



中国地质大学

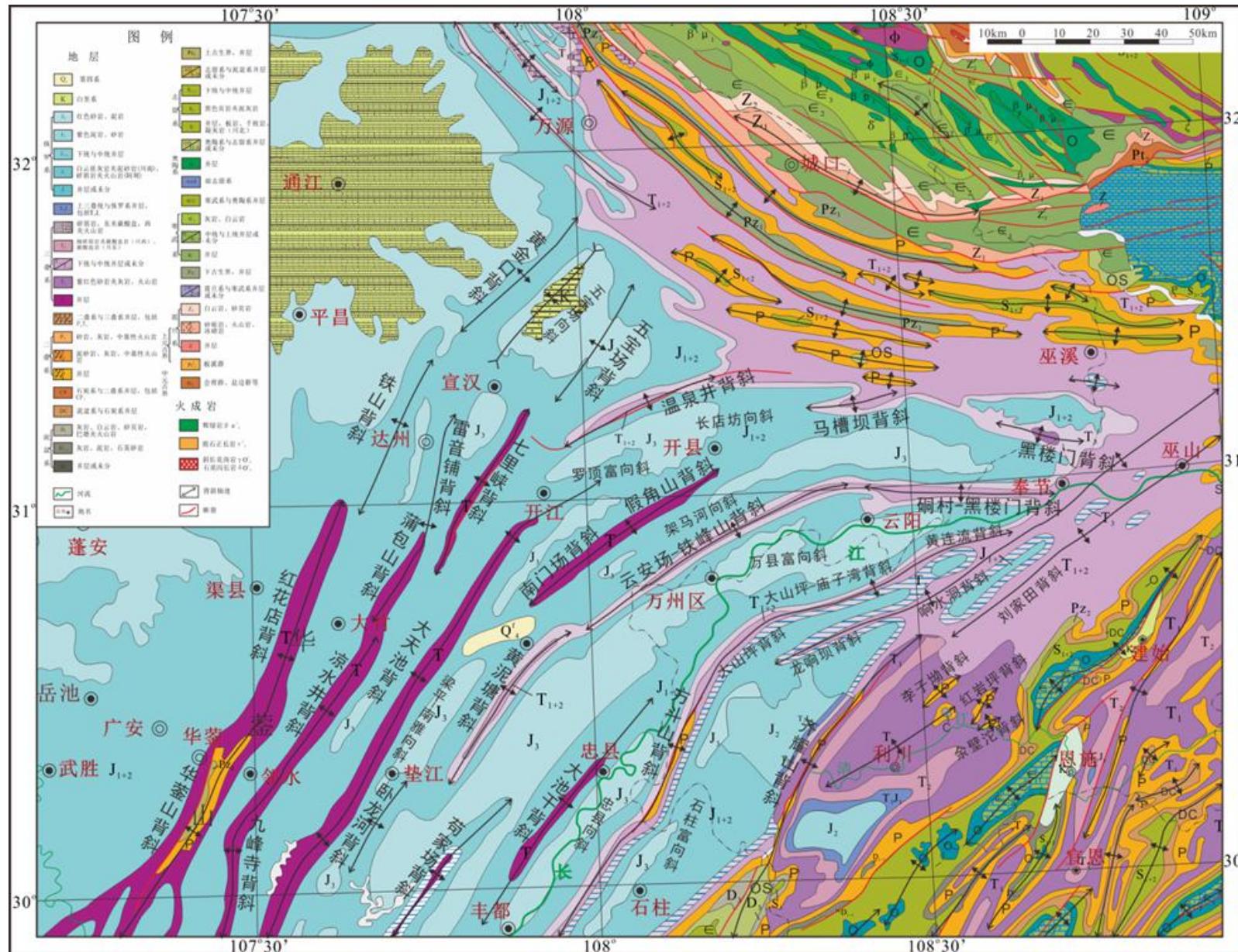
CHINA UNIVERSITY OF GEOSCIENCES

EGU2020-8698

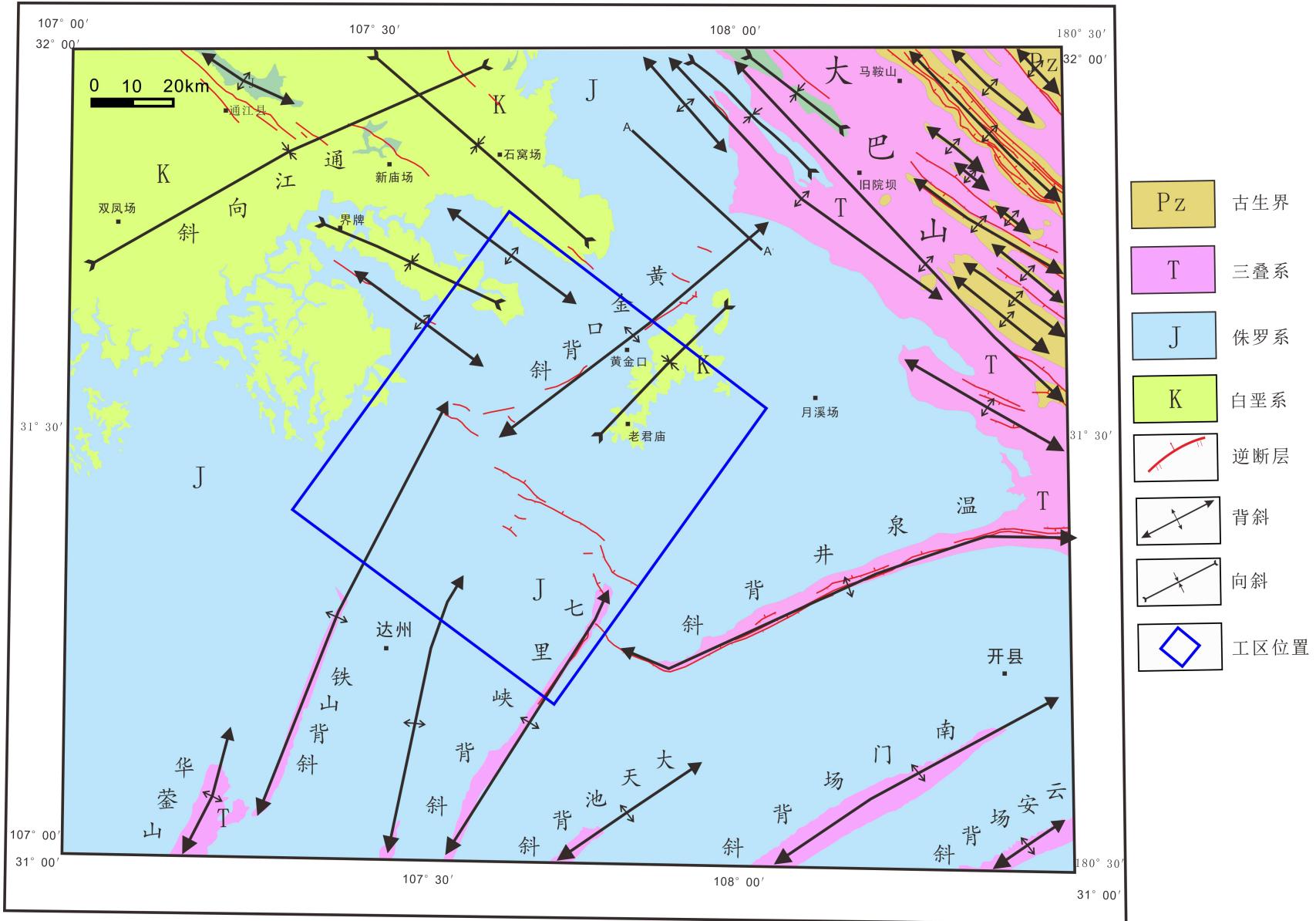
**Constraints of multiple detachment layers on  
structural deformation patterns in the basin:  
insight from 3D geological structure model in  
the Puguang area, China**

Hanyu Huang

The Puguang area is located in the intersection zone of the Dabashan foreland fold belt and Jura-type folds in eastern Sichuan.

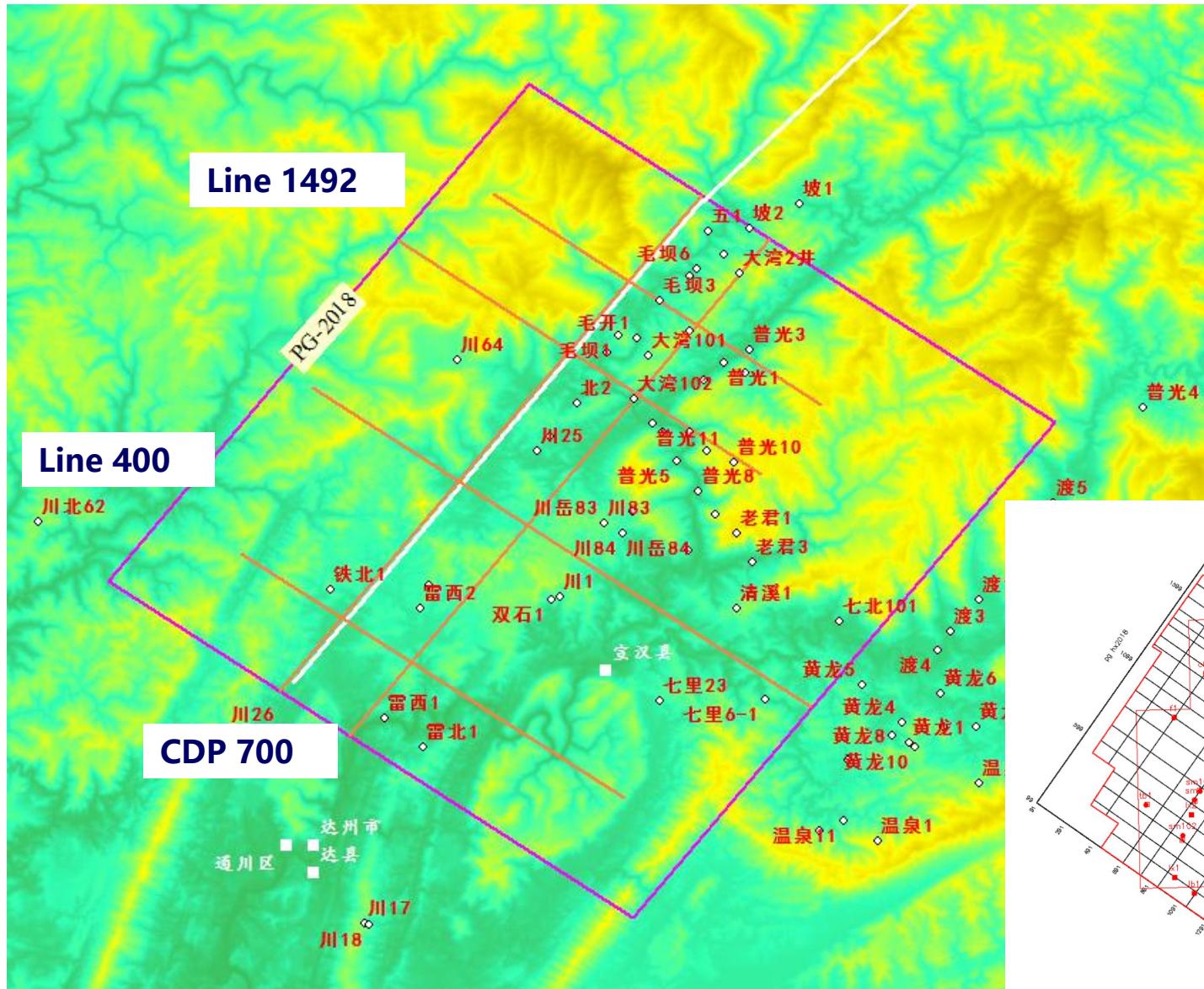


# Structural outline map of Puguang area

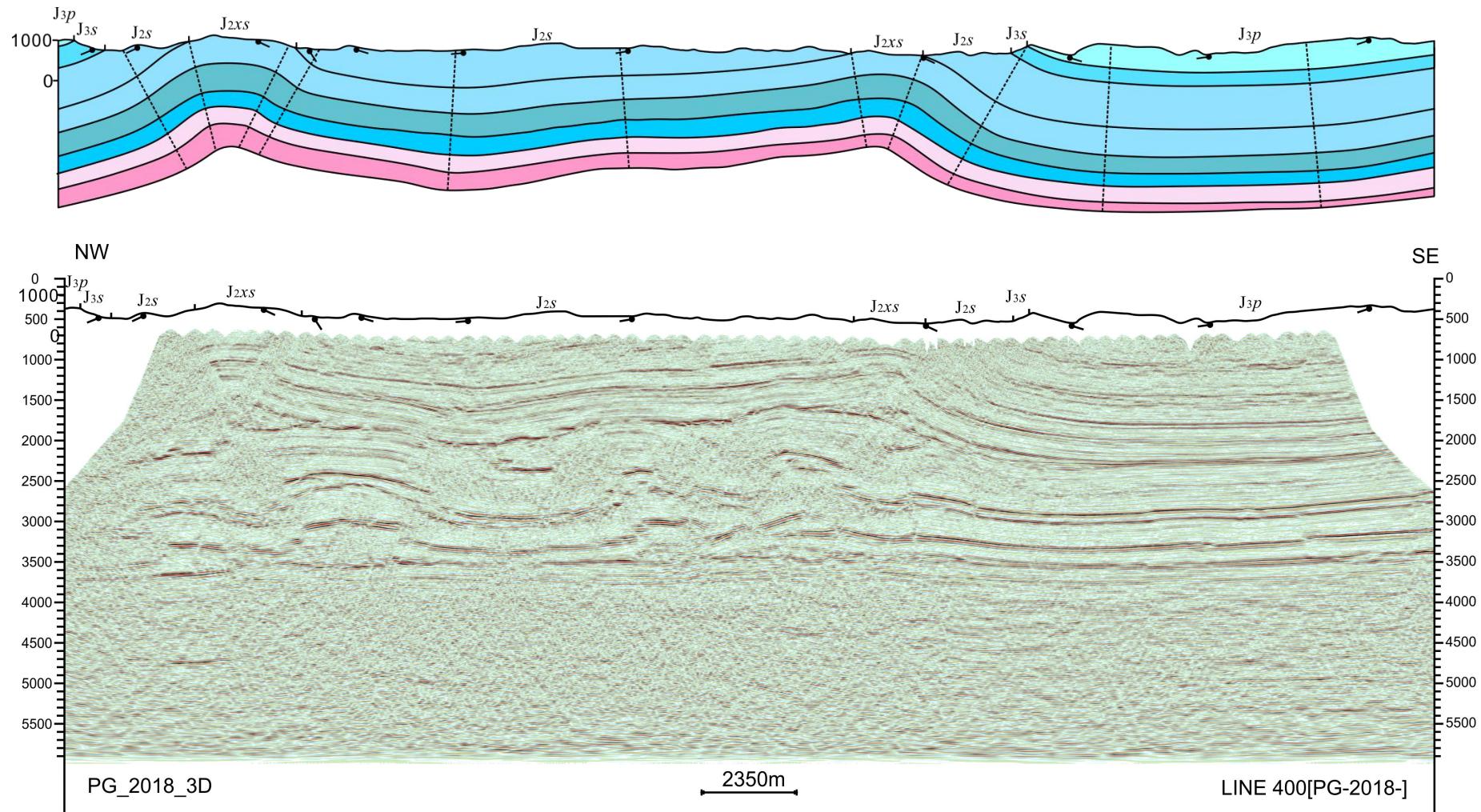


# Methods

- ① Outcrop data
- ② Dem data
- ③ Seismic data



# Line 400



# Line 400



398m, J<sub>3p</sub>, sandstone



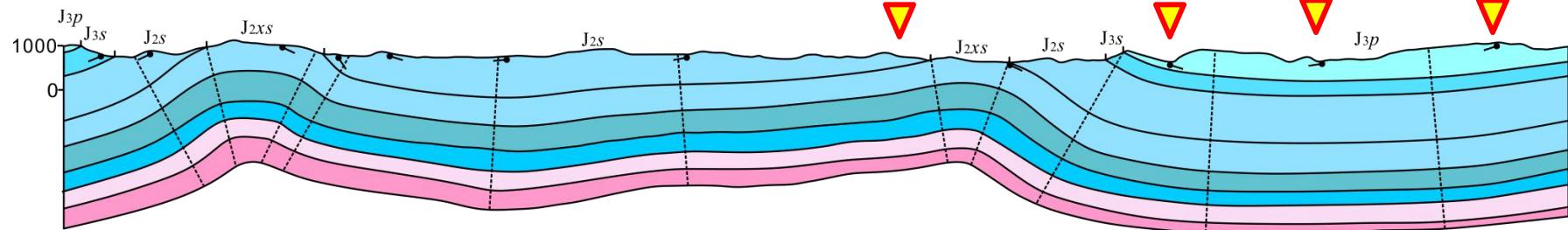
351m, J<sub>3p</sub>, sandstone



642m, J<sub>3p</sub>, sandstone



584m, J<sub>2s</sub>, sandstone



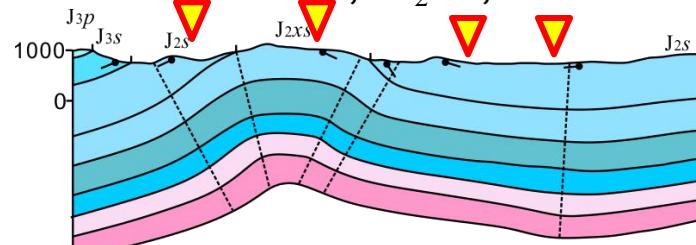
# Line 400



517m,  $J_2s$ , mudstone and sandstone



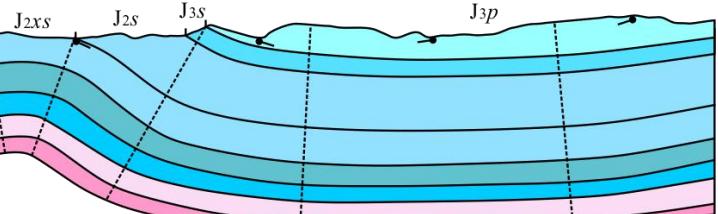
466m,  $J_2xs$ , sandstone

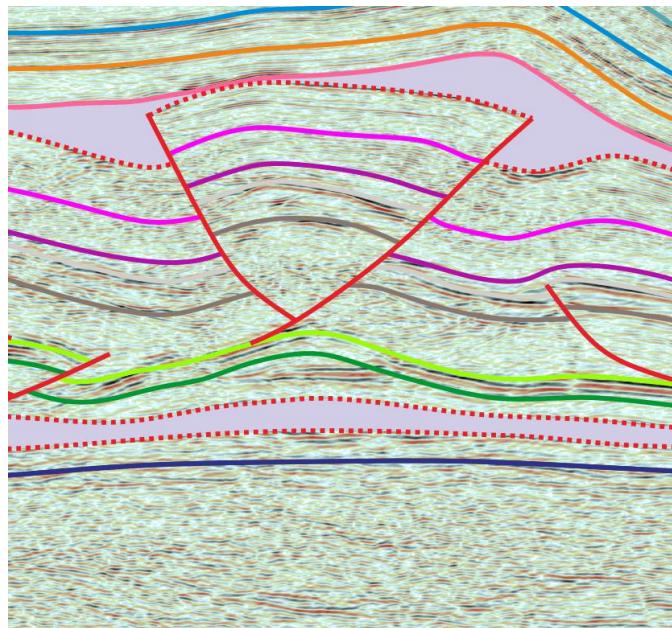
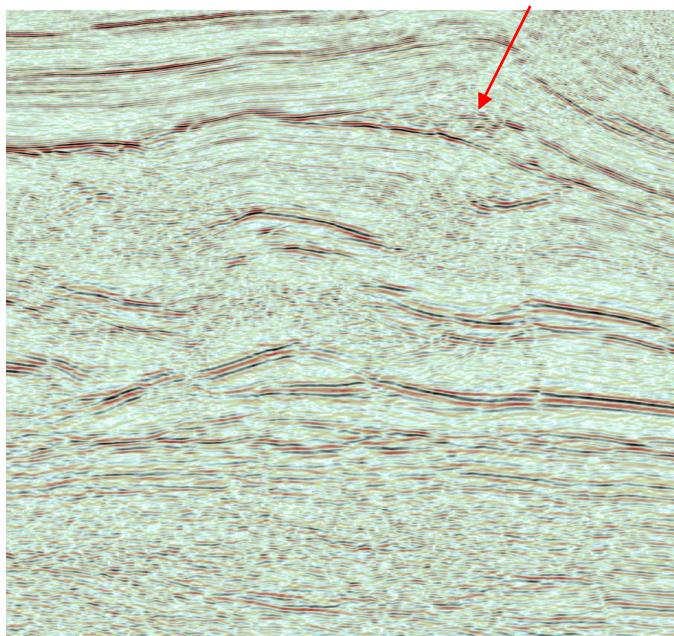
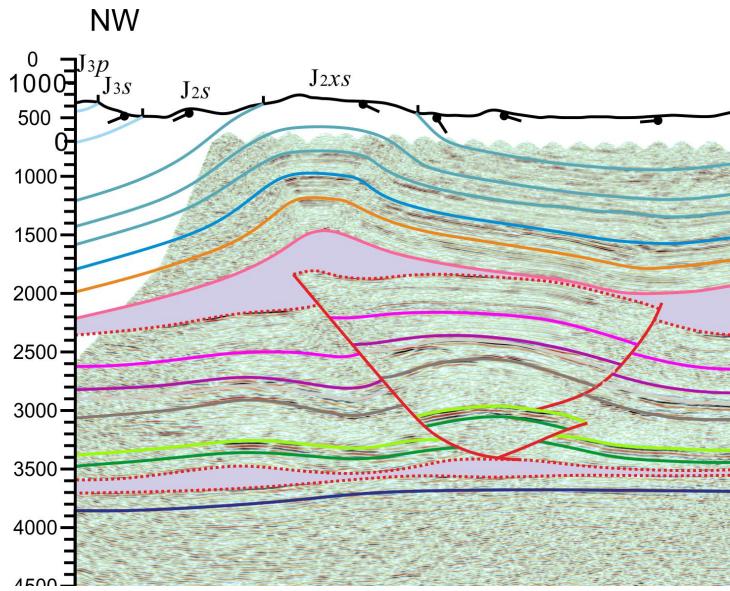
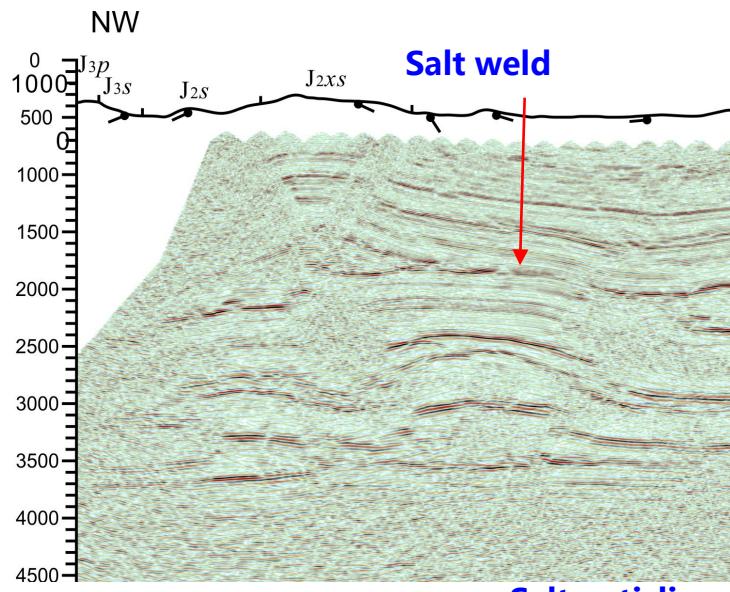


547m,  $J_2s$ , mudstone and siltstone

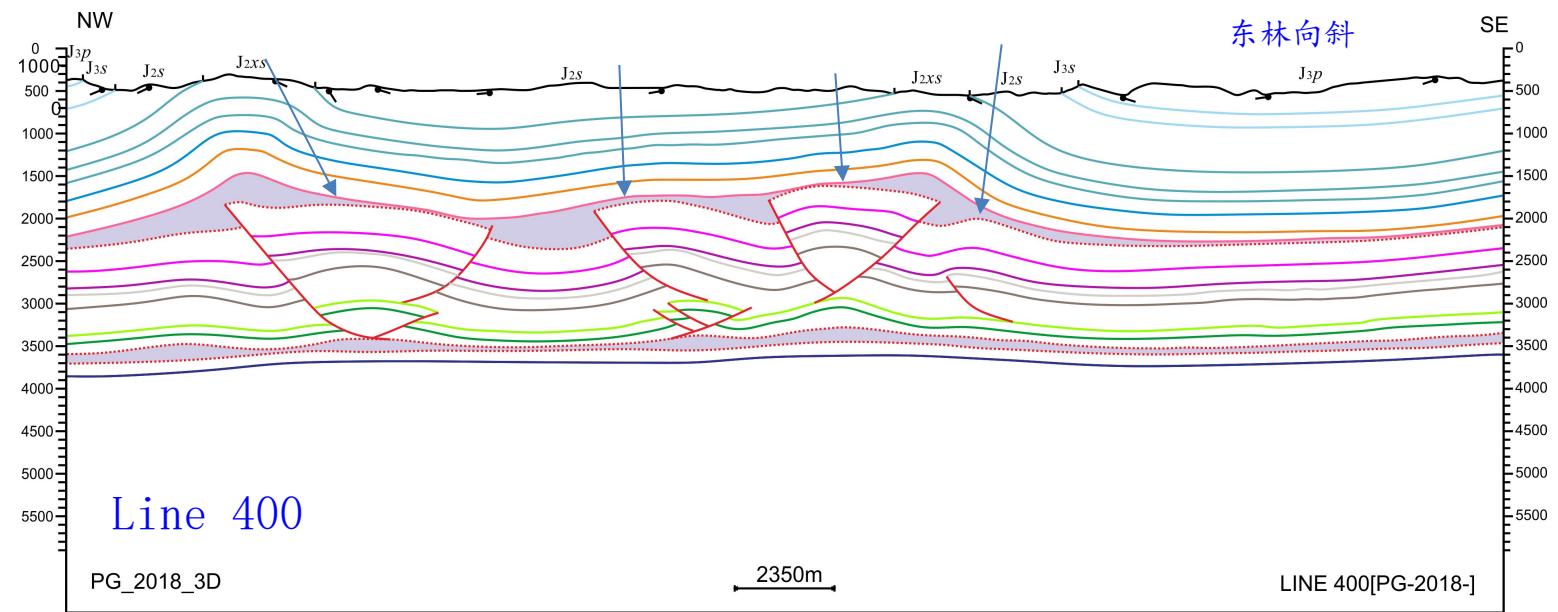
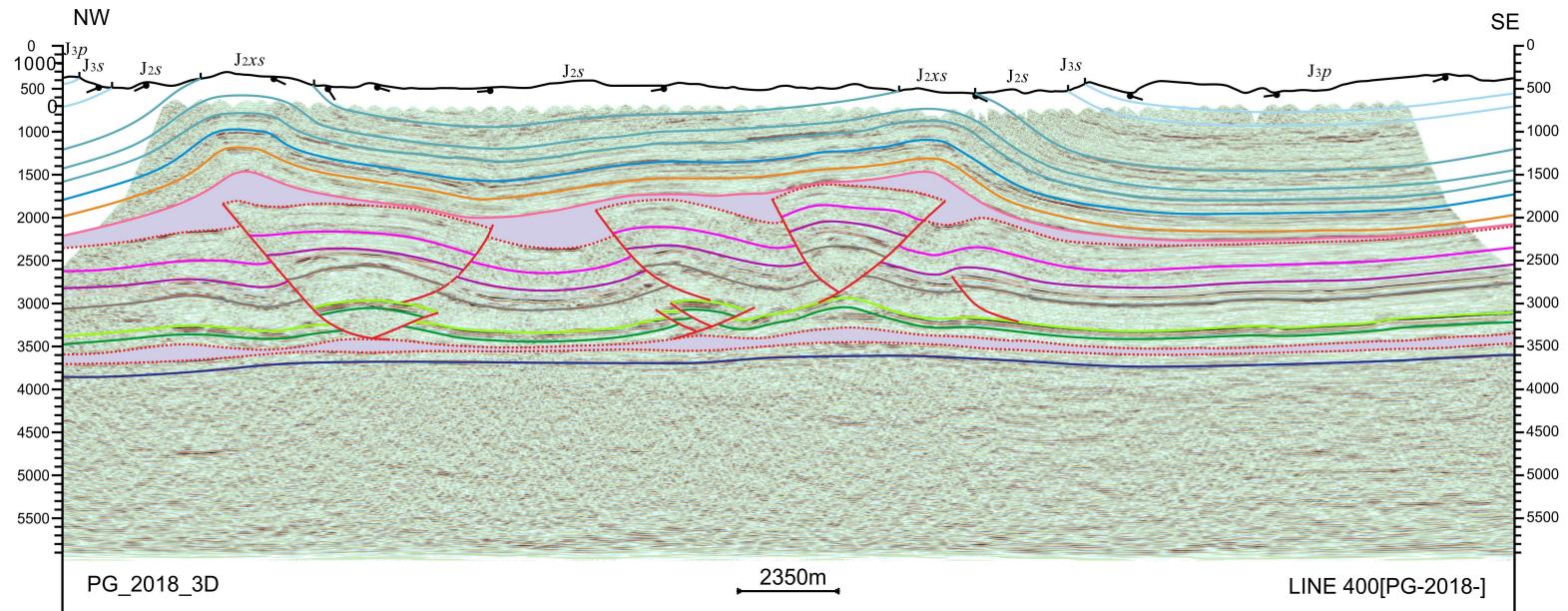


405m,  $J_2s$ , sandstone

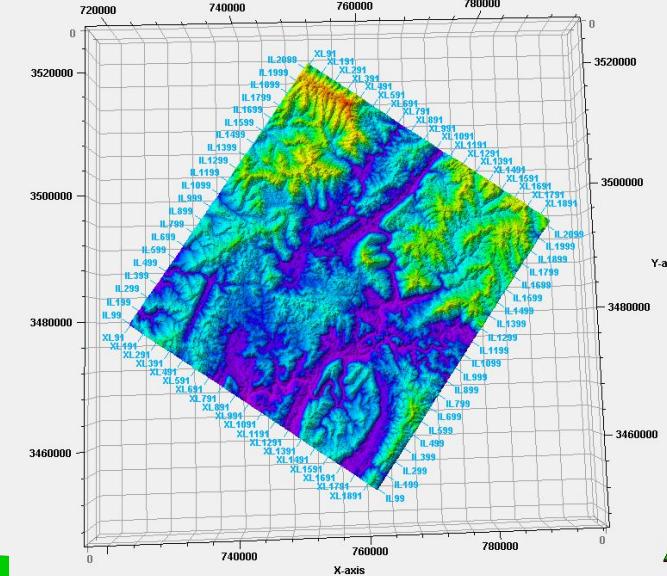
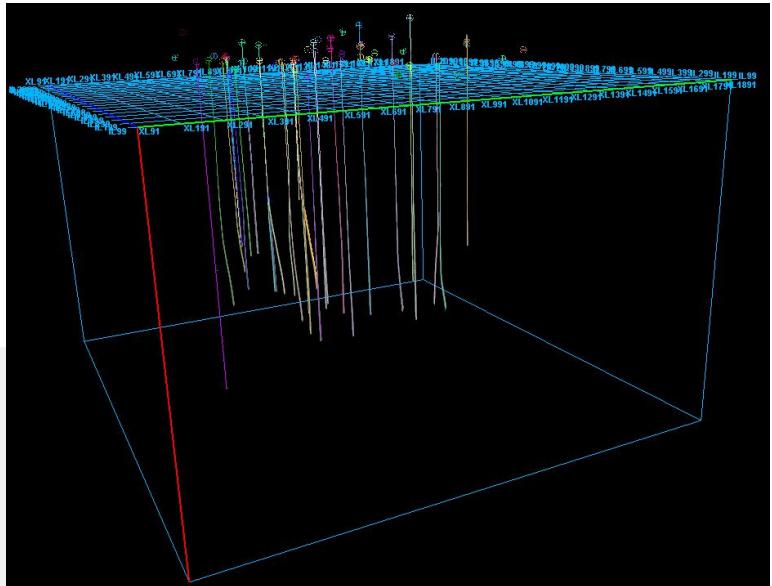
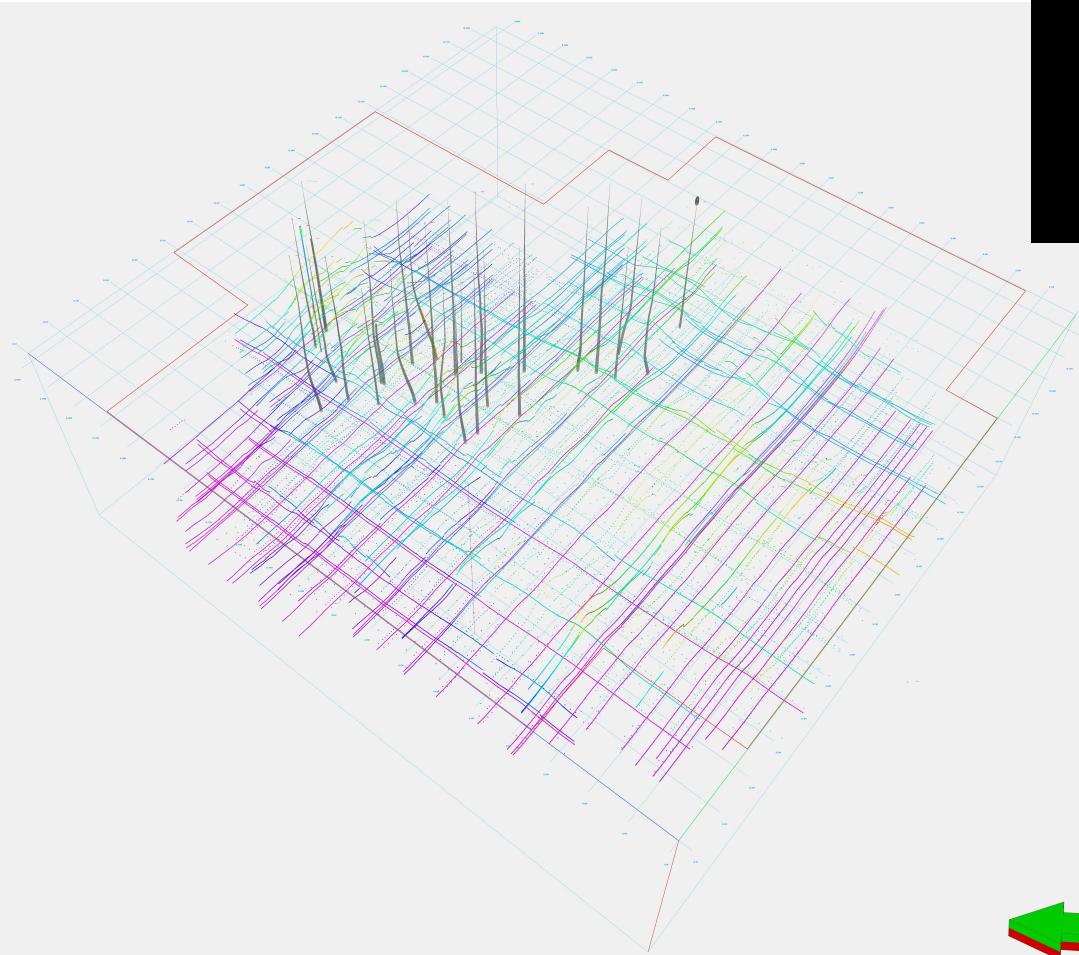




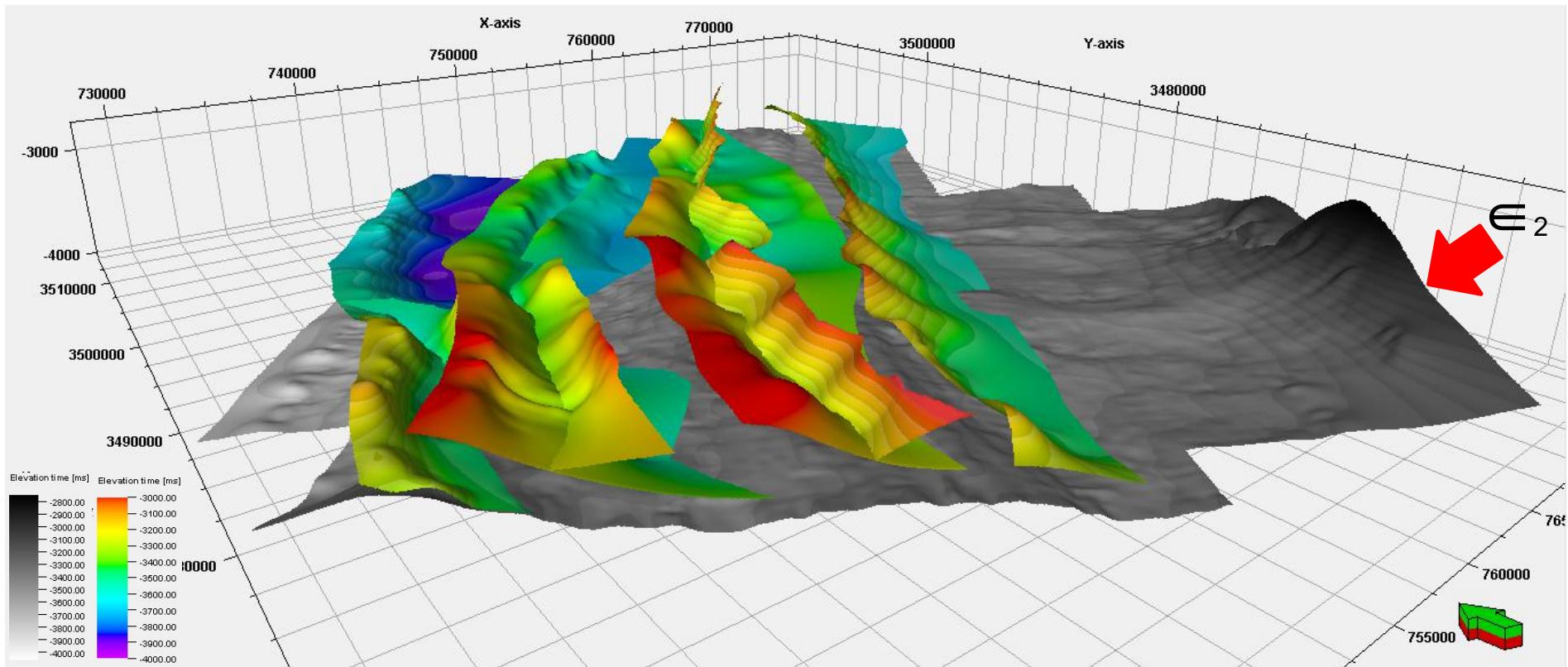
## ② Interpretation

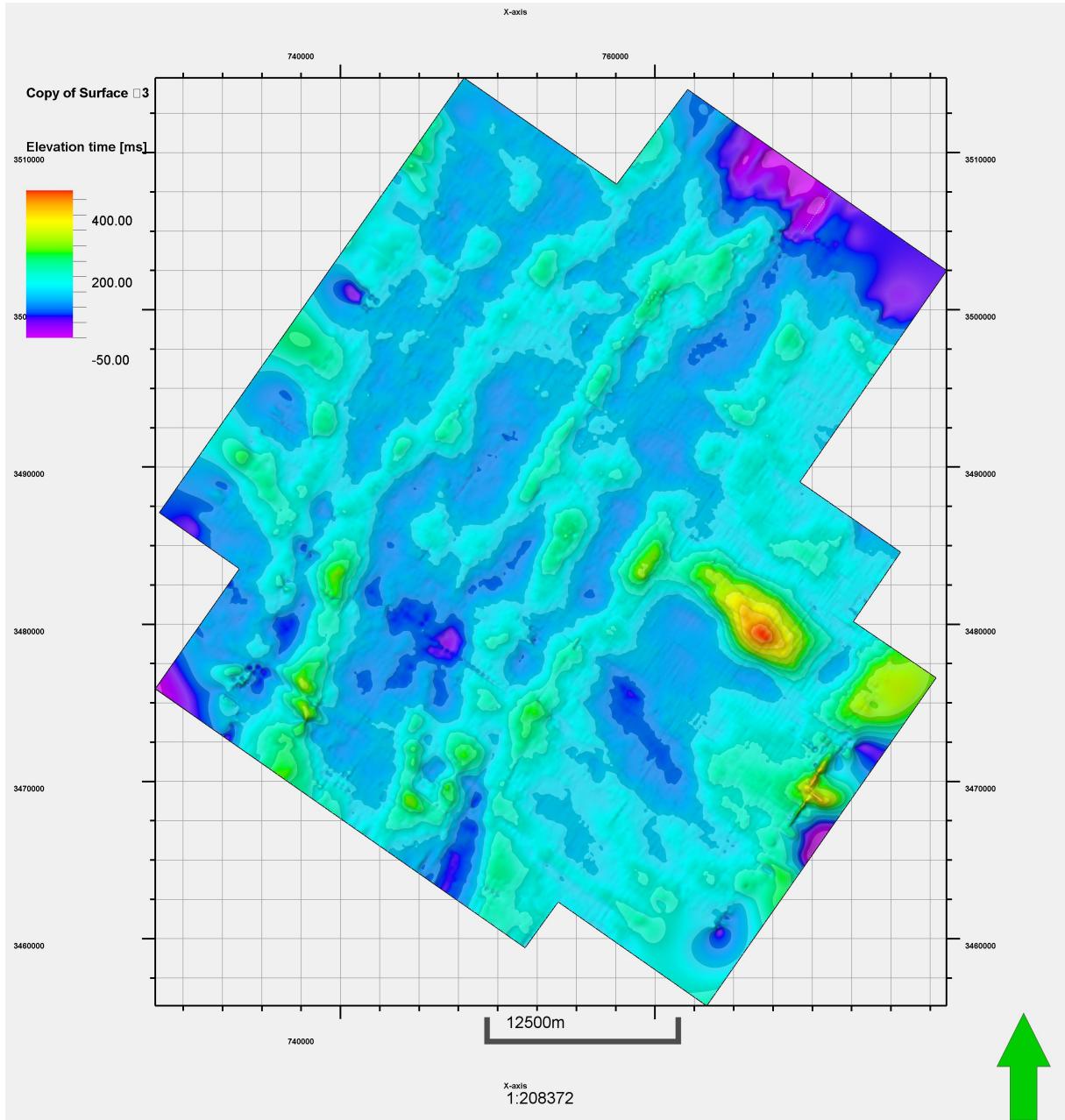


# 3D model



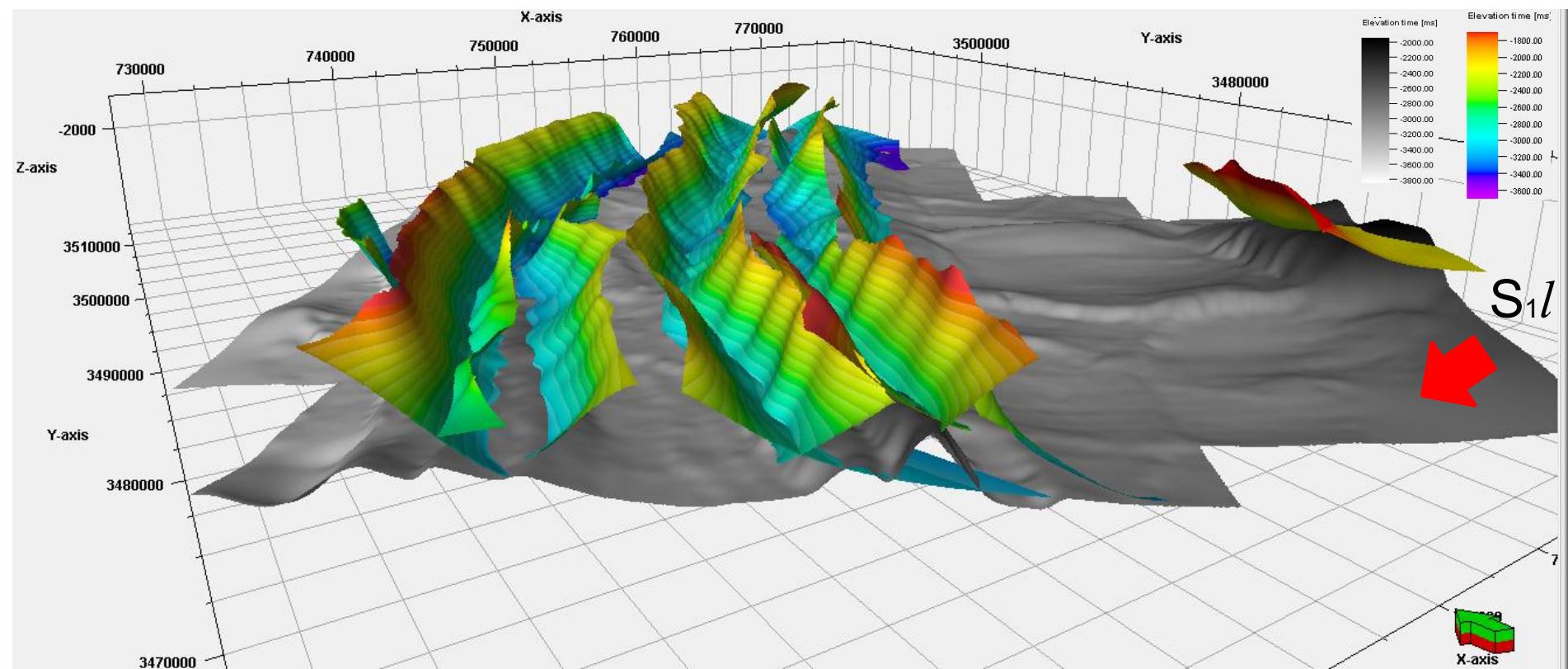
# Deep structural deformation system ( $\in_{2-3}$ -S)



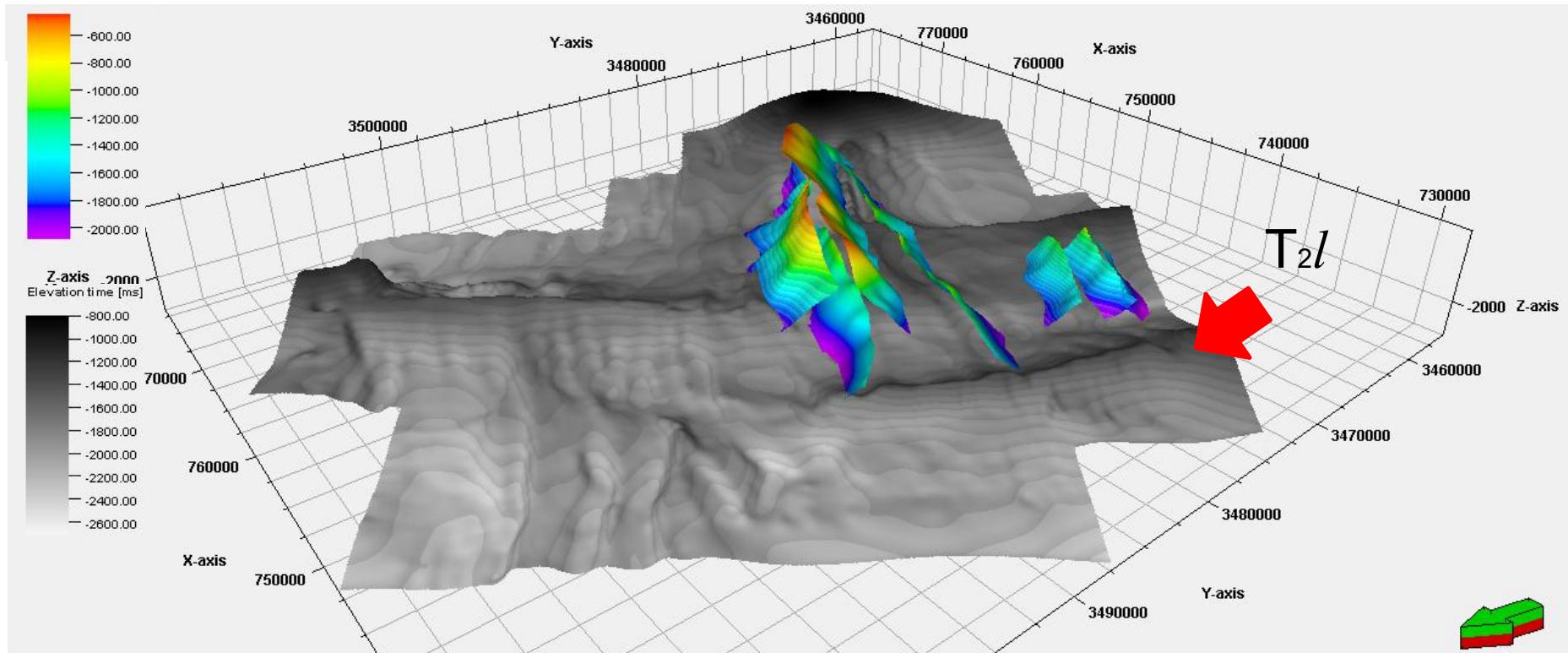


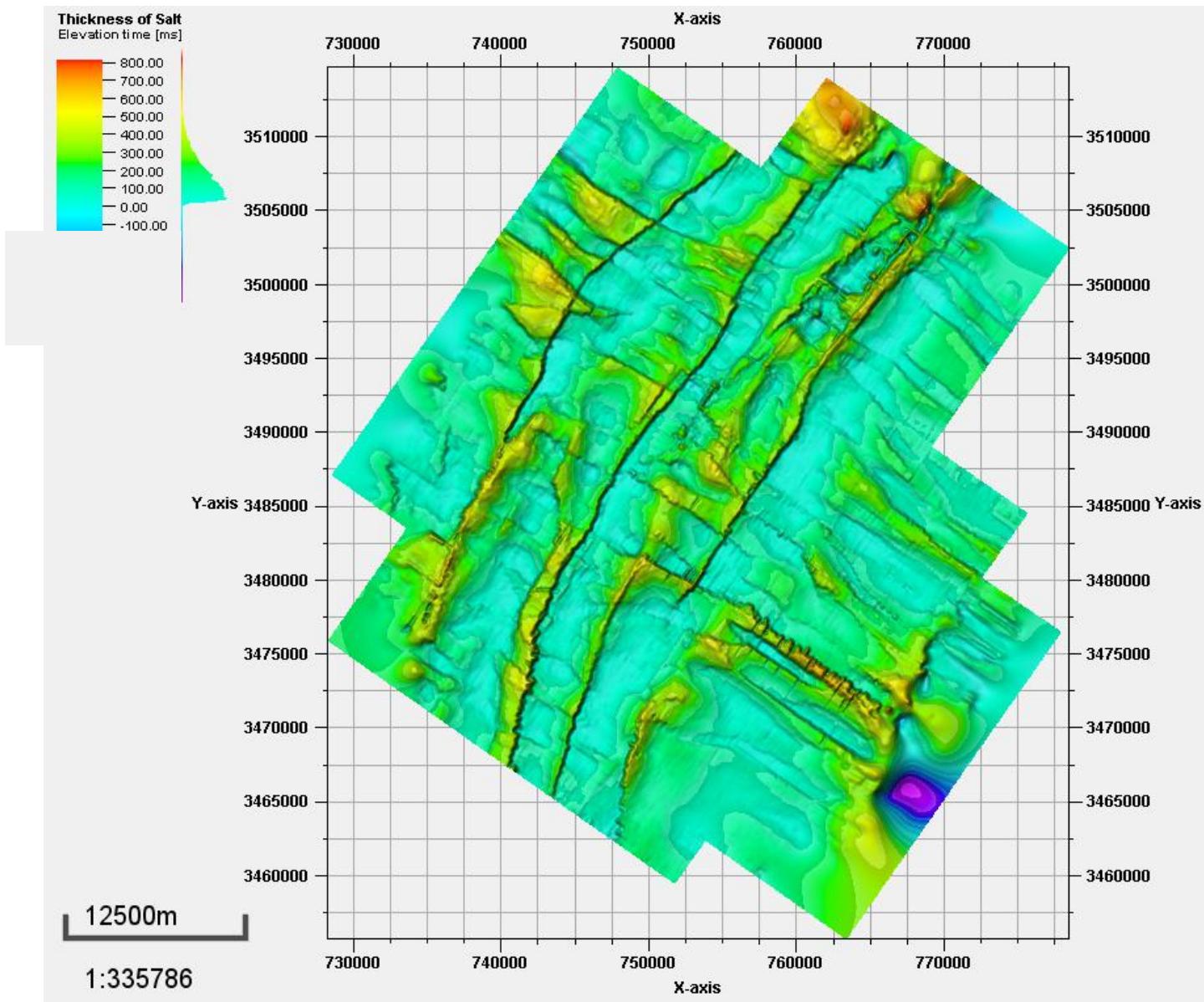
**Isopach map of middle Cambrian salt rocks**

# Central structural deformation system ( $S-T_1j$ )



# Shallow structural deformation system





**Isopach map of lower Triassic gypsum and salt rocks**



Thanks

2019/8/13 18:30