

Fig. II -2-30(1) 2D analysis plane maps at the depth of 50m and 75m in Tawi Rakah area

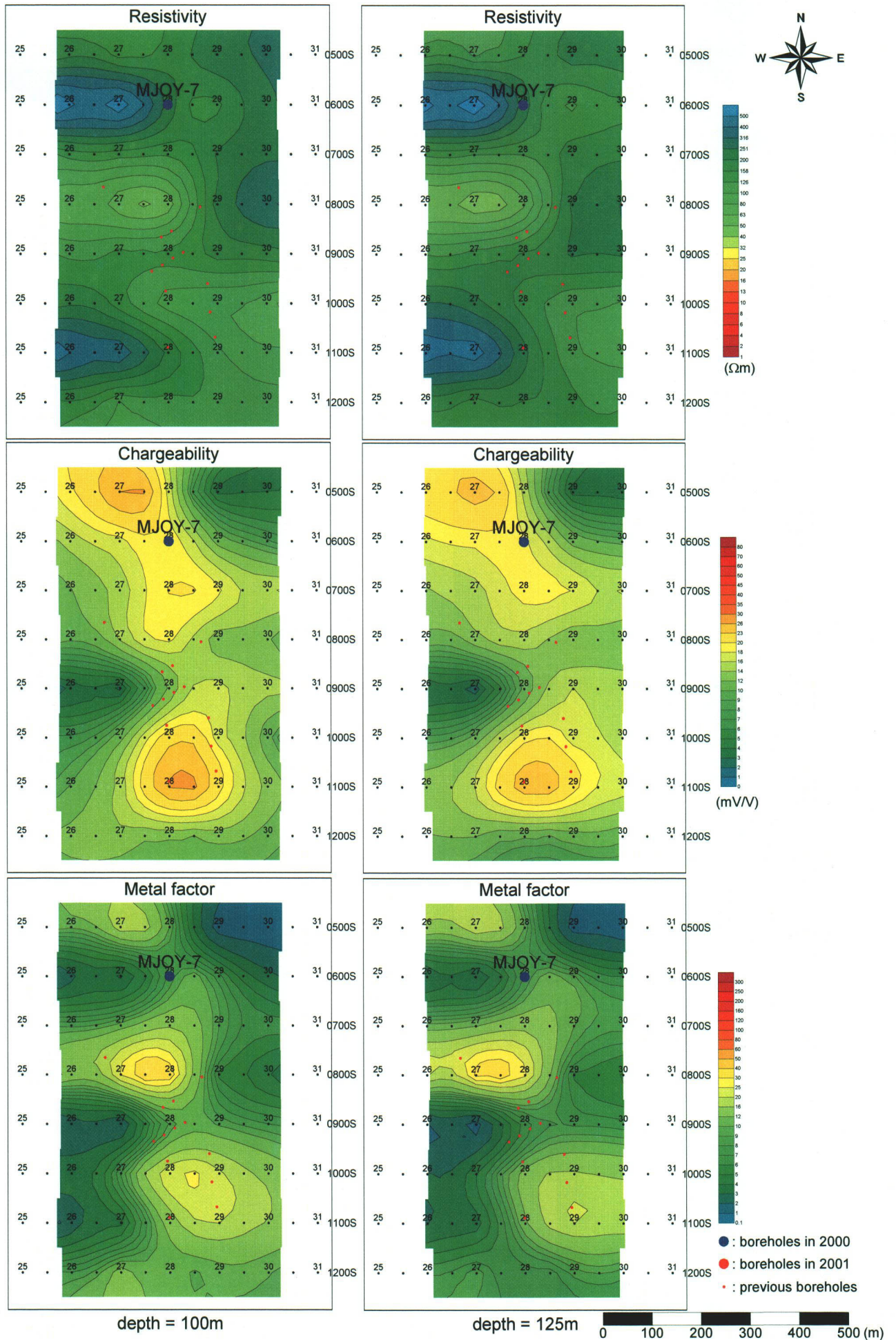


Fig. II-2-30(2) 2D analysis plane maps at the depth of 100m and 125m in Tawi Rakah area

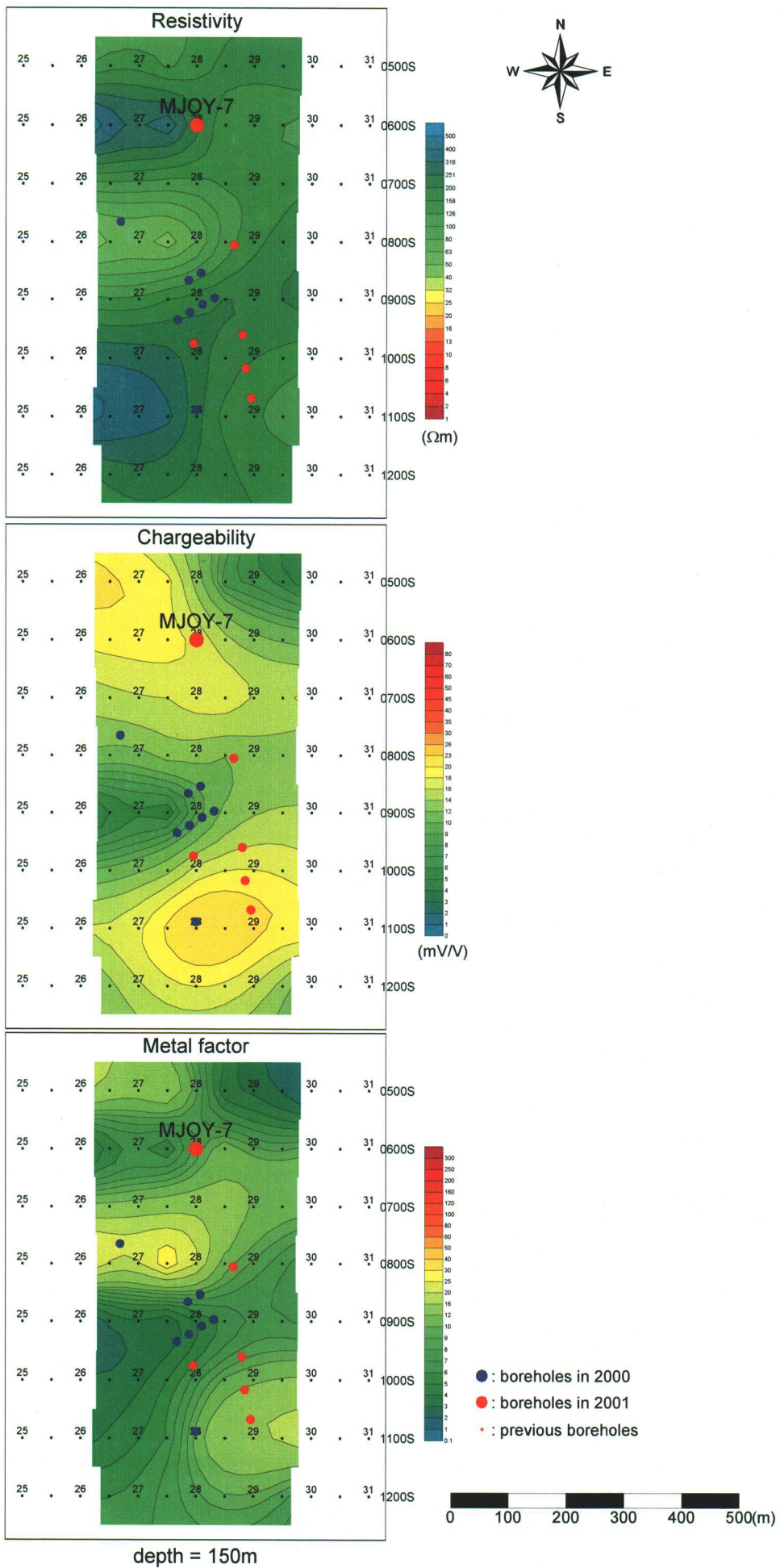


Fig. II-2-30(3) 2D analysis plane maps at the depth of 150m in Tawi Rakah area

average value of $130\Omega\text{m}$. Chargeability values ranged from 1.1 to 29.1mV/V with an average is 12.0mV/V.

In the shallower part, low resistivity and high chargeability were mostly detected in the station 28 around the central part of the Line 900S. Since this anomaly distribution agrees well with the known mineralized zone on the surface, it is assumed that the IP anomaly reflects the mineralized zone. In the deep part (deeper than $N=3$), low resistivity and high chargeability distribution are seen, but they show the 'pants leg' effect of the shallow part of anomalous body as seen in the 2-D analysis sections of Fig. II-2-29.

2-5-4 Hayl as Safil area

Fig. II-2-31 shows the locations of the IP lines in Hayl as Safil area. In Phase II of this project, we carried out 10 IP lines of 1000m each along EW direction and 2 more lines of 1300m each along NS direction. TDIP pseudo-sections and plane maps are indicated in Figs. II-2-32 (1)~(7) and Figs. II-2-33 (1)~(5), respectively. 2-D analysis for sections and plane maps are illustrated in Figs. II-2-34 (1)~(7) and Figs. II-2-35 (1)~(5), respectively.

The apparent resistivity values detected in this area ranged from $4.1\Omega\text{m}$ to $2676\Omega\text{m}$ with an average value of $116\Omega\text{m}$. Chargeability was detected in the range from 0.5 to 62mV/V with an average of 13.6mV/V. In this area, the 4 deposits of Al Ashgar, Hayl as Safil, Bishara, and Al Jadeed had been confirmed. In Phase II, the survey location consisted of a part of Al Ashgar, Bishara and Hayl as Safil ore bodies.

Clear IP anomalies are seen to correspond well with each of the ore bodies. According to the results obtained in Al Ashgar ore body, low resistivity and high chargeability are seen distributed in the shallower part from a depth of 80m and it is assumed to correspond to an anomaly reflected also by the massive sulphide deposit. In relation to Bishara ore body, which consists mainly of massive sulphide ore, low resistivity and high chargeability are seen distributed from the surface to a depth of 100m.

In relation to Hayl as Safil ore body, low resistivity and high chargeability are confirmed but with a depth deeper than the IP anomaly detected in Bishara ore body.

With the exception of the existing ore bodies, high chargeability anomaly is seen in the central east part of the gossan and distributed north south between the lines 1800N and 2100N. In this high chargeability distribution, high resistivity is generally distributed and only low resistivity is partly seen distributed in the north and south edge. Two relatively low resistivity-high chargeability distributions are seen, one of them is detected near the Line 2300N around the station 35.5 and another one, detected during Phase I and located near the Line 3600W around station 24 of the Phase I.

2-5-5 Najaid area

Fig. II-2-36 shows the locations of the IP lines in Najaid area. In Phase II of this project, 5 IP lines of 800m each were set up along EW direction and 1 more line of 800m each along NS direction. TDIP

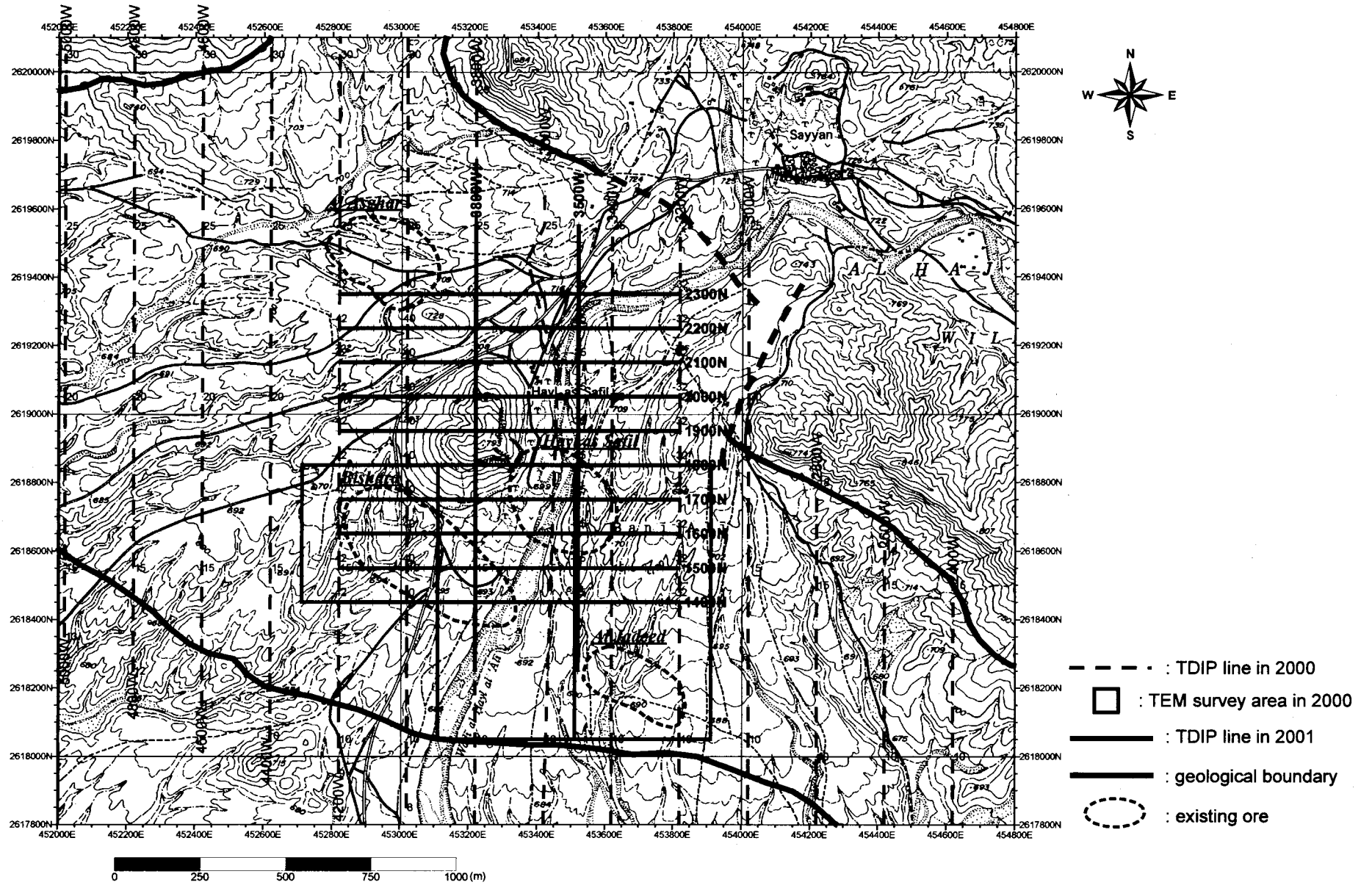


Fig. II-2-31 Geophysical survey location in Hayl as Safil area

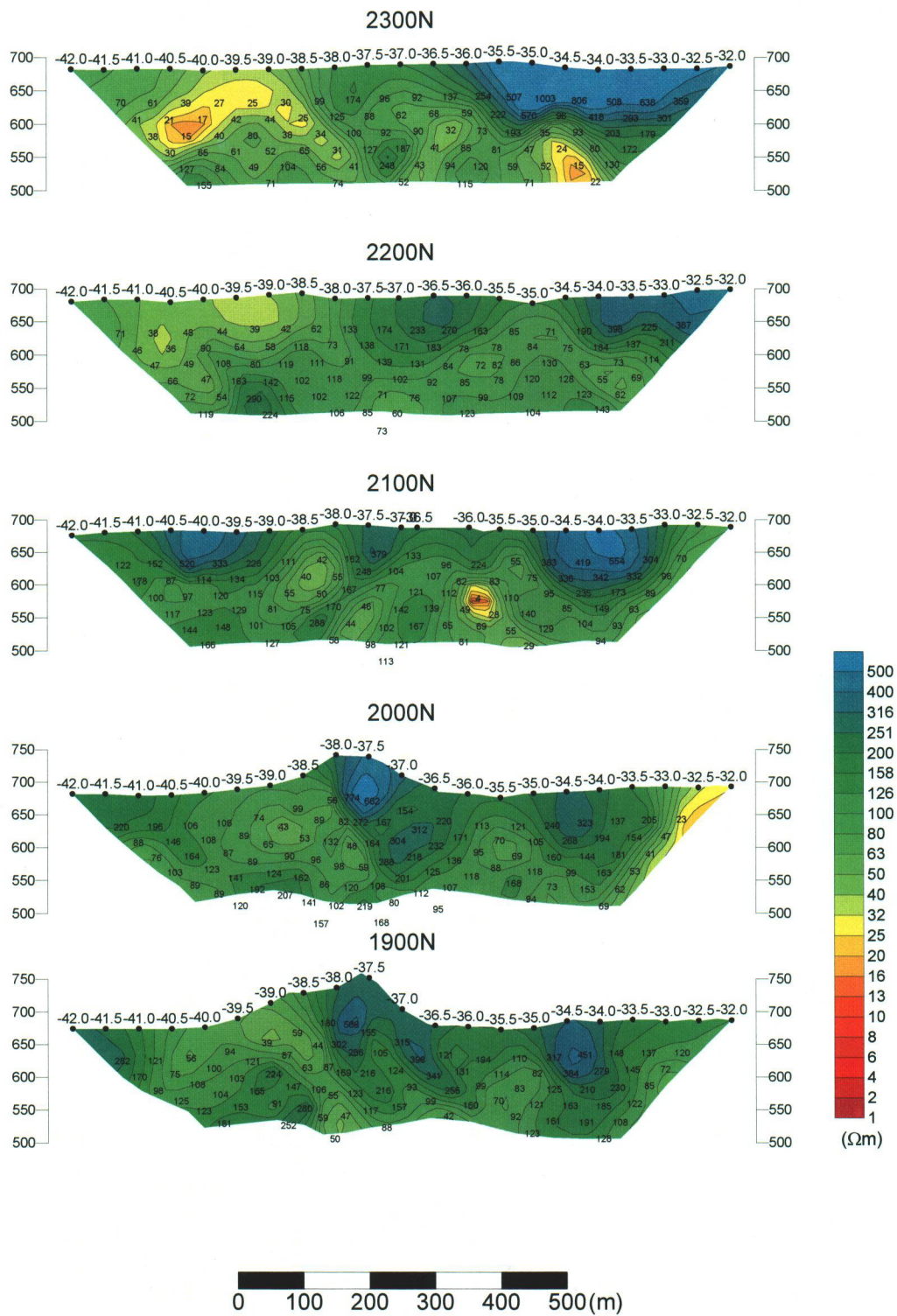


Fig. II -2-32(1) Apparent resistivity pseudo-sections in Hayl as Safil area(2300N – 1900N)

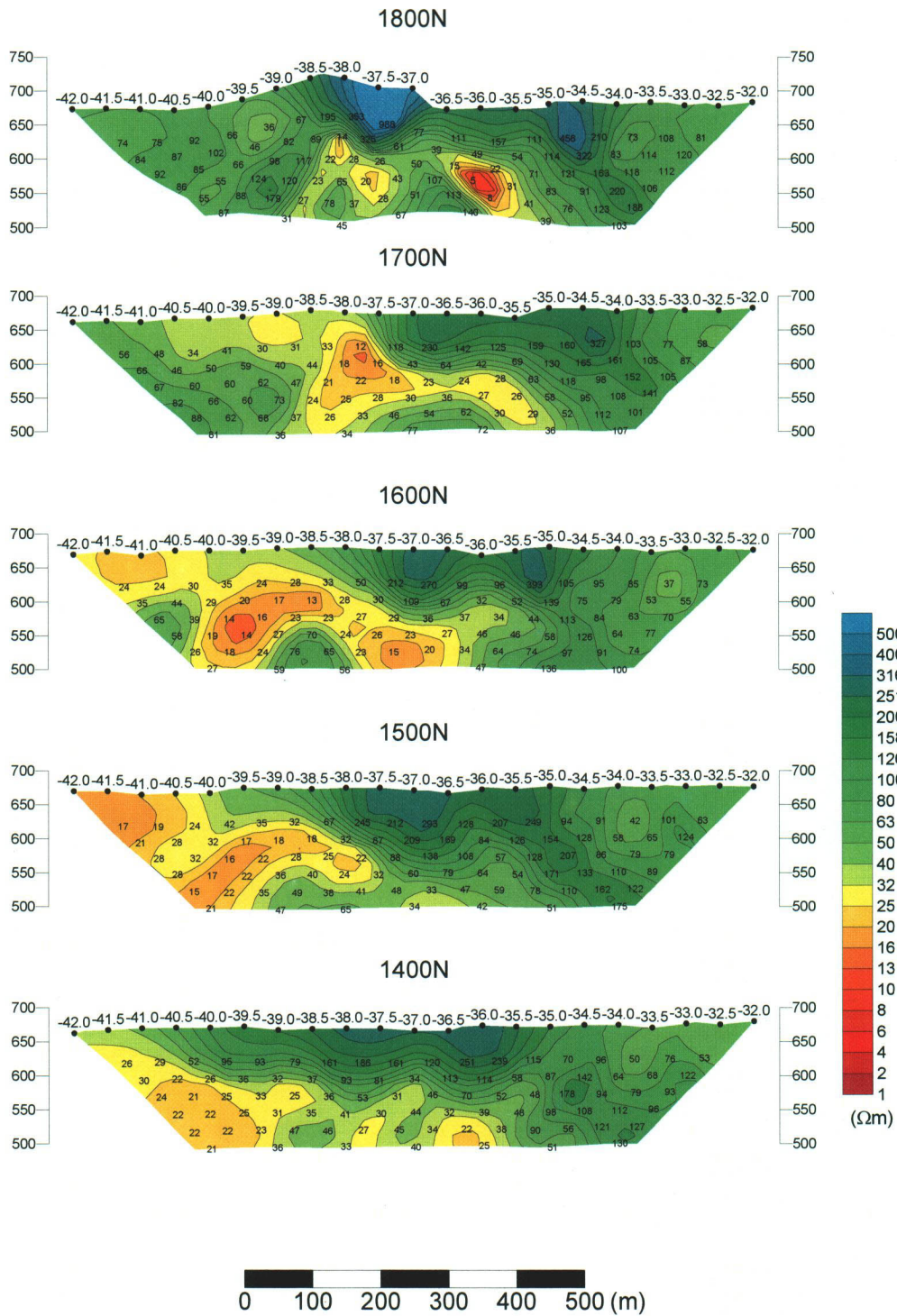


Fig. II -2-32(2) Apparent resistivity pseudo-sections in Hayl as Safil area(1800N – 1400N)

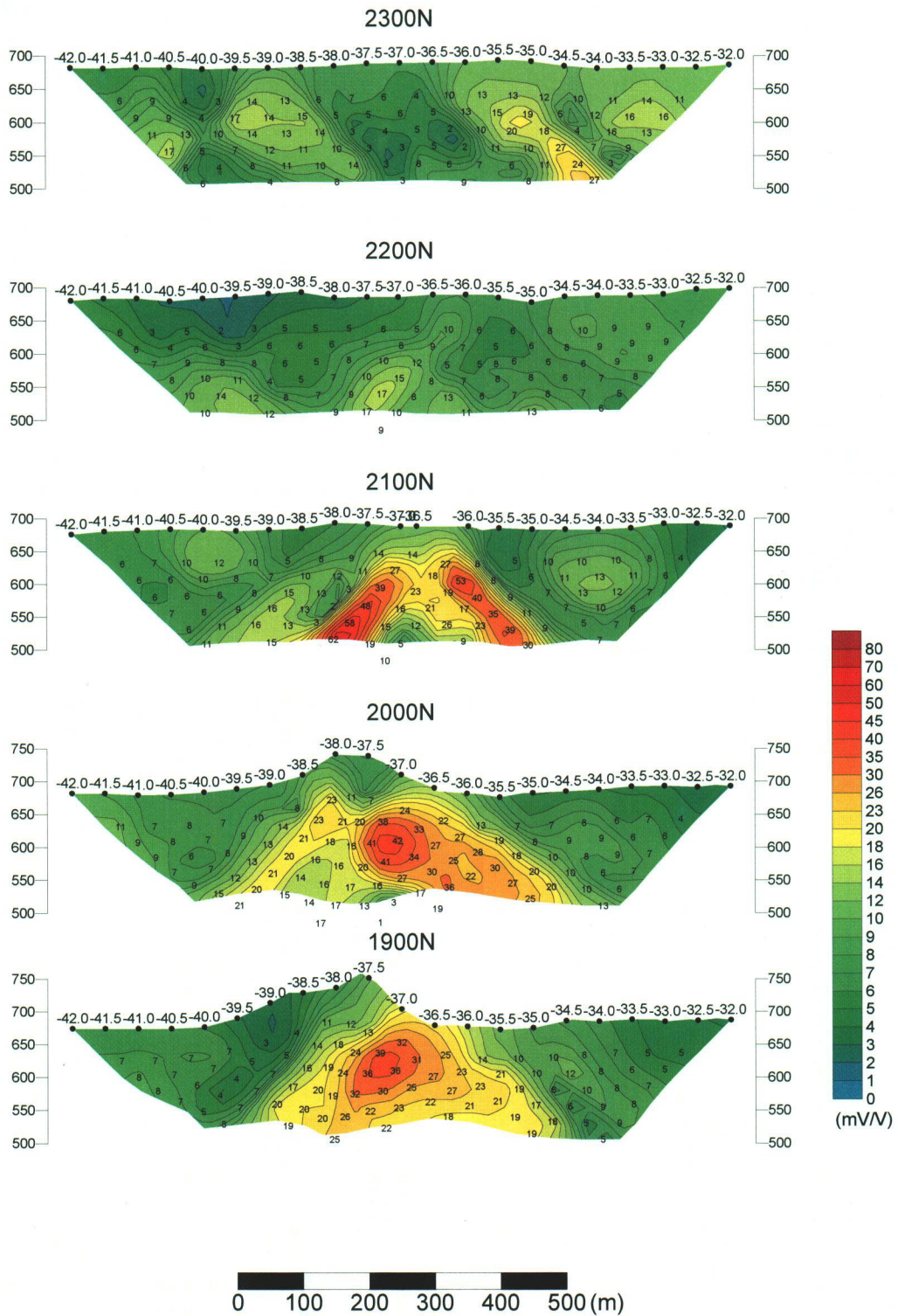


Fig. II -2-32(3) Chargeability pseudo-sections in Hayl as Safil area(2300N – 1900N)

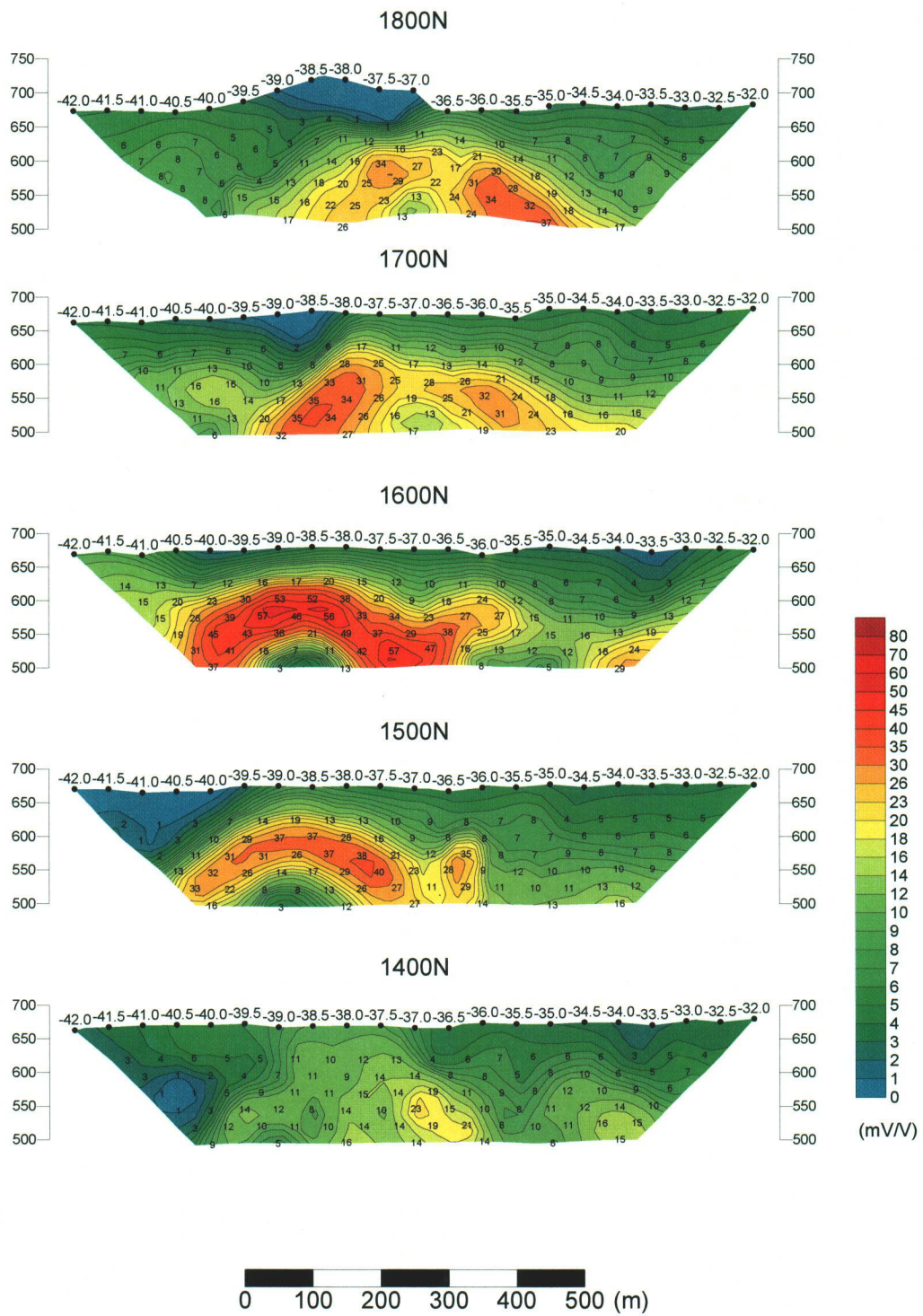


Fig. II -2-32(4) Chageability pseudo-sections in Hayl as Safil area(1800N – 1400N)

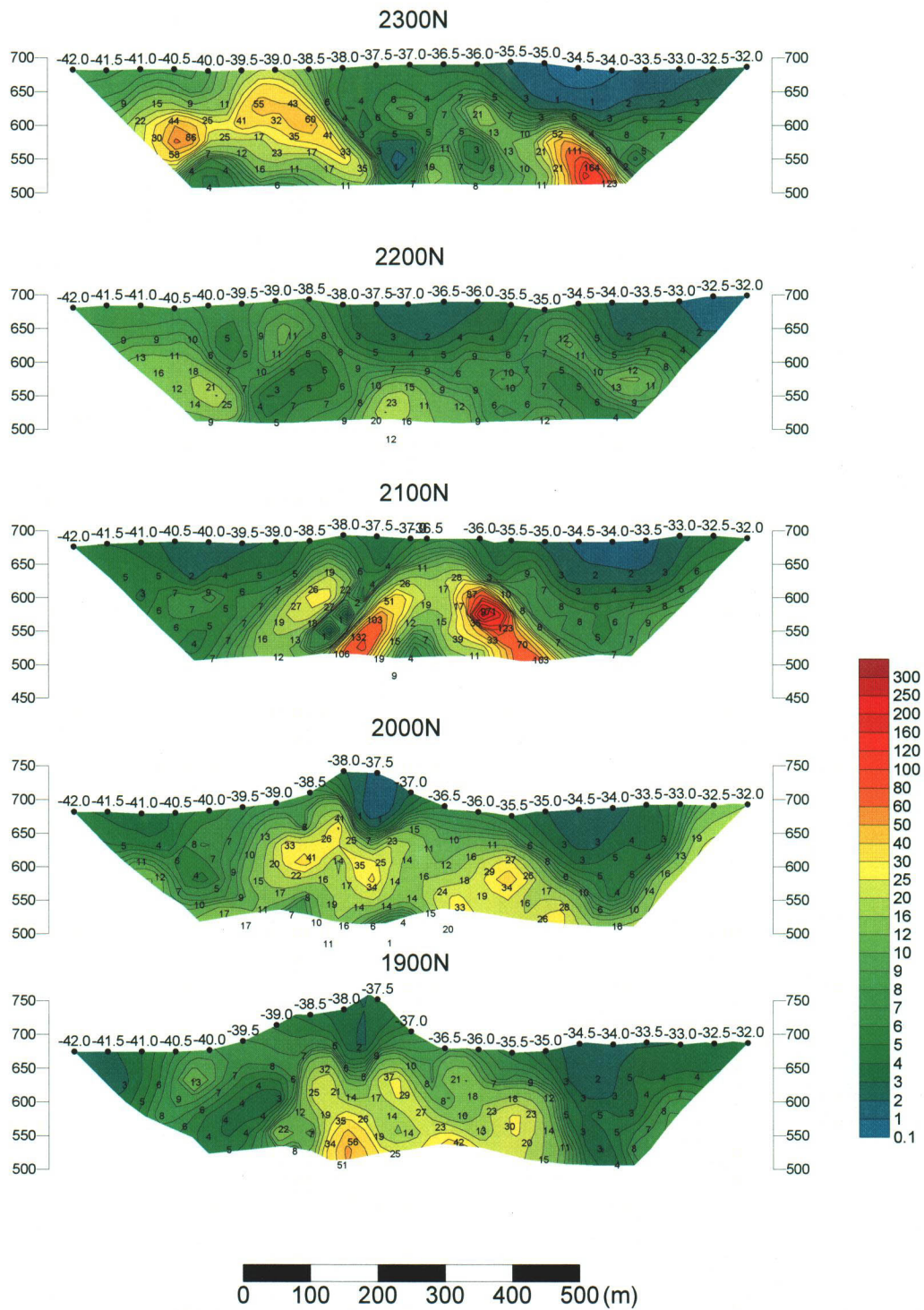


Fig. II -2-32(5) Metal factor pseudo-sections in Hayl as Safil area(2300N – 1900N)

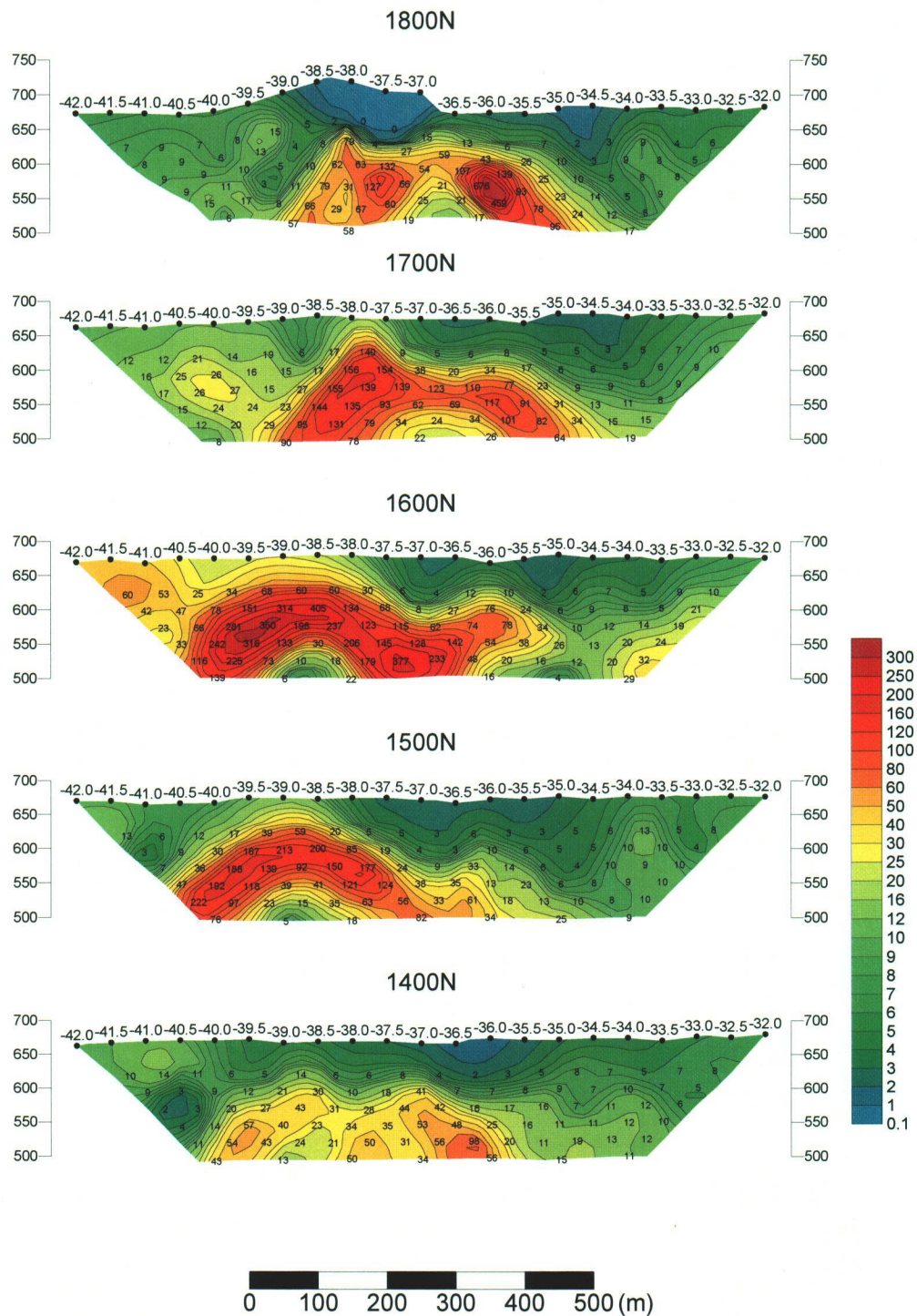
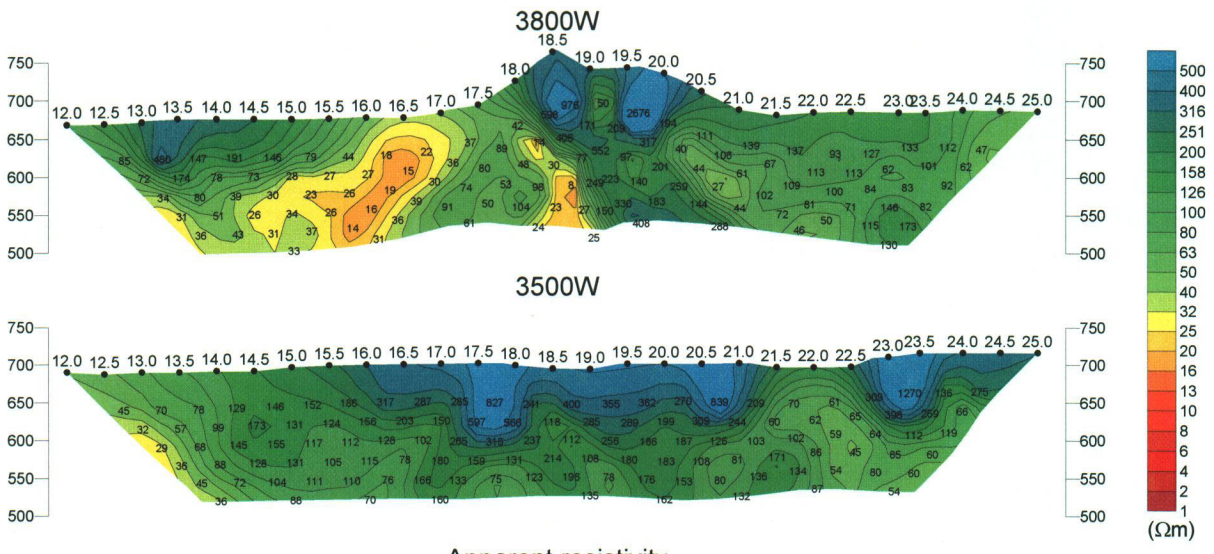
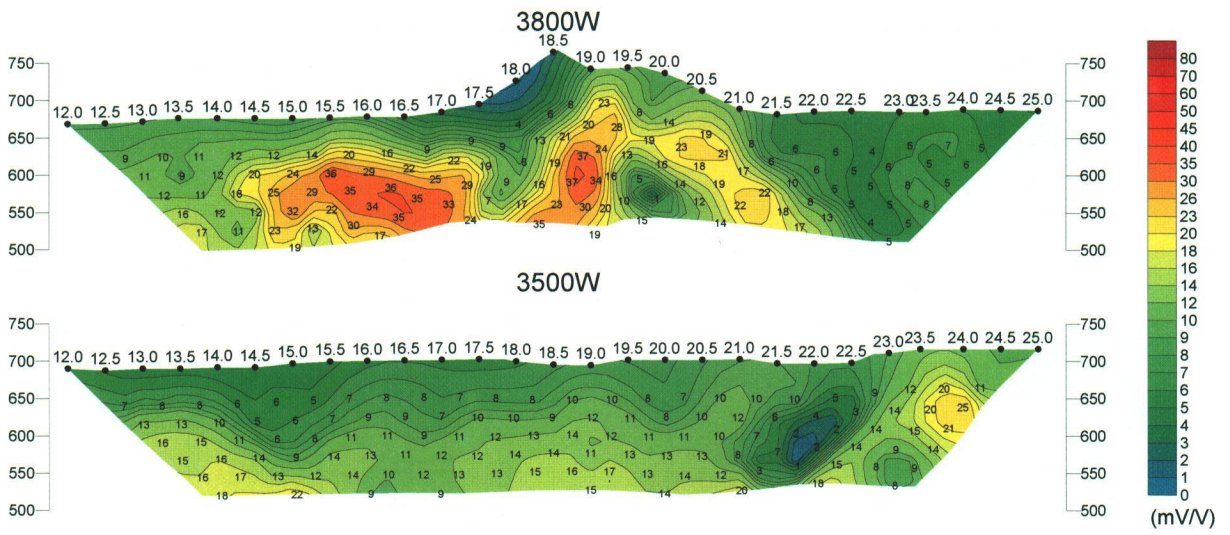


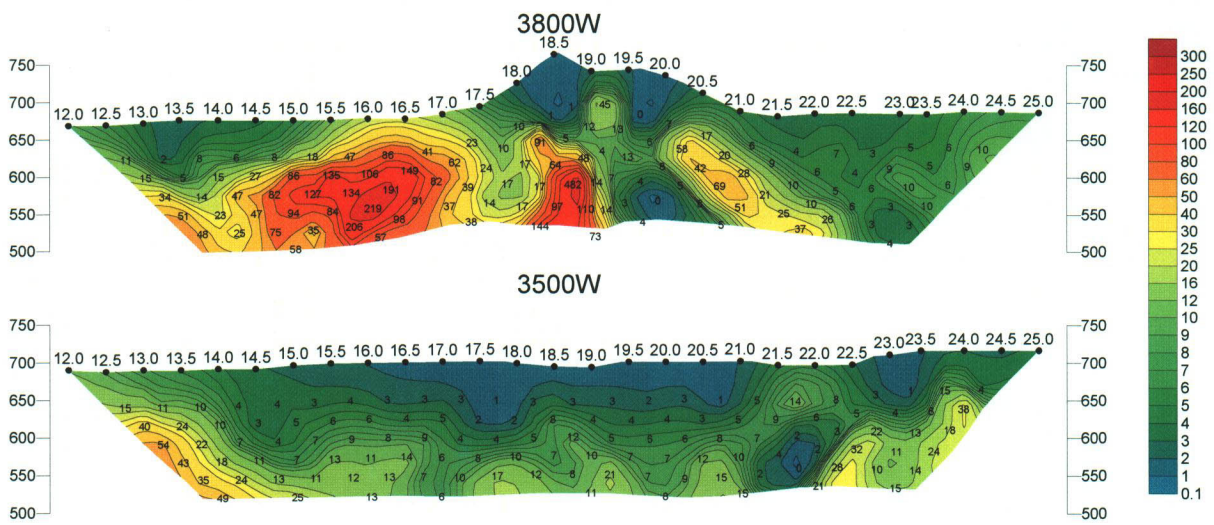
Fig. II-2-32(6) Metal factor pseudo-sections in Hayl as Safil area(1800N – 1400N)



Apparent resistivity



Chargeability



Metal factor



Fig. II -2-32(7) TDIP pseudo-sections of N-S lines in Hayl as Safil area