Site destroyed	Count	3	1	0	0	0	4
		% within Vertical Damage Effect	75.0%	25.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.0%	2.3%	.0%	.0%	.0%	2.4%
Total		Count	100	44	16	3	2	165
		% within Vertical Damage Effect	60.6%	26.7%	9.7%	1.8%	1.2%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-80: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Vertical Damage Effect	Unknown	Count	1	1	1	0	1	0	0	0	4
		% within Vertical Damage Effect	25.0%	25.0%	25.0%	.0%	25.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.6%	2.0%	3.2%	.0%	25.0%	.0%	.0%	.0%	2.4%
	Site buried	Count	0	1	0	0	0	0	0	1	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	50.0%	100.0%
		% within Severity	.0%	2.0%	.0%	.0%	.0%	.0%	.0%	100.0%	1.2%
	Pitted	Count	2	0	0	0	0	0	0	0	2
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.2%
	Site slightly dispersed / degraded	Count	1	11	9	10	1	0	1	0	33
		% within Vertical Damage Effect	3.0%	33.3%	27.3%	30.3%	3.0%	.0%	3.0%	.0%	100.0%
		% within Severity	1.6%	22.0%	29.0%	62.5%	25.0%	.0%	50.0%	.0%	19.8%
	Upper levels damaged	Count	43	25	16	5	1	3	1	0	94
		% within Vertical Damage Effect	45.7%	26.6%	17.0%	5.3%	1.1%	3.2%	1.1%	.0%	100.0%
		% within Severity	70.5%	50.0%	51.6%	31.3%	25.0%	100.0%	50.0%	.0%	56.0%
	Site heavily dispersed / degraded	Count	9	9	3	1	0	0	0	0	22
		% within Vertical Damage Effect	40.9%	40.9%	13.6%	4.5%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	14.8%	18.0%	9.7%	6.3%	.0%	.0%	.0%	.0%	13.1%
	Site destroyed to ground level	Count	3	2	1	0	1	0	0	0	7
		% within Vertical Damage Effect	42.9%	28.6%	14.3%	.0%	14.3%	.0%	.0%	.0%	100.0%
		% within Severity	4.9%	4.0%	3.2%	.0%	25.0%	.0%	.0%	.0%	4.2%
	Site destroyed	Count	2	1	1	0	0	0	0	0	4
		% within Vertical Damage Effect	50.0%	25.0%	25.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.3%	2.0%	3.2%	.0%	.0%	.0%	.0%	.0%	2.4%
Total		Count	61	50	31	16	4	3	2	1	168
		% within Vertical Damage Effect	36.3%	29.8%	18.5%	9.5%	2.4%	1.8%	1.2%	.6%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-81: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Vertical Damage Effect	Unknown	Count	3	0	1	0	0	0	0	0	4
		% within Vertical Damage Effect	75.0%	.0%	25.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	4.3%	.0%	3.2%	.0%	.0%	.0%	.0%	.0%	2.3%
	Site buried	Count	0	1	0	0	0	0	0	1	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	50.0%	100.0%
		% within Severity	.0%	1.9%	.0%	.0%	.0%	.0%	.0%	100.0%	1.1%
	Pitted	Count	2	0	0	0	0	0	0	0	2
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.1%
	Site slightly dispersed / degraded	Count	1	15	10	9	1	0	1	0	37
		% within Vertical Damage Effect	2.7%	40.5%	27.0%	24.3%	2.7%	.0%	2.7%	.0%	100.0%
		% within Severity	1.4%	28.8%	32.3%	64.3%	33.3%	.0%	50.0%	.0%	21.1%
	Upper levels damaged	Count	47	24	16	4	1	3	1	0	96
		% within Vertical Damage Effect	49.0%	25.0%	16.7%	4.2%	1.0%	3.1%	1.0%	.0%	100.0%
		% within Severity	69.1%	46.2%	51.6%	28.6%	33.3%	100.0%	50.0%	.0%	54.9%
	Site heavily dispersed / degraded	Count	11	9	2	1	0	0	0	0	23
		% within Vertical Damage Effect	47.8%	39.1%	8.7%	4.3%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	15.9%	17.3%	6.5%	7.1%	.0%	.0%	.0%	.0%	13.1%
	Site destroyed to ground level	Count	3	2	1	0	1	0	0	0	7
		% within Vertical Damage Effect	42.9%	28.6%	14.3%	.0%	14.3%	.0%	.0%	.0%	100.0%
		% within Severity	4.3%	3.8%	3.2%	.0%	33.3%	.0%	.0%	.0%	4.0%
	Site destroyed	Count	2	1	1	0	0	0	0	0	4
		% within Vertical Damage Effect	50.0%	25.0%	25.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.9%	1.9%	3.2%	.0%	.0%	.0%	.0%	.0%	2.3%
Total		Count	69	52	31	14	3	3	2	1	175
		% within Vertical Damage Effect	39.4%	29.7%	17.7%	8.0%	1.7%	1.7%	1.1%	.6%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-82: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON SPOT 2004 (AMALGAMATED SITES)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Vertical Damage Effect	Unknown	Count	7	6	2	3	1	0	0	0	19
		% within Vertical Damage Effect	36.8%	31.6%	10.5%	15.8%	5.3%	.0%	.0%	.0%	100.0%
		% within Severity	8.2%	6.1%	5.4%	15.8%	20.0%	.0%	.0%	.0%	8.6%
	Site buried	Count	0	1	0	0	0	0	0	1	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	50.0%	100.0%
		% within Severity	.0%	1.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.9%
	Pitted	Count	2	0	0	0	0	0	0	0	2
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
	Site slightly dispersed / degraded	Count	3	12	9	10	1	0	1	0	36
		% within Vertical Damage Effect	8.3%	33.3%	25.0%	27.8%	2.8%	.0%	2.8%	.0%	100.0%
		% within Severity	3.5%	18.2%	24.3%	52.6%	20.0%	.0%	33.3%	.0%	16.4%
	Upper levels damaged	Count	51	32	21	4	2	4	2	0	116
		% within Vertical Damage Effect	44.0%	27.6%	18.1%	3.4%	1.7%	3.4%	1.7%	.0%	100.0%
		% within Severity	60.0%	48.5%	56.8%	21.1%	40.0%	100.0%	66.7%	.0%	52.7%
	Site heavily dispersed / degraded	Count	15	10	3	2	0	0	0	0	30
		% within Vertical Damage Effect	50.0%	33.3%	10.0%	6.7%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	17.6%	15.2%	8.1%	10.5%	.0%	.0%	.0%	.0%	13.6%
	Site destroyed to ground level	Count	4	3	1	0	1	0	0	0	9
		% within Vertical Damage Effect	44.4%	33.3%	11.1%	.0%	11.1%	.0%	.0%	.0%	100.0%
		% within Severity	4.7%	4.5%	2.7%	.0%	20.0%	.0%	.0%	.0%	4.1%
	Site destroyed	Count	3	2	1	0	0	0	0	0	6
		% within Vertical Damage Effect	50.0%	33.3%	16.7%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.5%	3.0%	2.7%	.0%	.0%	.0%	.0%	.0%	2.7%
Total		Count	85	66	37	19	5	4	3	1	220
		% within Vertical Damage Effect	38.6%	30.0%	16.8%	8.6%	2.3%	1.8%	1.4%	.5%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-83: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON SPOT 2004 (UNIT ANALYSIS)

			Severity								Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	
Vertical Damage Effect	Unknown	Count	12	5	1	2	0	0	0	0	20
		% within Vertical Damage Effect	60.0%	25.0%	5.0%	10.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	12.0%	7.1%	2.8%	11.1%	.0%	.0%	.0%	.0%	8.5%
	Site buried	Count	0	1	0	0	0	0	0	1	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	50.0%	100.0%
		% within Severity	.0%	1.4%	.0%	.0%	.0%	.0%	.0%	100.0%	.8%
	Pitted	Count	2	0	0	0	0	0	0	0	2
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.8%
	Site slightly dispersed / degraded	Count	4	13	10	9	1	0	1	0	38
		% within Vertical Damage Effect	10.5%	34.2%	26.3%	23.7%	2.6%	.0%	2.6%	.0%	100.0%
		% within Severity	4.0%	18.6%	26.6%	50.0%	33.3%	.0%	50.0%	.0%	16.1%
	Upper levels damaged	Count	57	36	24	6	1	3	1	0	128
		% within Vertical Damage Effect	44.5%	28.1%	18.8%	4.7%	.8%	2.3%	.8%	.0%	100.0%
		% within Severity	57.0%	51.4%	61.5%	33.3%	33.3%	100.0%	50.0%	.0%	54.2%
	Site heavily dispersed / degraded	Count	18	10	2	1	0	0	0	0	31
		% within Vertical Damage Effect	58.1%	32.3%	6.5%	3.2%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	18.0%	14.3%	5.1%	5.6%	.0%	.0%	.0%	.0%	13.1%
	Site destroyed to ground level	Count	4	3	1	0	1	0	0	0	9
		% within Vertical Damage Effect	44.4%	33.3%	11.1%	.0%	11.1%	.0%	.0%	.0%	100.0%
		% within Severity	4.0%	4.3%	2.6%	.0%	33.3%	.0%	.0%	.0%	3.8%
	Site destroyed	Count	3	2	1	0	0	0	0	0	6
		% within Vertical Damage Effect	50.0%	33.3%	16.7%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.0%	2.9%	2.6%	.0%	.0%	.0%	.0%	.0%	2.5%
Total		Count	100	70	39	18	3	3	2	1	236
		% within Vertical Damage Effect	42.4%	29.7%	16.5%	7.6%	1.3%	1.3%	.8%	.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-84: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON GEOEYE 2009 (AMALGAMATED SITES)

			Severity									Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	9	
Vertical Damage Effect	Unknown	Count	1	1	0	0	1	0	0	0	0	3
		% within Vertical Damage Effect	33.3%	33.3%	.0%	.0%	33.3%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	1.3%	1.5%	.0%	.0%	14.3%	.0%	.0%	.0%	.0%	1.3%
	Site buried	Count	0	1	0	0	0	0	1	0	0	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	.0%	50.0%	.0%	.0%	100.0%
		% within Severity	.0%	1.5%	.0%	.0%	.0%	.0%	50.0%	.0%	.0%	.9%
	Pitted	Count	2	0	0	1	0	0	0	1	0	4
		% within Vertical Damage Effect	50.0%	.0%	.0%	25.0%	.0%	.0%	.0%	25.0%	.0%	100.0%
		% within Severity	2.7%	.0%	.0%	4.5%	.0%	.0%	.0%	100.0%	.0%	1.8%
	Site slightly dispersed / degraded	Count	1	10	16	9	3	1	0	0	0	40
		% within Vertical Damage Effect	2.5%	25.0%	40.0%	22.5%	7.5%	2.5%	.0%	.0%	.0%	100.0%
		% within Severity	1.3%	15.4%	33.3%	40.9%	42.9%	33.3%	.0%	.0%	.0%	17.9%
	Upper levels damaged	Count	45	37	24	10	3	2	1	0	1	123
		% within Vertical Damage Effect	36.6%	30.1%	19.5%	8.1%	2.4%	1.6%	.8%	.0%	.8%	100.0%
		% within Severity	60.0%	56.9%	50.0%	45.5%	42.9%	66.7%	50.0%	.0%	100.0%	54.9%
	Site heavily dispersed / degraded	Count	16	11	8	2	0	0	0	0	0	35
		% within Vertical Damage Effect	45.7%	31.4%	17.1%	5.7%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	21.3%	16.9%	12.5%	9.1%	.0%	.0%	.0%	.0%	.0%	15.6%
	Site destroyed to ground level	Count	8	4	1	0	0	0	0	0	0	13
		% within Vertical Damage Effect	61.5%	30.8%	7.7%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	10.7%	6.2%	2.1%	.0%	.0%	.0%	.0%	.0%	.0%	5.8%
	Site destroyed	Count	2	1	1	0	0	0	0	0	0	4
		% within Vertical Damage Effect	50.0%	25.0%	25.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.7%	1.5%	2.1%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Total		Count	75	65	48	22	7	3	2	1	1	224
		% within Vertical Damage Effect	33.5%	29.0%	21.4%	9.8%	3.1%	1.3%	.9%	.4%	.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-85: SEVERITY OF VERTICAL EXTENTS OF DAMAGE ON GEOEYE 2009 (UNIT ANALYSIS)

			Severity									Total
			Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	9	
Vertical Damage Effect	Unknown	Count	3	0	0	0	0	0	0	0	0	3
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	3.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Site buried	Count	0	1	0	0	0	0	1	0	0	2
		% within Vertical Damage Effect	.0%	50.0%	.0%	.0%	.0%	.0%	50.0%	.0%	.0%	100.0%
		% within Severity	.0%	1.5%	.0%	.0%	.0%	.0%	50.0%	.0%	.0%	.9%
	Pitted	Count	2	0	0	1	0	0	0	1	0	4
		% within Vertical Damage Effect	50.0%	.0%	.0%	25.0%	.0%	.0%	.0%	25.0%	.0%	100.0%
		% within Severity	2.4%	.0%	.0%	5.0%	.0%	.0%	.0%	100.0%	.0%	1.7%
	Site slightly dispersed / degraded	Count	2	12	17	8	3	1	0	0	0	43
		% within Vertical Damage Effect	4.7%	27.9%	39.5%	18.6%	7.0%	2.3%	.0%	.0%	.0%	100.0%
		% within Severity	2.4%	17.9%	34.7%	40.0%	60.0%	33.3%	.0%	.0%	.0%	18.5%
	Upper levels damaged	Count	49	38	25	9	2	2	1	0	1	127
		% within Vertical Damage Effect	38.6%	29.9%	19.7%	7.1%	1.6%	1.6%	.8%	.0%	.8%	100.0%
		% within Severity	58.3%	56.7%	51.0%	45.0%	40.0%	66.7%	50.0%	.0%	100.0%	54.7%
	Site heavily dispersed / degraded	Count	18	11	5	2	0	0	0	0	0	36
		% within Vertical Damage Effect	50.0%	30.6%	13.9%	5.6%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	21.4%	18.4%	10.2%	10.0%	.0%	.0%	.0%	.0%	.0%	15.5%
	Site destroyed to ground level	Count	8	4	1	0	0	0	0	0	0	13
		% within Vertical Damage Effect	61.5%	30.8%	7.7%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	9.5%	6.0%	2.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.6%
	Site destroyed	Count	2	1	1	0	0	0	0	0	0	4
		% within Vertical Damage Effect	50.0%	25.0%	25.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Severity	2.4%	1.5%	2.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.7%
Total		Count	84	67	49	20	5	3	2	1	1	232
		% within Vertical Damage Effect	36.2%	28.9%	21.1%	8.6%	2.2%	1.3%	.9%	.4%	.4%	100.0%
		% within Severity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-86: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON CORONA (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	3	8.8%	36	49.3%
	Site buried	0	.0%	2	5.9%	0	.0%
	Pitted	0	.0%	1	2.9%	0	.0%
	Site slightly dispersed / degraded	16	39.0%	8	23.5%	12	16.9%
	Upper levels damaged	22	53.7%	15	44.1%	18	25.4%
	Site heavily dispersed / degraded	3	7.3%	1	2.9%	4	5.6%
	Site destroyed to ground level	0	.0%	1	2.9%	1	1.4%
	Site destroyed	0	.0%	3	8.8%	1	1.4%

TABLE H-87: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON CORONA (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	3	8.8%	47	52.8%
	Site buried	0	.0%	2	5.9%	0	.0%
	Pitted	0	.0%	1	2.9%	0	.0%
	Site slightly dispersed / degraded	16	39.1%	8	23.5%	14	15.7%
	Upper levels damaged	23	54.8%	15	44.1%	22	24.7%
	Site heavily dispersed / degraded	3	7.1%	1	2.9%	4	4.5%
	Site destroyed to ground level	0	.0%	1	2.9%	1	1.1%
	Site destroyed	0	.0%	3	8.8%	1	1.1%

TABLE H-88: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	1	1.9%	3	4.6%
	Site buried	0	.0%	2	3.8%	0	.0%
	Pitted	0	.0%	1	1.9%	1	1.5%
	Site slightly dispersed / degraded	11	21.6%	7	13.5%	15	23.1%
	Upper levels damaged	35	68.6%	27	51.9%	32	49.2%
	Site heavily dispersed / degraded	3	5.9%	7	13.5%	12	18.5%
	Site destroyed to ground level	2	3.9%	5	9.6%	0	.0%
	Site destroyed	0	.0%	2	3.8%	2	3.1%

TABLE H-89: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	1	1.9%	3	4.2%
	Site buried	0	.0%	2	3.8%	0	.0%
	Pitted	0	.0%	1	1.9%	1	1.4%
	Site slightly dispersed / degraded	11	21.6%	7	13.5%	19	26.4%
	Upper levels damaged	35	68.6%	27	51.9%	34	47.2%
	Site heavily dispersed / degraded	3	5.9%	7	13.5%	13	18.1%
	Site destroyed to ground level	2	3.9%	5	9.6%	0	.0%
	Site destroyed	0	.0%	2	3.8%	2	2.8%

TABLE H-90: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON SPOT 2004 (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	2	3.5%	17	15.7%
	Site buried	0	.0%	2	3.5%	0	.0%
	Pitted	0	.0%	1	1.8%	1	.9%
	Site slightly dispersed / degraded	13	23.6%	7	12.3%	16	14.8%
	Upper levels damaged	37	67.3%	29	50.9%	50	46.3%
	Site heavily dispersed / degraded	3	5.5%	9	15.8%	18	16.7%
	Site destroyed to ground level	2	3.6%	6	8.8%	2	1.9%
	Site destroyed	0	.0%	2	3.5%	4	3.7%

TABLE H-91: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON SPOT 2004 (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	2	3.5%	18	14.6%
	Site buried	0	.0%	2	3.5%	0	.0%
	Pitted	0	.0%	1	1.8%	1	.8%
	Site slightly dispersed / degraded	13	23.2%	7	12.3%	19	14.8%
	Upper levels damaged	38	67.9%	29	50.9%	61	49.6%
	Site heavily dispersed / degraded	3	5.4%	9	15.8%	19	15.4%
	Site destroyed to ground level	2	3.6%	6	8.8%	2	1.6%
	Site destroyed	0	.0%	2	3.5%	4	3.3%

TABLE H-92: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON GEOEYE 2009 (AMALGAMATED SITES)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	0	.0%	3	3.0%
	Site buried	0	.0%	2	3.1%	0	.0%
	Pitted	1	1.7%	2	3.1%	1	1.0%
	Site slightly dispersed / degraded	9	15.0%	11	17.2%	20	20.0%
	Upper levels damaged	43	71.7%	31	48.4%	49	49.0%
	Site heavily dispersed / degraded	5	8.3%	12	18.8%	18	18.0%
	Site destroyed to ground level	2	3.3%	4	6.3%	7	7.0%
	Site destroyed	0	.0%	2	3.1%	2	2.0%

TABLE H-93: VERTICAL EXTENTS OF DAMAGE BY LOCATION ON GEOEYE 2009 (UNIT ANALYSIS)

		Alluvial Upland Plain		River / Wadi Terrace		Limestone Hills	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Vertical Damage Effect	Undamaged	0	.0%	0	.0%	0	.0%
	Unknown	0	.0%	0	.0%	3	2.8%
	Site buried	0	.0%	2	3.1%	0	.0%
	Pitted	1	1.8%	2	3.1%	1	.9%
	Site slightly dispersed / degraded	8	14.8%	11	17.2%	23	21.5%
	Upper levels damaged	44	72.1%	31	48.4%	52	48.6%
	Site heavily dispersed / degraded	5	9.2%	12	18.8%	19	17.8%
	Site destroyed to ground level	2	3.3%	4	6.3%	7	6.5%
	Site destroyed	0	.0%	2	3.1%	2	1.8%

TABLE H-94: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON CORONA (AMALGAMATED SITES)

			Site Type					Total
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	
Vertical Damage Effect	Unknown	Count	6	9	13	5	5	38
		% within Site Type	16.7%	27.3%	21.7%	71.4%	50.0%	26.0%
	Site buried	Count	0	0	1	1	0	2
		% within Site Type	.0%	.0%	1.7%	14.3%	.0%	1.4%
	Pitted	Count	1	0	0	0	0	1
		% within Site Type	2.8%	.0%	.0%	.0%	.0%	.7%
	Site slightly dispersed / degraded	Count	16	9	9	0	2	36
		% within Site Type	44.4%	27.3%	15.0%	.0%	20.0%	24.7%
	Upper levels damaged	Count	11	13	28	1	2	55
		% within Site Type	30.6%	39.4%	46.7%	14.3%	20.0%	37.7%
	Site heavily dispersed / degraded	Count	0	2	5	0	1	9
		% within Site Type	.0%	6.1%	8.3%	.0%	10.0%	6.5%
	Site destroyed to ground level	Count	0	0	2	0	0	2
		% within Site Type	.0%	.0%	3.3%	.0%	.0%	1.4%
	Site destroyed	Count	2	0	2	0	0	4
		% within Site Type	5.6%	.0%	3.3%	.0%	.0%	2.7%
Total		Count	36	33	60	7	10	146
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-95: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON CORONA (UNIT ANALYSIS)

			Site Type						
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Vertical Damage Effect	Unknown	Count	7	10	21	5	1	6	50
		% within Site Type	18.9%	26.3%	29.6%	71.4%	100.0%	54.5%	30.3%
	Site buried	Count	0	0	1	1	0	0	2
		% within Site Type	.0%	.0%	1.4%	14.3%	.0%	.0%	1.2%
	Pitted	Count	1	0	0	0	0	0	1
		% within Site Type	2.7%	.0%	.0%	.0%	.0%	.0%	.6%
	Site slightly dispersed / degraded	Count	16	10	10	0	0	2	38
		% within Site Type	43.2%	26.3%	14.1%	.0%	.0%	18.2%	23.0%
	Upper levels damaged	Count	11	16	30	1	0	2	60
		% within Site Type	29.7%	42.1%	42.3%	14.3%	.0%	18.2%	36.4%
	Site heavily dispersed / degraded	Count	0	2	5	0	0	1	8
		% within Site Type	.0%	5.3%	7.0%	.0%	.0%	9.1%	4.8%
	Site destroyed to ground level	Count	0	0	2	0	0	0	2
		% within Site Type	.0%	.0%	2.8%	.0%	.0%	.0%	1.2%
	Site destroyed	Count	2	0	2	0	0	0	4
		% within Site Type	5.4%	.0%	2.8%	.0%	.0%	.0%	2.4%
Total		Count	37	38	71	7	1	11	165
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-96: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Vertical Damage Effect	Unknown	Count	1	0	1	1	1	4
		% within Site Type	2.1%	.0%	1.3%	25.0%	9.1%	2.4%
	Site buried	Count	0	0	1	1	0	2
		% within Site Type	.0%	.0%	1.3%	25.0%	.0%	1.2%
	Pitted	Count	2	0	0	0	0	2
		% within Site Type	4.3%	.0%	.0%	.0%	.0%	1.2%
	Site slightly dispersed / degraded	Count	11	7	14	0	1	33
		% within Site Type	23.4%	22.6%	18.7%	.0%	9.1%	19.6%
	Upper levels damaged	Count	21	18	48	1	8	94
		% within Site Type	44.7%	58.1%	61.3%	25.0%	72.7%	56.0%
	Site heavily dispersed / degraded	Count	6	6	8	1	1	22
		% within Site Type	12.8%	19.4%	10.7%	25.0%	9.1%	13.1%
	Site destroyed to ground level	Count	5	0	2	0	0	7
		% within Site Type	10.6%	.0%	2.7%	.0%	.0%	4.2%
	Site destroyed	Count	1	0	3	0	0	4
		% within Site Type	2.1%	.0%	4.0%	.0%	.0%	2.4%
Total		Count	47	31	75	4	11	168
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-97: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Vertical Damage Effect	Unknown	Count	1	0	1	1	1	4
		% within Site Type	2.1%	.0%	1.3%	25.0%	7.7%	2.3%
	Site buried	Count	0	0	1	1	0	2
		% within Site Type	.0%	.0%	1.3%	25.0%	.0%	1.1%
	Pitted	Count	2	0	0	0	0	2
		% within Site Type	4.3%	.0%	.0%	.0%	.0%	1.1%
	Site slightly dispersed / degraded	Count	11	8	15	0	3	37
		% within Site Type	23.4%	23.5%	19.5%	.0%	23.1%	21.1%
	Upper levels damaged	Count	21	20	48	1	6	96
		% within Site Type	44.7%	58.8%	62.3%	25.0%	46.2%	54.9%
	Site heavily dispersed / degraded	Count	6	6	7	1	3	23
		% within Site Type	12.8%	17.6%	9.1%	25.0%	23.1%	13.1%
	Site destroyed to ground level	Count	5	0	2	0	0	7
		% within Site Type	10.6%	.0%	2.6%	.0%	.0%	4.0%
	Site destroyed	Count	1	0	3	0	0	4
		% within Site Type	2.1%	.0%	3.9%	.0%	.0%	2.3%
Total		Count	47	34	77	4	13	175
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-98: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON SPOT 2004 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Vertical Damage Effect	Unknown	Count	2	4	6	4	3	19
		% within Site Type	3.8%	9.1%	6.3%	36.4%	17.6%	8.6%
	Site buried	Count	0	0	1	1	0	2
		% within Site Type	.0%	.0%	1.1%	9.1%	.0%	.9%
	Pitted	Count	2	0	0	0	0	2
		% within Site Type	3.8%	.0%	.0%	.0%	.0%	.9%
	Site slightly dispersed / degraded	Count	14	7	14	0	1	36
		% within Site Type	26.4%	15.9%	14.7%	.0%	5.9%	16.4%
	Upper levels damaged	Count	23	26	54	2	11	116
		% within Site Type	43.4%	59.1%	56.8%	18.2%	64.7%	52.7%
	Site heavily dispersed / degraded	Count	6	7	11	4	2	30
		% within Site Type	11.3%	15.9%	11.6%	36.4%	11.8%	13.6%
	Site destroyed to ground level	Count	5	0	4	0	0	9
		% within Site Type	9.4%	.0%	4.2%	.0%	.0%	4.1%
	Site destroyed	Count	1	0	5	0	0	6
		% within Site Type	1.9%	.0%	5.3%	.0%	.0%	2.7%
Total		Count	53	44	95	11	17	220
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-99: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON SPOT 2004 (UNIT ANALYSIS)

			Site Type						
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Vertical Damage Effect	Unknown	Count	2	5	7	4	0	2	20
		% within Site Type	3.8%	10.4%	6.3%	36.4%	.0%	16.7%	8.5%
	Site buried	Count	0	0	1	1	0	0	2
		% within Site Type	.0%	.0%	.9%	9.1%	.0%	.0%	.8%
	Pitted	Count	2	0	0	0	0	0	2
		% within Site Type	3.8%	.0%	.0%	.0%	.0%	.0%	.8%
	Site slightly dispersed / degraded	Count	14	8	14	0	0	2	38
		% within Site Type	26.4%	16.7%	12.6%	.0%	.0%	16.7%	16.1%
	Upper levels damaged	Count	23	28	70	2	0	5	128
		% within Site Type	43.4%	58.3%	63.1%	18.2%	.0%	41.7%	54.2%
	Site heavily dispersed / degraded	Count	6	7	10	4	1	3	31
		% within Site Type	11.3%	14.6%	9.0%	36.4%	100.0%	25.0%	13.1%
	Site destroyed to ground level	Count	5	0	4	0	0	0	9
		% within Site Type	9.4%	.0%	3.6%	.0%	.0%	.0%	3.8%
	Site destroyed	Count	1	0	5	0	0	0	6
		% within Site Type	1.9%	.0%	4.5%	.0%	.0%	.0%	2.5%
Total		Count	53	48	111	11	1	12	236
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-100: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON GEOEYE 2009 (AMALGAMATED SITES)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Vertical Damage Effect	Unknown	Count	1	0	1	0	1	3
		% within Site Type	1.5%	.0%	1.1%	.0%	6.7%	1.3%
	Site buried	Count	0	0	1	1	0	2
		% within Site Type	.0%	.0%	1.1%	12.5%	.0%	.9%
	Pitted	Count	3	0	1	0	0	4
		% within Site Type	4.5%	.0%	1.1%	.0%	.0%	1.8%
	Site slightly dispersed / degraded	Count	17	8	13	1	1	40
		% within Site Type	25.8%	17.4%	14.6%	12.5%	6.7%	17.9%
	Upper levels damaged	Count	28	29	51	3	12	123
		% within Site Type	42.4%	63.0%	57.3%	37.5%	80.0%	54.9%
	Site heavily dispersed / degraded	Count	11	8	13	2	1	35
		% within Site Type	16.7%	17.4%	14.6%	25.0%	6.7%	15.6%
	Site destroyed to ground level	Count	5	1	6	1	0	13
		% within Site Type	7.6%	2.2%	6.7%	12.5%	.0%	5.8%
	Site destroyed	Count	1	0	3	0	0	4
		% within Site Type	1.5%	.0%	3.4%	.0%	.0%	1.8%
Total		Count	66	46	89	8	15	224
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-101: VERTICAL EXTENTS OF DAMAGE BY SITE TYPE ON GEOEYE 2009 (UNIT ANALYSIS)

			Site Type					
			Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Vertical Damage Effect	Unknown	Count	1	0	1	0	1	3
		% within Site Type	1.5%	.0%	1.1%	.0%	6.3%	1.3%
	Site buried	Count	0	0	1	1	0	2
		% within Site Type	.0%	.0%	1.1%	12.5%	.0%	.9%
	Pitted	Count	3	0	1	0	0	4
		% within Site Type	4.5%	.0%	1.1%	.0%	.0%	1.7%
	Site slightly dispersed / degraded	Count	17	9	14	1	2	43
		% within Site Type	25.8%	18.0%	15.2%	12.5%	12.5%	18.5%
	Upper levels damaged	Count	28	32	54	3	10	127
		% within Site Type	42.4%	64.0%	58.7%	37.5%	62.5%	54.7%
	Site heavily dispersed / degraded	Count	11	8	12	2	3	36
		% within Site Type	16.7%	16.0%	13.0%	25.0%	18.8%	15.5%
	Site destroyed to ground level	Count	5	1	6	1	0	13
		% within Site Type	7.6%	2.0%	6.5%	12.5%	.0%	5.6%
	Site destroyed	Count	1	0	3	0	0	4
		% within Site Type	1.5%	.0%	3.3%	.0%	.0%	1.7%
Total		Count	66	50	92	8	16	232
		% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-102: CHANGE IN VERTICAL EXTENT FROM THE 1960S TO 2009 (UNIT ANALYSIS)

			Vertical Effect (Geoeye)								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Vertical Effect (Corona)	Unknown	Count	3	0	1	1	18	7	2	0	33
		% within Vertical Effect (Corona)	9.1%	.0%	3.0%	3.0%	57.6%	21.2%	6.1%	.0%	100.0%
	Site buried	Count	0	1	0	0	1	0	0	0	2
		% within Vertical Effect (Corona)	.0%	50.0%	.0%	.0%	50.0%	.0%	.0%	.0%	100.0%
	Pitted	Count	0	0	1	0	0	0	0	0	1
		% within Vertical Effect (Corona)	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	Site slightly dispersed / degraded	Count	0	0	0	4	26	6	1	1	37
		% within Vertical Effect (Corona)	.0%	.0%	.0%	10.8%	67.6%	16.2%	2.7%	2.7%	100.0%
	Upper levels damaged	Count	0	0	0	1	43	9	3	1	57
		% within Vertical Effect (Corona)	.0%	.0%	.0%	1.8%	75.4%	15.8%	5.3%	1.8%	100.0%
	Site heavily dispersed / degraded	Count	0	0	0	2	3	3	0	0	8
		% within Vertical Effect (Corona)	.0%	.0%	.0%	25.0%	37.5%	37.5%	.0%	.0%	100.0%
	Site destroyed to ground level	Count	0	0	0	0	0	0	2	0	2
		% within Vertical Effect (Corona)	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	Site destroyed	Count	0	0	0	0	0	1	1	2	4
		% within Vertical Effect (Corona)	.0%	.0%	.0%	.0%	.0%	25.0%	25.0%	50.0%	100.0%
Total		Count	3	1	2	8	91	26	9	4	144
		% within Vertical Effect (Corona)	2.1%	.7%	1.4%	5.6%	63.2%	18.1%	6.3%	2.8%	100.0%

8.6.4 - THE RELATIONSHIP BETWEEN HORIZONTAL AND VERTICAL DAMAGE EXTENTS

AND

8.6.5 - MOST AFFECTED / UNAFFECTED SITES

TABLE H-103: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON CORONA (AMALGAMATED SITES)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	38	0	0	0	0	0	0	0	38
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	26.0%
	Peripheral	Count	0	0	0	13	6	1	0	0	20
		% within Horizontal Damage Effect	.0%	.0%	.0%	65.0%	30.0%	5.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	38.1%	10.9%	12.5%	.0%	.0%	13.7%
	Intermittent / fractional	Count	0	0	0	11	4	0	0	0	15
		% within Horizontal Damage Effect	.0%	.0%	.0%	73.3%	26.7%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	30.6%	7.3%	.0%	.0%	.0%	10.3%
	Sectional / partial	**Count**	0	2	0	8	18	5	2	4	39
		% within Horizontal Damage Effect	.0%	5.1%	.0%	20.5%	46.2%	12.8%	5.1%	10.3%	100.0%
		% within Vertical Damage Effect	.0%	100.0%	.0%	22.2%	32.7%	62.5%	100.0%	100.0%	26.7%
	Majority / Extensive	Count	0	0	1	3	15	2	0	0	21
		% within Horizontal Damage Effect	.0%	.0%	4.8%	14.3%	71.4%	9.5%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	100.0%	8.3%	27.3%	25.0%	.0%	.0%	14.4%
	Total / wholesale	Count	0	0	0	1	12	0	0	0	13
		% within Horizontal Damage Effect	.0%	.0%	.0%	7.7%	92.3%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	2.8%	21.8%	.0%	.0%	.0%	8.9%
Total		Count	38	2	1	36	55	8	2	4	146
		% within Horizontal Damage Effect	26.0%	1.4%	.7%	24.7%	37.7%	5.5%	1.4%	2.7%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-104: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON CORONA (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	50	0	0	0	0	0	0	0	50
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	30.3%
	Peripheral	Count	0	0	0	14	8	1	0	0	23
		% within Horizontal Damage Effect	.0%	.0%	.0%	60.9%	34.8%	4.3%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	36.8%	13.3%	12.5%	.0%	.0%	13.9%
	Intermittent / fractional	Count	0	0	0	10	5	0	0	0	15
		% within Horizontal Damage Effect	.0%	.0%	.0%	66.7%	33.3%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	26.3%	8.3%	.0%	.0%	.0%	9.1%
	Sectional / partial	Count	0	2	0	10	17	5	2	4	40
		% within Horizontal Damage Effect	.0%	5.0%	.0%	25.0%	42.5%	12.5%	5.0%	10.0%	100.0%
		% within Vertical Damage Effect	.0%	100.0%	.0%	26.3%	28.3%	62.5%	100.0%	100.0%	24.2%
	Majority / Extensive	Count	0	0	1	3	16	2	0	0	22
		% within Horizontal Damage Effect	.0%	.0%	4.5%	13.6%	72.7%	9.1%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	100.0%	7.9%	26.7%	25.0%	.0%	.0%	13.3%
	Total / wholesale	Count	0	0	0	1	14	0	0	0	15
		% within Horizontal Damage Effect	.0%	.0%	.0%	6.7%	93.3%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	2.6%	23.3%	.0%	.0%	.0%	9.1%
Total		Count	50	2	1	38	60	8	2	4	165
		% within Horizontal Damage Effect	30.3%	1.2%	.6%	23.0%	36.4%	4.8%	1.2%	2.4%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-105: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	4	0	0	0	0	0	0	0	4
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.4%
	Peripheral	Count	0	0	0	11	3	2	0	1	17
		% within Horizontal Damage Effect	.0%	.0%	.0%	64.7%	17.6%	11.8%	.0%	5.8%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	33.3%	3.2%	9.1%	.0%	25.0%	10.1%
	Intermittent / fractional	Count	0	0	1	14	16	7	4	0	42
		% within Horizontal Damage Effect	.0%	.0%	2.4%	33.3%	38.1%	16.7%	9.5%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	50.0%	42.4%	17.0%	31.8%	57.1%	.0%	25.0%
	Sectional / partial	Count	0	2	0	5	49	11	3	3	73
		% within Horizontal Damage Effect	.0%	2.7%	.0%	6.8%	67.1%	15.1%	4.1%	4.1%	100.0%
		% within Vertical Damage Effect	.0%	100.0%	.0%	15.2%	52.1%	50.0%	42.9%	75.0%	43.5%
	Majority / Extensive	Count	0	0	1	3	19	2	0	0	25
		% within Horizontal Damage Effect	.0%	.0%	4.0%	12.0%	76.0%	8.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	50.0%	9.1%	20.2%	9.1%	.0%	.0%	14.9%
	Total / wholesale	Count	0	0	0	0	7	0	0	0	7
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	7.4%	.0%	.0%	.0%	4.2%
Total		Count	4	2	2	33	94	22	7	4	168
		% within Horizontal Damage Effect	2.4%	1.2%	1.2%	19.6%	56.0%	13.1%	4.2%	2.4%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-106: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	4	0	0	0	0	0	0	0	4
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.3%
	Peripheral	Count	0	0	0	12	3	2	0	1	18
		% within Horizontal Damage Effect	.0%	.0%	.0%	66.7%	16.7%	11.1%	.0%	5.6%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	32.4%	3.1%	8.7%	.0%	25.0%	10.3%
	Intermittent / fractional	Count	0	0	0	15	17	7	4	0	43
		% within Horizontal Damage Effect	.0%	.0%	.0%	34.9%	39.5%	16.3%	9.3%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	40.5%	17.7%	30.4%	57.1%	.0%	24.6%
	Sectional / partial	Count	0	2	1	7	45	12	3	3	73
		% within Horizontal Damage Effect	.0%	2.7%	1.4%	9.6%	61.6%	16.4%	4.1%	4.1%	100.0%
		% within Vertical Damage Effect	.0%	100.0%	50.0%	18.9%	46.9%	52.2%	42.9%	75.0%	41.7%
	Majority / Extensive	Count	0	0	1	3	23	2	0	0	29
		% within Horizontal Damage Effect	.0%	.0%	3.4%	10.3%	79.3%	6.9%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	50.0%	8.1%	24.0%	8.7%	.0%	.0%	16.6%
	Total / wholesale	Count	0	0	0	0	8	0	0	0	8
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	8.3%	.0%	.0%	.0%	4.6%
Total		Count	4	2	2	37	96	23	7	4	175
		% within Horizontal Damage Effect	2.3%	1.1%	1.1%	21.1%	54.9%	13.1%	4.0%	2.3%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-107: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON SPOT 2004 (AMALGAMATED SITES)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	18	0	0	0	0	0	0	0	18
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	94.7%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	8.2%
	Peripheral	Count	0	0	0	14	9	2	1	1	26
		% within Horizontal Damage Effect	.0%	.0%	.0%	53.8%	30.8%	7.7%	3.8%	3.8%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	38.9%	8.3%	6.7%	11.1%	16.7%	11.8%
	Intermittent / fractional	Count	0	0	1	13	19	7	4	0	44
		% within Horizontal Damage Effect	.0%	.0%	2.3%	29.5%	43.2%	15.9%	9.1%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	50.0%	36.1%	16.4%	23.3%	44.4%	.0%	20.0%
	Sectional / partial	Count	0	2	0	6	58	19	4	5	94
		% within Horizontal Damage Effect	.0%	2.1%	.0%	6.4%	61.7%	20.2%	4.3%	5.3%	100.0%
		% within Vertical Damage Effect	.0%	100.0%	.0%	16.7%	50.0%	63.3%	44.4%	83.3%	42.7%
	Majority / Extensive	Count	1	0	1	3	23	2	0	0	30
		% within Horizontal Damage Effect	3.3%	.0%	3.3%	10.0%	76.7%	6.7%	.0%	.0%	100.0%
		% within Vertical Damage Effect	5.3%	.0%	50.0%	8.3%	19.8%	6.7%	.0%	.0%	13.6%
	Total / wholesale	Count	0	0	0	0	8	0	0	0	8
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	6.9%	.0%	.0%	.0%	3.6%
Total		Count	19	2	2	36	116	30	9	6	220
		% within Horizontal Damage Effect	8.6%	.9%	.9%	16.4%	52.7%	13.6%	4.1%	2.7%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-108: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON SPOT 2004 (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	19	0	0	0	0	0	0	0	19
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	95.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	8.1%
	Peripheral	Count	0	0	0	15	11	2	1	1	30
		% within Horizontal Damage Effect	.0%	.0%	.0%	50.0%	36.7%	6.7%	3.3%	3.3%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	38.5%	8.6%	6.5%	11.1%	16.7%	12.7%
	Intermittent / fractional	Count	0	0	0	14	19	7	4	0	44
		% within Horizontal Damage Effect	.0%	.0%	.0%	31.8%	43.2%	15.9%	9.1%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	35.9%	14.8%	22.6%	44.4%	.0%	18.6%
	Sectional / partial	**Count**	**0**	**2**	**1**	**8**	**80**	**19**	**4**	**5**	**97**
		% within Horizontal Damage Effect	**.0%**	**2.1%**	**1.0%**	**8.2%**	**81.9%**	**19.6%**	**4.1%**	**5.2%**	**100.0%**
		% within Vertical Damage Effect	.0%	100.0%	50.0%	15.9%	46.9%	61.3%	44.4%	83.3%	41.1%
	Majority / Extensive	Count	1	0	1	3	27	2	0	0	34
		% within Horizontal Damage Effect	2.9%	.0%	2.9%	8.8%	79.4%	5.9%	.0%	.0%	100.0%
		% within Vertical Damage Effect	5.0%	.0%	50.0%	7.9%	21.1%	6.5%	.0%	.0%	14.4%
	Total / wholesale	Count	0	0	0	0	11	1	0	0	12
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	91.7%	8.3%	.0%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	8.6%	3.2%	.0%	.0%	5.1%
Total		Count	20	2	2	38	128	31	9	6	236
		% within Horizontal Damage Effect	8.5%	.8%	.8%	16.1%	54.2%	13.1%	3.8%	2.5%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-109: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON GEOEYE 2009 (AMALGAMATED SITES)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	3	0	0	0	0	0	0	0	3
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Peripheral	Count	0	0	0	14	7	2	1	1	25
		% within Horizontal Damage Effect	.0%	.0%	.0%	56.0%	28.0%	8.0%	4.0%	4.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	35.0%	5.7%	5.7%	7.7%	25.0%	11.2%
	Intermittent / fractional	Count	0	0	2	14	28	9	3	0	54
		% within Horizontal Damage Effect	.0%	.0%	3.7%	25.9%	48.1%	16.7%	5.6%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	50.0%	35.0%	21.1%	25.7%	23.1%	.0%	24.1%
	Sectional / partial	Count	0	2	1	7	55	21	7	3	96
		% within Horizontal Damage Effect	.0%	2.1%	1.0%	7.3%	57.3%	21.9%	7.3%	3.1%	100.0%
		% within Vertical Damage Effect	.0%	100.0%	25.0%	17.5%	44.7%	60.0%	53.8%	75.0%	42.9%
	Majority / Extensive	Count	0	0	1	5	25	3	1	0	35
		% within Horizontal Damage Effect	.0%	.0%	2.9%	14.3%	71.4%	8.6%	2.9%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	25.0%	12.5%	20.3%	8.6%	7.7%	.0%	15.6%
	Total / wholesale	Count	0	0	0	0	10	0	1	0	11
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	90.9%	.0%	9.1%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	8.1%	.0%	7.7%	.0%	4.9%
Total		Count	3	2	4	40	123	35	13	4	224
		% within Horizontal Damage Effect	1.3%	.9%	1.8%	17.9%	54.9%	15.6%	5.8%	1.8%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-110: RELATIONSHIP BETWEEN HORIZONTAL EXTENT AND VERTICAL DEPTH OF DAMAGE ON GEOEYE 2009 (UNIT ANALYSIS)

			Vertical Damage Effect								
			Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Horizontal Damage Effect	Unknown	Count	3	0	0	0	0	0	0	0	3
		% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Peripheral	Count	0	0	0	15	7	2	1	1	26
		% within Horizontal Damage Effect	.0%	.0%	.0%	57.7%	26.9%	7.7%	3.8%	3.8%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	34.9%	5.5%	5.6%	7.7%	25.0%	11.2%
	Intermittent / fractional	Count	0	0	2	15	27	9	3	0	56
		% within Horizontal Damage Effect	.0%	.0%	3.6%	26.8%	48.2%	16.1%	5.4%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	50.0%	34.9%	21.3%	25.0%	23.1%	.0%	24.1%
	Sectional / partial	Count	0	2	1	9	51	22	7	3	94
		% within Horizontal Damage Effect	.0%	2.1%	1.1%	9.5%	54.3%	23.4%	7.4%	3.2%	100.0%
		% within Vertical Damage Effect	.0%	100.0%	25.0%	18.6%	40.2%	61.1%	53.8%	75.0%	40.5%
	Majority / Extensive	Count	0	0	1	5	30	3	1	0	40
		% within Horizontal Damage Effect	.0%	.0%	2.5%	12.5%	75.0%	7.5%	2.5%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	25.0%	11.6%	23.6%	8.3%	7.7%	.0%	17.2%
	Total / wholesale	Count	0	0	0	0	12	0	1	0	13
		% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	92.3%	.0%	7.7%	.0%	100.0%
		% within Vertical Damage Effect	.0%	.0%	.0%	.0%	9.4%	.0%	7.7%	.0%	5.6%
Total		Count	3	2	4	43	127	36	13	4	232
		% within Horizontal Damage Effect	1.3%	.9%	1.7%	18.5%	54.7%	15.5%	5.6%	1.7%	100.0%
		% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

8.7 - DAMAGE EXTENTS: ANALYSIS OF DAMAGE SOURCES

TABLE H-111 - COUNT OF UNITS AFFECTED BY EACH DAMAGE CAUSE

	Sub Units	% of 100
Arable Agriculture	72	72.0%
Bulldozing	12	12.0%
Cuts	10	10.0%
Development	27	27.0%
Dumping Pits	3	3.0%
Grave Pits	12	12.0%
Irrigation Channels	5	5.0%
Looting	17	17.0%
Military Damage	1	1.0%
Mudbrick Pits	0	0.0%
Natural Erosion	11	11.0%
Orchards	32	32.0%
Pits (Other)	7	7.0%
Quarries	3	3.0%
Railway	1	1.0%
Roads / Tracks	53	53.0%
Visitor Erosion / Vandalism	1	1.0%
Water Erosion	10	10.0%
Unknown	54	54.0%

FIGURE H-18: BAR CHARTS OF FREQUENCY OF DAMAGE SOURCES BY IMAGERY (UNIT ANALYSIS)

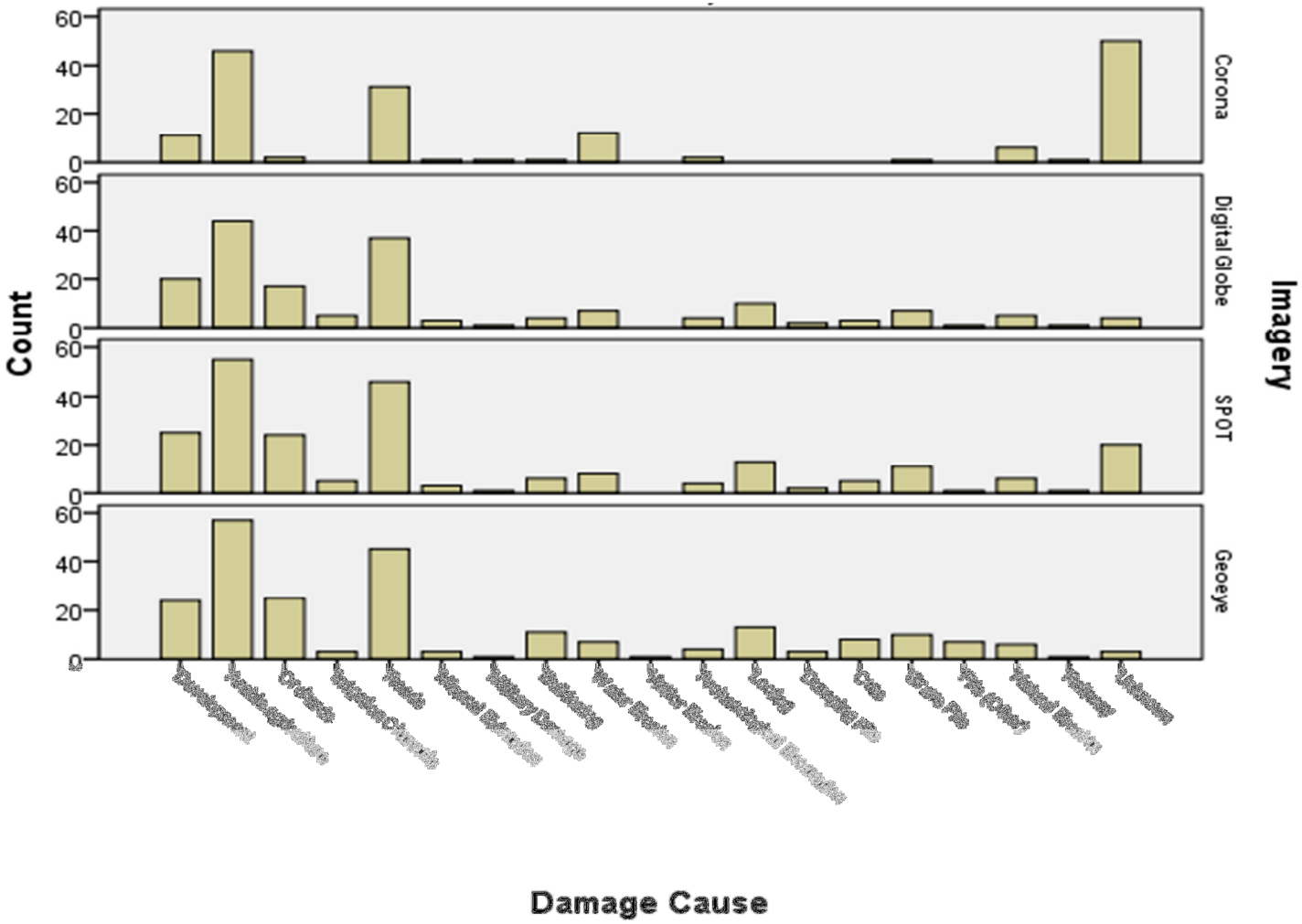


FIGURE H-19: GRAPH OF HORIZONTAL EXTENT OF DAMAGE BY CAUSE (CORONA)

(UNIT ANALYSIS)

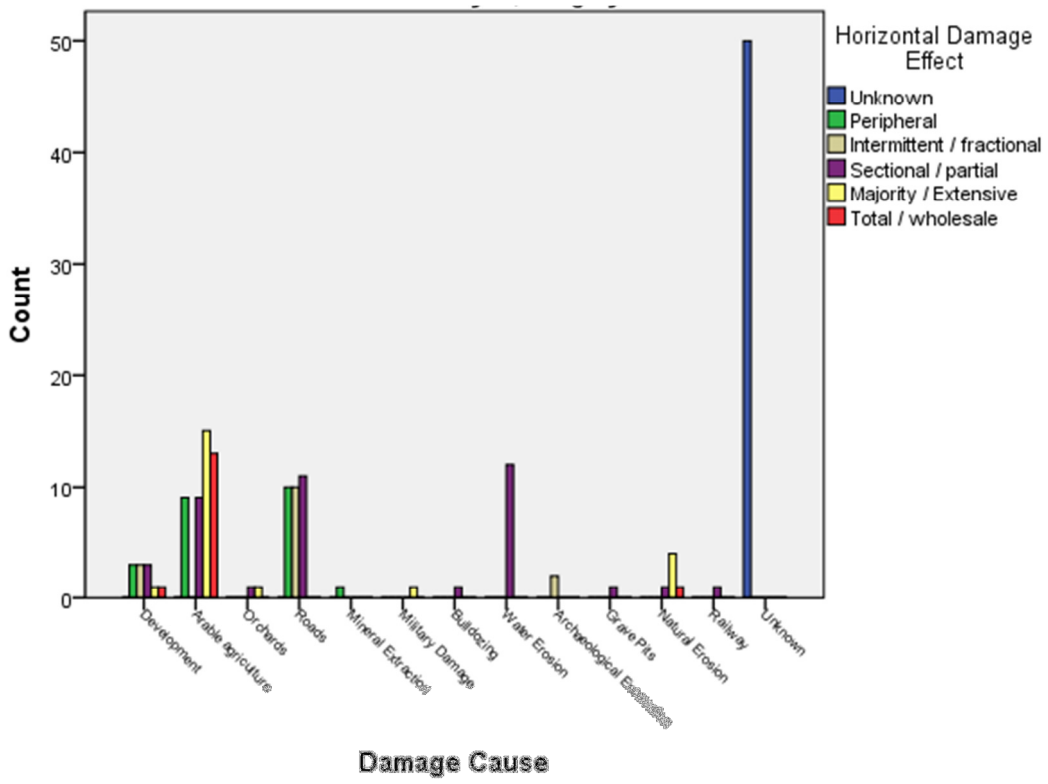


FIGURE H-20: GRAPH OF HORIZONTAL EXTENT OF DAMAGE BY CAUSE (DIGITALGLOBE 2003)

(UNIT ANALYSIS)

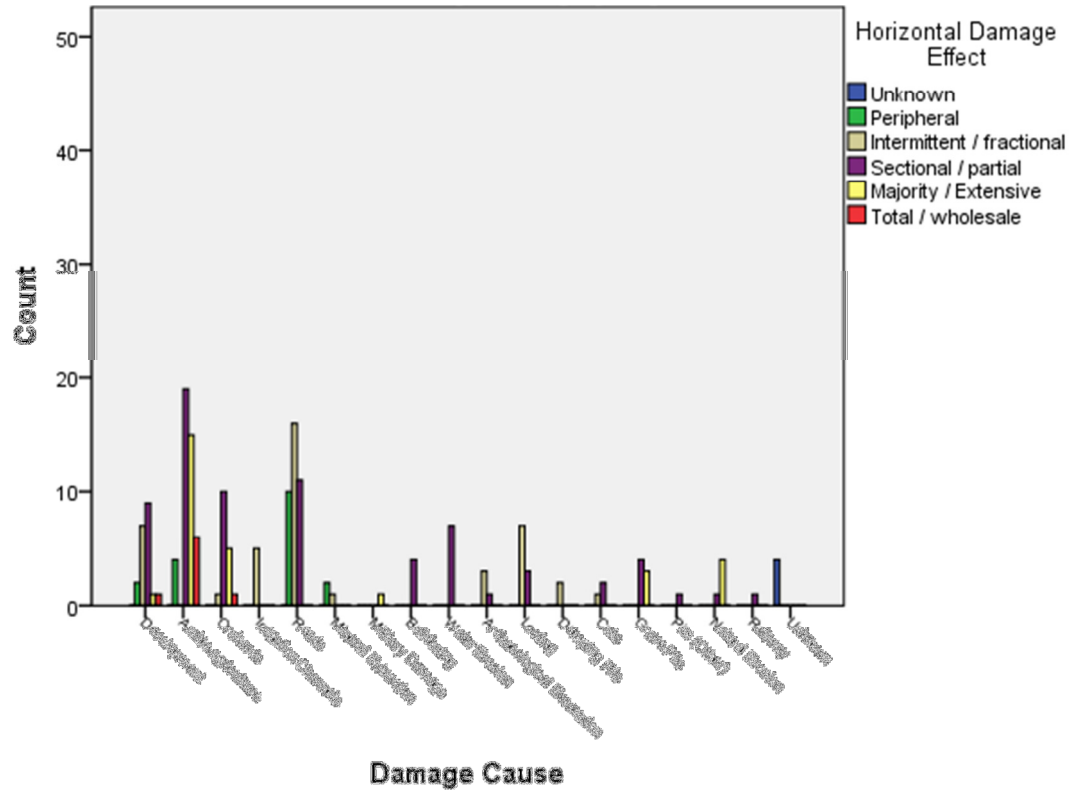


FIGURE H-21: GRAPH OF HORIZONTAL EXTENT OF DAMAGE BY CAUSE (SPOT 2004) (UNIT ANALYSIS)

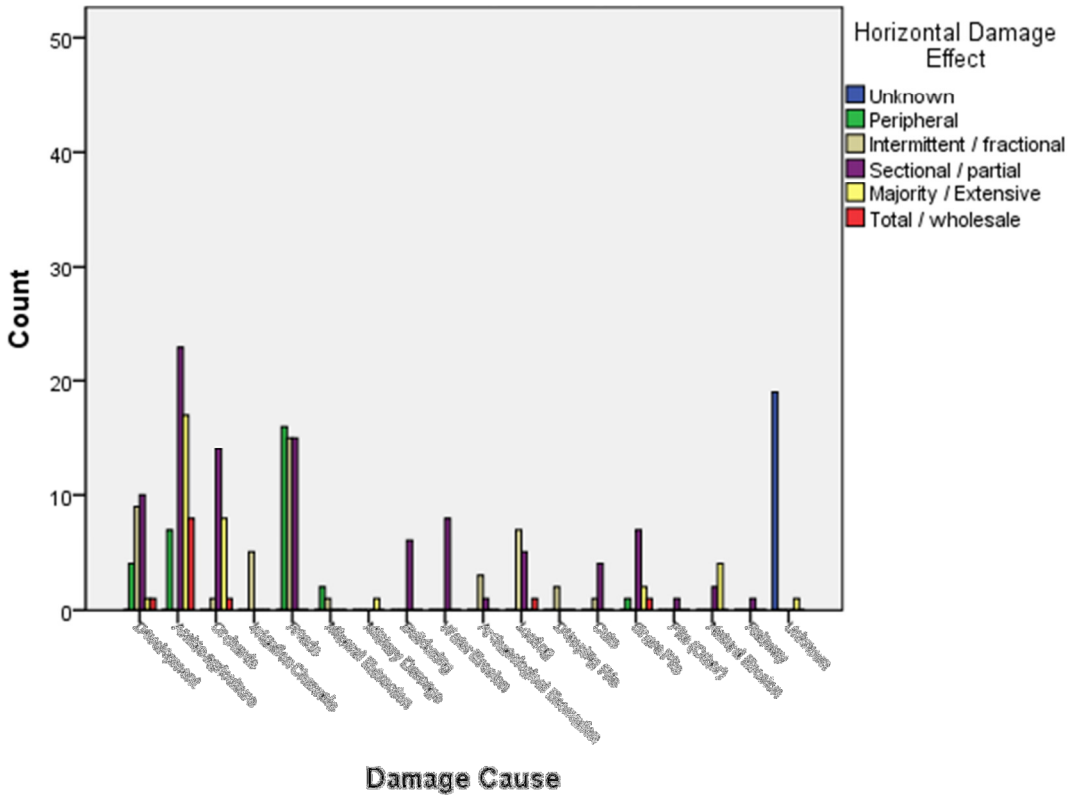


FIGURE H-22: GRAPH OF HORIZONTAL EXTENT OF DAMAGE BY CAUSE (GEOEYE 2009) (UNIT ANALYSIS)

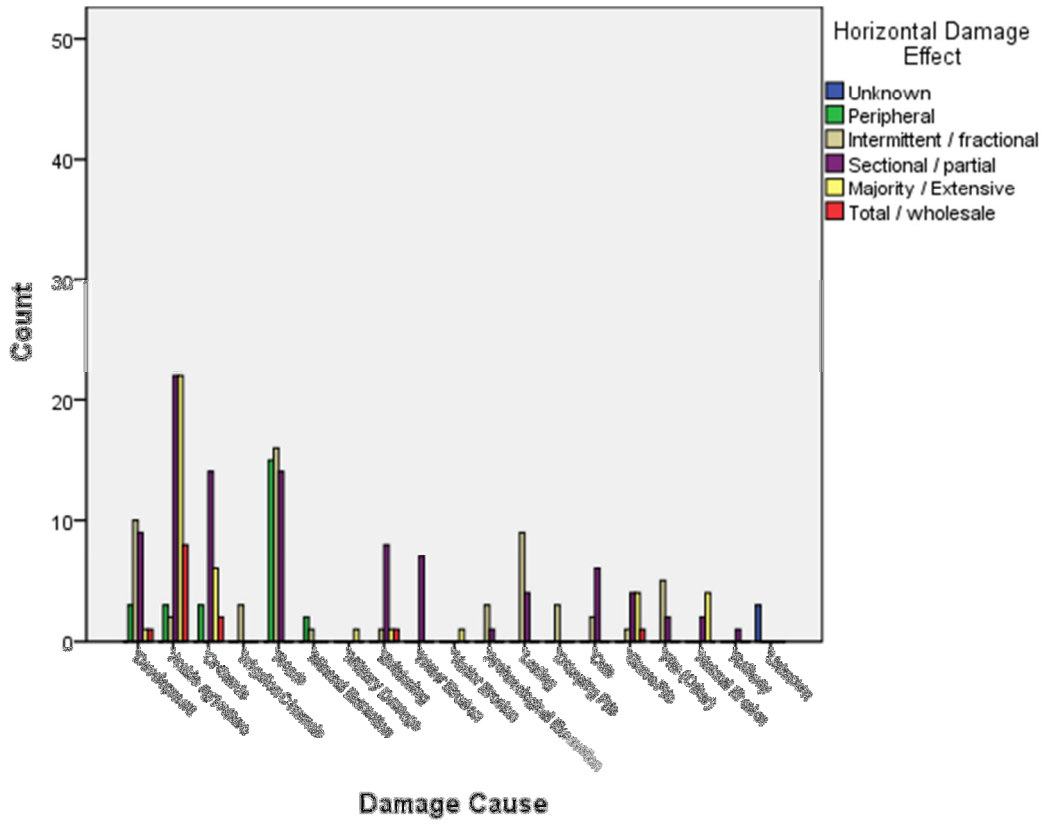


FIGURE H-23: GRAPH OF VERTICAL EXTENT OF DAMAGE BY CAUSE (CORONA) (UNIT ANALYSIS)

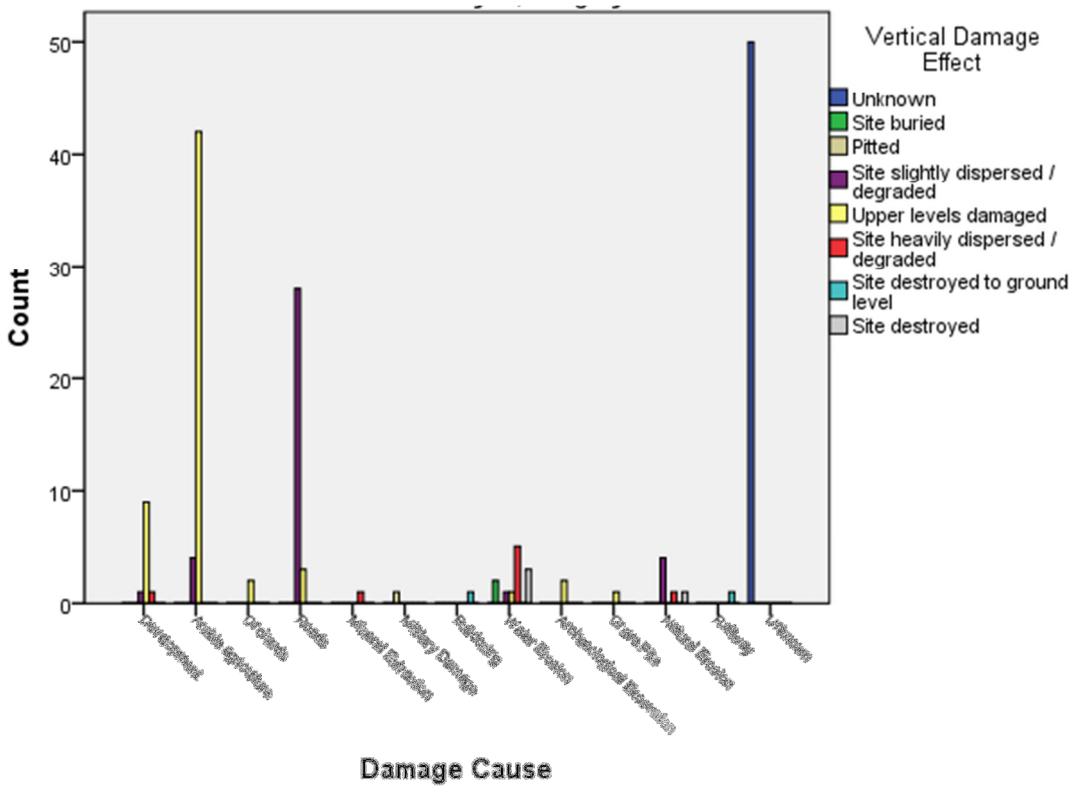


FIGURE H-24: GRAPH OF VERTICAL EXTENT OF DAMAGE BY CAUSE (DIGITALGLOBE 2003) (UNIT ANALYSIS)

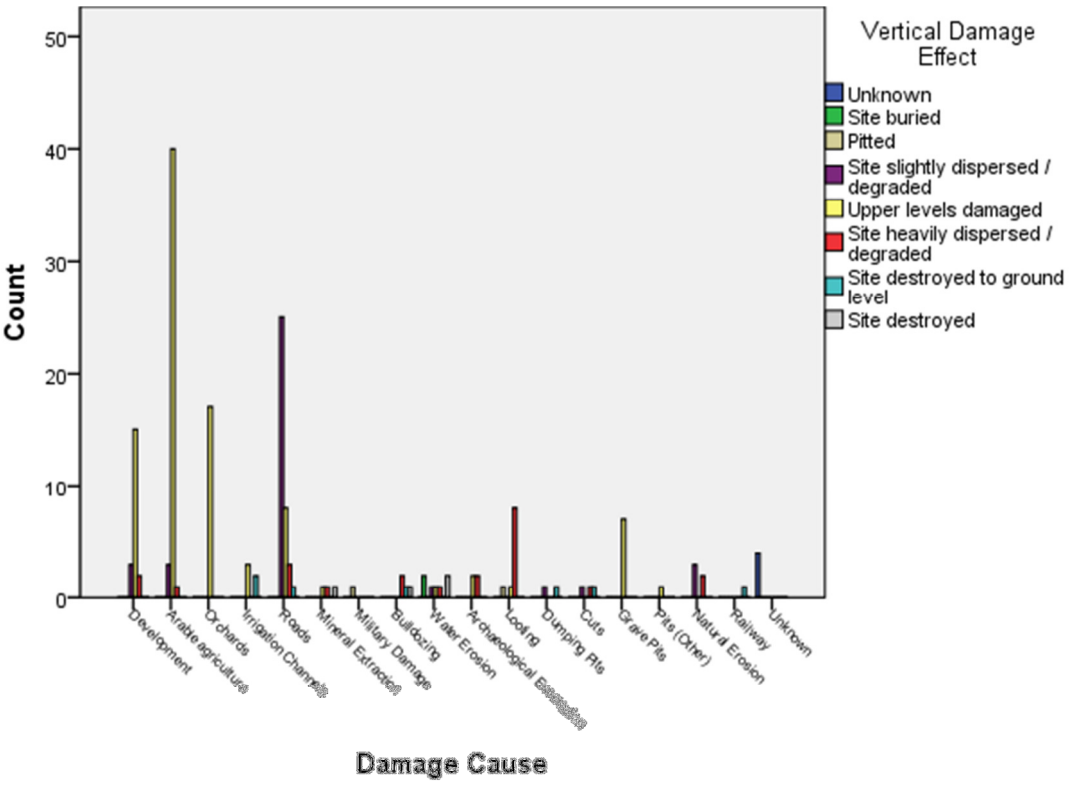


FIGURE H-25: GRAPH OF VERTICAL EXTENT OF DAMAGE BY CAUSE (SPOT 2004) (UNIT ANALYSIS)

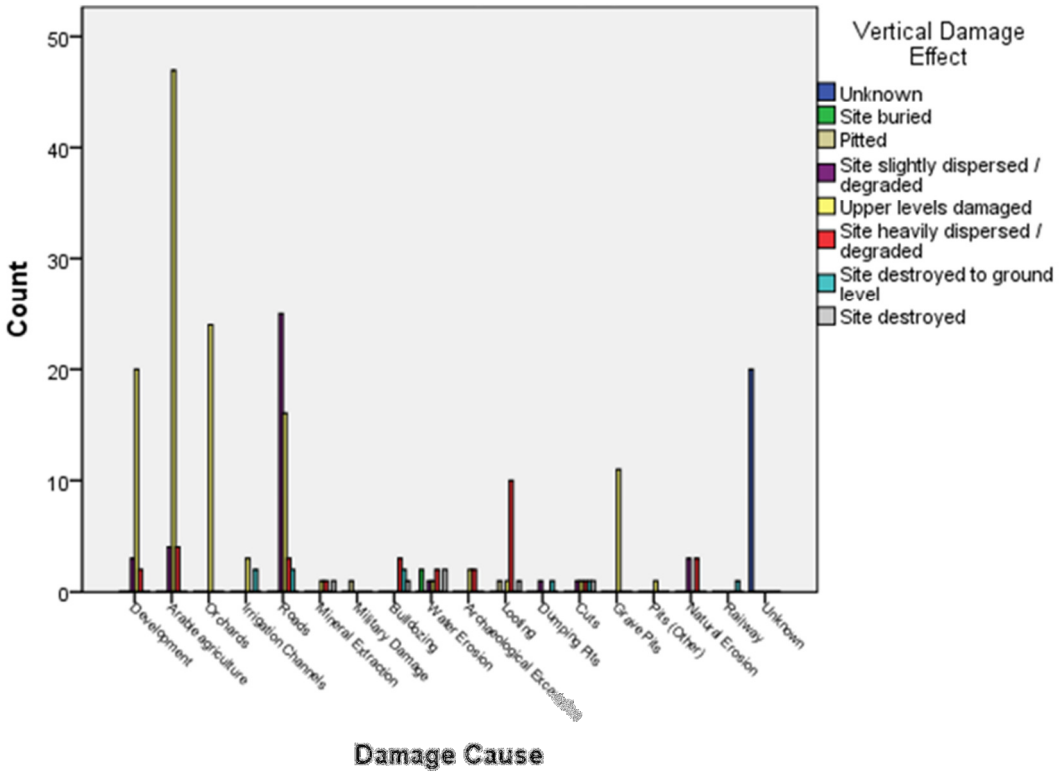


FIGURE H-26: GRAPH OF VERTICAL EXTENT OF DAMAGE BY CAUSE (GEOEYE 2009) (UNIT ANALYSIS)

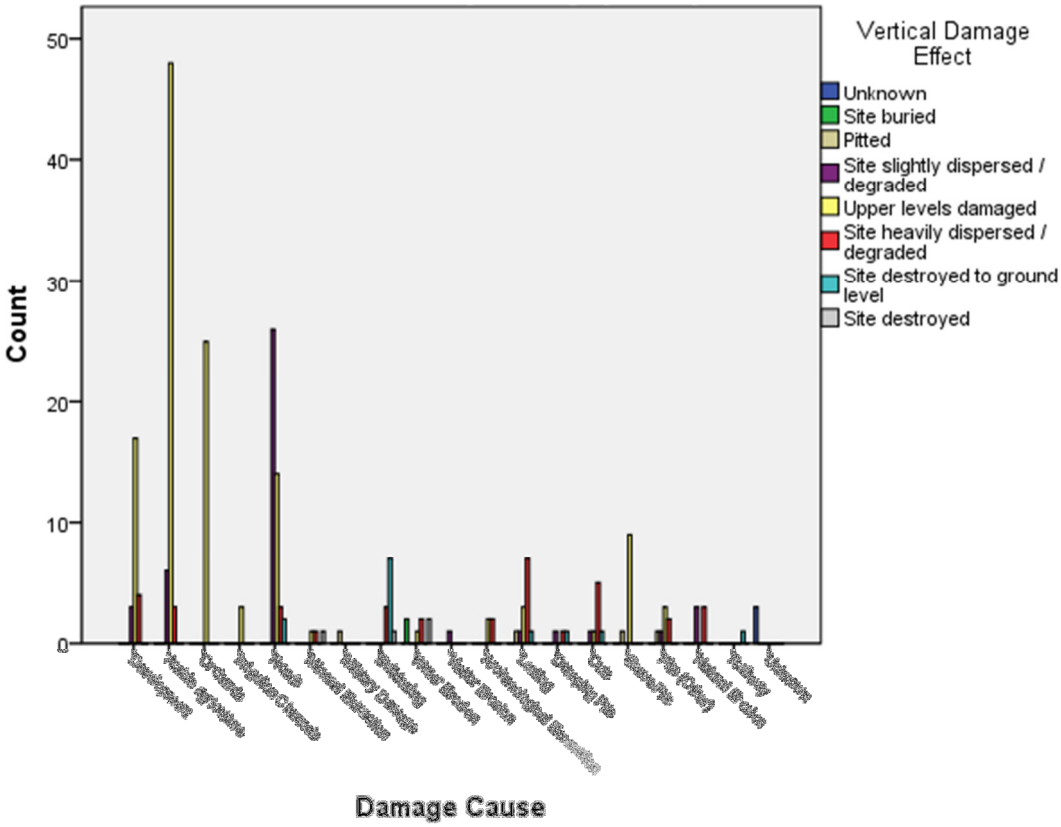


TABLE H-112: TOTAL NUMBER AND PERCENTAGE OF DAMAGE CAUSES BY IMAGERY TYPE (AMALGAMATED SITES)

		Imagery				
		Corona	DigitalGlobe	SPOT	Geoeye	Total
Development	Count	10	19	24	23	76
	% of Total	1.3%	2.5%	3.2%	3.0%	10.0%
Arable agriculture	Count	42	43	51	55	191
	% of Total	5.5%	5.7%	6.7%	7.3%	25.2%
Orchards	Count	2	17	22	25	66
	% of Total	.3%	2.2%	2.9%	3.3%	8.7%
Irrigation Channels	Count	0	5	5	3	13
	% of Total	.0%	.7%	.7%	.4%	1.7%
Roads	Count	29	34	40	42	145
	% of Total	3.8%	4.5%	5.3%	5.5%	19.1%
Mineral Extraction	Count	1	3	3	3	10
	% of Total	.1%	.4%	.4%	.4%	1.3%
Military Damage	Count	1	1	1	1	4
	% of Total	.1%	.1%	.1%	.1%	.5%
Bulldozing	Count	1	4	6	11	22
	% of Total	.1%	.5%	.8%	1.5%	2.9%
Water Erosion	Count	12	7	8	7	34
	% of Total	1.6%	.9%	1.1%	.9%	4.5%
Visitor Erosion	Count	0	0	0	1	1
	% of Total	.0%	.0%	.0%	.1%	.1%
Archaeological Excavation	Count	2	4	4	4	14
	% of Total	.3%	.5%	.5%	.5%	1.8%
Looting	Count	0	9	12	12	33
	% of Total	.0%	1.2%	1.6%	1.6%	4.4%
Dumping Pits	Count	0	2	2	3	7
	% of Total	.0%	.3%	.3%	.4%	.9%
Cuts	Count	0	3	5	8	16
	% of Total	.0%	.4%	.7%	1.1%	2.1%
Grave Pits	Count	1	6	10	9	26
	% of Total	.1%	.8%	1.3%	1.2%	3.4%
Pits (Other)	Count	0	1	1	7	9
	% of Total	.0%	.1%	.1%	.9%	1.2%
Natural Erosion	Count	6	5	6	6	23
	% of Total	.8%	.7%	.8%	.8%	3.0%
Railway	Count	1	1	1	1	4
	% of Total	.1%	.1%	.1%	.1%	.5%
Unknown	Count	38	4	19	3	64
	% of Total	5.0%	.5%	2.5%	.4%	8.4%
	Count	148	168	220	224	758
	% of Total	19.3%	22.2%	29.0%	29.6%	100.0%

TABLE H-113: TOTAL NUMBER AND PERCENTAGE OF DAMAGE CAUSES BY IMAGERY TYPE (UNIT ANALYSIS)

		Imagery				
		Corona	DigitalGlobe	SPOT	Geoeye	Total
Development	Count	11	20	25	24	80
	% of Total	1.4%	2.5%	3.1%	3.0%	9.9%
Arable agriculture	Count	46	44	55	57	202
	% of Total	5.7%	5.4%	6.8%	7.1%	25.0%
Orchards	Count	2	17	24	25	68
	% of Total	.2%	2.1%	3.0%	3.1%	8.4%
Irrigation Channels	Count	0	5	5	3	13
	% of Total	.0%	.6%	.6%	.4%	1.6%
Roads	Count	31	37	46	45	159
	% of Total	3.8%	4.6%	5.7%	5.6%	19.7%
Mineral Extraction	Count	1	3	3	3	10
	% of Total	.1%	.4%	.4%	.4%	1.2%
Military Damage	Count	1	1	1	1	4
	% of Total	.1%	.1%	.1%	.1%	.5%
Bulldozing	Count	1	4	6	11	22
	% of Total	.1%	.5%	.7%	1.4%	2.7%
Water Erosion	Count	12	7	8	7	34
	% of Total	1.5%	.9%	1.0%	.9%	4.2%
Visitor Erosion	Count	0	0	0	1	1
	% of Total	.0%	.0%	.0%	.1%	.1%
Archaeological Excavation	Count	2	4	4	4	14
	% of Total	.2%	.5%	.5%	.5%	1.7%
Looting	Count	0	10	13	13	36
	% of Total	.0%	1.2%	1.6%	1.6%	4.5%
Dumping Pits	Count	0	2	2	3	7
	% of Total	.0%	.2%	.2%	.4%	.9%
Cuts	Count	0	3	5	8	16
	% of Total	.0%	.4%	.6%	1.0%	2.0%
Grave Pits	Count	1	7	11	10	29
	% of Total	.1%	.9%	1.4%	1.2%	3.6%
Pits (Other)	Count	0	1	1	7	9
	% of Total	.0%	.1%	.1%	.9%	1.1%
Natural Erosion	Count	6	5	6	6	23
	% of Total	.7%	.6%	.7%	.7%	2.8%
Railway	Count	1	1	1	1	4
	% of Total	.1%	.1%	.1%	.1%	.5%
Unknown	Count	50	4	20	3	77
	% of Total	6.2%	.5%	2.5%	.4%	9.5%
	Count	165	175	236	232	808
	% of Total	20.4%	21.7%	29.2%	28.7%	100.0%

Table H-114: Damage Causes by Severity on Corona (Amalgamated Sites)

		Severity									
		Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	10th	Total
Development	Count	6	1	1	1	1	0	0	0	0	10
	% within Severity	7.1%	2.4%	6.7%	33.3%	50.0%	.0%	.0%	.0%	.0%	6.8%
[illegible]	Count	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% within Severity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Count	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% within Severity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Count	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% within Severity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Roads	Count	3	18	8	0	0	0	0	0	0	29
	% within Severity	3.5%	43.9%	53.3%	.0%	.0%	.0%	.0%	.0%	.0%	19.9%
Mineral Extraction	Count	0	1	0	0	0	0	0	0	0	1
	% within Severity	.0%	2.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.7%
[illegible]	Count	1	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.7%
[illegible]	Count	1	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.7%
Water Erosion	Count	5	5	1	0	1	0	0	0	0	12
	% within Severity	5.9%	12.2%	6.7%	.0%	50.0%	.0%	.0%	.0%	.0%	8.2%
[illegible]	Count	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% within Severity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Count	0	[illegible]	0	[illegible]	0	0	0	0	0	[illegible]
	% within Severity	.0%	[illegible]	.0%	[illegible]	.0%	.0%	.0%	.0%	.0%	[illegible]
Looting	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
[illegible]	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
[illegible]	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
[illegible]	Count	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% within Severity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Count	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	% within Severity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Natural Erosion	Count	3	2	1	0	0	0	0	0	0	[illegible]
	% within Severity	3.5%	4.9%	6.7%	.0%	.0%	.0%	.0%	.0%	.0%	[illegible]
[illegible]	Count	1	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.7%
Unknown	Count	[illegible]	[illegible]	[illegible]	0	0	0	0	0	0	[illegible]
	% within Severity	32.9%	17.1%	20.0%	.0%	.0%	.0%	.0%	.0%	.0%	[illegible]
No Damage	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-115: DAMAGE CAUSES BY SEVERITY ON CORONA (UNIT ANALYSIS)

		Severity									
		Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	10th	Total
Development	Count	7	1	1	1	1	0	0	0	0	11
	% within Severity	7.0%	2.3%	6.3%	33.3%	50.0%	.0%	.0%	.0%	.0%	8.7%
Arable agriculture	Count	38	4	3	1	0	0	0	0	0	46
	% within Severity	38.0%	9.1%	18.8%	33.3%	.0%	.0%	.0%	.0%	.0%	27.9%
Orchards	Count	1	1	0	0	0	0	0	0	0	2
	% within Severity	1.0%	2.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.2%
Irrigation Channels	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Roads	Count	5	16	0	0	0	0	0	0	0	21
	% within Severity	5.0%	40.9%	50.0%	.0%	.0%	.0%	.0%	.0%	.0%	16.8%
Mineral Extraction	Count	0	1	0	0	0	0	0	0	0	1
	% within Severity	.0%	2.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Military Damage	Count	1	0	0	0	0	0	0	0	0	1
	% within Severity	1.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Subsiding	Count	1	0	0	0	0	0	0	0	0	1
	% within Severity	1.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Water Erosion	Count	3	5	1	0	1	0	0	0	0	12
	% within Severity	3.0%	11.4%	6.3%	.0%	50.0%	.0%	.0%	.0%	.0%	7.9%
Water Erosion	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Archaeological Excavation	Count	0	1	0	1	0	0	0	0	0	2
	% within Severity	.0%	2.3%	.0%	33.3%	.0%	.0%	.0%	.0%	.0%	1.2%
Looting	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Mudbrick Pits	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Dumping Pits	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Cuts	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Grave Pits	Count	0	1	0	0	0	0	0	0	0	1
	% within Severity	.0%	2.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Pits (Other)	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Natural Erosion	Count	3	2	1	0	0	0	0	0	0	6
	% within Severity	3.0%	4.5%	6.3%	.0%	.0%	.0%	.0%	.0%	.0%	3.5%
Railway	Count	1	0	0	0	0	0	0	0	0	1
	% within Severity	1.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Unknown	Count	39	10	2	0	0	0	0	0	0	51
	% within Severity	39.0%	22.7%	12.5%	.0%	.0%	.0%	.0%	.0%	.0%	30.1%
No Damage	Count	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-116: DAMAGE CAUSES BY SEVERITY ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

		Severity										
		Primary	Secondary	Tertiary	Quaternary	Ordinary	Senary	7th	8th	9	10th	Total
Development	Count	7	3	6	1	0	2	0	0	0	0	19
	% within Severity	11.5%	6.0%	18.4%	6.3%	.0%	66.7%	.0%	.0%	.0%	.0%	11.5%
Arable agriculture	Count	24	13	4	2	0	0	0	0	0	0	43
	% within Severity	39.3%	26.0%	12.5%	12.5%	.0%	.0%	.0%	.0%	.0%	.0%	25.9%
Orchards	Count	7	7	2	1	0	0	0	0	0	0	17
	% within Severity	11.5%	14.0%	6.3%	6.3%	.0%	.0%	.0%	.0%	.0%	.0%	10.1%
Irrigation Channels	Count	0	1	1	1	1	1	0	0	0	0	5
	% within Severity	.0%	2.0%	3.2%	6.3%	25.0%	33.3%	.0%	.0%	.0%	.0%	3.0%
Roads	Count	1	10	12	9	2	0	1	0	0	0	54
	% within Severity	1.6%	20.0%	38.7%	56.3%	50.0%	.0%	50.0%	.0%	.0%	.0%	32.3%
Mineral Extraction	Count	0	2	1	0	0	0	0	0	0	0	3
	% within Severity	.0%	4.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Military Damage	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Ridging	Count	2	1	1	0	0	0	0	0	0	0	4
	% within Severity	3.3%	2.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.4%
Water Erosion	Count	4	2	0	0	0	0	0	1	0	0	7
	% within Severity	6.6%	4.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	4.2%
Water Erosion	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Archaeological Excavation	Count	1	0	0	2	0	0	1	0	0	0	4
	% within Severity	1.6%	.0%	.0%	12.5%	.0%	.0%	50.0%	.0%	.0%	.0%	2.4%
Looting	Count	5	3	1	0	0	0	0	0	0	0	9
	% within Severity	8.2%	6.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.4%
Mudbrick Pits	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Dumping Pits	Count	0	2	0	0	0	0	0	0	0	0	2
	% within Severity	.0%	4.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.2%
Quarry	Count	1	2	0	0	0	0	0	0	0	0	3
	% within Severity	1.6%	4.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Grave Pits	Count	3	2	1	0	0	0	0	0	0	0	6
	% within Severity	4.9%	4.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
Pits (Other)	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Natural Erosion	Count	2	1	1	1	0	0	0	0	0	0	5
	% within Severity	3.3%	2.0%	3.2%	6.3%	.0%	.0%	.0%	.0%	.0%	.0%	3.0%
Railway	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Unknown	Count	1	1	1	0	1	0	0	0	0	0	4
	% within Severity	1.6%	2.0%	3.2%	.0%	25.0%	.0%	.0%	.0%	.0%	.0%	2.4%
No Damage	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-117: DAMAGE CAUSES BY SEVERITY ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Severity										
		Primary	Secondary	Tertiary	Quaternary	Ordinary	Penary	7th	8th	9	10th	Total
Development	Count	7	4	6	1	0	2	0	0	0	0	20
	% within Severity	10.1%	7.7%	16.7%	7.1%	.0%	66.7%	.0%	.0%	.0%	.0%	11.4%
Arable agriculture	Count	27	12	4	1	0	0	0	0	0	0	44
	% within Severity	39.1%	23.1%	12.5%	7.1%	.0%	.0%	.0%	.0%	.0%	.0%	25.1%
Orchards	Count	7	7	2	1	0	0	0	0	0	0	17
	% within Severity	10.1%	13.5%	6.3%	7.1%	.0%	.0%	.0%	.0%	.0%	.0%	9.7%
Irrigation Channels	Count	0	1	1	1	1	1	0	0	0	0	5
	% within Severity	.0%	1.9%	3.2%	7.1%	33.3%	33.3%	.0%	.0%	.0%	.0%	2.9%
Roads	Count	1	13	13	7	2	0	1	0	0	0	37
	% within Severity	1.4%	25.0%	41.9%	50.0%	66.7%	.0%	50.0%	.0%	.0%	.0%	21.1%
Mineral Extraction	Count	0	2	1	0	0	0	0	0	0	0	3
	% within Severity	.0%	3.8%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.7%
Military Damage	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Rubbishing	Count	2	1	1	0	0	0	0	0	0	0	4
	% within Severity	2.9%	1.9%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.3%
Water Erosion	Count	4	2	0	0	0	0	0	1	0	0	7
	% within Severity	5.8%	3.8%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	4.0%
Water Erosion	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Archaeological Excavation	Count	1	0	0	2	0	0	1	0	0	0	4
	% within Severity	1.4%	.0%	.0%	14.3%	.0%	.0%	50.0%	.0%	.0%	.0%	2.3%
Looting	Count	7	3	0	0	0	0	0	0	0	0	10
	% within Severity	10.1%	5.8%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.7%
Mudbrick Pits	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Dumping Pits	Count	0	2	0	0	0	0	0	0	0	0	2
	% within Severity	.0%	3.8%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.1%
Quarry	Count	1	2	0	0	0	0	0	0	0	0	3
	% within Severity	1.4%	3.8%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.7%
Grave Pits	Count	4	2	1	0	0	0	0	0	0	0	7
	% within Severity	5.8%	3.8%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.0%
Pits (Other)	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Natural Erosion	Count	2	1	1	1	0	0	0	0	0	0	5
	% within Severity	2.9%	1.9%	3.2%	7.1%	.0%	.0%	.0%	.0%	.0%	.0%	2.9%
Railway	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.6%
Unknown	Count	3	0	1	0	0	0	0	0	0	0	4
	% within Severity	4.3%	.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.3%
No Damage	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-118: DAMAGE CAUSES BY SEVERITY ON SPOT 2004 (AMALGAMATED SITES)

		Severity										
		Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	9	10th	Total
Development	Count	8	5	7	1	1	2	0	0	0	0	24
	% within Severity	9.4%	7.5%	10.0%	5.0%	20.0%	40.0%	.0%	.0%	.0%	.0%	10.0%
Arable agriculture	Count	27	16	7	1	0	0	0	0	0	0	51
	% within Severity	31.8%	24.2%	10.0%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	22.0%
Orchards	Count	10	9	2	1	0	0	0	0	0	0	22
	% within Severity	11.8%	13.6%	2.9%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	10.0%
Irrigation Channels	Count	0	1	1	1	1	1	0	0	0	0	5
	% within Severity	.0%	1.5%	2.7%	5.0%	20.0%	20.0%	.0%	.0%	.0%	.0%	2.3%
Roads	Count	4	12	13	9	2	0	1	0	0	0	40
	% within Severity	4.7%	18.2%	35.1%	42.1%	40.0%	.0%	33.3%	.0%	.0%	.0%	18.2%
Mineral Extraction	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Military Damage	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.5%
Building	Count	4	1	1	0	0	0	0	0	0	0	6
	% within Severity	4.7%	1.5%	2.7%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.7%
Water Erosion	Count	5	2	0	0	0	0	0	1	0	0	8
	% within Severity	5.9%	3.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	3.6%
Water Erosion	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Archaeological Excavation	Count	1	0	0	2	0	0	1	0	0	0	4
	% within Severity	1.2%	.0%	.0%	10.0%	.0%	.0%	33.3%	.0%	.0%	.0%	1.8%
Looting	Count	8	2	1	1	0	0	0	0	0	0	12
	% within Severity	9.4%	3.0%	2.7%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.5%
Mudbrick Pits	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Dumping Pits	Count	0	2	0	0	0	0	0	0	0	0	2
	% within Severity	.0%	3.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
Cuts	Count	1	3	0	0	0	1	0	0	0	0	5
	% within Severity	1.2%	4.5%	.0%	.0%	.0%	20.0%	.0%	.0%	.0%	.0%	2.3%
Grave Pits	Count	4	3	2	0	0	0	1	0	0	0	10
	% within Severity	4.7%	4.5%	5.4%	.0%	.0%	.0%	33.3%	.0%	.0%	.0%	4.5%
Pits (Other)	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.5%
Natural Erosion	Count	3	1	1	1	0	0	0	0	0	0	6
	% within Severity	3.5%	1.5%	2.7%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.7%
Railway	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.5%
Unknown	Count	7	6	2	3	1	0	0	0	0	0	19
	% within Severity	8.2%	9.1%	5.4%	15.0%	20.0%	.0%	.0%	.0%	.0%	.0%	8.6%
No Damage	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-119: DAMAGE CAUSES BY SEVERITY ON SPOT 2004 (UNIT ANALYSIS)

		Severity										
		Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	9	10th	Total
Development	Count	9	5	7	2	0	2	0	0	0	0	25
	% within Severity	9.0%	7.1%	17.5%	11.1%	.0%	66.7%	.0%	.0%	.0%	.0%	10.5%
Arable agriculture	Count	23	17	7	2	0	0	0	0	0	0	55
	% within Severity	23.0%	24.3%	17.5%	11.1%	.0%	.0%	.0%	.0%	.0%	.0%	23.3%
Orchards	Count	12	9	2	1	0	0	0	0	0	0	24
	% within Severity	12.0%	12.9%	5.1%	5.6%	.0%	.0%	.0%	.0%	.0%	.0%	10.2%
Irrigation Channels	Count	0	1	1	1	1	1	0	0	0	0	5
	% within Severity	.0%	1.4%	2.6%	5.6%	33.3%	33.3%	.0%	.0%	.0%	.0%	2.1%
Roads	Count	5	15	15	7	2	0	1	0	0	0	45
	% within Severity	5.0%	21.4%	38.5%	38.9%	66.7%	.0%	50.0%	.0%	.0%	.0%	19.0%
Mineral Extraction	Count	0	2	1	0	0	0	0	0	0	0	3
	% within Severity	.0%	2.9%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
Military Damage	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Bulldozing	Count	4	1	1	0	0	0	0	0	0	0	6
	% within Severity	4.0%	1.4%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.5%
Water Erosion	Count	5	2	0	0	0	0	0	1	0	0	8
	% within Severity	5.0%	2.9%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	3.4%
Water Erosion	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Archaeological Excavation	Count	1	0	0	2	0	0	1	0	0	0	4
	% within Severity	1.0%	.0%	.0%	11.1%	.0%	.0%	50.0%	.0%	.0%	.0%	1.7%
Looting	Count	11	2	0	0	0	0	0	0	0	0	13
	% within Severity	11.0%	2.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.5%
Mudbrick Pits	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Dumping Pits	Count	0	2	0	0	0	0	0	0	0	0	2
	% within Severity	.0%	2.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
Quarries	Count	1	3	1	0	0	0	0	0	0	0	5
	% within Severity	1.0%	4.3%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.1%
Grave Pits	Count	4	5	2	0	0	0	0	0	0	0	11
	% within Severity	4.0%	7.1%	5.1%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.7%
Pits (Other)	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Natural Erosion	Count	3	1	1	1	0	0	0	0	0	0	6
	% within Severity	3.0%	1.4%	2.6%	5.6%	.0%	.0%	.0%	.0%	.0%	.0%	2.5%
Railway	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Unknown	Count	12	5	1	2	0	0	0	0	0	0	20
	% within Severity	12.0%	7.1%	2.6%	11.1%	.0%	.0%	.0%	.0%	.0%	.0%	8.5%
No Damage	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-120: DAMAGE CAUSES BY SEVERITY ON GEOEYE 2009 (AMALGAMATED SITES)

		Severity										
		Primary	Secondary	Tertiary	Quaternary	Ordinary	Senary	7th	8th	9	10th	Total
Development	Count	6	5	4	2	2	1	0	0	0	0	20
	% within Severity	10.7%	9.2%	9.3%	9.1%	28.6%	50.0%	.0%	.0%	.0%	.0%	10.3%
Arable agriculture	Count	25	19	9	0	2	0	0	0	0	0	55
	% within Severity	39.3%	29.2%	18.6%	.0%	28.6%	.0%	.0%	.0%	.0%	.0%	24.0%
Orchards	Count	9	12	2	2	0	0	0	0	0	0	25
	% within Severity	12.5%	18.5%	4.2%	9.1%	.0%	.0%	.0%	.0%	.0%	.0%	11.2%
Irrigation Channels	Count	0	0	3	2	0	0	1	0	0	0	3
	% within Severity	.0%	.0%	.0%	9.1%	.0%	.0%	50.0%	.0%	.0%	.0%	1.3%
Roads	Count	1	7	22	9	1	2	0	0	0	0	42
	% within Severity	1.2%	10.8%	45.8%	40.9%	14.3%	66.7%	.0%	.0%	.0%	.0%	18.8%
Mineral Extraction	Count	0	1	1	1	0	0	0	0	0	0	3
	% within Severity	.0%	1.5%	2.1%	4.5%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
Military Damage	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Soildwing	Count	7	2	1	1	0	0	0	0	0	0	11
	% within Severity	9.3%	3.1%	2.1%	4.5%	.0%	.0%	.0%	.0%	.0%	.0%	4.8%
Water Erosion	Count	5	1	0	0	0	0	1	0	0	0	7
	% within Severity	6.7%	1.5%	.0%	.0%	.0%	.0%	50.0%	.0%	.0%	.0%	3.1%
Water Erosion	Count	0	1	0	0	0	0	0	0	0	0	1
	% within Severity	.0%	1.5%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Archaeological Excavation	Count	1	0	0	2	0	0	0	0	1	0	4
	% within Severity	1.3%	.0%	.0%	9.1%	.0%	.0%	.0%	.0%	100.0%	.0%	1.8%
Looting	Count	3	3	2	0	1	0	0	0	0	0	12
	% within Severity	3.9%	4.6%	4.2%	.0%	14.3%	.0%	.0%	.0%	.0%	.0%	5.4%
Mediaval Pits	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Dumping Pits	Count	1	2	0	0	0	0	0	0	0	0	3
	% within Severity	1.3%	3.1%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
Cuts	Count	2	5	0	1	0	0	0	0	0	0	8
	% within Severity	2.7%	7.7%	.0%	4.5%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
Grave Pits	Count	4	3	1	1	0	0	0	0	0	0	9
	% within Severity	5.3%	4.6%	2.1%	4.5%	.0%	.0%	.0%	.0%	.0%	.0%	4.0%
Pits (Other)	Count	2	1	3	0	0	0	0	1	0	0	7
	% within Severity	2.7%	1.5%	6.3%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	3.1%
Natural Erosion	Count	1	1	3	1	0	0	0	0	0	0	6
	% within Severity	1.3%	1.5%	6.3%	4.5%	.0%	.0%	.0%	.0%	.0%	.0%	2.7%
Railway	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Unknown	Count	1	1	0	0	1	0	0	0	0	0	3
	% within Severity	1.3%	1.5%	.0%	.0%	14.3%	.0%	.0%	.0%	.0%	.0%	1.3%
No Damage	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-121: DAMAGE CAUSES BY SEVERITY ON GEOEYE 2009 (UNIT ANALYSIS)

		Severity										
		Primary	Secondary	Tertiary	Quaternary	Quinary	Senary	7th	8th	9	10th	Total
Development	Count	8	7	4	2	2	1	0	0	0	0	24
	% within Severity	9.5%	10.4%	8.2%	10.0%	40.0%	50.0%	.0%	.0%	.0%	.0%	10.3%
Arable agriculture	Count	29	18	9	0	1	0	0	0	0	0	57
	% within Severity	34.5%	26.9%	18.4%	.0%	20.0%	.0%	.0%	.0%	.0%	.0%	24.5%
Orchards	Count	9	11	3	2	0	0	0	0	0	0	25
	% within Severity	10.7%	16.4%	6.1%	10.0%	.0%	.0%	.0%	.0%	.0%	.0%	10.8%
Irrigation Channels	Count	0	0	0	2	0	0	1	0	0	0	3
	% within Severity	.0%	.0%	.0%	10.0%	.0%	.0%	50.0%	.0%	.0%	.0%	1.3%
Roads	Count	2	10	22	8	1	2	0	0	0	0	45
	% within Severity	2.4%	14.9%	44.9%	40.0%	20.0%	66.7%	.0%	.0%	.0%	.0%	19.4%
Mineral Extraction	Count	0	1	2	0	0	0	0	0	0	0	3
	% within Severity	.0%	1.5%	4.1%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
Military Damage	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Building	Count	7	2	1	1	0	0	0	0	0	0	11
	% within Severity	8.3%	3.0%	2.0%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.7%
Water Erosion	Count	5	1	0	0	0	0	1	0	0	0	7
	% within Severity	6.0%	1.5%	.0%	.0%	.0%	.0%	50.0%	.0%	.0%	.0%	3.0%
Water Erosion	Count	0	1	0	0	0	0	0	0	0	0	1
	% within Severity	.0%	1.5%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Archaeological Excavation	Count	1	0	0	2	0	0	0	0	1	0	4
	% within Severity	1.2%	.0%	.0%	10.0%	.0%	.0%	.0%	.0%	100.0%	.0%	1.7%
Looting	Count	6	3	1	0	1	0	0	0	0	0	13
	% within Severity	8.3%	4.5%	2.0%	.0%	20.0%	.0%	.0%	.0%	.0%	.0%	5.6%
Mudbrick Pits	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Dumping Pits	Count	1	2	0	0	0	0	0	0	0	0	3
	% within Severity	1.2%	3.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
Cuts	Count	2	5	0	1	0	0	0	0	0	0	8
	% within Severity	2.4%	7.5%	.0%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.4%
Grave Pits	Count	4	4	1	1	0	0	0	0	0	0	10
	% within Severity	4.8%	6.0%	2.0%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.3%
Pits (Other)	Count	2	1	3	0	0	0	0	1	0	0	7
	% within Severity	2.4%	1.5%	6.1%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	3.0%
Natural Erosion	Count	1	1	3	1	0	0	0	0	0	0	6
	% within Severity	1.2%	1.5%	6.1%	5.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.6%
Railway	Count	1	0	0	0	0	0	0	0	0	0	1
	% within Severity	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Unknown	Count	3	0	0	0	0	0	0	0	0	0	3
	% within Severity	3.6%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
No Damage	Count	0	0	0	0	0	0	0	0	0	0	0
	% within Severity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%

TABLE H-122: DAMAGE CAUSE BY LOCATION ON CORONA (AMALGAMATED SITES)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	4	9.8%	4	5.6%	2	5.9%
	Arable agriculture	17	41.5%	13	18.3%	12	35.3%
	Orchards	2	4.9%	0	.0%	0	.0%
	Irrigation Channels	0	.0%	0	.0%	0	.0%
	Roads	13	31.7%	11	15.5%	5	14.7%
	Mineral Extraction	0	.0%	1	1.4%	0	.0%
	Military Damage	0	.0%	0	.0%	1	2.9%
	Bulldozing	0	.0%	1	1.4%	0	.0%
	Water Erosion	2	4.9%	3	4.2%	7	20.6%
	Visitor Erosion	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	2	5.9%
	Looting	0	.0%	0	.0%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	0	.0%
	Grave Pits	1	2.4%	0	.0%	0	.0%
	Pits (Other)	0	.0%	0	.0%	0	.0%
	Natural Erosion	2	4.9%	3	4.2%	1	2.9%
	Railway	0	.0%	0	.0%	1	2.9%
	Unknown	0	.0%	35	49.3%	3	8.8%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-123: DAMAGE CAUSE BY LOCATION ON CORONA (UNIT ANALYSIS)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	4	9.5%	5	5.6%	2	5.9%
	Arable agriculture	18	42.9%	16	18.0%	12	35.3%
	Orchards	2	4.8%	0	.0%	0	.0%
	Irrigation Channels	0	.0%	0	.0%	0	.0%
	Roads	13	31.0%	13	14.6%	5	14.7%
	Mineral Extraction	0	.0%	1	1.1%	0	.0%
	Military Damage	0	.0%	0	.0%	1	2.9%
	Bulldozing	0	.0%	1	1.1%	0	.0%
	Water Erosion	2	4.8%	3	3.4%	7	20.6%
	Visitor Erosion	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	2	5.9%
	Looting	0	.0%	0	.0%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	0	.0%	0	.0%	0	.0%
	Cuts	0	.0%	0	.0%	0	.0%
	Grave Pits	1	2.4%	0	.0%	0	.0%
	Pits (Other)	0	.0%	0	.0%	0	.0%
	Natural Erosion	2	4.8%	3	3.4%	1	2.9%
	Railway	0	.0%	0	.0%	1	2.9%
	Unknown	0	.0%	47	52.8%	3	8.8%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-124: DAMAGE CAUSE BY LOCATION ON DIGITALGLOBE2003 (AMALGAMATED SITES)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	9	17.6%	4	6.2%	6	11.5%
	Arable agriculture	14	27.5%	18	27.7%	11	21.2%
	Orchards	11	21.6%	3	4.6%	3	5.8%
	Irrigation Channels	0	.0%	0	.0%	5	9.6%
	Roads	13	25.5%	11	16.9%	10	19.2%
	Mineral Extraction	0	.0%	3	4.6%	0	.0%
	Military Damage	0	.0%	0	.0%	1	1.9%
	Bulldozing	1	2.0%	0	.0%	3	5.8%
	Water Erosion	0	.0%	2	3.1%	5	9.6%
	Visitor Erosion	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	4	7.7%
	Looting	0	.0%	9	13.8%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	1	2.0%	1	1.5%	0	.0%
	Cuts	0	.0%	2	3.1%	1	1.9%
	Grave Pits	1	2.0%	4	6.2%	1	1.9%
	Pits (Other)	0	.0%	1	1.5%	0	.0%
	Natural Erosion	1	2.0%	4	6.2%	0	.0%
	Railway	0	.0%	0	.0%	1	1.9%
	Unknown	0	.0%	3	4.6%	1	1.9%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-125: DAMAGE CAUSE BY LOCATION ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	9	17.6%	5	6.9%	6	11.5%
	Arable agriculture	14	27.5%	19	26.4%	11	21.2%
	Orchards	11	21.6%	3	4.2%	3	5.8%
	Irrigation Channels	0	.0%	0	.0%	5	9.6%
	Roads	13	25.5%	14	19.4%	10	19.2%
	Mineral Extraction	0	.0%	3	4.2%	0	.0%
	Military Damage	0	.0%	0	.0%	1	1.9%
	Bulldozing	1	2.0%	0	.0%	3	5.8%
	Water Erosion	0	.0%	2	2.8%	5	9.6%
	Visitor Erosion	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	4	7.7%
	Looting	0	.0%	10	13.9%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	1	2.0%	1	1.4%	0	.0%
	Cuts	0	.0%	2	2.8%	1	1.9%
	Grave Pits	1	2.0%	5	6.9%	1	1.9%
	Pits (Other)	0	.0%	1	1.4%	0	.0%
	Natural Erosion	1	2.0%	4	5.6%	0	.0%
	Railway	0	.0%	0	.0%	1	1.9%
	Unknown	0	.0%	3	4.2%	1	1.9%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-126: DAMAGE CAUSE BY LOCATION ON SPOT 2004 (AMALGAMATED SITES)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	10	18.2%	8	7.4%	6	10.5%
	Arable agriculture	16	29.1%	21	19.4%	14	24.6%
	Orchards	11	20.0%	8	7.4%	3	5.3%
	Irrigation Channels	0	.0%	0	.0%	5	8.8%
	Roads	14	25.5%	16	14.8%	10	17.5%
	Mineral Extraction	0	.0%	3	2.8%	0	.0%
	Military Damage	0	.0%	0	.0%	1	1.8%
	Bulldozing	1	1.8%	1	.9%	4	7.0%
	Water Erosion	0	.0%	3	2.8%	5	8.8%
	Visitor Erosion	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	4	7.0%
	Looting	0	.0%	12	11.1%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	1	1.8%	1	.9%	0	.0%
	Cuts	0	.0%	4	3.7%	1	1.8%
	Grave Pits	1	1.8%	8	7.4%	1	1.8%
	Pits (Other)	0	.0%	1	.9%	0	.0%
	Natural Erosion	1	1.8%	5	4.6%	0	.0%
	Railway	0	.0%	0	.0%	1	1.8%
	Unknown	0	.0%	17	15.7%	2	3.5%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-127: DAMAGE CAUSE BY LOCATION ON SPOT 2004 (UNIT ANALYSIS)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	10	17.9%	8	7.3%	6	10.5%
	Arable agriculture	17	30.4%	24	19.5%	14	24.6%
	Orchards	11	19.6%	10	8.1%	3	5.3%
	Irrigation Channels	0	.0%	0	.0%	5	8.8%
	Roads	14	25.0%	22	17.9%	10	17.5%
	Mineral Extraction	0	.0%	3	2.4%	0	.0%
	Military Damage	0	.0%	0	.0%	1	1.8%
	Bulldozing	1	1.8%	1	.8%	4	7.0%
	Water Erosion	0	.0%	3	2.4%	5	8.8%
	Visitor Erosion	0	.0%	0	.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	4	7.0%
	Looting	0	.0%	13	10.6%	0	.0%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	1	1.8%	1	.8%	0	.0%
	Cuts	0	.0%	4	3.3%	1	1.8%
	Grave Pits	1	1.8%	9	7.3%	1	1.8%
	Pits (Other)	0	.0%	1	.8%	0	.0%
	Natural Erosion	1	1.8%	5	4.1%	0	.0%
	Railway	0	.0%	0	.0%	1	1.8%
	Unknown	0	.0%	18	14.6%	2	3.5%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-128: DAMAGE CAUSE BY LOCATION ON GEOEYE 2009 (AMALGAMATED SITES)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	10	16.7%	6	6.0%	7	10.9%
	Arable agriculture	14	23.3%	28	28.0%	13	20.3%
	Orchards	13	21.7%	8	8.0%	4	6.3%
	Irrigation Channels	0	.0%	0	.0%	3	4.7%
	Roads	14	23.3%	16	16.0%	12	18.8%
	Mineral Extraction	0	.0%	3	3.0%	0	.0%
	Military Damage	0	.0%	0	.0%	1	1.6%
	Bulldozing	1	1.7%	5	5.0%	5	7.8%
	Water Erosion	0	.0%	2	2.0%	5	7.8%
	Visitor Erosion	0	.0%	1	1.0%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	4	6.3%
	Looting	0	.0%	10	10.0%	2	3.1%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	1	1.7%	2	2.0%	0	.0%
	Cuts	1	1.7%	3	3.0%	4	6.3%
	Grave Pits	2	3.3%	6	6.0%	1	1.6%
	Pits (Other)	3	5.0%	2	2.0%	2	3.1%
	Natural Erosion	1	1.7%	5	5.0%	0	.0%
	Railway	0	.0%	0	.0%	1	1.6%
	Unknown	0	.0%	3	3.0%	0	.0%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-129: DAMAGE CAUSE BY LOCATION ON GEOEYE 2009 (UNIT ANALYSIS)

		Alluvial Upland Plain		Limestone Hills		River / Wadi Terrace	
		Count		Count		Count	
		Count	% within Area	Count	% within Area	Count	% within Area
Damage Cause	Development	10	16.4%	7	6.5%	7	10.9%
	Arable agriculture	15	24.6%	29	27.1%	13	20.3%
	Orchards	13	21.3%	8	7.5%	4	6.3%
	Irrigation Channels	0	.0%	0	.0%	3	4.7%
	Roads	14	23.0%	19	17.8%	12	18.8%
	Mineral Extraction	0	.0%	3	2.8%	0	.0%
	Military Damage	0	.0%	0	.0%	1	1.6%
	Bulldozing	1	1.6%	5	4.7%	5	7.8%
	Water Erosion	0	.0%	2	1.9%	5	7.8%
	Visitor Erosion	0	.0%	1	.9%	0	.0%
	Archaeological Excavation	0	.0%	0	.0%	4	6.3%
	Looting	0	.0%	11	10.3%	2	3.1%
	Mudbrick Pits	0	.0%	0	.0%	0	.0%
	Dumping Pits	1	1.6%	2	1.9%	0	.0%
	Cuts	1	1.6%	3	2.8%	4	6.3%
	Grave Pits	2	3.3%	7	6.5%	1	1.6%
	Pits (Other)	3	4.9%	2	1.9%	2	3.1%
	Natural Erosion	1	1.6%	5	4.7%	0	.0%
	Railway	0	.0%	0	.0%	1	1.6%
	Unknown	0	.0%	3	2.8%	0	.0%
	No Damage	0	.0%	0	.0%	0	.0%

TABLE H-130: DAMAGE CAUSE BY SITE TYPE ON CORONA (AMALGAMATED SITES)

		Site Type					
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Development	Count	3	4	3	0	0	10
	% within Damage Cause	30.0%	40.0%	30.0%	.0%	.0%	100.0%
	% within Site Type	8.3%	12.1%	5.0%	.0%	.0%	6.8%
Arable agriculture	Count	9	9	22	0	2	42
	% within Damage Cause	21.4%	21.4%	52.4%	.0%	4.8%	100.0%
	% within Site Type	25.0%	27.3%	36.7%	.0%	20.0%	28.8%
Orchards	Count	0	1	1	0	0	2
	% within Damage Cause	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Site Type	.0%	3.0%	1.7%	.0%	.0%	1.4%
Roads	Count	9	9	9	0	2	29
	% within Damage Cause	31.0%	31.0%	31.0%	.0%	6.9%	100.0%
	% within Site Type	25.0%	27.3%	15.0%	.0%	20.0%	19.9%
Mineral Extraction	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.7%	.0%	.0%	.7%
Military Damage	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.8%	.0%	.0%	.0%	.0%	.7%
Bulldozing	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.7%	.0%	.0%	.7%
Water Erosion	Count	2	1	6	2	1	12
	% within Damage Cause	16.7%	8.3%	50.0%	16.7%	8.3%	100.0%
	% within Site Type	5.6%	3.0%	10.0%	28.6%	10.0%	8.2%
Archaeological Excavation	Count	1	0	1	0	0	2
	% within Damage Cause	50.0%	.0%	50.0%	.0%	.0%	100.0%
	% within Site Type	2.8%	.0%	1.7%	.0%	.0%	1.4%
Grave Pits	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.7%	.0%	.0%	.7%
Natural Erosion	Count	5	0	1	0	0	6
	% within Damage Cause	83.3%	.0%	16.7%	.0%	.0%	100.0%
	% within Site Type	13.9%	.0%	1.7%	.0%	.0%	4.1%
Railway	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.7%	.0%	.0%	.7%
Unknown	Count	6	9	13	5	5	38
	% within Damage Cause	15.8%	23.7%	34.2%	13.2%	13.2%	100.0%
	% within Site Type	16.7%	27.3%	21.7%	71.4%	50.0%	26.0%
	Count	36	33	60	7	10	146
	% within Damage Cause	24.7%	22.6%	41.1%	4.8%	6.8%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-131: DAMAGE CAUSE BY SITE TYPE ON CORONA (UNIT ANALYSIS)

		Site Type						
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Development	Count	3	5	3	0	0	0	11
	% within Damage Cause	27.3%	45.5%	27.3%	.0%	.0%	.0%	100.0%
	% within Site Type	8.1%	13.2%	4.2%	.0%	.0%	.0%	6.7%
Arable agriculture	Count	9	11	24	0	0	2	46
	% within Damage Cause	19.6%	23.9%	52.2%	.0%	.0%	4.3%	100.0%
	% within Site Type	24.3%	28.9%	33.8%	.0%	.0%	18.2%	27.9%
Orchards	Count	0	1	1	0	0	0	2
	% within Damage Cause	.0%	50.0%	50.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	2.6%	1.4%	.0%	.0%	.0%	1.2%
Roads	Count	9	10	10	0	0	2	31
	% within Damage Cause	29.0%	32.3%	32.3%	.0%	.0%	6.5%	100.0%
	% within Site Type	24.3%	26.3%	14.1%	.0%	.0%	18.2%	18.8%
Mineral Extraction	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.4%	.0%	.0%	.0%	.6%
Military Damage	Count	1	0	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.7%	.0%	.0%	.0%	.0%	.0%	.6%
Bulldozing	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.4%	.0%	.0%	.0%	.6%
Water Erosion	Count	2	1	6	2	0	1	12
	% within Damage Cause	16.7%	8.3%	50.0%	16.7%	.0%	8.3%	100.0%
	% within Site Type	5.4%	2.6%	8.5%	28.6%	.0%	9.1%	7.3%
Archaeological Excavation	Count	1	0	1	0	0	0	2
	% within Damage Cause	50.0%	.0%	50.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.7%	.0%	1.4%	.0%	.0%	.0%	1.2%
Grave Pits	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.4%	.0%	.0%	.0%	.6%
Natural Erosion	Count	5	0	1	0	0	0	6
	% within Damage Cause	83.3%	.0%	16.7%	.0%	.0%	.0%	100.0%
	% within Site Type	13.5%	.0%	1.4%	.0%	.0%	.0%	3.6%
Railway	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.4%	.0%	.0%	.0%	.6%
Unknown	Count	7	10	21	5	1	6	50
	% within Damage Cause	14.0%	20.0%	42.0%	10.0%	2.0%	12.0%	100.0%
	% within Site Type	18.9%	26.3%	29.6%	71.4%	100.0%	54.5%	30.3%
	Count	37	38	71	7	1	11	165
	% within Damage Cause	22.4%	23.0%	43.0%	4.2%	.6%	6.7%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-132: DAMAGE CAUSE BY SITE TYPE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

		Site Type					
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Development	Count	6	4	9	0	0	19
	% within Damage Cause	31.6%	21.1%	47.4%	.0%	.0%	100.0%
	% within Site Type	12.8%	12.9%	12.0%	.0%	.0%	11.3%
Arable agriculture	Count	9	10	20	0	4	43
	% within Damage Cause	20.9%	23.3%	46.5%	.0%	9.3%	100.0%
	% within Site Type	19.1%	32.3%	26.7%	.0%	36.4%	25.6%
Orchards	Count	1	4	12	0	0	17
	% within Damage Cause	5.9%	23.5%	70.6%	.0%	.0%	100.0%
	% within Site Type	2.1%	12.9%	16.0%	.0%	.0%	10.1%
Irrigation Channels	Count	2	1	2	0	0	5
	% within Damage Cause	40.0%	20.0%	40.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	3.2%	2.7%	.0%	.0%	3.0%
Roads	Count	9	7	15	0	3	34
	% within Damage Cause	26.5%	20.6%	44.1%	.0%	8.8%	100.0%
	% within Site Type	19.1%	22.6%	20.0%	.0%	27.3%	20.2%
Mineral Extraction	Count	1	0	1	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	33.3%	100.0%
	% within Site Type	2.1%	.0%	1.3%	.0%	9.1%	1.8%
Military Damage	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.1%	.0%	.0%	.0%	.0%	.6%
Bulldozing	Count	2	1	1	0	0	4
	% within Damage Cause	50.0%	25.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	3.2%	1.3%	.0%	.0%	2.4%
Water Erosion	Count	0	0	5	2	0	7
	% within Damage Cause	.0%	.0%	71.4%	28.6%	.0%	100.0%
	% within Site Type	.0%	.0%	6.7%	50.0%	.0%	4.2%
Archaeological Excavation	Count	3	0	1	0	0	4
	% within Damage Cause	75.0%	.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	6.4%	.0%	1.3%	.0%	.0%	2.4%
Looting	Count	2	2	3	1	1	9
	% within Damage Cause	22.2%	22.2%	33.3%	11.1%	11.1%	100.0%
	% within Site Type	4.3%	6.5%	4.0%	25.0%	9.1%	5.4%
Dumping Pits	Count	2	0	0	0	0	2
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	.0%	.0%	.0%	.0%	1.2%
Cuts	Count	2	1	0	0	0	3
	% within Damage Cause	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	3.2%	.0%	.0%	.0%	1.8%
Grave Pits	Count	2	0	3	0	1	6
	% within Damage Cause	33.3%	.0%	50.0%	.0%	16.7%	100.0%
	% within Site Type	4.3%	.0%	4.0%	.0%	9.1%	3.6%
Pits (Other)	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.1%	.0%	.0%	.0%	.0%	.6%
Natural Erosion	Count	3	1	1	0	0	5
	% within Damage Cause	60.0%	20.0%	20.0%	.0%	.0%	100.0%
	% within Site Type	6.4%	3.2%	1.3%	.0%	.0%	3.0%
Railway	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.3%	.0%	.0%	.6%
Unknown	Count	1	0	1	1	1	4
	% within Damage Cause	25.0%	.0%	25.0%	25.0%	25.0%	100.0%
	% within Site Type	2.1%	.0%	1.3%	25.0%	9.1%	2.4%
	Count	47	31	75	4	11	168
	% within Damage Cause	28.0%	18.5%	44.6%	2.4%	6.5%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-133: DAMAGE CAUSE BY SITE TYPE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Site Type					
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Development	Count	6	5	9	0	0	20
	% within Damage Cause	30.0%	25.0%	45.0%	.0%	.0%	100.0%
	% within Site Type	12.8%	14.7%	11.7%	.0%	.0%	11.4%
Arable agriculture	Count	9	11	21	0	3	44
	% within Damage Cause	20.5%	25.0%	47.7%	.0%	6.8%	100.0%
	% within Site Type	19.1%	32.4%	27.3%	.0%	23.1%	25.1%
Orchards	Count	1	4	12	0	0	17
	% within Damage Cause	5.9%	23.5%	70.6%	.0%	.0%	100.0%
	% within Site Type	2.1%	11.8%	15.6%	.0%	.0%	9.7%
Irrigation Channels	Count	2	1	2	0	0	5
	% within Damage Cause	40.0%	20.0%	40.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	2.9%	2.6%	.0%	.0%	2.9%
Roads	Count	9	8	16	0	4	37
	% within Damage Cause	24.3%	21.6%	43.2%	.0%	10.8%	100.0%
	% within Site Type	19.1%	23.5%	20.8%	.0%	30.8%	21.1%
Mineral Extraction	Count	1	0	1	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	33.3%	100.0%
	% within Site Type	2.1%	.0%	1.3%	.0%	7.7%	1.7%
Military Damage	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.1%	.0%	.0%	.0%	.0%	.6%
Bulldozing	Count	2	1	1	0	0	4
	% within Damage Cause	50.0%	25.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	2.9%	1.3%	.0%	.0%	2.3%
Water Erosion	Count	0	0	5	2	0	7
	% within Damage Cause	.0%	.0%	71.4%	28.6%	.0%	100.0%
	% within Site Type	.0%	.0%	6.5%	50.0%	.0%	4.0%
Archaeological Excavation	Count	3	0	1	0	0	4
	% within Damage Cause	75.0%	.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	6.4%	.0%	1.3%	.0%	.0%	2.3%
Looting	Count	2	2	2	1	3	10
	% within Damage Cause	20.0%	20.0%	20.0%	10.0%	30.0%	100.0%
	% within Site Type	4.3%	5.9%	2.6%	25.0%	23.1%	5.7%
Dumping Pits	Count	2	0	0	0	0	2
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	.0%	.0%	.0%	.0%	1.1%
Cuts	Count	2	1	0	0	0	3
	% within Damage Cause	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Site Type	4.3%	2.9%	.0%	.0%	.0%	1.7%
Grave Pits	Count	2	0	4	0	1	7
	% within Damage Cause	28.6%	.0%	57.1%	.0%	14.3%	100.0%
	% within Site Type	4.3%	.0%	5.2%	.0%	7.7%	4.0%
Pits (Other)	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	2.1%	.0%	.0%	.0%	.0%	.6%
Natural Erosion	Count	3	1	1	0	0	5
	% within Damage Cause	60.0%	20.0%	20.0%	.0%	.0%	100.0%
	% within Site Type	6.4%	2.9%	1.3%	.0%	.0%	2.9%
Railway	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.3%	.0%	.0%	.6%
Unknown	Count	1	0	1	1	1	4
	% within Damage Cause	25.0%	.0%	25.0%	25.0%	25.0%	100.0%
	% within Site Type	2.1%	.0%	1.3%	25.0%	7.7%	2.3%
	Count	47	34	77	4	13	175
	% within Damage Cause	26.9%	19.4%	44.0%	2.3%	7.4%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-134: DAMAGE CAUSE BY SITE TYPE ON SPOT 2004 (AMALGAMATED SITES)

		Site Type					
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Development	Count	7	6	10	0	1	24
	% within Damage Cause	29.2%	25.0%	41.7%	.0%	4.2%	100.0%
	% within Site Type	13.2%	13.6%	10.5%	.0%	5.9%	10.9%
Arable agriculture	Count	11	10	26	2	2	51
	% within Damage Cause	21.6%	19.6%	51.0%	3.9%	3.9%	100.0%
	% within Site Type	20.8%	22.7%	27.4%	18.2%	11.8%	23.2%
Orchards	Count	1	5	15	0	1	22
	% within Damage Cause	4.5%	22.7%	68.2%	.0%	4.5%	100.0%
	% within Site Type	1.9%	11.4%	15.8%	.0%	5.8%	10.0%
Irrigation Channels	Count	2	1	2	0	0	5
	% within Damage Cause	40.0%	20.0%	40.0%	.0%	.0%	100.0%
	% within Site Type	3.8%	2.3%	2.1%	.0%	.0%	2.3%
Roads	Count	11	9	16	0	4	40
	% within Damage Cause	27.5%	22.5%	40.0%	.0%	10.0%	100.0%
	% within Site Type	20.8%	20.5%	16.8%	.0%	23.5%	18.2%
Mineral Extraction	Count	1	0	1	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	33.3%	100.0%
	% within Site Type	1.9%	.0%	1.1%	.0%	5.8%	1.4%
Military Damage	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.9%	.0%	.0%	.0%	.0%	.5%
Bulldozing	Count	2	1	2	1	0	6
	% within Damage Cause	33.3%	16.7%	33.3%	16.7%	.0%	100.0%
	% within Site Type	3.8%	2.3%	2.1%	9.1%	.0%	2.7%
Water Erosion	Count	0	1	5	2	0	8
	% within Damage Cause	.0%	12.5%	62.5%	25.0%	.0%	100.0%
	% within Site Type	.0%	2.3%	5.3%	18.2%	.0%	3.6%
Archaeological Excavation	Count	3	0	1	0	0	4
	% within Damage Cause	75.0%	.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	5.7%	.0%	1.1%	.0%	.0%	1.8%
Looting	Count	2	2	4	2	2	12
	% within Damage Cause	16.7%	16.7%	33.3%	16.7%	16.7%	100.0%
	% within Site Type	3.8%	4.5%	4.2%	18.2%	11.8%	5.5%
Dumping Pits	Count	2	0	0	0	0	2
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.8%	.0%	.0%	.0%	.0%	.9%
Cuts	Count	2	1	1	0	1	5
	% within Damage Cause	40.0%	20.0%	20.0%	.0%	20.0%	100.0%
	% within Site Type	3.8%	2.3%	1.1%	.0%	5.9%	2.3%
Grave Pits	Count	2	3	3	0	2	10
	% within Damage Cause	20.0%	30.0%	30.0%	.0%	20.0%	100.0%
	% within Site Type	3.8%	6.8%	3.2%	.0%	11.8%	4.5%
Pits (Other)	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.9%	.0%	.0%	.0%	.0%	.5%
Natural Erosion	Count	3	1	2	0	0	6
	% within Damage Cause	50.0%	16.7%	33.3%	.0%	.0%	100.0%
	% within Site Type	5.7%	2.3%	2.1%	.0%	.0%	2.7%
Railway	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.1%	.0%	.0%	.5%
Unknown	Count	2	4	6	4	3	19
	% within Damage Cause	10.5%	21.1%	31.6%	21.1%	15.8%	100.0%
	% within Site Type	3.8%	9.1%	6.3%	36.4%	17.6%	8.6%
	Count	53	44	95	11	17	220
	% within Damage Cause	24.1%	20.0%	43.2%	5.0%	7.7%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-135: DAMAGE CAUSE BY SITE TYPE ON SPOT 2004 (UNIT ANALYSIS)

		Site Type						
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Tombs / Cairns	Multiple	Total
Development	Count	7	7	11	0	0	0	25
	% within Damage Cause	28.0%	28.0%	44.0%	.0%	.0%	.0%	100.0%
	% within Site Type	13.2%	14.6%	9.9%	.0%	.0%	.0%	10.6%
Arable agriculture	Count	11	11	30	2	0	1	55
	% within Damage Cause	20.0%	20.0%	54.5%	3.6%	.0%	1.8%	100.0%
	% within Site Type	20.8%	22.9%	27.0%	18.2%	.0%	8.3%	23.3%
Orchards	Count	1	5	18	0	0	0	24
	% within Damage Cause	4.2%	20.8%	75.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.9%	10.4%	16.2%	.0%	.0%	.0%	10.2%
Irrigation Channels	Count	2	1	2	0	0	0	5
	% within Damage Cause	40.0%	20.0%	40.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.8%	2.1%	1.8%	.0%	.0%	.0%	2.1%
Roads	Count	11	10	21	0	0	4	46
	% within Damage Cause	23.9%	21.7%	45.7%	.0%	.0%	8.7%	100.0%
	% within Site Type	20.8%	20.8%	18.9%	.0%	.0%	33.3%	19.5%
Mineral Extraction	Count	1	0	1	0	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	.0%	33.3%	100.0%
	% within Site Type	1.9%	.0%	.9%	.0%	.0%	8.3%	1.3%
Military Damage	Count	1	0	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.9%	.0%	.0%	.0%	.0%	.0%	.4%
Bulldozing	Count	2	1	2	1	0	0	6
	% within Damage Cause	33.3%	16.7%	33.3%	16.7%	.0%	.0%	100.0%
	% within Site Type	3.8%	2.1%	1.8%	9.1%	.0%	.0%	2.5%
Water Erosion	Count	0	1	5	2	0	0	8
	% within Damage Cause	.0%	12.5%	62.5%	25.0%	.0%	.0%	100.0%
	% within Site Type	.0%	2.1%	4.5%	18.2%	.0%	.0%	3.4%
Archaeological Excavation	Count	3	0	1	0	0	0	4
	% within Damage Cause	75.0%	.0%	25.0%	.0%	.0%	.0%	100.0%
	% within Site Type	5.7%	.0%	.9%	.0%	.0%	.0%	1.7%
Looting	Count	2	2	3	2	1	3	13
	% within Damage Cause	15.4%	15.4%	23.1%	15.4%	7.7%	23.1%	100.0%
	% within Site Type	3.8%	4.2%	2.7%	18.2%	100.0%	25.0%	5.5%
Dumping Pits	Count	2	0	0	0	0	0	2
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.8%	.0%	.0%	.0%	.0%	.0%	.8%
Cuts	Count	2	1	2	0	0	0	5
	% within Damage Cause	40.0%	20.0%	40.0%	.0%	.0%	.0%	100.0%
	% within Site Type	3.8%	2.1%	1.8%	.0%	.0%	.0%	2.1%
Grave Pits	Count	2	3	5	0	0	1	11
	% within Damage Cause	18.2%	27.3%	45.5%	.0%	.0%	9.1%	100.0%
	% within Site Type	3.8%	6.3%	4.5%	.0%	.0%	8.3%	4.7%
Pits (Other)	Count	1	0	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.9%	.0%	.0%	.0%	.0%	.0%	.4%
Natural Erosion	Count	3	1	2	0	0	0	6
	% within Damage Cause	50.0%	16.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Site Type	5.7%	2.1%	1.8%	.0%	.0%	.0%	2.5%
Railway	Count	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	.9%	.0%	.0%	.0%	.4%
Unknown	Count	2	5	7	4	0	2	20
	% within Damage Cause	10.0%	25.0%	35.0%	20.0%	.0%	10.0%	100.0%
	% within Site Type	3.8%	10.4%	6.3%	36.4%	.0%	16.7%	8.5%
	Count	53	48	111	11	1	12	236
	% within Damage Cause	22.5%	20.3%	47.0%	4.7%	.4%	5.1%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-136: DAMAGE CAUSE BY SITE TYPE ON GEOEYE 2009 (AMALGAMATED SITES)

		Site Type					
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Development	Count	8	4	10	0	1	23
	% within Damage Cause	34.8%	17.4%	43.5%	.0%	4.3%	100.0%
	% within Site Type	12.1%	8.7%	11.2%	.0%	6.7%	10.3%
Arable agriculture	Count	12	13	23	3	4	55
	% within Damage Cause	21.8%	23.6%	41.8%	5.5%	7.3%	100.0%
	% within Site Type	18.2%	28.3%	25.8%	37.5%	26.7%	24.6%
Orchards	Count	1	7	14	0	3	25
	% within Damage Cause	4.0%	28.0%	56.0%	.0%	12.0%	100.0%
	% within Site Type	1.5%	15.2%	15.7%	.0%	20.0%	11.2%
Irrigation Channels	Count	1	1	1	0	0	3
	% within Damage Cause	33.3%	33.3%	33.3%	.0%	.0%	100.0%
	% within Site Type	1.5%	2.2%	1.1%	.0%	.0%	1.3%
Roads	Count	14	9	16	0	3	42
	% within Damage Cause	33.3%	21.4%	38.1%	.0%	7.1%	100.0%
	% within Site Type	21.2%	19.6%	18.0%	.0%	20.0%	18.8%
Mineral Extraction	Count	1	0	1	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	33.3%	100.0%
	% within Site Type	1.5%	.0%	1.1%	.0%	6.7%	1.3%
Military Damage	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.5%	.0%	.0%	.0%	.0%	.4%
Bulldozing	Count	3	2	5	1	0	11
	% within Damage Cause	27.3%	18.2%	45.5%	9.1%	.0%	100.0%
	% within Site Type	4.5%	4.3%	5.6%	12.5%	.0%	4.9%
Water Erosion	Count	0	1	4	2	0	7
	% within Damage Cause	.0%	14.3%	57.1%	28.6%	.0%	100.0%
	% within Site Type	.0%	2.2%	4.5%	25.0%	.0%	3.1%
Visitor Erosion	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.1%	.0%	.0%	.4%
Archaeological Excavation	Count	3	0	1	0	0	4
	% within Damage Cause	75.0%	.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	4.5%	.0%	1.1%	.0%	.0%	1.8%
Looting	Count	5	2	3	1	1	12
	% within Damage Cause	41.7%	16.7%	25.0%	8.3%	8.3%	100.0%
	% within Site Type	7.6%	4.3%	3.4%	12.5%	6.7%	5.4%
Dumping Pits	Count	3	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	4.5%	.0%	.0%	.0%	.0%	1.3%
Cuts	Count	4	2	2	0	0	8
	% within Damage Cause	50.0%	25.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	6.1%	4.3%	2.2%	.0%	.0%	3.6%
Grave Pits	Count	3	2	3	0	1	9
	% within Damage Cause	33.3%	22.2%	33.3%	.0%	11.1%	100.0%
	% within Site Type	4.5%	4.3%	3.4%	.0%	6.7%	4.0%
Pits (Other)	Count	3	2	1	1	0	7
	% within Damage Cause	42.9%	28.6%	14.3%	14.3%	.0%	100.0%
	% within Site Type	4.5%	4.3%	1.1%	12.5%	.0%	3.1%
Natural Erosion	Count	3	1	2	0	0	6
	% within Damage Cause	50.0%	16.7%	33.3%	.0%	.0%	100.0%
	% within Site Type	4.5%	2.2%	2.2%	.0%	.0%	2.7%
Railway	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.1%	.0%	.0%	.4%
Unknown	Count	1	0	1	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	33.3%	100.0%
	% within Site Type	1.5%	.0%	1.1%	.0%	6.7%	1.3%
	Count	66	46	89	8	15	224
	% within Damage Cause	29.5%	20.5%	39.7%	3.6%	6.7%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-137: DAMAGE CAUSE BY SITE TYPE ON GEOEYE 2009 (UNIT ANALYSIS)

		Site Type					
		Tell	Tell (Low)	Flat Site / Scatter	Building(s)	Multiple	Total
Development	Count	8	5	10	0	1	24
	% within Damage Cause	33.3%	20.8%	41.7%	.0%	4.2%	100.0%
	% within Site Type	12.1%	10.0%	10.9%	.0%	6.3%	10.3%
Arable agriculture	Count	12	15	24	3	3	57
	% within Damage Cause	21.1%	26.3%	42.1%	5.3%	5.3%	100.0%
	% within Site Type	18.2%	30.0%	26.1%	37.5%	18.8%	24.6%
Orchards	Count	1	7	15	0	2	25
	% within Damage Cause	4.0%	28.0%	60.0%	.0%	8.0%	100.0%
	% within Site Type	1.5%	14.0%	16.3%	.0%	12.5%	10.8%
Irrigation Channels	Count	1	1	1	0	0	3
	% within Damage Cause	33.3%	33.3%	33.3%	.0%	.0%	100.0%
	% within Site Type	1.5%	2.0%	1.1%	.0%	.0%	1.3%
Roads	Count	14	10	17	0	4	45
	% within Damage Cause	31.1%	22.2%	37.8%	.0%	8.8%	100.0%
	% within Site Type	21.2%	20.0%	18.5%	.0%	25.0%	19.4%
Mineral Extraction	Count	1	0	1	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	33.3%	100.0%
	% within Site Type	1.5%	.0%	1.1%	.0%	6.3%	1.3%
Military Damage	Count	1	0	0	0	0	1
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	1.5%	.0%	.0%	.0%	.0%	.4%
Bulldozing	Count	3	2	5	1	0	11
	% within Damage Cause	27.3%	18.2%	45.5%	9.1%	.0%	100.0%
	% within Site Type	4.5%	4.0%	5.4%	12.5%	.0%	4.7%
Water Erosion	Count	0	1	4	2	0	7
	% within Damage Cause	.0%	14.3%	57.1%	28.6%	.0%	100.0%
	% within Site Type	.0%	2.0%	4.3%	25.0%	.0%	3.0%
Visitor Erosion	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.1%	.0%	.0%	.4%
Archaeological Excavation	Count	3	0	1	0	0	4
	% within Damage Cause	75.0%	.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	4.5%	.0%	1.1%	.0%	.0%	1.7%
Looting	Count	5	2	2	1	3	13
	% within Damage Cause	38.5%	15.4%	15.4%	7.7%	23.1%	100.0%
	% within Site Type	7.6%	4.0%	2.2%	12.5%	18.8%	5.6%
Dumping Pits	Count	3	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Site Type	4.5%	.0%	.0%	.0%	.0%	1.3%
Cuts	Count	4	2	2	0	0	8
	% within Damage Cause	50.0%	25.0%	25.0%	.0%	.0%	100.0%
	% within Site Type	6.1%	4.0%	2.2%	.0%	.0%	3.4%
Grave Pits	Count	3	2	4	0	1	10
	% within Damage Cause	30.0%	20.0%	40.0%	.0%	10.0%	100.0%
	% within Site Type	4.5%	4.0%	4.3%	.0%	6.3%	4.3%
Pits (Other)	Count	3	2	1	1	0	7
	% within Damage Cause	42.9%	28.6%	14.3%	14.3%	.0%	100.0%
	% within Site Type	4.5%	4.0%	1.1%	12.5%	.0%	3.0%
Natural Erosion	Count	3	1	2	0	0	6
	% within Damage Cause	50.0%	16.7%	33.3%	.0%	.0%	100.0%
	% within Site Type	4.5%	2.0%	2.2%	.0%	.0%	2.6%
Railway	Count	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Site Type	.0%	.0%	1.1%	.0%	.0%	.4%
Unknown	Count	1	0	1	0	1	3
	% within Damage Cause	33.3%	.0%	33.3%	.0%	33.3%	100.0%
	% within Site Type	1.5%	.0%	1.1%	.0%	6.3%	1.3%
	Count	66	50	92	8	16	232
	% within Damage Cause	28.4%	21.6%	39.7%	3.4%	6.9%	100.0%
	% within Site Type	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-138: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON CORONA (AMALGAMATED SITES)

		Horizontal Damage Effect						Total
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	
Development	Count	0	3	2	4	1	0	10
	% within Damage Cause	.0%	30.0%	20.0%	40.0%	10.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	15.0%	13.3%	10.3%	4.8%	.0%	6.8%
Arable agriculture	Count	0	7	0	9	14	12	42
	% within Damage Cause	.0%	16.7%	.0%	21.4%	33.3%	28.6%	100.0%
	% within Horizontal Damage Effect	.0%	35.0%	.0%	23.1%	66.7%	92.3%	28.8%
Orchards	Count	0	0	0	1	1	0	2
	% within Damage Cause	.0%	.0%	.0%	50.0%	50.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.6%	4.8%	.0%	1.4%
Roads	Count	0	6	11	9	0	0	28
	% within Damage Cause	.0%	21.0%	37.9%	31.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	45.0%	73.3%	23.1%	.0%	.0%	19.9%
Mineral Extraction	Count	0	1	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	5.0%	.0%	.0%	.0%	.0%	.7%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	4.8%	.0%	.7%
Bulldozing	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.6%	.0%	.0%	.7%
Water Erosion	Count	0	0	0	12	0	0	12
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	30.8%	.0%	.0%	8.2%
Archaeological Excavation	Count	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	13.3%	.0%	.0%	.0%	1.4%
Grave Pits	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.6%	.0%	.0%	.7%
Natural Erosion	Count	0	0	0	1	4	1	6
	% within Damage Cause	.0%	.0%	.0%	16.7%	66.7%	16.7%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.6%	19.0%	7.7%	4.1%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.6%	.0%	.0%	.7%
Unknown	Count	38	0	0	0	0	0	38
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	26.0%
	Count	38	20	15	39	21	13	146
	% within Damage Cause	26.0%	13.7%	10.3%	26.7%	14.4%	8.9%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-139: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON CORONA (UNIT ANALYSIS)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	3	3	3	1	1	11
	% within Damage Cause	.0%	27.3%	27.3%	27.3%	9.1%	9.1%	100.0%
	% within Horizontal Damage Effect	.0%	13.0%	20.0%	7.5%	4.5%	6.7%	6.7%
Arable agriculture	Count	0	9	0	9	15	13	46
	% within Damage Cause	.0%	19.6%	.0%	19.6%	32.6%	28.3%	100.0%
	% within Horizontal Damage Effect	.0%	39.1%	.0%	22.5%	68.2%	86.7%	27.9%
Orchards	Count	0	0	0	1	1	0	2
	% within Damage Cause	.0%	.0%	.0%	50.0%	50.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.5%	4.5%	.0%	1.2%
Roads	Count	0	10	10	11	0	0	31
	% within Damage Cause	.0%	32.3%	32.3%	35.5%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	43.5%	66.7%	27.5%	.0%	.0%	18.8%
Mineral Extraction	Count	0	1	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	4.3%	.0%	.0%	.0%	.0%	.6%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	4.5%	.0%	.6%
Bulldozing	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.5%	.0%	.0%	.6%
Water Erosion	Count	0	0	0	12	0	0	12
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	30.0%	.0%	.0%	7.3%
Archaeological Excavation	Count	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	13.3%	.0%	.0%	.0%	1.2%
Grave Pits	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.5%	.0%	.0%	.6%
Natural Erosion	Count	0	0	0	1	4	1	6
	% within Damage Cause	.0%	.0%	.0%	16.7%	66.7%	16.7%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.5%	18.2%	6.7%	3.6%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.5%	.0%	.0%	.6%
Unknown	Count	50	0	0	0	0	0	50
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	30.3%
	Count	50	23	15	40	22	15	165
	% within Damage Cause	30.3%	13.9%	9.1%	24.2%	13.3%	9.1%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-140: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	2	8	10	1	0	19
	% within Damage Cause	.0%	10.5%	31.6%	52.6%	5.3%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	11.8%	14.3%	13.7%	4.0%	.0%	11.3%
Arable agriculture	Count	0	4	0	20	13	6	43
	% within Damage Cause	.0%	9.3%	.0%	46.5%	30.2%	14.0%	100.0%
	% within Horizontal Damage Effect	.0%	23.5%	.0%	27.4%	52.0%	85.7%	25.6%
Orchards	Count	0	0	1	10	5	1	17
	% within Damage Cause	.0%	.0%	5.9%	58.9%	29.4%	5.9%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.4%	13.7%	20.0%	14.3%	10.1%
Irrigation Channels	Count	0	0	5	0	0	0	5
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	11.9%	.0%	.0%	.0%	3.0%
Roads	Count	0	9	15	10	0	0	34
	% within Damage Cause	.0%	26.5%	44.1%	29.4%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	52.9%	35.7%	13.7%	.0%	.0%	20.2%
Mineral Extraction	Count	0	2	1	0	0	0	3
	% within Damage Cause	.0%	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	11.8%	2.4%	.0%	.0%	.0%	1.8%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	4.0%	.0%	.6%
Bulldozing	Count	0	0	0	4	0	0	4
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	5.5%	.0%	.0%	2.4%
Water Erosion	Count	0	0	0	7	0	0	7
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	9.6%	.0%	.0%	4.2%
Archaeological Excavation	Count	0	0	3	1	0	0	4
	% within Damage Cause	.0%	.0%	75.0%	25.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	7.1%	1.4%	.0%	.0%	2.4%
Looting	Count	0	0	8	1	0	0	9
	% within Damage Cause	.0%	.0%	88.8%	11.1%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	19.0%	1.4%	.0%	.0%	5.4%
Dumping Pits	Count	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	4.8%	.0%	.0%	.0%	1.2%
Cuts	Count	0	0	1	2	0	0	3
	% within Damage Cause	.0%	.0%	33.3%	66.7%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.4%	2.7%	.0%	.0%	1.8%
Grave Pits	Count	0	0	0	5	1	0	6
	% within Damage Cause	.0%	.0%	.0%	83.3%	16.7%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	6.8%	4.0%	.0%	3.6%
Pits (Other)	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.4%	.0%	.0%	.6%
Natural Erosion	Count	0	0	0	1	4	0	5
	% within Damage Cause	.0%	.0%	.0%	20.0%	80.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.4%	16.0%	.0%	3.0%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.4%	.0%	.0%	.6%
Unknown	Count	4	0	0	0	0	0	4
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	2.4%
	Count	4	17	42	73	25	7	168
	% within Damage Cause	2.4%	10.1%	25.0%	43.5%	14.9%	4.2%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-141: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Horizontal Damage Effect						Total
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	
Development	Count	0	2	7	9	1	1	20
	% within Damage Cause	.0%	10.0%	35.0%	45.0%	5.0%	5.0%	100.0%
	% within Horizontal Damage Effect	.0%	11.1%	16.3%	12.3%	3.4%	12.5%	11.4%
Arable agriculture	Count	0	4	0	19	15	6	44
	% within Damage Cause	.0%	9.1%	.0%	43.2%	34.1%	13.6%	100.0%
	% within Horizontal Damage Effect	.0%	22.2%	.0%	26.0%	51.7%	75.0%	25.1%
Orchards	Count	0	0	1	10	5	1	17
	% within Damage Cause	.0%	.0%	5.9%	58.8%	29.4%	5.9%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.3%	13.7%	17.2%	12.5%	9.7%
Irrigation Channels	Count	0	0	5	0	0	0	5
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	11.6%	.0%	.0%	.0%	2.9%
Roads	Count	0	10	16	11	0	0	37
	% within Damage Cause	.0%	27.0%	43.2%	29.7%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	55.6%	37.2%	15.1%	.0%	.0%	21.1%
Mineral Extraction	Count	0	2	1	0	0	0	3
	% within Damage Cause	.0%	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	11.1%	2.3%	.0%	.0%	.0%	1.7%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	3.4%	.0%	.6%
Bulldozing	Count	0	0	0	4	0	0	4
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	5.5%	.0%	.0%	2.3%
Water Erosion	Count	0	0	0	7	0	0	7
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	9.6%	.0%	.0%	4.0%
Archaeological Excavation	Count	0	0	3	1	0	0	4
	% within Damage Cause	.0%	.0%	75.0%	25.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	7.0%	1.4%	.0%	.0%	2.3%
Looting	Count	0	0	7	3	0	0	10
	% within Damage Cause	.0%	.0%	70.0%	30.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	16.3%	4.1%	.0%	.0%	5.7%
Dumping Pits	Count	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	4.7%	.0%	.0%	.0%	1.1%
Cuts	Count	0	0	1	2	0	0	3
	% within Damage Cause	.0%	.0%	33.3%	66.7%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.3%	2.7%	.0%	.0%	1.7%
Grave Pits	Count	0	0	0	4	3	0	7
	% within Damage Cause	.0%	.0%	.0%	57.1%	42.9%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	5.5%	10.3%	.0%	4.0%
Pits (Other)	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.4%	.0%	.0%	.6%
Natural Erosion	Count	0	0	0	1	4	0	5
	% within Damage Cause	.0%	.0%	.0%	20.0%	80.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.4%	13.8%	.0%	2.9%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.4%	.0%	.0%	.6%
Unknown	Count	4	0	0	0	0	0	4
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	2.3%
	Count	4	18	43	73	29	8	175
	% within Damage Cause	2.3%	10.3%	24.6%	41.7%	16.6%	4.6%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-142: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (AMALGAMATED SITES)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	4	8	11	1	0	24
	% within Damage Cause	.0%	16.7%	33.3%	45.8%	4.2%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	15.4%	18.2%	11.7%	3.3%	.0%	10.9%
Arable agriculture	Count	0	7	0	21	16	7	51
	% within Damage Cause	.0%	13.7%	.0%	41.2%	31.4%	13.7%	100.0%
	% within Horizontal Damage Effect	.0%	26.9%	.0%	22.3%	53.3%	87.5%	23.2%
Orchards	Count	0	0	1	14	7	0	22
	% within Damage Cause	.0%	.0%	4.5%	63.6%	31.8%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.3%	14.9%	23.3%	.0%	10.0%
Irrigation Channels	Count	0	0	5	0	0	0	5
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	11.4%	.0%	.0%	.0%	2.3%
Roads	Count	0	12	14	14	0	0	40
	% within Damage Cause	.0%	30.0%	35.0%	35.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	46.2%	31.8%	14.9%	.0%	.0%	18.2%
Mineral Extraction	Count	0	2	1	0	0	0	3
	% within Damage Cause	.0%	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	7.7%	2.3%	.0%	.0%	.0%	1.4%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	3.3%	.0%	.5%
Bulldozing	Count	0	0	0	6	0	0	6
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	6.4%	.0%	.0%	2.7%
Water Erosion	Count	0	0	0	8	0	0	8
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	8.5%	.0%	.0%	3.6%
Archaeological Excavation	Count	0	0	3	1	0	0	4
	% within Damage Cause	.0%	.0%	75.0%	25.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	6.8%	1.1%	.0%	.0%	1.8%
Looting	Count	0	0	8	4	0	0	12
	% within Damage Cause	.0%	.0%	66.7%	33.3%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	18.2%	4.3%	.0%	.0%	5.5%
Dumping Pits	Count	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	4.5%	.0%	.0%	.0%	.9%
Cuts	Count	0	0	2	3	0	0	5
	% within Damage Cause	.0%	.0%	40.0%	60.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	4.5%	3.2%	.0%	.0%	2.3%
Grave Pits	Count	0	1	0	8	0	1	10
	% within Damage Cause	.0%	10.0%	.0%	80.0%	.0%	10.0%	100.0%
	% within Horizontal Damage Effect	.0%	3.8%	.0%	8.5%	.0%	12.5%	4.5%
Pits (Other)	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.1%	.0%	.0%	.5%
Natural Erosion	Count	0	0	0	2	4	0	6
	% within Damage Cause	.0%	.0%	.0%	33.3%	66.7%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.1%	13.3%	.0%	2.7%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.1%	.0%	.0%	.5%
Unknown	Count	18	0	0	0	1	0	19
	% within Damage Cause	94.7%	.0%	.0%	.0%	5.3%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	3.3%	.0%	8.6%
	Count	18	26	44	94	30	8	220
	% within Damage Cause	8.2%	11.8%	20.0%	42.7%	13.6%	3.6%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-143: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (UNIT ANALYSIS)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	4	9	10	1	1	25
	% within Damage Cause	.0%	16.0%	36.0%	40.0%	4.0%	4.0%	100.0%
	% within Horizontal Damage Effect	.0%	13.3%	20.5%	10.3%	2.9%	8.3%	10.5%
Arable agriculture	Count	0	7	0	23	17	8	55
	% within Damage Cause	.0%	12.7%	.0%	41.8%	30.9%	14.5%	100.0%
	% within Horizontal Damage Effect	.0%	23.3%	.0%	23.7%	50.0%	66.7%	23.3%
Orchards	Count	0	0	1	14	8	1	24
	% within Damage Cause	.0%	.0%	4.2%	58.3%	33.3%	4.2%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.3%	14.4%	23.5%	8.3%	10.2%
Irrigation Channels	Count	0	0	5	0	0	0	5
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	11.4%	.0%	.0%	.0%	2.1%
Roads	Count	0	10	15	15	0	0	40
	% within Damage Cause	.0%	34.5%	32.6%	32.6%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	53.3%	34.1%	15.5%	.0%	.0%	16.5%
Mineral Extraction	Count	0	2	1	0	0	0	3
	% within Damage Cause	.0%	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	6.7%	2.3%	.0%	.0%	.0%	1.3%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	2.9%	.0%	.4%
Bulldozing	Count	0	0	0	6	0	0	6
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	6.2%	.0%	.0%	2.5%
Water Erosion	Count	0	0	0	8	0	0	8
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	8.2%	.0%	.0%	3.4%
Archaeological Excavation	Count	0	0	3	1	0	0	4
	% within Damage Cause	.0%	.0%	75.0%	25.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	6.8%	1.0%	.0%	.0%	1.7%
Loading	Count	0	0	7	5	0	1	13
	% within Damage Cause	.0%	.0%	53.8%	38.5%	.0%	7.7%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	15.9%	5.2%	.0%	8.3%	5.5%
Dumping Pits	Count	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	4.5%	.0%	.0%	.0%	.8%
Cuts	Count	0	0	1	4	0	0	5
	% within Damage Cause	.0%	.0%	20.0%	80.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	2.3%	4.1%	.0%	.0%	2.1%
Grave Pits	Count	0	1	0	7	2	1	11
	% within Damage Cause	.0%	9.1%	.0%	63.6%	18.2%	9.1%	100.0%
	% within Horizontal Damage Effect	.0%	3.3%	.0%	7.2%	5.9%	8.3%	4.7%
Pits (Other)	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.0%	.0%	.0%	.4%
Natural Erosion	Count	0	0	0	2	4	0	6
	% within Damage Cause	.0%	.0%	.0%	33.3%	66.7%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.1%	11.8%	.0%	2.5%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.0%	.0%	.0%	.4%
Unknown	Count	19	0	0	0	1	0	20
	% within Damage Cause	95.0%	.0%	.0%	.0%	5.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	2.9%	.0%	8.5%
	Count	19	30	44	97	34	12	236
	% within Damage Cause	8.1%	12.7%	18.6%	41.1%	14.4%	5.1%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-144: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2009 (AMALGAMATED SITES)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	3	9	10	1	0	23
	% within Damage Cause	.0%	13.0%	39.1%	43.5%	4.3%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	12.0%	16.7%	10.4%	2.9%	.0%	10.3%
Arable agriculture	Count	0	3	2	24	19	7	55
	% within Damage Cause	.0%	5.5%	3.6%	43.6%	34.5%	12.7%	100.0%
	% within Horizontal Damage Effect	.0%	12.0%	3.7%	25.0%	54.3%	63.6%	24.6%
Orchards	Count	0	3	0	14	6	2	25
	% within Damage Cause	.0%	12.0%	.0%	56.0%	24.0%	8.0%	100.0%
	% within Horizontal Damage Effect	.0%	12.0%	.0%	14.6%	17.1%	18.2%	11.2%
Irrigation Channels	Count	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	5.6%	.0%	.0%	.0%	1.3%
Roads	Count	0	14	15	13	0	0	42
	% within Damage Cause	.0%	33.3%	35.7%	31.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	56.0%	27.8%	13.5%	.0%	.0%	18.8%
Mineral Extraction	Count	0	2	1	0	0	0	3
	% within Damage Cause	.0%	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	8.0%	1.9%	.0%	.0%	.0%	1.3%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	2.9%	.0%	.4%
Bulldozing	Count	0	0	1	8	1	1	11
	% within Damage Cause	.0%	.0%	9.1%	72.7%	9.1%	9.1%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	1.9%	8.3%	2.9%	9.1%	4.9%
Water Erosion	Count	0	0	0	7	0	0	7
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	7.3%	.0%	.0%	3.1%
Visitor Erosion	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	2.9%	.0%	.4%
Archaeological Excavation	Count	0	0	3	1	0	0	4
	% within Damage Cause	.0%	.0%	75.0%	25.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	5.6%	1.0%	.0%	.0%	1.8%
Looting	Count	0	0	9	3	0	0	12
	% within Damage Cause	.0%	.0%	75.0%	25.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	16.7%	3.1%	.0%	.0%	5.4%
Dumping Pits	Count	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	5.6%	.0%	.0%	.0%	1.3%
Cuts	Count	0	0	2	6	0	0	8
	% within Damage Cause	.0%	.0%	25.0%	75.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	3.7%	6.3%	.0%	.0%	3.6%
Grave Pits	Count	0	0	1	5	2	1	9
	% within Damage Cause	.0%	.0%	11.1%	55.6%	22.2%	11.1%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	1.9%	5.2%	5.7%	9.1%	4.0%
Pits (Other)	Count	0	0	5	2	0	0	7
	% within Damage Cause	.0%	.0%	71.4%	28.6%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	9.3%	2.1%	.0%	.0%	3.1%
Natural Erosion	Count	0	0	0	2	4	0	6
	% within Damage Cause	.0%	.0%	.0%	33.3%	66.7%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.1%	11.4%	.0%	2.7%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.0%	.0%	.0%	.4%
Unknown	Count	3	0	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Count	3	25	54	96	35	11	224
	% within Damage Cause	1.3%	11.2%	24.1%	42.9%	15.6%	4.9%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-145: HORIZONTAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2009 (UNIT ANALYSIS)

		Horizontal Damage Effect						
		Unknown	Peripheral	Intermittent / fractional	Sectional / partial	Majority / Extensive	Total / wholesale	Total
Development	Count	0	3	10	9	1	1	24
	% within Damage Cause	.0%	12.5%	41.7%	37.5%	4.2%	4.2%	100.0%
	% within Horizontal Damage Effect	.0%	11.5%	17.9%	9.6%	2.5%	7.7%	10.3%
Arable agriculture	Count	0	3	2	22	22	8	57
	% within Damage Cause	.0%	5.3%	3.5%	38.6%	38.6%	14.0%	100.0%
	% within Horizontal Damage Effect	.0%	11.5%	3.6%	23.4%	55.0%	61.5%	24.6%
Orchards	Count	0	3	0	14	6	2	25
	% within Damage Cause	.0%	12.0%	.0%	56.0%	24.0%	8.0%	100.0%
	% within Horizontal Damage Effect	.0%	11.5%	.0%	14.9%	15.0%	15.4%	10.8%
Irrigation Channels	Count	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	5.4%	.0%	.0%	.0%	1.3%
Roads	Count	0	15	19	14	0	0	45
	% within Damage Cause	.0%	33.3%	35.8%	31.1%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	57.7%	28.6%	14.9%	.0%	.0%	19.4%
Mineral Extraction	Count	0	2	1	0	0	0	3
	% within Damage Cause	.0%	66.7%	33.3%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	7.7%	1.8%	.0%	.0%	.0%	1.3%
Military Damage	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	2.5%	.0%	.4%
Bulldozing	Count	0	0	1	8	1	1	11
	% within Damage Cause	.0%	.0%	9.1%	72.7%	9.1%	9.1%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	1.8%	8.5%	2.5%	7.7%	4.7%
Water Erosion	Count	0	0	0	7	0	0	7
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	7.4%	.0%	.0%	3.0%
Visitor Erosion	Count	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	.0%	2.5%	.0%	.4%
Archaeological Excavation	Count	0	0	3	1	0	0	4
	% within Damage Cause	.0%	.0%	75.0%	25.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	5.4%	1.1%	.0%	.0%	1.7%
Looting	Count	0	0	9	4	0	0	13
	% within Damage Cause	.0%	.0%	69.2%	30.8%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	16.1%	4.3%	.0%	.0%	5.6%
Dumping Pits	Count	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	5.4%	.0%	.0%	.0%	1.3%
Cuts	Count	0	0	2	6	0	0	8
	% within Damage Cause	.0%	.0%	25.0%	75.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	3.6%	6.4%	.0%	.0%	3.4%
Grave Pits	Count	0	0	1	4	4	1	10
	% within Damage Cause	.0%	.0%	10.0%	40.0%	40.0%	10.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	1.8%	4.3%	10.0%	7.7%	4.3%
Pits (Other)	Count	0	0	5	2	0	0	7
	% within Damage Cause	.0%	.0%	71.4%	28.6%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	8.9%	2.1%	.0%	.0%	3.0%
Natural Erosion	Count	0	0	0	2	4	0	6
	% within Damage Cause	.0%	.0%	.0%	33.3%	66.7%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	2.1%	10.0%	.0%	2.6%
Railway	Count	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	.0%	.0%	.0%	1.1%	.0%	.0%	.4%
Unknown	Count	3	0	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Horizontal Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Count	3	26	56	94	40	13	232
	% within Damage Cause	1.3%	11.2%	24.1%	40.5%	17.2%	5.6%	100.0%
	% within Horizontal Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-146: VERTICAL EXTENT OF DAMAGE BY CAUSE ON CORONA (AMALGAMATED SITES)

		Vertical Damage Effect								Total
		Unknown	Site buried	Pitted	Site slightly depressed / degraded	Upper levels damaged	Site heavily depressed / degraded	Site destroyed to ground level	Site destroyed	
Development	Count	0	0	0	1	9	1	0	0	10
	% within Damage Cause	.0%	.0%	.0%	10.0%	90.0%	10.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.8%	16.4%	12.5%	.0%	.0%	6.8%
Arable agriculture	Count	0	0	0	4	38	0	0	0	42
	% within Damage Cause	.0%	.0%	.0%	9.5%	90.5%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	11.1%	69.1%	.0%	.0%	.0%	28.8%
Orchards	Count	0	0	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	1.4%
Roads	Count	0	0	0	26	3	0	0	0	29
	% within Damage Cause	.0%	.0%	.0%	89.7%	10.3%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	72.2%	5.5%	.0%	.0%	.0%	19.9%
Mineral Extraction	Count	0	0	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	12.5%	.0%	.0%	.7%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.7%
Building	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	50.0%	.0%	.7%
Water Erosion	Count	0	2	0	1	1	5	0	3	12
	% within Damage Cause	.0%	16.7%	.0%	8.3%	8.3%	41.7%	.0%	25.0%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	2.8%	1.8%	62.5%	.0%	75.0%	8.2%
Archaeological Excavation	Count	0	0	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	1.4%
Grave Pits	Count	0	0	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.8%	.0%	.0%	.0%	.7%
Natural Erosion	Count	0	0	0	4	0	1	0	1	6
	% within Damage Cause	.0%	.0%	.0%	66.7%	.0%	16.7%	.0%	16.7%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	11.1%	.0%	12.5%	.0%	25.0%	4.1%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	50.0%	.0%	.7%
Unknown	Count	38	0	0	0	0	0	0	0	38
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	26.0%
	Count	38	2	1	36	55	8	2	4	146
	% within Damage Cause	26.0%	1.4%	.7%	24.7%	37.7%	5.5%	1.4%	2.7%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-147: VERTICAL EXTENT OF DAMAGE BY CAUSE ON CORONA (UNIT ANALYSIS)

		Vertical Damage Effect								Total
		Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	
Development	Count	0	0	0	1	9	1	0	0	11
	% within Damage Cause	.0%	.0%	.0%	9.1%	81.8%	9.1%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.8%	15.0%	12.5%	.0%	.0%	9.7%
Arable agriculture	Count	0	0	0	4	42	0	0	0	46
	% within Damage Cause	.0%	.0%	.0%	8.7%	91.3%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	10.5%	70.0%	.0%	.0%	.0%	27.9%
Orchards	Count	0	0	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	3.3%	.0%	.0%	.0%	1.2%
Roads	Count	0	0	0	28	3	0	0	0	31
	% within Damage Cause	.0%	.0%	.0%	90.3%	9.7%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	73.7%	5.0%	.0%	.0%	.0%	18.8%
Mineral Extraction	Count	0	0	0	0	0	1	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	12.5%	.0%	.0%	.6%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.6%
Bulldozing	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	50.0%	.0%	.6%
Water Erosion	Count	0	2	0	1	1	5	0	3	12
	% within Damage Cause	.0%	16.7%	.0%	8.3%	8.3%	41.7%	.0%	25.0%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	2.6%	1.7%	62.5%	.0%	75.0%	7.3%
Archaeological Excavation	Count	0	0	0	0	2	0	0	0	2
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	3.3%	.0%	.0%	.0%	1.2%
Grave Pits	Count	0	0	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.7%	.0%	.0%	.0%	.6%
Natural Erosion	Count	0	0	0	4	0	1	0	1	6
	% within Damage Cause	.0%	.0%	.0%	66.7%	.0%	16.7%	.0%	16.7%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	10.5%	.0%	12.5%	.0%	25.0%	3.6%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	50.0%	.0%	.6%
Unknown	Count	50	0	0	0	0	0	0	0	50
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	30.3%
	Count	50	2	1	38	60	8	2	4	165
	% within Damage Cause	30.3%	1.2%	.6%	23.0%	36.4%	4.8%	1.2%	2.4%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-148: VERTICAL EXTENT OF DAMAGE BY CAUSE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

		Vertical Damage Effect								
		Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Development	Count	0	0	0	3	14	2	0	0	19
	% within Damage Cause	.0%	.0%	.0%	15.8%	73.7%	10.5%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	9.1%	14.9%	9.1%	.0%	.0%	11.3%
Arable agriculture	Count	0	0	0	3	38	1	0	0	43
	% within Damage Cause	.0%	.0%	.0%	7.0%	88.7%	2.3%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	9.1%	41.5%	4.5%	.0%	.0%	25.6%
Orchards	Count	0	0	0	0	17	0	0	0	17
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	18.1%	.0%	.0%	.0%	10.1%
Irrigation Channels	Count	0	0	0	0	3	0	2	0	5
	% within Damage Cause	.0%	.0%	.0%	.0%	60.0%	.0%	40.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	3.2%	.0%	28.6%	.0%	3.0%
Roads	Count	0	0	0	21	8	3	1	0	34
	% within Damage Cause	.0%	.0%	.0%	61.8%	23.5%	8.8%	2.9%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	63.6%	8.5%	13.6%	14.3%	.0%	20.2%
Mineral Extraction	Count	0	0	0	0	1	1	0	1	3
	% within Damage Cause	.0%	.0%	.0%	.0%	33.3%	33.3%	.0%	33.3%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.1%	4.5%	.0%	25.0%	1.8%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	.6%
Bulldozing	Count	0	0	0	0	0	2	1	1	4
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	50.0%	25.0%	25.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	9.1%	14.3%	25.0%	2.4%
Water Erosion	Count	0	2	0	1	1	1	0	2	7
	% within Damage Cause	.0%	28.6%	.0%	14.3%	14.3%	14.3%	.0%	28.6%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	3.0%	1.1%	4.5%	.0%	50.0%	4.2%
Archaeological Excavation	Count	0	0	0	0	2	2	0	0	4
	% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	2.1%	9.1%	.0%	.0%	2.4%
Looting	Count	0	0	1	0	1	7	0	0	9
	% within Damage Cause	.0%	.0%	11.1%	.0%	11.1%	77.8%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	1.1%	31.8%	.0%	.0%	5.4%
Dumping Pits	Count	0	0	0	1	0	0	1	0	2
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	.0%	50.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	3.0%	.0%	.0%	14.3%	.0%	1.2%
Cuts	Count	0	0	0	1	0	1	1	0	3
	% within Damage Cause	.0%	.0%	.0%	33.3%	.0%	33.3%	33.3%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	3.0%	.0%	4.5%	14.3%	.0%	1.8%
Grave Pits	Count	0	0	0	0	6	0	0	0	6
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	6.4%	.0%	.0%	.0%	3.6%
Pits (Other)	Count	0	0	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.1%	.0%	.0%	.0%	.6%
Natural Erosion	Count	0	0	0	3	0	2	0	0	5
	% within Damage Cause	.0%	.0%	.0%	60.0%	.0%	40.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	9.1%	.0%	9.1%	.0%	.0%	3.0%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	14.3%	.0%	.6%
Unknown	Count	4	0	0	0	0	0	0	0	4
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.4%
	Count	4	2	2	33	94	22	7	4	168
	% within Damage Cause	2.4%	1.2%	1.2%	19.6%	56.0%	13.1%	4.2%	2.4%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-149: VERTICAL EXTENT OF DAMAGE BY CAUSE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Vertical Damage Effect								
		Unknown	Site buried	Filled	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Development	Count	0	0	0	3	15	2	0	0	20
	% within Damage Cause	.0%	.0%	.0%	15.0%	75.0%	10.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	8.1%	15.6%	8.7%	.0%	.0%	11.4%
Arable agriculture	Count	0	0	0	3	40	1	0	0	44
	% within Damage Cause	.0%	.0%	.0%	6.8%	90.9%	2.3%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	8.1%	41.7%	4.3%	.0%	.0%	25.1%
Orchards	Count	0	0	0	0	17	0	0	0	17
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	17.7%	.0%	.0%	.0%	9.7%
Irrigation Channels	Count	0	0	0	0	3	0	2	0	5
	% within Damage Cause	.0%	.0%	.0%	.0%	60.0%	.0%	40.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	3.1%	.0%	28.6%	.0%	2.9%
Roads	Count	0	0	0	25	8	3	1	0	37
	% within Damage Cause	.0%	.0%	.0%	67.6%	21.6%	8.1%	2.7%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	67.6%	8.3%	13.0%	14.3%	.0%	21.1%
Mineral Extraction	Count	0	0	0	0	1	1	0	1	3
	% within Damage Cause	.0%	.0%	.0%	.0%	33.3%	33.3%	.0%	33.3%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.0%	4.3%	.0%	25.0%	1.7%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	.6%
Bulldozing	Count	0	0	0	0	0	2	1	1	4
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	50.0%	25.0%	25.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	8.7%	14.3%	25.0%	2.3%
Water Erosion	Count	0	2	0	1	1	1	0	2	7
	% within Damage Cause	.0%	28.6%	.0%	14.3%	14.3%	14.3%	.0%	28.6%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	2.7%	1.0%	4.3%	.0%	50.0%	4.0%
Archaeological Excavation	Count	0	0	0	0	2	2	0	0	4
	% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	2.1%	8.7%	.0%	.0%	2.3%
Loading	Count	0	0	1	0	1	8	0	0	10
	% within Damage Cause	.0%	.0%	10.0%	.0%	10.0%	80.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	1.0%	34.8%	.0%	.0%	5.7%
Dumping Pits	Count	0	0	0	1	0	0	1	0	2
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	.0%	50.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.7%	.0%	.0%	14.3%	.0%	1.1%
Cuts	Count	0	0	0	1	0	1	1	0	3
	% within Damage Cause	.0%	.0%	.0%	33.3%	.0%	33.3%	33.3%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.7%	.0%	4.3%	14.3%	.0%	1.7%
Grave Pits	Count	0	0	0	0	7	0	0	0	7
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	7.3%	.0%	.0%	.0%	4.0%
Pits (Other)	Count	0	0	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%	.6%
Natural Erosion	Count	0	0	0	3	0	2	0	0	5
	% within Damage Cause	.0%	.0%	.0%	60.0%	.0%	40.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	8.1%	.0%	8.7%	.0%	.0%	2.9%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	14.3%	.0%	.6%
Unknown	Count	4	0	0	0	0	0	0	0	4
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.3%
	Count	4	2	2	37	96	23	7	4	175
	% within Damage Cause	2.3%	1.1%	1.1%	21.1%	54.9%	13.1%	4.0%	2.3%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-150: VERTICAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (AMALGAMATED SITES)

		Vertical Damage Effect								
		Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Development	Count	0	0	0	3	19	2	0	0	24
	% within Damage Cause	.0%	.0%	.0%	12.5%	79.2%	8.3%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	8.3%	16.4%	6.7%	.0%	.0%	10.9%
Arable agriculture	Count	0	0	0	4	43	4	0	0	51
	% within Damage Cause	.0%	.0%	.0%	7.8%	84.3%	7.8%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	11.1%	37.1%	13.3%	.0%	.0%	23.2%
Orchards	Count	0	0	0	0	22	0	0	0	22
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	19.0%	.0%	.0%	.0%	10.0%
Irrigation Channels	Count	0	0	0	0	3	0	2	0	5
	% within Damage Cause	.0%	.0%	.0%	.0%	60.0%	.0%	40.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	2.6%	.0%	22.2%	.0%	2.3%
Roads	Count	0	0	0	23	12	3	2	0	40
	% within Damage Cause	.0%	.0%	.0%	57.5%	30.0%	7.5%	5.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	63.9%	10.3%	10.0%	22.2%	.0%	18.2%
Mineral Extraction	Count	0	0	0	0	1	1	0	1	3
	% within Damage Cause	.0%	.0%	.0%	.0%	33.3%	33.3%	.0%	33.3%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.9%	3.3%	.0%	16.7%	1.4%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	.5%
Bulldozing	Count	0	0	0	0	0	3	2	1	6
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	50.0%	33.3%	16.7%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	10.0%	22.2%	16.7%	2.7%
Water Erosion	Count	0	2	0	1	1	2	0	2	8
	% within Damage Cause	.0%	25.0%	.0%	12.5%	12.5%	25.0%	.0%	25.0%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	2.8%	.9%	6.7%	.0%	33.3%	3.6%
Archaeological Excavation	Count	0	0	0	0	2	2	0	0	4
	% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.7%	6.7%	.0%	.0%	1.8%
Looting	Count	0	0	1	0	1	9	0	1	12
	% within Damage Cause	.0%	.0%	8.3%	.0%	8.3%	75.0%	.0%	8.3%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	.9%	30.0%	.0%	16.7%	5.5%
Dumping Pits	Count	0	0	0	1	0	0	1	0	2
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	.0%	50.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.8%	.0%	.0%	11.1%	.0%	.9%
Cuts	Count	0	0	0	1	1	1	1	1	5
	% within Damage Cause	.0%	.0%	.0%	20.0%	20.0%	20.0%	20.0%	20.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.8%	.9%	3.3%	11.1%	16.7%	2.3%
Grave Pits	Count	0	0	0	0	10	0	0	0	10
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	8.6%	.0%	.0%	.0%	4.5%
Pits (Other)	Count	0	0	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.5%
Natural Erosion	Count	0	0	0	3	0	3	0	0	6
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	8.3%	.0%	10.0%	.0%	.0%	2.7%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	11.1%	.0%	.5%
Unknown	Count	19	0	0	0	0	0	0	0	19
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	8.6%
	Count	19	2	2	36	116	30	9	6	220
	% within Damage Cause	8.6%	.9%	.9%	16.4%	52.7%	13.6%	4.1%	2.7%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-151: VERTICAL EXTENT OF DAMAGE BY CAUSE ON SPOT 2004 (UNIT ANALYSIS)

		Vertical Damage Effect								
		Unknown	Site buried	Pitted	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Development	Count	0	0	0	3	20	2	0	0	25
	% within Damage Cause	.0%	.0%	.0%	12.0%	80.0%	8.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	7.9%	15.6%	6.5%	.0%	.0%	10.6%
Arable agriculture	Count	0	0	0	4	47	4	0	0	55
	% within Damage Cause	.0%	.0%	.0%	7.3%	85.5%	7.3%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	10.5%	36.7%	12.9%	.0%	.0%	23.3%
Orchards	Count	0	0	0	0	24	0	0	0	24
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	18.8%	.0%	.0%	.0%	10.2%
Irrigation Channels	Count	0	0	0	0	3	0	2	0	5
	% within Damage Cause	.0%	.0%	.0%	.0%	60.0%	.0%	40.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	2.3%	.0%	22.2%	.0%	2.1%
Roads	Count	0	0	0	25	18	3	2	0	48
	% within Damage Cause	.0%	.0%	.0%	54.3%	34.8%	6.5%	4.3%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	65.8%	12.5%	9.7%	22.2%	.0%	19.5%
Mineral Extraction	Count	0	0	0	0	1	1	0	1	3
	% within Damage Cause	.0%	.0%	.0%	.0%	33.3%	33.3%	.0%	33.3%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.8%	3.2%	.0%	16.7%	1.3%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	.0%	.0%	.0%	.0%	.4%
Bulldozing	Count	0	0	0	0	0	3	2	1	6
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	50.0%	33.3%	16.7%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	9.7%	22.2%	16.7%	2.5%
Water Erosion	Count	0	2	0	1	1	2	0	2	8
	% within Damage Cause	.0%	25.0%	.0%	12.5%	12.5%	25.0%	.0%	25.0%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	2.6%	.8%	6.5%	.0%	33.3%	3.4%
Archaeological Excavation	**Count**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**4**
	% within Damage Cause	**.0%**	**.0%**	**.0%**	**.0%**	**50.0%**	**50.0%**	**.0%**	**.0%**	**100.0%**
	% within Vertical Damage Effect	**.0%**	**.0%**	**.0%**	**.0%**	**1.6%**	**6.5%**	**.0%**	**.0%**	**1.7%**
Looting	**Count**	**0**	**0**	**1**	**0**	**1**	**10**	**0**	**1**	**13**
	% within Damage Cause	.0%	.0%	7.7%	.0%	7.7%	76.9%	.0%	7.7%	100.0%
	% within Vertical Damage Effect	.0%	.0%	50.0%	.0%	.8%	32.3%	.0%	16.7%	5.5%
Dumping Pits	Count	0	0	0	1	0	0	1	0	2
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	.0%	50.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.6%	.0%	.0%	11.1%	.0%	.9%
Cuts	Count	0	0	0	1	1	1	1	1	5
	% within Damage Cause	.0%	.0%	.0%	20.0%	20.0%	20.0%	20.0%	20.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.6%	.8%	3.2%	11.1%	16.7%	2.1%
Grave Pits	Count	0	0	0	0	11	0	0	0	11
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	8.6%	.0%	.0%	.0%	4.7%
Pits (Other)	Count	0	0	0	0	1	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.4%
Natural Erosion	Count	0	0	0	3	0	3	0	0	6
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	7.9%	.0%	9.7%	.0%	.0%	2.5%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	11.1%	.0%	.4%
Unknown	Count	20	0	0	0	0	0	0	0	20
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	8.5%
	Count	20	2	2	38	128	31	9	6	236
	% within Damage Cause	8.5%	.8%	.8%	16.1%	54.2%	13.1%	3.8%	2.5%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-152: VERTICAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2009 (AMALGAMATED SITES)

		Vertical Damage Effect								
		Unknown	Site buried	Filled	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Development	Count	0	0	0	3	18	4	0	0	23
	% within Damage Cause	.0%	.0%	.0%	13.0%	66.8%	17.4%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	7.5%	13.0%	11.4%	.0%	.0%	10.3%
Arable agriculture	Count	0	0	0	5	47	3	0	0	55
	% within Damage Cause	.0%	.0%	.0%	9.1%	85.5%	5.5%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	12.5%	33.2%	8.6%	.0%	.0%	24.6%
Orchards	Count	0	0	0	0	25	0	0	0	25
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	20.3%	.0%	.0%	.0%	11.2%
Irrigation Channels	Count	0	0	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	2.4%	.0%	.0%	.0%	1.3%
Roads	Count	0	0	0	24	13	3	2	0	42
	% within Damage Cause	.0%	.0%	.0%	57.1%	31.0%	7.1%	4.8%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	60.0%	10.6%	8.6%	15.4%	.0%	18.8%
Mineral Extraction	Count	0	0	0	0	1	1	0	1	3
	% within Damage Cause	.0%	.0%	.0%	.0%	33.3%	33.3%	.0%	33.3%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.8%	2.9%	.0%	25.0%	1.3%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	.0%	.0%	.0%	.0%	.0%	.4%
Bulldozing	Count	0	0	0	0	0	3	7	1	11
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	27.3%	63.6%	9.1%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	8.6%	53.8%	25.0%	4.9%
Water Erosion	Count	0	2	0	0	1	2	0	2	7
	% within Damage Cause	.0%	28.6%	.0%	.0%	14.3%	28.6%	.0%	28.6%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	.0%	.8%	5.7%	.0%	50.0%	3.1%
Visitor Erosion	Count	0	0	0	1	0	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.5%	.0%	.0%	.0%	.0%	.4%
Archaeological Excavation	Count	0	0	0	0	2	2	0	0	4
	% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.6%	5.7%	.0%	.0%	1.8%
Looting	Count	0	0	1	1	3	6	1	0	12
	% within Damage Cause	.0%	.0%	8.3%	8.3%	25.0%	50.0%	8.3%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	2.5%	2.4%	17.1%	7.7%	.0%	5.4%
Dumping Pits	Count	0	0	0	1	0	1	1	0	3
	% within Damage Cause	.0%	.0%	.0%	33.3%	.0%	33.3%	33.3%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.5%	.0%	2.9%	7.7%	.0%	1.3%
Cuts	Count	0	0	0	1	1	5	1	0	8
	% within Damage Cause	.0%	.0%	.0%	12.5%	12.5%	62.5%	12.5%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.5%	.0%	14.3%	7.7%	.0%	3.6%
Grave Pits	Count	0	0	1	0	8	0	0	0	9
	% within Damage Cause	.0%	.0%	11.1%	.0%	88.9%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	.0%	6.5%	.0%	.0%	.0%	4.0%
Pits (Other)	Count	0	0	1	1	3	2	0	0	7
	% within Damage Cause	.0%	.0%	14.3%	14.3%	42.8%	28.6%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	2.5%	2.4%	5.7%	.0%	.0%	3.1%
Natural Erosion	Count	0	0	0	3	0	3	0	0	6
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	7.5%	.0%	8.6%	.0%	.0%	2.7%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	7.7%	.0%	.4%
Unknown	Count	3	0	0	0	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Count	3	2	4	40	123	35	13	4	224
	% within Damage Cause	1.3%	.9%	1.8%	17.9%	54.9%	15.6%	5.8%	1.8%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-153: VERTICAL EXTENT OF DAMAGE BY CAUSE ON GEOEYE 2009 (UNIT ANALYSIS)

		Vertical Damage Effect								
		Unknown	Site buried	Filled	Site slightly dispersed / degraded	Upper levels damaged	Site heavily dispersed / degraded	Site destroyed to ground level	Site destroyed	Total
Development	Count	0	0	0	3	17	4	0	0	24
	% within Damage Cause	.0%	.0%	.0%	12.5%	70.8%	16.7%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	7.0%	13.4%	11.1%	.0%	.0%	10.3%
Arable agriculture	Count	0	0	0	5	48	3	0	0	57
	% within Damage Cause	.0%	.0%	.0%	10.5%	84.2%	5.3%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	14.0%	37.8%	8.3%	.0%	.0%	24.5%
Orchards	Count	0	0	0	0	25	0	0	0	25
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	19.7%	.0%	.0%	.0%	10.8%
Irrigation Channels	Count	0	0	0	0	3	0	0	0	3
	% within Damage Cause	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	2.4%	.0%	.0%	.0%	1.3%
Roads	Count	0	0	0	20	14	3	2	0	40
	% within Damage Cause	.0%	.0%	.0%	57.8%	31.1%	8.7%	4.4%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	30.5%	11.0%	8.3%	15.4%	.0%	12.4%
Mineral Extraction	Count	0	0	0	0	1	1	0	1	3
	% within Damage Cause	.0%	.0%	.0%	.0%	33.3%	33.3%	.0%	33.3%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.8%	2.8%	.0%	25.0%	1.3%
Military Damage	Count	0	0	1	0	0	0	0	0	1
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	.0%	.0%	.0%	.0%	.0%	.4%
Bulldozing	Count	0	0	0	0	0	3	7	1	11
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	27.3%	63.6%	9.1%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	8.3%	53.8%	25.0%	4.7%
Water Erosion	Count	0	2	0	0	1	2	0	2	7
	% within Damage Cause	.0%	28.6%	.0%	.0%	14.3%	28.6%	.0%	28.6%	100.0%
	% within Vertical Damage Effect	.0%	100.0%	.0%	.0%	.8%	5.6%	.0%	50.0%	3.0%
Water Erosion	Count	0	0	0	1	0	0	0	0	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.3%	.0%	.0%	.0%	.0%	.4%
Archaeological Excavation	Count	0	0	0	0	2	2	0	0	4
	% within Damage Cause	.0%	.0%	.0%	.0%	50.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	1.6%	5.6%	.0%	.0%	1.7%
Looting	Count	0	0	1	1	3	7	1	0	13
	% within Damage Cause	.0%	.0%	7.7%	7.7%	23.1%	53.8%	7.7%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	2.3%	2.4%	19.4%	7.7%	.0%	5.6%
Dumping Pits	Count	0	0	0	1	0	1	1	0	3
	% within Damage Cause	.0%	.0%	.0%	33.3%	.0%	33.3%	33.3%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.3%	.0%	2.8%	7.7%	.0%	1.3%
Cuts	Count	0	0	0	1	1	5	1	0	8
	% within Damage Cause	.0%	.0%	.0%	12.5%	12.5%	62.5%	12.5%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	2.3%	.8%	13.9%	7.7%	.0%	3.4%
Grave Pits	Count	0	0	1	0	9	0	0	0	10
	% within Damage Cause	.0%	.0%	10.0%	.0%	90.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	.0%	7.1%	.0%	.0%	.0%	4.3%
Pits (Other)	Count	0	0	1	1	3	2	0	0	7
	% within Damage Cause	.0%	.0%	14.3%	14.3%	42.9%	28.6%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	25.0%	2.3%	2.4%	5.6%	.0%	.0%	3.0%
Natural Erosion	Count	0	0	0	3	0	3	0	0	6
	% within Damage Cause	.0%	.0%	.0%	50.0%	.0%	50.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	7.0%	.0%	8.3%	.0%	.0%	2.6%
Railway	Count	0	0	0	0	0	0	1	0	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
	% within Vertical Damage Effect	.0%	.0%	.0%	.0%	.0%	.0%	7.7%	.0%	.4%
Unknown	Count	3	0	0	0	0	0	0	0	3
	% within Damage Cause	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	% within Vertical Damage Effect	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%
	Count	3	2	4	43	127	36	13	4	232
	% within Damage Cause	1.3%	.9%	1.7%	18.5%	54.7%	15.5%	5.6%	1.7%	100.0%
	% within Vertical Damage Effect	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

8.8 - DAMAGE LEVELS AND SITE STABILITY

TABLE H-154: DAMAGE INCREASE BY IMAGERY TYPE (AMALGAMATED SITES)

			Imagery			Total
			DigitalGlobe	SPOT	Geoeye	
Damage increasing?	Unknown	Count	3	5	5	13
		% within Imagery	1.8%	2.3%	2.2%	2.1%
	No increase visible	Count	49	117	87	253
		% within Imagery	29.2%	53.2%	38.8%	41.3%
	Increase since / between Corona	Count	31	61	40	132
		% within Imagery	18.5%	27.7%	17.9%	21.6%
	Increase since/ between field visits	Count	0	0	3	3
		% within Imagery	.0%	.0%	1.3%	.5%
	Increase since / between DigitalGlobe 2003 / 2008	Count	1	4	40	45
		% within Imagery	.6%	1.8%	17.9%	7.4%
	Increase since SPOT 2004	Count	0	0	3	3
		% within Imagery	.0%	.0%	1.3%	.5%
	Increase since DigitalGlobe 2008	Count	0	0	1	1
		% within Imagery	.0%	.0%	.4%	.2%
	Damage lessening	Count	1	0	3	4
		% within Imagery	.6%	.0%	1.3%	.7%
	New	Count	83	33	42	158
		% within Imagery	49.4%	15.0%	18.8%	25.8%
Total		Count	168	220	224	612
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE H-155: DAMAGE INCREASE BY IMAGERY TYPE (UNIT ANALYSIS)

			Imagery			Total
			DigitalGlobe	SPOT	Geoeye	
Damage Increasing?	Unknown	Count	2	6	4	12
		% within Imagery	1.1%	2.5%	1.7%	1.9%
	No increase visible	Count	56	122	89	267
		% within Imagery	32.0%	51.7%	38.4%	41.5%
	Increase since / between Corona	Count	29	60	40	129
		% within Imagery	16.6%	25.4%	17.2%	20.1%
	Increase since/ between field visits	Count	0	0	3	3
		% within Imagery	.0%	.0%	1.3%	.5%
	Increase since / between DigitalGlobe 2003 / 2008	Count	1	6	46	53
		% within Imagery	.6%	2.5%	19.8%	8.2%
	Increase since SPOT 2004	Count	0	0	4	4
		% within Imagery	.0%	.0%	1.7%	.6%
	Increase since DigitalGlobe 2008	Count	0	0	1	1
		% within Imagery	.0%	.0%	.4%	.2%
	Damage lessening	Count	1	0	3	4
		% within Imagery	.6%	.0%	1.3%	.6%
	New	Count	86	42	42	170
		% within Imagery	49.1%	17.8%	18.1%	26.4%
Total		Count	175	236	232	643
		% within Imagery	100.0%	100.0%	100.0%	100.0%

TABLE H-156: DAMAGE INCREASE BY CAUSE ON DIGITALGLOBE 2003 (AMALGAMATED SITES)

		Damage increasing?						Total
		Unknown	No increase visible	Increase since / between Corona	Increase since / between DigitalGlobe 2003 / 2008	Damage lessening	New	
Development	Count	0	2	5	0	0	12	19
	% within Damage Cause	.0%	10.5%	26.3%	.0%	.0%	63.2%	100.0%
Arable agriculture	Count	1	17	14	1	0	10	43
	% within Damage Cause	2.3%	39.5%	32.6%	2.3%	.0%	23.3%	100.0%
Orchards	Count	0	0	2	0	0	15	17
	% within Damage Cause	.0%	.0%	11.8%	.0%	.0%	88.2%	100.0%
Irrigation Channels	Count	0	0	0	0	0	5	5
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Roads	Count	0	12	10	0	1	11	34
	% within Damage Cause	.0%	35.3%	29.4%	.0%	2.9%	32.4%	100.0%
Mineral Extraction	Count	0	1	0	0	0	2	3
	% within Damage Cause	.0%	33.3%	.0%	.0%	.0%	66.7%	100.0%
Military Damage	Count	0	1	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
Bulldozing	Count	0	0	0	0	0	4	4
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Water Erosion	Count	2	5	0	0	0	0	7
	% within Damage Cause	28.6%	71.4%	.0%	.0%	.0%	.0%	100.0%
Archaeological Excavation	Count	0	2	0	0	0	2	4
	% within Damage Cause	.0%	50.0%	.0%	.0%	.0%	50.0%	100.0%
Looting	Count	0	0	0	0	0	9	9
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Dumping Pits	Count	0	0	0	0	0	2	2
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Cuts	Count	0	0	0	0	0	3	3
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Grave Pits	Count	0	1	0	0	0	5	6
	% within Damage Cause	.0%	16.7%	.0%	.0%	.0%	83.3%	100.0%
Pits (Other)	Count	0	0	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Natural Erosion	Count	0	3	0	0	0	2	5
	% within Damage Cause	.0%	60.0%	.0%	.0%	.0%	40.0%	100.0%
Railway	Count	0	1	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
Unknown	Count	0	4	0	0	0	0	4
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
	Count	3	48	31	1	1	93	180
	% within Damage Cause	1.8%	29.2%	19.5%	.6%	.6%	49.4%	100.0%

TABLE H-157: DAMAGE INCREASE BY CAUSE ON DIGITALGLOBE 2003 (UNIT ANALYSIS)

		Damage Increasing?						Total
		Unknown	No increase visible	Increase since / between Corona	Increase since / between DigitalGlobe 2003 / 2008	Damage lessening	New	
Development	Count	0	3	5	0	0	12	20
	% within Damage Cause	.0%	15.0%	25.0%	.0%	.0%	60.0%	100.0%
Arable agriculture	Count	0	20	13	1	0	10	44
	% within Damage Cause	.0%	45.5%	29.5%	2.3%	.0%	22.7%	100.0%
Orchards	Count	0	0	2	0	0	15	17
	% within Damage Cause	.0%	.0%	11.8%	.0%	.0%	88.2%	100.0%
Irrigation Channels	Count	0	0	0	0	0	5	5
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Roads	Count	0	15	9	0	1	12	37
	% within Damage Cause	.0%	40.5%	24.3%	.0%	2.7%	32.4%	100.0%
Mineral Extraction	Count	0	1	0	0	0	2	3
	% within Damage Cause	.0%	33.3%	.0%	.0%	.0%	66.7%	100.0%
Military Damage	Count	0	1	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
Bulldozing	Count	0	0	0	0	0	4	4
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Water Erosion	Count	2	5	0	0	0	0	7
	% within Damage Cause	28.6%	71.4%	.0%	.0%	.0%	.0%	100.0%
Archaeological Excavation	Count	0	2	0	0	0	2	4
	% within Damage Cause	.0%	50.0%	.0%	.0%	.0%	50.0%	100.0%
Looting	Count	0	0	0	0	0	10	10
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Dumping Pits	Count	0	0	0	0	0	2	2
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Cuts	Count	0	0	0	0	0	3	3
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Grave Pits	Count	0	1	0	0	0	6	7
	% within Damage Cause	.0%	14.3%	.0%	.0%	.0%	85.7%	100.0%
Pits (Other)	Count	0	0	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Natural Erosion	Count	0	3	0	0	0	2	5
	% within Damage Cause	.0%	60.0%	.0%	.0%	.0%	40.0%	100.0%
Railway	Count	0	1	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
Unknown	Count	0	4	0	0	0	0	4
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
	Count	2	56	29	1	1	86	175
	% within Damage Cause	1.1%	32.0%	16.6%	.6%	.6%	49.1%	100.0%

TABLE H-158: DAMAGE INCREASE BY CAUSE ON SPOT 2004 (AMALGAMATED SITES)

		Damage increasing?					
		Unknown	No increase visible	Increase since / between Corona	Increase since / between DigitalGlobe 2003 / 2008	New	Total
Development	Count	0	7	14	1	2	24
	% within Damage Cause	.0%	29.2%	58.3%	4.2%	8.3%	100.0%
Arable agriculture	Count	0	28	14	1	8	51
	% within Damage Cause	.0%	54.9%	27.5%	2.0%	15.7%	100.0%
Orchards	Count	0	7	9	0	6	22
	% within Damage Cause	.0%	31.8%	40.9%	.0%	27.3%	100.0%
Irrigation Channels	Count	0	0	6	0	0	6
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
Roads	Count	0	23	12	2	3	40
	% within Damage Cause	.0%	57.5%	30.0%	5.0%	7.5%	100.0%
Mineral Extraction	Count	1	2	0	0	0	3
	% within Damage Cause	33.3%	66.7%	.0%	.0%	.0%	100.0%
Military Damage	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
Bulldozing	Count	1	1	3	0	1	6
	% within Damage Cause	16.7%	16.7%	50.0%	.0%	16.7%	100.0%
Water Erosion	Count	2	6	0	0	0	8
	% within Damage Cause	25.0%	75.0%	.0%	.0%	.0%	100.0%
Archaeological Excavation	Count	0	2	2	0	0	4
	% within Damage Cause	.0%	50.0%	50.0%	.0%	.0%	100.0%
Looting	Count	1	8	0	0	3	12
	% within Damage Cause	8.3%	66.7%	.0%	.0%	25.0%	100.0%
Dumping Pits	Count	0	0	2	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
Cuts	Count	0	3	0	0	2	5
	% within Damage Cause	.0%	60.0%	.0%	.0%	40.0%	100.0%
Grave Pits	Count	0	6	0	0	4	10
	% within Damage Cause	.0%	60.0%	.0%	.0%	40.0%	100.0%
Pits (Other)	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
Natural Erosion	Count	0	5	0	0	1	6
	% within Damage Cause	.0%	83.3%	.0%	.0%	16.7%	100.0%
Railway	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
Unknown	Count	0	16	0	0	3	19
	% within Damage Cause	.0%	84.2%	.0%	.0%	15.8%	100.0%
	Count	5	117	61	4	33	220
	% within Damage Cause	2.3%	53.2%	27.7%	1.8%	15.0%	100.0%

TABLE H-159: DAMAGE INCREASE BY CAUSE ON SPOT 2004 (UNIT ANALYSIS)

		Damage Increasing?					
		Unknown	No increase visible	Increase since / between Corona	Increase since / between DigitalGlobe 2003 / 2008	New	Total
Development	Count	0	8	14	1	2	25
	% within Damage Cause	.0%	32.0%	56.0%	4.0%	8.0%	100.0%
Arable agriculture	Count	0	30	13	1	11	55
	% within Damage Cause	.0%	54.5%	23.6%	1.8%	20.0%	100.0%
Orchards	Count	0	7	9	0	8	24
	% within Damage Cause	.0%	29.2%	37.5%	.0%	33.3%	100.0%
Irrigation Channels	Count	0	0	5	0	0	5
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
Roads	Count	0	24	12	4	6	46
	% within Damage Cause	.0%	52.2%	26.1%	8.7%	13.0%	100.0%
Mineral Extraction	Count	1	2	0	0	0	3
	% within Damage Cause	33.3%	66.7%	.0%	.0%	.0%	100.0%
Military Damage	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
Bulldozing	Count	1	1	3	0	1	6
	% within Damage Cause	16.7%	16.7%	50.0%	.0%	16.7%	100.0%
Water Erosion	Count	2	6	0	0	0	8
	% within Damage Cause	25.0%	75.0%	.0%	.0%	.0%	100.0%
Archaeological Excavation	Count	0	2	2	0	0	4
	% within Damage Cause	.0%	50.0%	50.0%	.0%	.0%	100.0%
Looting	Count	1	9	0	0	3	13
	% within Damage Cause	7.7%	69.2%	.0%	.0%	23.1%	100.0%
Dumping Pits	Count	0	0	2	0	0	2
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	100.0%
Cuts	Count	0	3	0	0	2	5
	% within Damage Cause	.0%	60.0%	.0%	.0%	40.0%	100.0%
Grave Pits	Count	1	6	0	0	4	11
	% within Damage Cause	9.1%	54.5%	.0%	.0%	36.4%	100.0%
Pits (Other)	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
Natural Erosion	Count	0	5	0	0	1	6
	% within Damage Cause	.0%	83.3%	.0%	.0%	16.7%	100.0%
Railway	Count	0	1	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	100.0%
Unknown	Count	0	16	0	0	4	20
	% within Damage Cause	.0%	80.0%	.0%	.0%	20.0%	100.0%
	Count	6	122	60	6	42	236
	% within Damage Cause	2.5%	51.7%	25.4%	2.5%	17.8%	100.0%

TABLE H-160: DAMAGE INCREASE BY CAUSE ON GEOEYE 2009 (AMALGAMATED SITES)

		Damage Increasing?									
		Unknown	No increase visible	Increase since / between Corona	Increase since/ between field visits	Increase since / between DigitalGlobe 2003 / 2009	Increase since SPOT 2004	Increase since DigitalGlobe 2008	Damage lessening	New	Total
Development	Count	0	2	9	0	10	1	0	2	2	23
	% within Damage Cause	.0%	8.7%	39.1%	.0%	43.5%	4.3%	.0%	8.7%	8.7%	100.0%
Arable agriculture	Count	1	29	9	0	9	1	1	0	5	55
	% within Damage Cause	1.8%	52.7%	16.4%	.0%	16.4%	1.8%	1.8%	.0%	9.1%	100.0%
Orchards	Count	0	5	6	2	4	1	0	0	7	25
	% within Damage Cause	.0%	20.0%	24.0%	8.0%	16.0%	4.0%	.0%	.0%	28.0%	100.0%
Irrigation Channels	Count	0	0	3	0	0	0	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Roads	Count	0	21	10	0	6	0	0	1	4	42
	% within Damage Cause	.0%	50.0%	23.8%	.0%	14.3%	.0%	.0%	2.4%	9.5%	100.0%
Mineral Extraction	Count	1	1	0	0	1	0	0	0	0	3
	% within Damage Cause	33.3%	33.3%	.0%	.0%	33.3%	.0%	.0%	.0%	.0%	100.0%
Military Damage	Count	0	1	0	0	0	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Bulldozing	Count	0	1	2	0	2	0	0	0	6	11
	% within Damage Cause	.0%	9.1%	18.2%	.0%	18.2%	.0%	.0%	.0%	54.5%	100.0%
Water Erosion	Count	2	5	0	0	0	0	0	0	0	7
	% within Damage Cause	28.6%	71.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Visitor Erosion	Count	0	0	0	0	0	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Archaeological Excavation	Count	0	2	2	0	0	0	0	0	0	4
	% within Damage Cause	.0%	50.0%	50.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Looting	Count	0	3	0	1	5	0	0	0	3	12
	% within Damage Cause	.0%	25.0%	.0%	8.3%	41.7%	.0%	.0%	.0%	25.0%	100.0%
Dumping Pits	Count	0	1	1	0	0	0	0	0	1	3
	% within Damage Cause	.0%	33.3%	33.3%	.0%	.0%	.0%	.0%	.0%	33.3%	100.0%
Cuts	Count	0	2	0	0	1	0	0	0	5	8
	% within Damage Cause	.0%	25.0%	.0%	.0%	12.5%	.0%	.0%	.0%	62.5%	100.0%
Grave Pits	Count	1	5	1	0	1	0	0	0	1	9
	% within Damage Cause	11.1%	55.6%	11.1%	.0%	11.1%	.0%	.0%	.0%	11.1%	100.0%
Pits (Other)	Count	0	0	0	0	1	0	0	0	6	7
	% within Damage Cause	.0%	.0%	.0%	.0%	14.3%	.0%	.0%	.0%	85.7%	100.0%
Natural Erosion	Count	0	5	0	0	0	0	0	0	1	6
	% within Damage Cause	.0%	83.3%	.0%	.0%	.0%	.0%	.0%	.0%	16.7%	100.0%
Railway	Count	0	1	0	0	0	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Unknown	Count	0	3	0	0	0	0	0	0	0	3
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	Count	5	87	49	3	48	3	1	3	42	224
	% within Damage Cause	2.2%	38.8%	17.8%	1.3%	17.8%	1.3%	.4%	1.3%	18.8%	100.0%

TABLE H-161: DAMAGE INCREASE BY CAUSE ON GEOEYE 2009 (UNIT ANALYSIS)

		Damage Increasing?									
		Unknown	No increase visible	Increase since / between Corona	Increase since/ between field visits	Increase since / between DigitalGlobe 2003 / 2009	Increase since SPOT 2004	Increase since DigitalGlobe 2009	Damage lessening	New	Total
Development	Count	0	2	7	0	10	1	0	2	2	24
	% within Damage Cause	.0%	8.3%	29.2%	.0%	41.7%	4.2%	.0%	8.3%	8.3%	100.0%
Arable agriculture	Count	0	30	7	0	12	2	1	0	5	57
	% within Damage Cause	.0%	52.6%	12.3%	.0%	21.1%	3.5%	1.8%	.0%	8.8%	100.0%
Orchards	Count	0	5	8	2	4	1	0	0	7	25
	% within Damage Cause	.0%	20.0%	24.0%	8.0%	16.0%	4.0%	.0%	.0%	28.0%	100.0%
Irrigation Channels	Count	0	0	3	0	0	0	0	0	0	3
	% within Damage Cause	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Roads	Count	0	22	10	0	8	0	0	1	4	45
	% within Damage Cause	.0%	48.9%	22.2%	.0%	17.8%	.0%	.0%	2.2%	8.9%	100.0%
Mineral Extraction	Count	1	1	1	0	0	0	0	0	0	3
	% within Damage Cause	33.3%	33.3%	33.3%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Military Damage	Count	0	1	0	0	0	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Bulldozing	Count	0	1	2	0	2	0	0	0	6	11
	% within Damage Cause	.0%	9.1%	18.2%	.0%	18.2%	.0%	.0%	.0%	54.5%	100.0%
Water Erosion	Count	2	5	0	0	0	0	0	0	0	7
	% within Damage Cause	28.6%	71.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Visitor Erosion	Count	0	0	0	0	0	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
Archaeological Excavation	Count	0	2	2	0	0	0	0	0	0	4
	% within Damage Cause	.0%	50.0%	50.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Looting	Count	0	3	0	1	6	0	0	0	3	13
	% within Damage Cause	.0%	23.1%	.0%	7.7%	46.2%	.0%	.0%	.0%	23.1%	100.0%
Dumping Pits	Count	0	1	1	0	0	0	0	0	1	3
	% within Damage Cause	.0%	33.3%	33.3%	.0%	.0%	.0%	.0%	.0%	33.3%	100.0%
Cuts	Count	0	2	0	0	1	0	0	0	5	8
	% within Damage Cause	.0%	25.0%	.0%	.0%	12.5%	.0%	.0%	.0%	62.5%	100.0%
Grave Pits	Count	1	5	1	0	2	0	0	0	1	10
	% within Damage Cause	10.0%	50.0%	10.0%	.0%	20.0%	.0%	.0%	.0%	10.0%	100.0%
Pits (Other)	Count	0	0	0	0	1	0	0	0	6	7
	% within Damage Cause	.0%	.0%	.0%	.0%	14.3%	.0%	.0%	.0%	85.7%	100.0%
Natural Erosion	Count	0	5	0	0	0	0	0	0	1	6
	% within Damage Cause	.0%	83.3%	.0%	.0%	.0%	.0%	.0%	.0%	16.7%	100.0%
Railway	Count	0	1	0	0	0	0	0	0	0	1
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
Unknown	Count	0	3	0	0	0	0	0	0	0	3
	% within Damage Cause	.0%	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	Count	4	89	40	3	48	4	1	3	42	232
	% within Damage Cause	1.7%	38.4%	17.2%	1.3%	19.8%	1.7%	.4%	1.3%	18.1%	100.0%

8.9.2 - CASE STUDY: OUTER TOWNS

TABLE H-162: NUMBER OF DAMAGE THREATS IDENTIFIED ON OUTER TOWNS

		Corona	DigitalGlobe 2003	SPOT 2004	Geoeye 2009
No. of damage threats	Outer Towns	17	25	25	26
	Flat Sites	46	54	74	68
Average no. of threats per site	Outer Towns	3.40	5.00	5.00	5.20
	Flat Sites	1.39	1.64	2.24	2.06

TABLE H-163: DAMAGE CAUSES BY IMAGERY ON OUTER TOWNS (AMALGAMATED SITES)

		Imagery				
		Corona	DigitalGlobe	SPOT	Geoeye	Total
Development	Count	2	3	3	3	11
	% within Damage Cause	18.2%	27.3%	27.3%	27.3%	100.0%
	% within Imagery	11.8%	12.0%	12.0%	11.5%	11.8%
Arable agriculture	Count	4	5	4	5	18
	% within Damage Cause	22.2%	27.8%	22.2%	27.8%	100.0%
	% within Imagery	23.5%	20.0%	16.0%	19.2%	19.4%
Orchards	Count	0	2	2	3	7
	% within Damage Cause	.0%	28.6%	28.6%	42.9%	100.0%
	% within Imagery	.0%	8.0%	8.0%	11.5%	7.5%
Irrigation Channels	Count	0	2	2	1	5
	% within Damage Cause	.0%	40.0%	40.0%	20.0%	100.0%
	% within Imagery	.0%	8.0%	8.0%	3.8%	5.4%
Roads	Count	4	4	4	4	16
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	23.5%	16.0%	16.0%	15.4%	17.2%
Mineral Extraction	Count	0	1	1	1	3
	% within Damage Cause	.0%	33.3%	33.3%	33.3%	100.0%
	% within Imagery	.0%	4.0%	4.0%	3.8%	3.2%
Bulldozing	Count	0	1	1	2	4
	% within Damage Cause	.0%	25.0%	25.0%	50.0%	100.0%
	% within Imagery	.0%	4.0%	4.0%	7.7%	4.3%
Water Erosion	Count	3	3	3	2	11
	% within Damage Cause	27.3%	27.3%	27.3%	18.2%	100.0%
	% within Imagery	17.6%	12.0%	12.0%	7.7%	11.8%
Archaeological Excavation	Count	1	1	1	1	4
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	5.9%	4.0%	4.0%	3.8%	4.3%
Looting	Count	0	1	1	1	3
	% within Damage Cause	.0%	33.3%	33.3%	33.3%	100.0%
	% within Imagery	.0%	4.0%	4.0%	3.8%	3.2%
Grave Pits	Count	0	1	1	1	3
	% within Damage Cause	.0%	33.3%	33.3%	33.3%	100.0%
	% within Imagery	.0%	4.0%	4.0%	3.8%	3.2%
Pits (Other)	Count	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	100.0%
	% within Imagery	.0%	.0%	.0%	3.8%	1.1%
Railway	Count	1	1	1	1	4
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	5.9%	4.0%	4.0%	3.8%	4.3%
Unknown	Count	2	0	1	0	3
	% within Damage Cause	66.7%	.0%	33.3%	.0%	100.0%
	% within Imagery	11.8%	.0%	4.0%	.0%	3.2%
	Count	17	25	25	26	93
	% within Damage Cause	18.3%	26.9%	26.9%	28.0%	100.0%
	% within Imagery	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-164: DAMAGE CAUSES BY IMAGERY ON FLAT SITES (AMALGAMATED SITES)

		Imagery				Total
		Corona	DigitalGlobe	SPOT	Geoeye	
Development	Count	1	6	7	7	21
	% within Damage Cause	4.8%	28.6%	33.3%	33.3%	100.0%
	% within Imagery	2.2%	11.1%	9.5%	10.3%	8.7%
Arable agriculture	Count	19	16	22	19	76
	% within Damage Cause	25.0%	21.1%	28.9%	25.0%	100.0%
	% within Imagery	41.3%	29.6%	29.7%	27.9%	31.4%
Orchards	Count	1	10	13	12	36
	% within Damage Cause	2.8%	27.8%	36.1%	33.3%	100.0%
	% within Imagery	2.2%	18.5%	17.6%	17.6%	14.9%
Roads	Count	6	12	13	13	44
	% within Damage Cause	13.6%	27.3%	29.5%	29.5%	100.0%
	% within Imagery	13.0%	22.2%	17.6%	19.1%	18.2%
Mineral Extraction	Count	1	1	1	1	4
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	2.2%	1.9%	1.4%	1.5%	1.7%
Bulldozing	Count	1	0	1	3	5
	% within Damage Cause	20.0%	.0%	20.0%	60.0%	100.0%
	% within Imagery	2.2%	.0%	1.4%	4.4%	2.1%
Water Erosion	Count	3	2	2	2	9
	% within Damage Cause	33.3%	22.2%	22.2%	22.2%	100.0%
	% within Imagery	6.5%	3.7%	2.7%	2.9%	3.7%
Visitor Erosion	Count	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	100.0%
	% within Imagery	.0%	.0%	.0%	1.5%	.4%
Looting	Count	0	2	3	2	7
	% within Damage Cause	.0%	28.6%	42.9%	28.6%	100.0%
	% within Imagery	.0%	3.7%	4.1%	2.9%	2.9%
Cuts	Count	0	0	1	2	3
	% within Damage Cause	.0%	.0%	33.3%	66.7%	100.0%
	% within Imagery	.0%	.0%	1.4%	2.9%	1.2%
Grave Pits	Count	1	3	3	3	10
	% within Damage Cause	10.0%	30.0%	30.0%	30.0%	100.0%
	% within Imagery	2.2%	5.6%	4.1%	4.4%	4.1%
Natural Erosion	Count	1	1	2	2	6
	% within Damage Cause	16.7%	16.7%	33.3%	33.3%	100.0%
	% within Imagery	2.2%	1.9%	2.7%	2.9%	2.5%
Unknown	Count	12	1	6	1	20
	% within Damage Cause	60.0%	5.0%	30.0%	5.0%	100.0%
	% within Imagery	26.1%	1.9%	8.1%	1.5%	8.3%
	Count	46	54	74	68	242
	% within Damage Cause	19.0%	22.3%	30.6%	28.1%	100.0%
	% within Imagery	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-165: DAMAGE CAUSES BY IMAGERY ON OUTER TOWNS (UNIT ANALYSIS)

		Imagery				
		Corona	DigitalGlobe	SPOT	Geoeye	Total
Development	Count	2	3	3	3	11
	% within Damage Cause	18.2%	27.3%	27.3%	27.3%	100.0%
	% within Imagery	9.1%	11.1%	11.1%	10.7%	10.6%
Arable agriculture	Count	6	5	4	5	20
	% within Damage Cause	30.0%	25.0%	20.0%	25.0%	100.0%
	% within Imagery	27.3%	18.5%	14.8%	17.9%	19.2%
Orchards	Count	0	2	2	3	7
	% within Damage Cause	.0%	28.6%	28.6%	42.9%	100.0%
	% within Imagery	.0%	7.4%	7.4%	10.7%	6.7%
Irrigation Channels	Count	0	2	2	1	5
	% within Damage Cause	.0%	40.0%	40.0%	20.0%	100.0%
	% within Imagery	.0%	7.4%	7.4%	3.6%	4.8%
Roads	Count	5	5	5	5	20
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	22.7%	18.5%	18.5%	17.9%	19.2%
Mineral Extraction	Count	0	1	1	1	3
	% within Damage Cause	.0%	33.3%	33.3%	33.3%	100.0%
	% within Imagery	.0%	3.7%	3.7%	3.6%	2.9%
Bulldozing	Count	0	1	1	2	4
	% within Damage Cause	.0%	25.0%	25.0%	50.0%	100.0%
	% within Imagery	.0%	3.7%	3.7%	7.1%	3.8%
Water Erosion	Count	3	3	3	2	11
	% within Damage Cause	27.3%	27.3%	27.3%	18.2%	100.0%
	% within Imagery	13.6%	11.1%	11.1%	7.1%	10.6%
Archaeological Excavation	Count	1	1	1	1	4
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	4.5%	3.7%	3.7%	3.6%	3.8%
Looting	Count	0	1	1	1	3
	% within Damage Cause	.0%	33.3%	33.3%	33.3%	100.0%
	% within Imagery	.0%	3.7%	3.7%	3.6%	2.9%
Grave Pits	Count	0	2	2	2	6
	% within Damage Cause	.0%	33.3%	33.3%	33.3%	100.0%
	% within Imagery	.0%	7.4%	7.4%	7.1%	5.8%
Pits (Other)	Count	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	100.0%
	% within Imagery	.0%	.0%	.0%	3.6%	1.0%
Railway	Count	1	1	1	1	4
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	4.5%	3.7%	3.7%	3.6%	3.8%
Unknown	Count	4	0	1	0	5
	% within Damage Cause	80.0%	.0%	20.0%	.0%	100.0%
	% within Imagery	18.2%	.0%	3.7%	.0%	4.8%
	Count	22	27	27	29	104
	% within Damage Cause	21.2%	26.0%	26.0%	26.9%	100.0%
	% within Imagery	100.0%	100.0%	100.0%	100.0%	100.0%

TABLE H-166: DAMAGE CAUSES BY IMAGERY ON FLAT SITES (UNIT ANALYSIS)

		Imagery				
		Corona	DigitalGlobe	SPOT	Geoeye	Total
Development	Count	1	6	8	7	22
	% within Damage Cause	4.5%	27.3%	36.4%	31.8%	100.0%
	% within Imagery	1.9%	11.3%	9.2%	10.4%	8.5%
Arable agriculture	Count	19	16	26	19	80
	% within Damage Cause	23.8%	20.0%	32.5%	23.8%	100.0%
	% within Imagery	36.5%	30.2%	29.9%	28.4%	30.9%
Orchards	Count	1	10	18	12	39
	% within Damage Cause	2.6%	25.6%	41.0%	30.8%	100.0%
	% within Imagery	1.9%	18.9%	18.4%	17.9%	15.1%
Roads	Count	6	12	17	13	48
	% within Damage Cause	12.5%	25.0%	35.4%	27.1%	100.0%
	% within Imagery	11.5%	22.6%	19.5%	19.4%	18.5%
Mineral Extraction	Count	1	1	1	1	4
	% within Damage Cause	25.0%	25.0%	25.0%	25.0%	100.0%
	% within Imagery	1.9%	1.9%	1.1%	1.5%	1.5%
Bulldozing	Count	1	0	1	3	5
	% within Damage Cause	20.0%	.0%	20.0%	60.0%	100.0%
	% within Imagery	1.9%	.0%	1.1%	4.5%	1.9%
Water Erosion	Count	3	2	2	2	9
	% within Damage Cause	33.3%	22.2%	22.2%	22.2%	100.0%
	% within Imagery	5.8%	3.8%	2.3%	3.0%	3.5%
Visitor Erosion	Count	0	0	0	1	1
	% within Damage Cause	.0%	.0%	.0%	100.0%	100.0%
	% within Imagery	.0%	.0%	.0%	1.5%	.4%
Looting	Count	0	1	2	1	4
	% within Damage Cause	.0%	25.0%	50.0%	25.0%	100.0%
	% within Imagery	.0%	1.9%	2.3%	1.5%	1.5%
Cuts	Count	0	0	2	2	4
	% within Damage Cause	.0%	.0%	50.0%	50.0%	100.0%
	% within Imagery	.0%	.0%	2.3%	3.0%	1.5%
Grave Pits	Count	1	3	4	3	11
	% within Damage Cause	9.1%	27.3%	36.4%	27.3%	100.0%
	% within Imagery	1.9%	5.7%	4.6%	4.5%	4.2%
Natural Erosion	Count	1	1	2	2	6
	% within Damage Cause	16.7%	16.7%	33.3%	33.3%	100.0%
	% within Imagery	1.9%	1.9%	2.3%	3.0%	2.3%
Unknown	Count	18	1	6	1	26
	% within Damage Cause	69.2%	3.8%	23.1%	3.8%	100.0%
	% within Imagery	34.6%	1.9%	6.9%	1.5%	10.0%
	Count	52	53	87	67	259
	% within Damage Cause	20.1%	20.5%	33.6%	25.9%	100.0%
	% within Imagery	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix I

Database