

FORTH/MERSEY 1:100,000 SHEETS

Enhancement descriptions for airborne magnetics. NOTE: in the northern two thirds of the area the flight line direction is N-S and E-W over the remaining area to the south. Decorrugation was performed to reduce the levelling errors associated with the N-S flight lines.

Slide 1 : Greyscale, raw magnetics with histogram-normalised stretch and 0.1% clip.

Slide 2 : Greyscale, decorrugated magnetics with histogram-normalised stretch and 0.1% clip.

Slide 3 : Greyscale, decorrugated, 0.1% clip with space variant contrast stretch - a non-linear local enhancement (analogous to AGC) to accentuate subtle detail in areas of low amplitude.

Slide 4 : Greyscale, decorrugated, 0.1% clip with a first derivative approximation (N-S gradient) performed by convolving the image with a directional edge detecting template.

Slide 5 : Greyscale, decorrugated, 0.1% clip with a high pass spatial filter performed by convolution. High frequency magnetic anomalies usually caused by shallow magnetic rocks are highlighted.

Slide 6 : Greyscale, decorrugated, 0.1% clip with a high pass frequency filter using a 10km cutoff. High frequency magnetic anomalies usually caused by shallow magnetic rocks are highlighted.

Slide 7 : Greyscale, decorrugated, 0.1% clip shadowgram with NW illumination and 50° sun elevation.

Slide 8 : Greyscale, decorrugated, 0.1% clip shadowgram with NE illumination and 50° sun elevation.

Slide 9 : Pseudocoloured, decorrugated magnetics with 0.1% clip linear contrast stretch.

Slide 10 : Pseudocoloured, decorrugated, 0.1% clip with upward continuation to 1,000 metres. This filter has the effect of simulating measurements taken 1,000 metres above ground level. The result is to attenuate anomalies and is more pronounced for high than low frequency anomalies.

Slide 11 : Pseudocoloured, decorrugated, 0.1% clip with downward continuation to 50 metres. This filter simulates measurements taken 50 metres above ground level. It has more influence on high than low frequency components and effectively sharpens their appearance.

Slide 12 : Pseudocoloured, decorrugated, 0.1% clip shadowgram with NW illumination and 50° sun elevation.