data are checked for +-10 degrees of roll, +-5 degrees of pitch and +-5 degrees of yaw to obtain variations of less than a cumulative of 3.0 nT.

(2) Intersection control

The magnetic field data is adjusted by analyzing the results obtained from the survey lines and the tie-lines.

(a) IGRF Residual map and RTP

IGRF residual map is obtained by subtracting the International Geomagnetic Reference Field (IGRF)) from the Total magnetic field (TMI).

The Reduction To Pole (RTP) is operation is a data processing technique that converts the TMI data as if the inducing magnetic field had a 90° inclination. This process that simplify the data interpretation, transforms the dipolar magnetic anomalies to monopolar anomalies placed over the magnetic sources. The Reduction to the pole process makes the simplifying assumption that the rocks in the survey area are all magnetised parallel to the earth's magnetic field

3-4-2 Radiometric survey

The system monitores cosmic ray activity for all energies above 3000 keV and display the full spectrum to facilitate energy calibration checks and assist in verifying system resolution.

The folowing windows were recorded for each 1-second sampling interval digitally recorded and displayed on the in-light chart recorder.

Potassium	1370 to 1570 keV
Uranium	1660 to 1860 keV
Thorium	2410 to 2810 keV
Total Count	400 to 2810 keV
Cosmic	3000 to 6000 keV
Upward-looking Uranium	1660 to 1860 keV

3-5 Results of Data Processing

The final products are as indicated below. To facilitate the interpretation, the score of factor 2 obtained from geochemical analysis were superposed to these maps.

Map of Flight Path : Fig. II-3-1

Total Magnetic Intensity Map: Fig. II-3-2

TMI Reduced To the Pole Map: Fig. II-3-3

Second Vertical Derivative Map: Fig. II-3-4

Radiometrics Total Count Map: Fig. II-3-5

Radiometrics Potassium Count Map: Fig. II-3-6

Radiometrics Uranium Count Map: Fig. II-3-7

Radiometrics Thorium Count Map: Fig.II-3-8

Radiometrics Ternary ImageMap: Fig.II-3-9

Solid Interpretation Map (1): Fig.II-3-10

Solid Interpretation Map (2): Fig.II-3-11

The results of airborne geophysics are as follows. For further information related to these maps please refer to the report of FugroAirborne Surveys Pty. Ltd as shown in Appendix 19.

3-5-1 Airborne magnetic data (RTP-TMI)

The airborne survey detected in this Area 1 several distributions with high magnetic signatures. A NW-SE trend of magnetic lineament was detected elongated from the southeast corner to the center of the area with slight bending but showing a further westward continuation. Another NNE-SSW trend of magnetic lineament is detected in the northeastern part of the area, and turning along a N-S magnetic trend in the western part of the area. High magnetic signatures occur in the southeastern part and the northwestern part of the area. Low magnetic signatures occur in the north of the area and distributed over a relatively large area.

In Area 2, several N-S structures were detected. Broad high magnetic signatures are distributed in the central and western part of the area.

The geological and geochemical semi-detailed areas present the following magnetic characteristics:

(1) Erdenet area is located within a low magnetic zone trending along a NW-SE direction.

(2) Tsagaan Chuluut area is located around the intersection of a NW-SE low magnetic zone and a N-S intermediate magnetic zone.

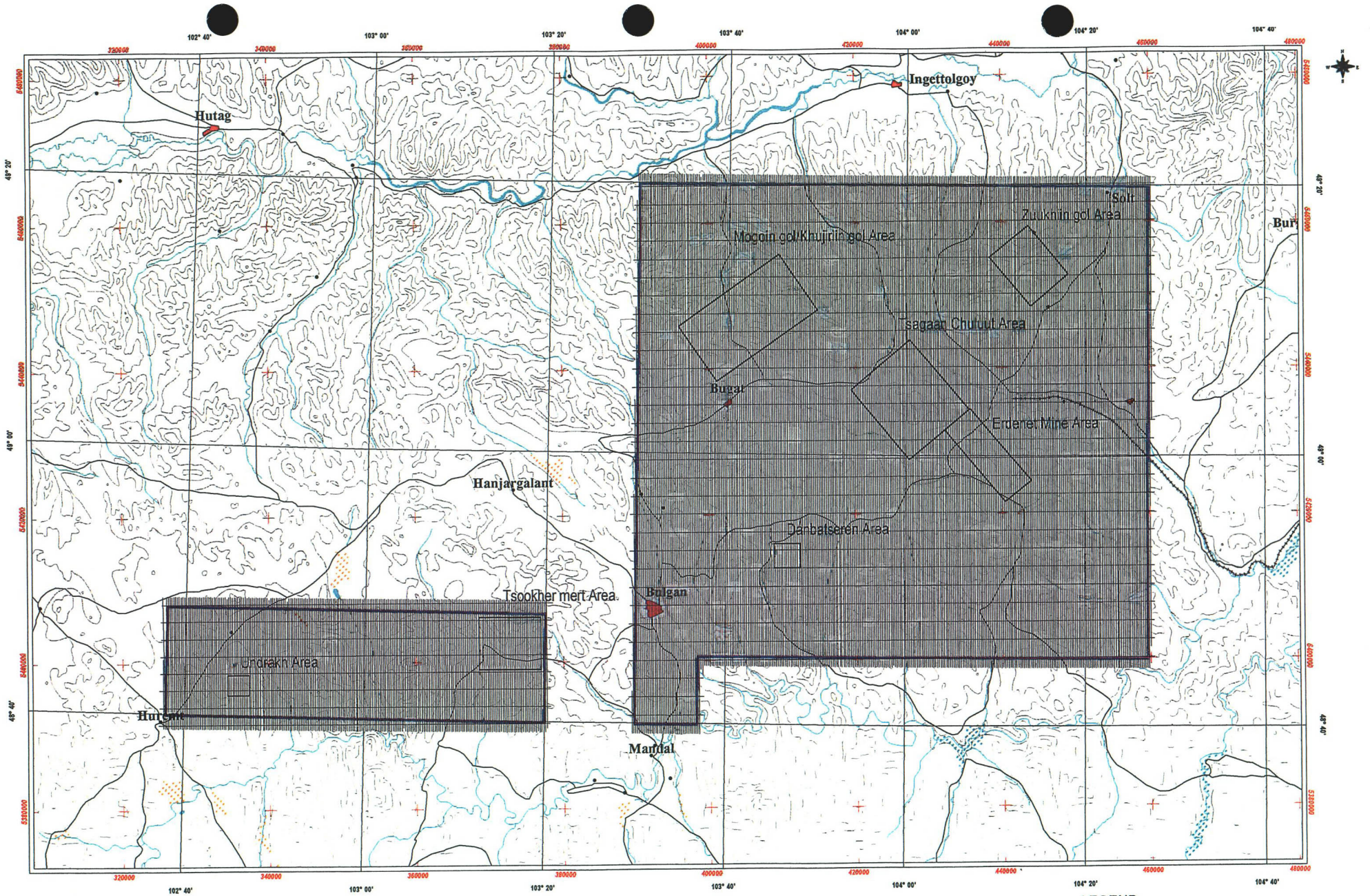
(3) The southern half of Zuukhiin Gol area is located inside a large magnetic distribution while the northern half is located in a low magnetic zone.

(4) Mogoin gol area is located inside a circular magnetic zone while Khujiriin Gol area is located in the north east side of a large magnetic distribution.

(5) Danbatseren area is located just to the south of the high magnetic zone.

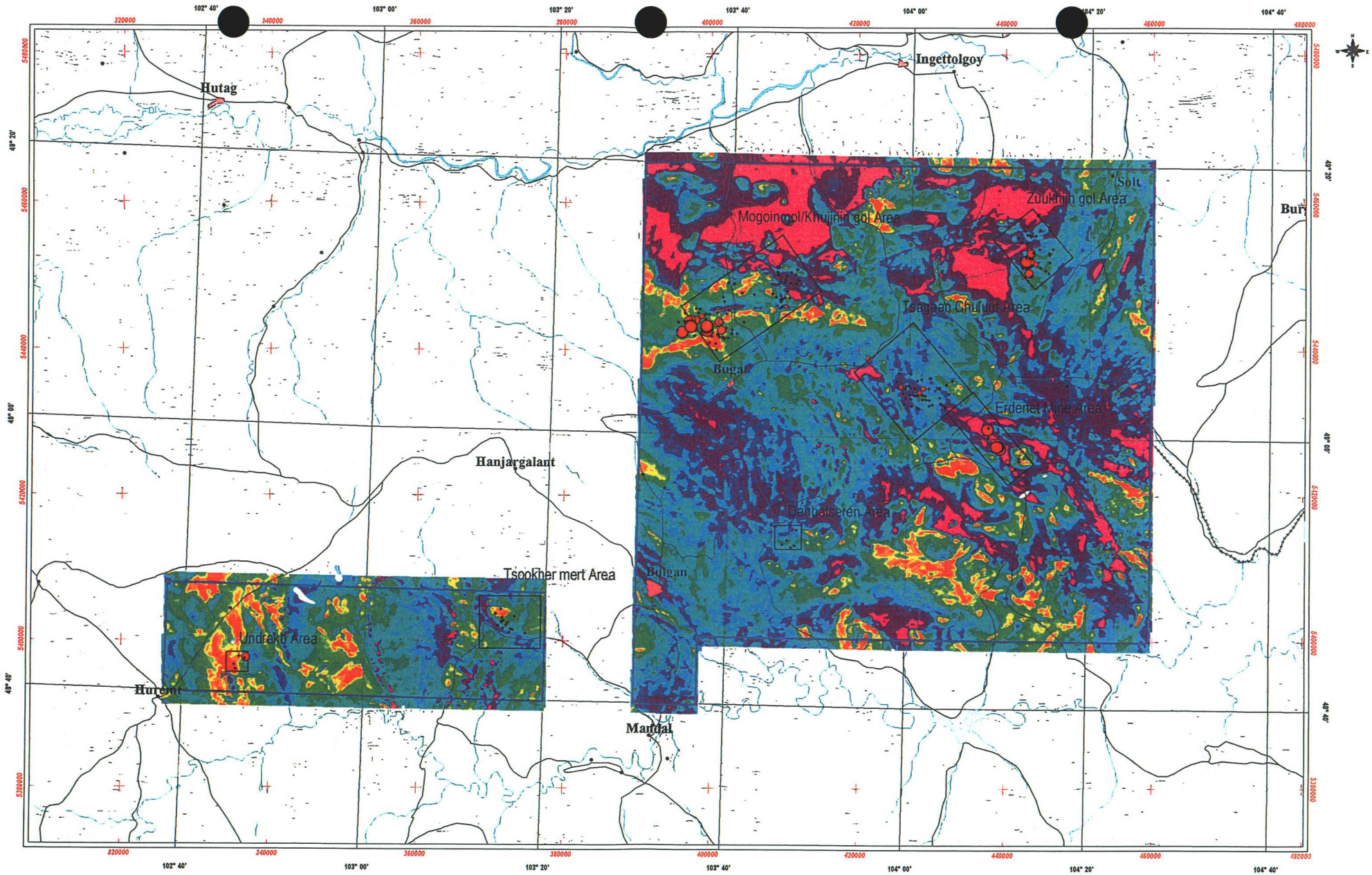
(6) Tsookher Mert area is located on a large magnetic distribution that includes a NW-SE trending low magnetic zone.

(7) Undrakh is located at the margin of a magnetic high zone.



Airborne geophysical survey flight path map

Fig. II-3-1 Flight path map in the Western Erdenet area



Total magnetic field and
Factor score 2 distribution map

10 0 10 20 km

Projection:UTM
Spheroid:WGS84
Zone:48

LEGEND

Total Magnetic Field(nT)
60500 - 62355
60400 - 60500
60300 - 60400
60200 - 60300
60100 - 60200
60000 - 60100
59900 - 60000
59800 - 59900
59700 - 59800
59600 - 59700
59500 - 59600
59400 - 59500
59300 - 59400
59200 - 59300
59100 - 59200
59000 - 59100
58900 - 59000
58050 - 58900

Factor Score 2
1.5 ≦
1.0 – 1.5
0.5 – 1.0
<0.5

Semi-detailed survy area
Airborne survey area
City
Town
Railway
Main road

Fig. II-3-2 Total magnetic intensity color image and factor 2 distribution map in the Western Erdenet area

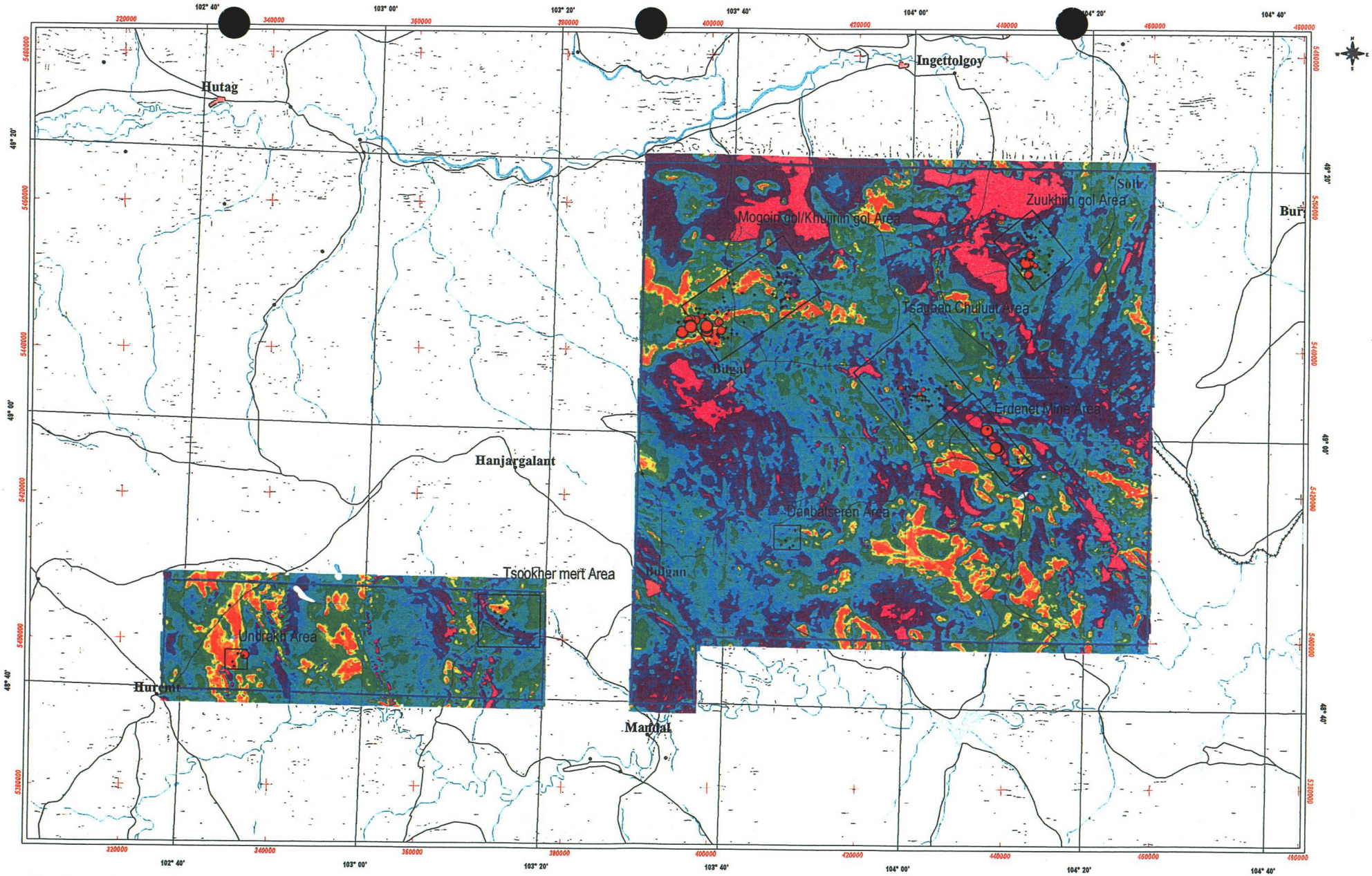
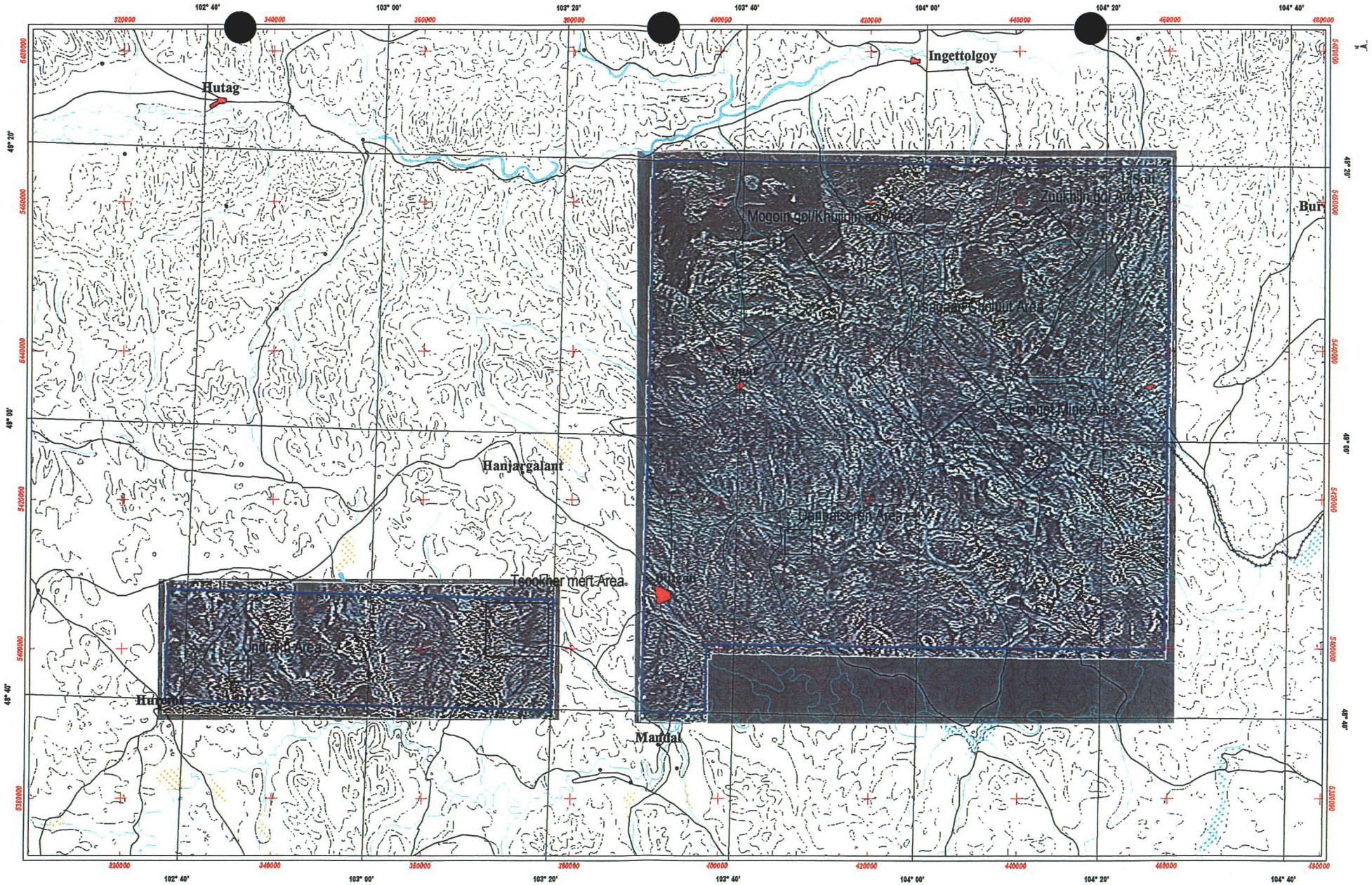


Fig. II-3-3 Total Magnetic Intensity - Reduced To Pole color image and factor 2 distribution map map in the Western Erdenet area



Laplacian map of RTP magnetic field

Fig. II-3-4 Second Vertical Derivative black and white image and factor 2 distribution map in the Western Erdenet area

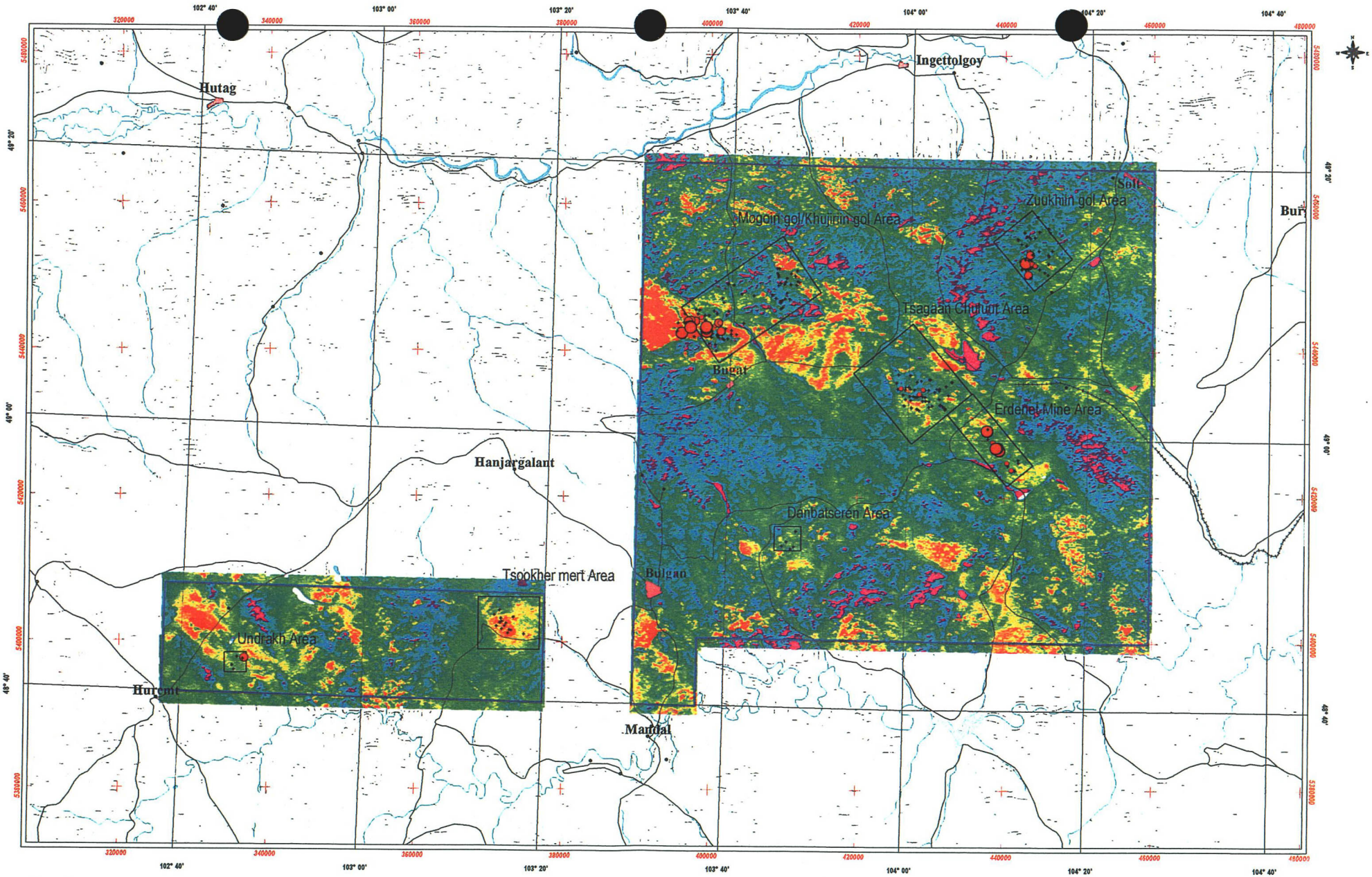


Fig. II-3-5 Colored total count radiometric image and factor 2 distribution map in the Western Erdenet area