4.2.9 Prospect 5

A schematic summary of the geology for the prospect area is shown in Figure 4.24, while examples of data are shown in Figure 4.25. The main litho-magnetic units are interpreted to be intrusive bodies with well-defined magnetic zonation.

The area appears to be an along strike continuation from the main Erdenetiin Ovoo prospects (4.2.1). The dominant structural strike is NW – SE and is associated with a series of major structural zones with a probable strike-slip displacement. A domain boundary occurs to the E of the area with a normal displacement and inferred down throw to the E.

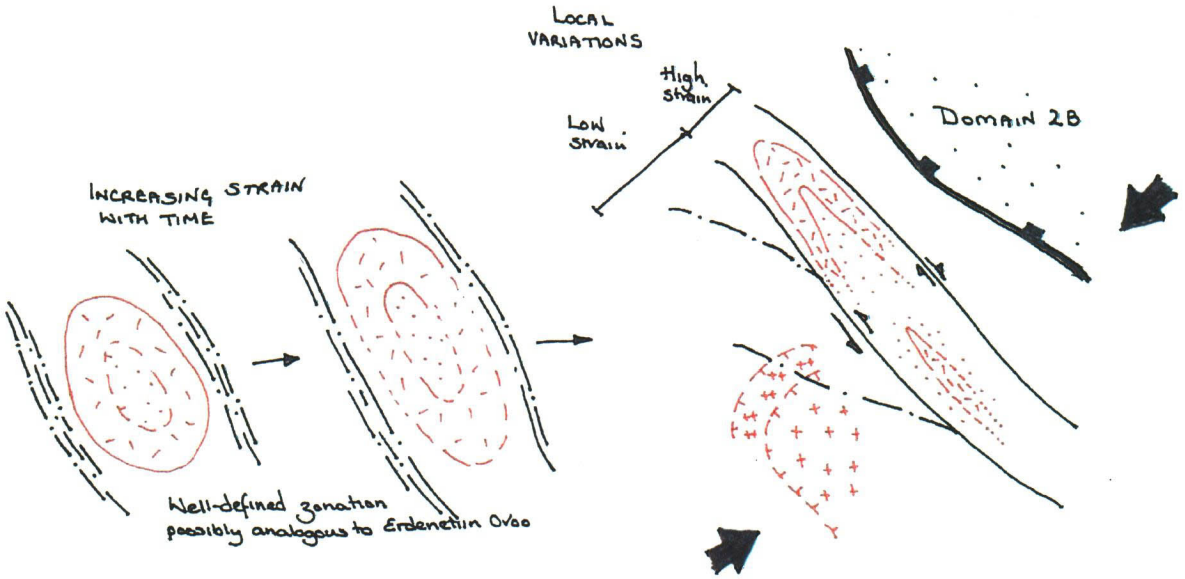
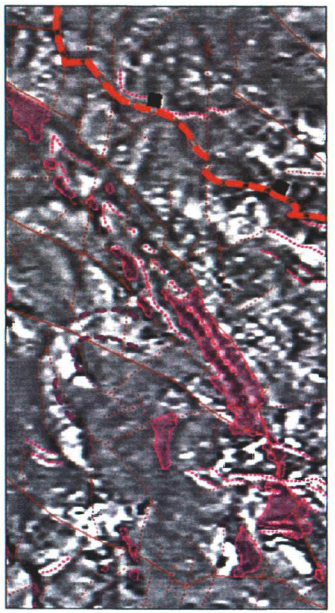


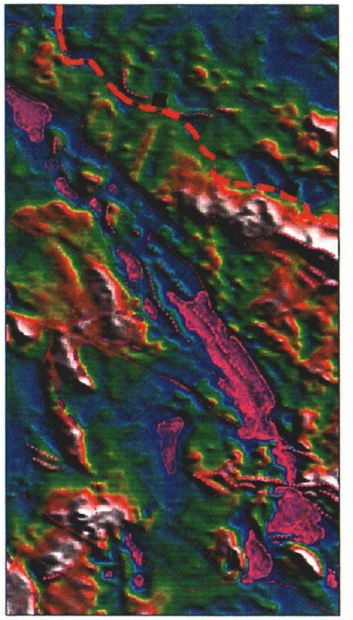
Figure 4.24: Schematic representation of differential strain within domain 3A.

Radiometric data appears to provide a similar but far more detailed distribution to the published mapping. In particular it appears to be good at differentiating different granitic bodies. More detailed analysis of the data may enable a more accurate litho-magnetic interpretation to be made. The large zone of clipped K enrichment coincides well with the core of a large granite body with an associated low magnetic response. However, simply clipping the total K count obscures low values that could be anomalous compared to their immediate surroundings.

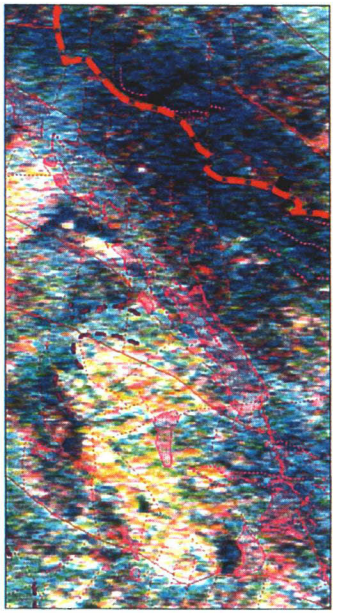


A

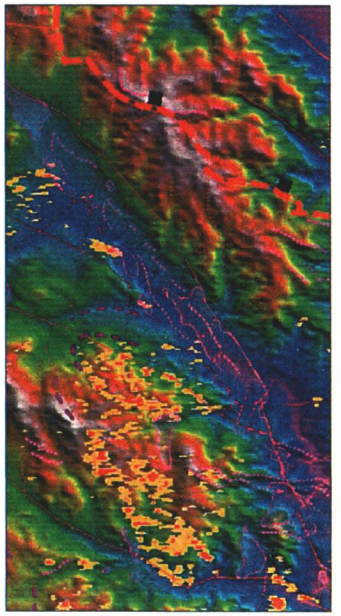
B



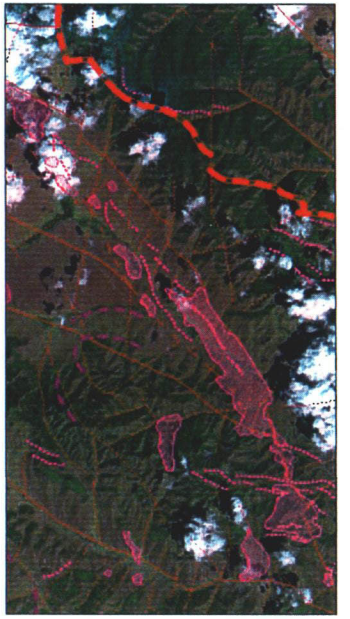
C



D



E



F

Figure 4.25: Characteristics of the Prospect 5area.

4.2.10 Mogoin Gol 2

A schematic summary of the geology for the prospect area is shown in Figure 4.26, while examples of data are shown in Figure 4.27. This area consists predominantly of two late Permian volcano-sedimentary sequences and a series of igneous intrusive units. The Permian sediments have a distinctive relative low, flat magnetic response, while the volcanic units have a moderate to high response with sub-linear character. There is a weak E - W trend shown by the long elliptical axes of zoned intrusive bodies and the strike of linear volcanic units.

A number of the intrusive units appear to be truncated to the S (407967mE 5461075mN and 410972mE 5457300mN). This may indicate that either E - W or ENE – WSW trending faults (or thrusts) are present within this area, although the contrast in the magnetic data is too slight to be certain.

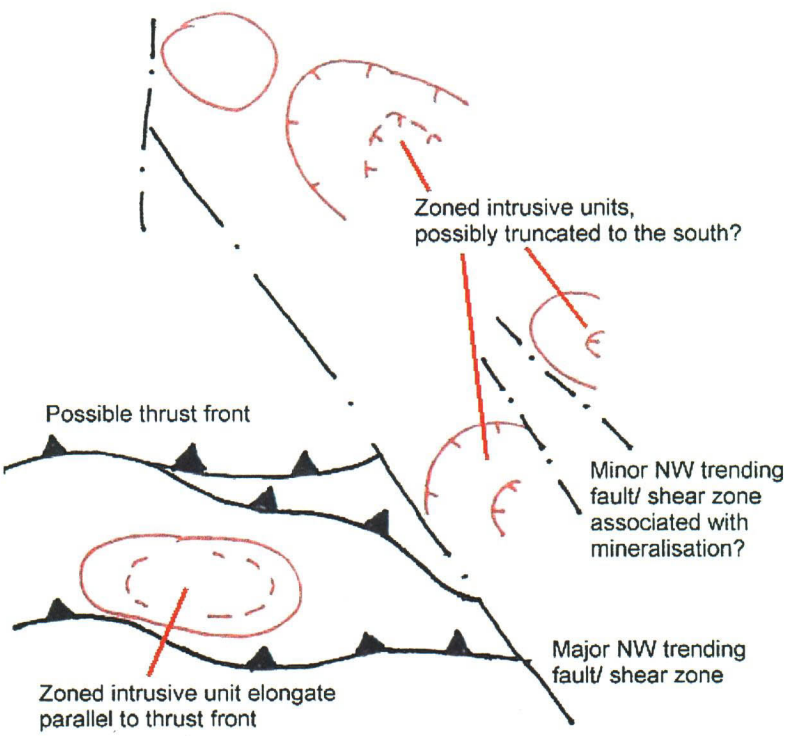


Figure 4.26: Schematic representation of possible thrusts and truncation of igneous bodies.

Radiometric data appears to have a partially similar distribution to the published mapping although there is potential to improve the interpretation. Main areas of high K coincide with mapped granitic units.

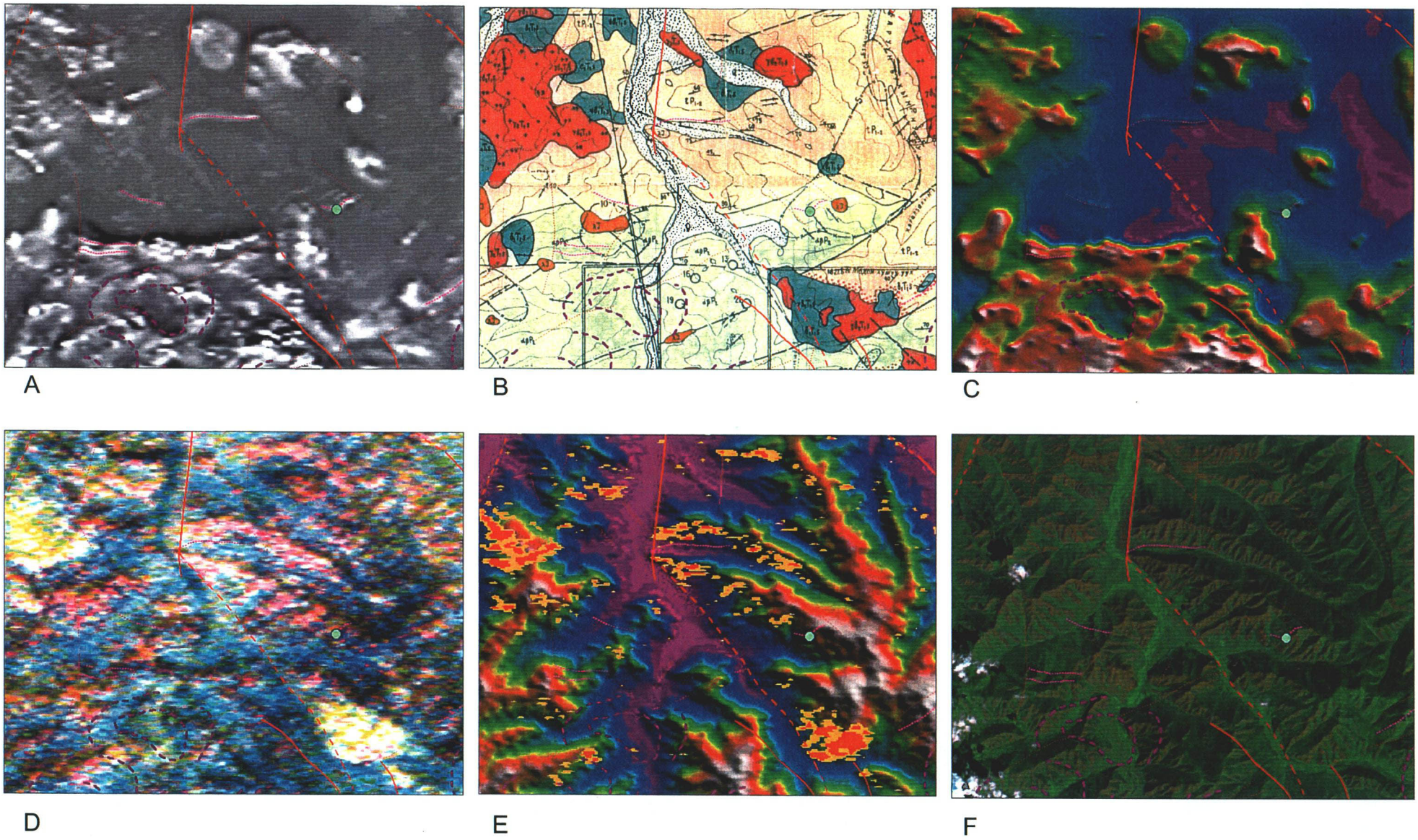


Figure 4.27: Characteristics of the Mogoin Gol 2 area.

4.2.11 Mej Uul

Examples of data for the prospect area are shown in Figure 4.31. This area consists predominantly of Triassic to Jurassic volcano-sedimentary units. These typically have a moderate to high relative magnetic intensity, short wavelength response. The dominant structures in the area consist of a broad zone (up to 4 km wide) of NW trending shear zones. These structures could possibly have a right lateral strike-slip displacement and a 'late' normal displacement with downthrow to the NE and are interpreted to be the main structures that divide domain 3 from domain 4.

Known areas of mineralisation appear to be associated with approximately N – S trending structures. These N – S trending faults may be 'late' extensional structures associated with the shear zones, however, there is little information to further constrain these mineralised areas.

Radiometric data appears to provide a slightly different distribution of surface material to that proposed from the published mapping. Detailed analysis of the data may enable a more accurate litho-magnetic interpretation to be made. There appears to be minimal direct evidence for potassic alteration in this area.

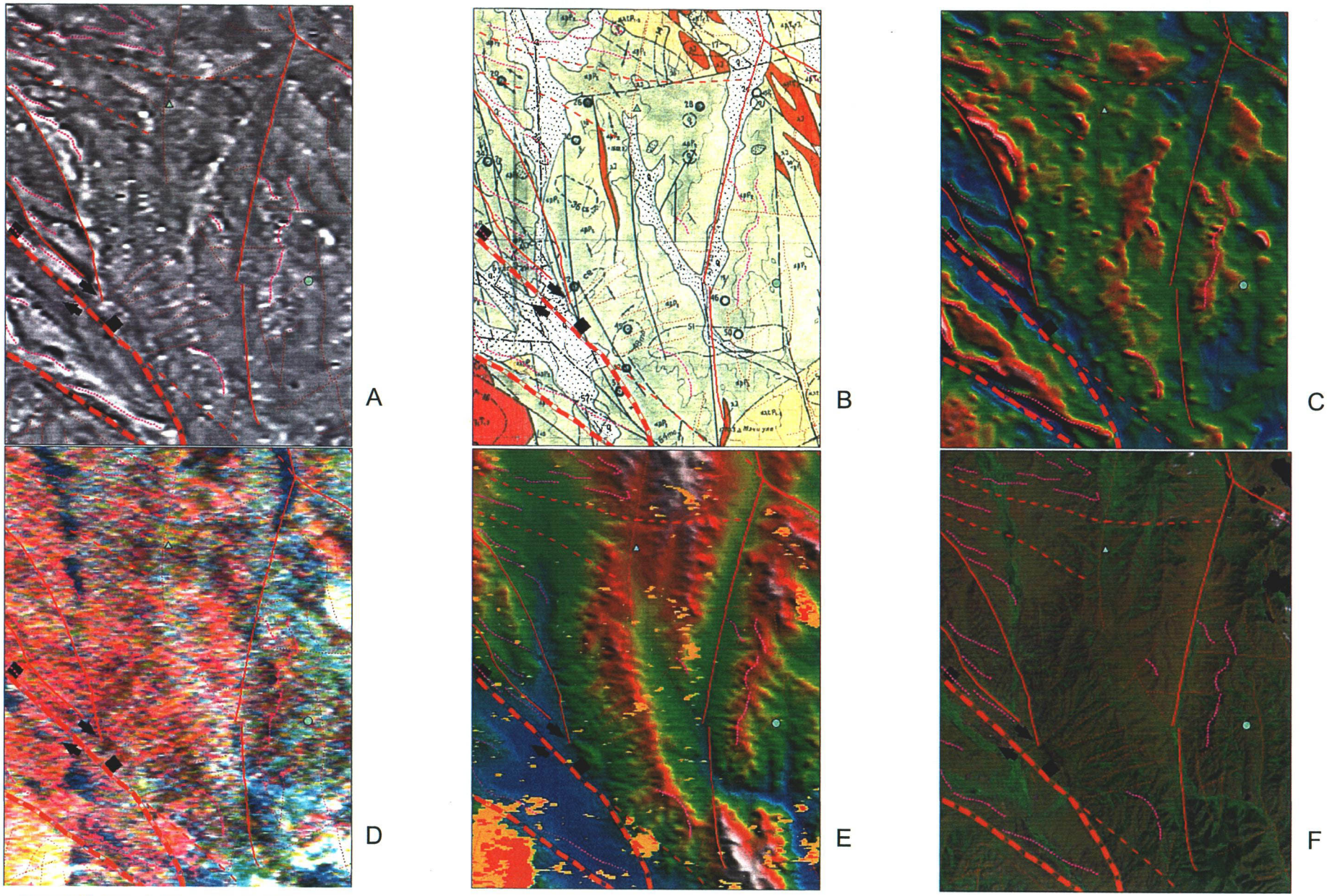


Figure 4.28: Characteristics of the Mej Uul area.

4.2.12 Undrakh

A schematic summary of the geology for the prospect area is shown in Figure 4.29, while examples of data are shown in Figure 4.30. The main feature of this area is the large, zoned igneous unit, with its elongate N - S trending ellipsoidal axis. This igneous body is sub-divided by an approximate NW to NNW trending fault with a left lateral displacement (355150mE 5399500mN). It is also bound to the SW by a similar trending structure (334000mE 5396000mN). Minor faults with varying strike occur around the intrusive body and are probably radial fractures associated with intrusion.

A distinctive anomalous NW to NNW trending zone with a relative low magnetic intensity occurs about 334600mE 5394900mN. This area may represent a 'late' intrusive unit with a different magnetic polarity to the surrounding igneous host, or may represent an intensely altered area.

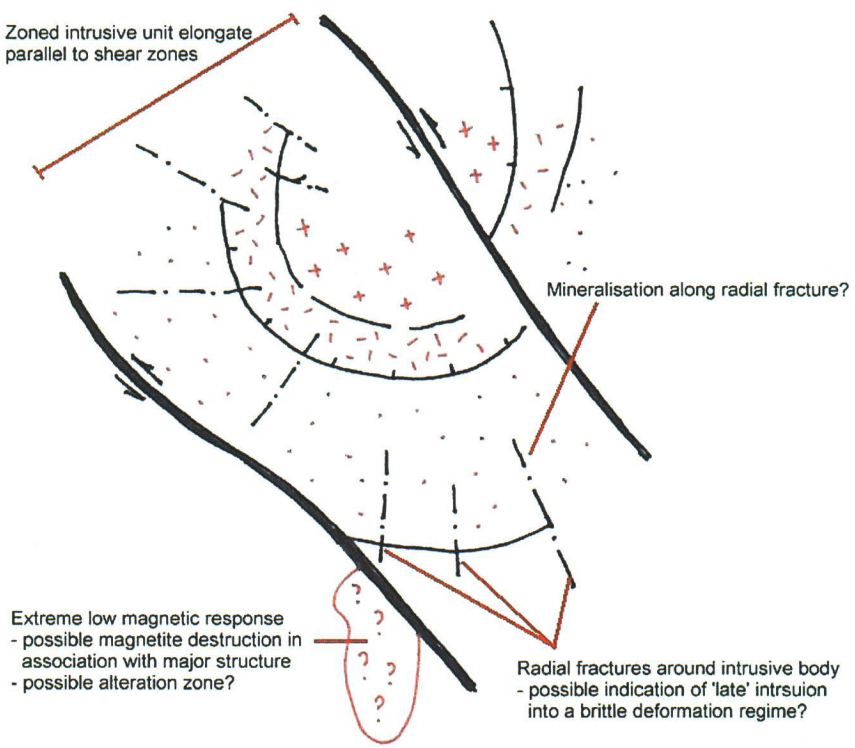


Figure 4.29: Schematic representation of radial fracturing around an intrusive body.

Radiometric data appears to provide a different distribution of surface material to that proposed from the published mapping. Detailed analysis of the data may enable a more accurate litho-magnetic interpretation to be made.

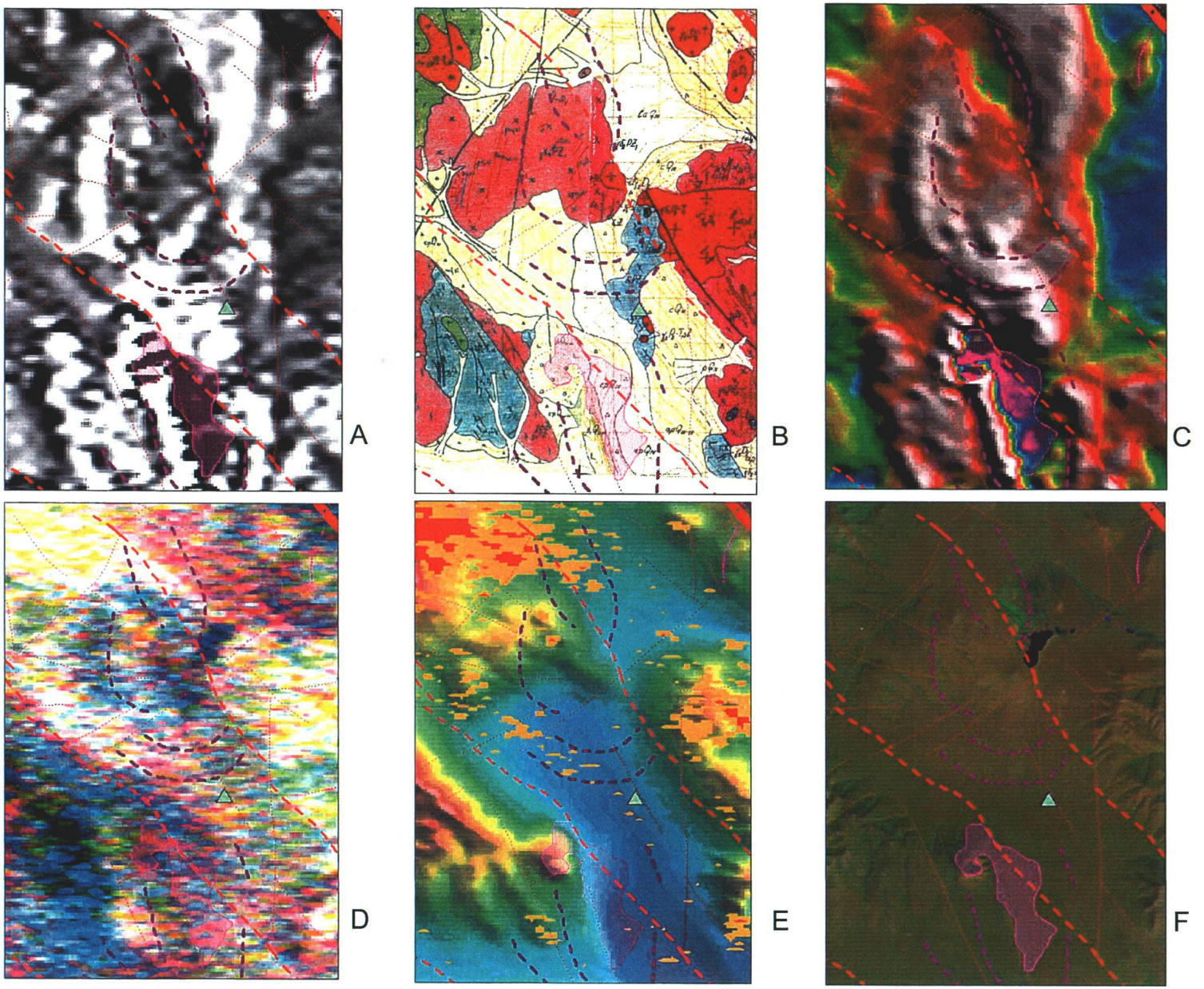


Figure 4.30: Characteristics of the Undrakh area.