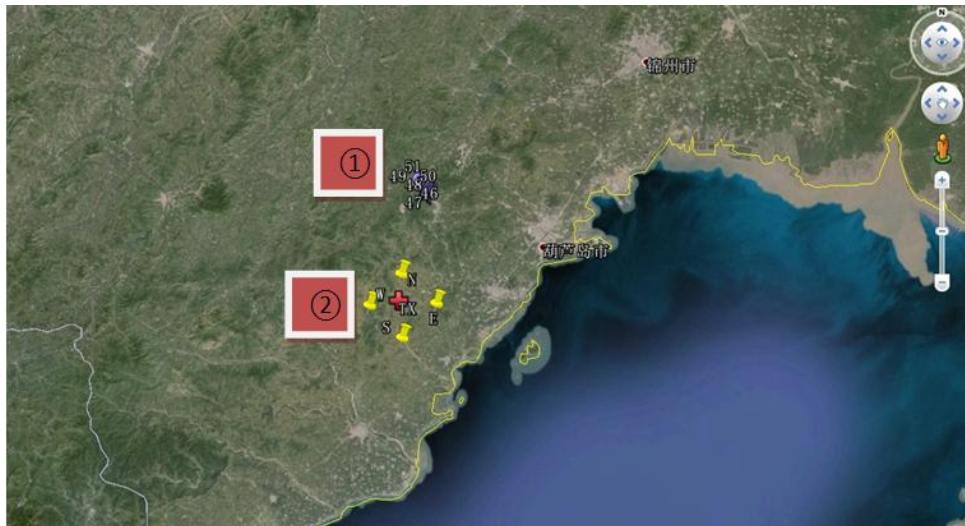


During the last two months ,our company ,together with Chinese academy of geological sciences have carried out a systematic CSAMT test in Niaoling province ,which located in northeast of China .

The CSAMT test include two parts ,one part is scalar csamt ,the other is Tcsamt test. Test location are showed below:



A. At first ,we start csamt in the region which showed in yellow labels in the google earth map. in this region ,there are 4 receiving points which distributed in E, N, W, S direction ,respectively and in the middle of the four reciving points, lay out the TX. The average distance between transmitter and receiving points is 8km or so.

the contents of test in this region :

1) Transmitting scalar TX current of different directions ( $0^\circ$ ,  $15^\circ$ ,  $30^\circ$ ,  $45^\circ$ ,  $60^\circ$ ,  $75^\circ$ ,  $90^\circ$ ,  $105^\circ$ ,  $120^\circ$ ,  $135^\circ$ ,  $150^\circ$  and  $165^\circ$ ) ,respectively and in receiving site ,use the "+" shape receiving manner. obtain the scalar CSAMT data of different TX directions.

2) Transmitting tensor alternative TX current of different directions ( $0^\circ\_90^\circ$ ,  $15^\circ\_105^\circ$ ,  $30^\circ\_120^\circ$ ,  $45^\circ\_135^\circ$ ,  $60^\circ\_150^\circ$ , and  $75^\circ\_165^\circ$ ) ,respectively and in receiving sites ,use the "+" shape receiving manner. obtain the TCSAMT data of different TX directions.

3) in each receiving point, AMT measurement are also carried out for comparing with csamt data.( the AMT may be doesn't work ,for the strong EM interference exist around the measurement sites)

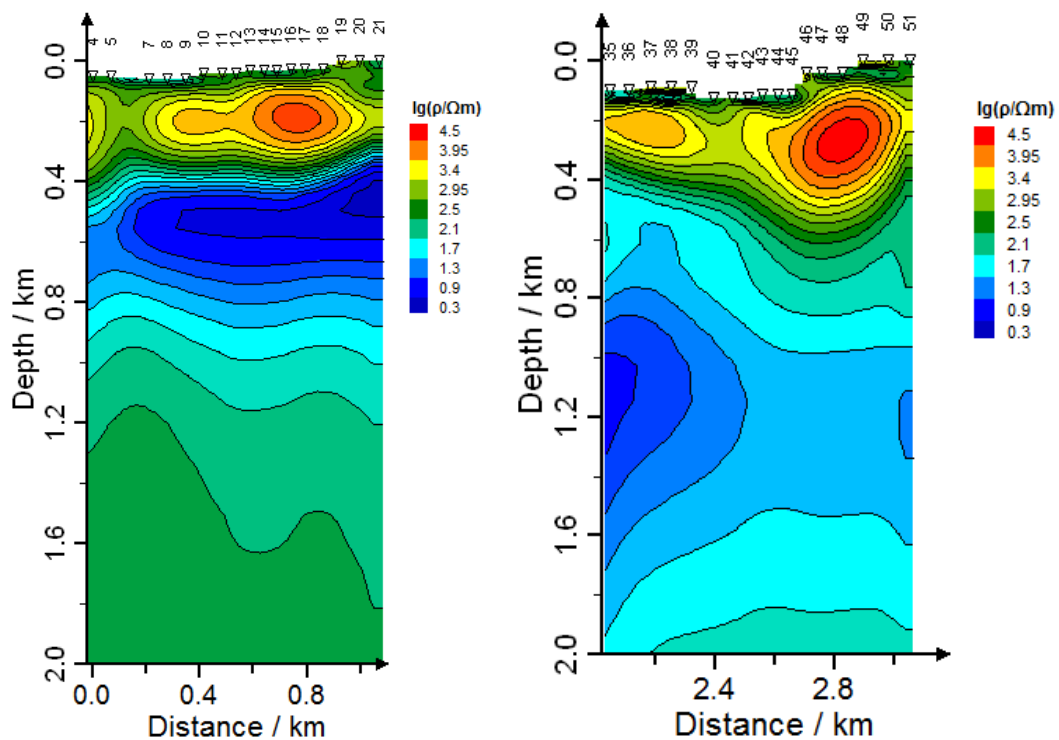
the data are done up in attachment(1),please check.

B. secondly , we have a Tcsamt measurement along a profile which showed with blue labels in google earth map (the enlarged map is also showed below).the distance between Tcsamt profile and TX-2 is about 10.5km and the transmitting manner is alternative dipole .the total number of TCSAMT site is 34, and average measuring point space is 70m.



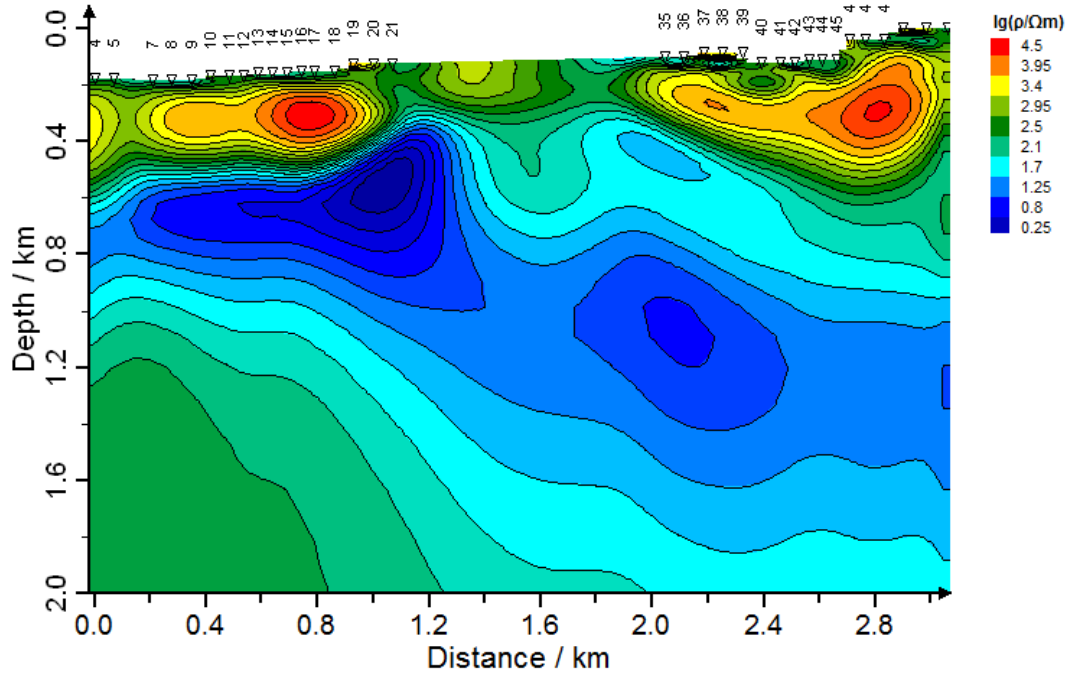
TCSMT profile in Molybdenum mine

the profile is located around a large Molybdenum mine, so the EM interference is very strong. in this region ,Archean migmatite, mixed granite and gneiss make up its basement and overlying sedimentary cover constituted of sinian-Permian carbonate rocks and clastic rocks .the geological structure is mainly NE-orient fault ,and some EW-orient fault system.



### Result of Line0 MT-2D Inversion

tau=30; floor Err(%)=TM 2; Iter=50; RMS=3.43



the above are the 2-D inversion results. the blue low resistivity layer may be the coal layer which has been tested by logging in this area .the profile TCSAMT data are done up in attachment(2).