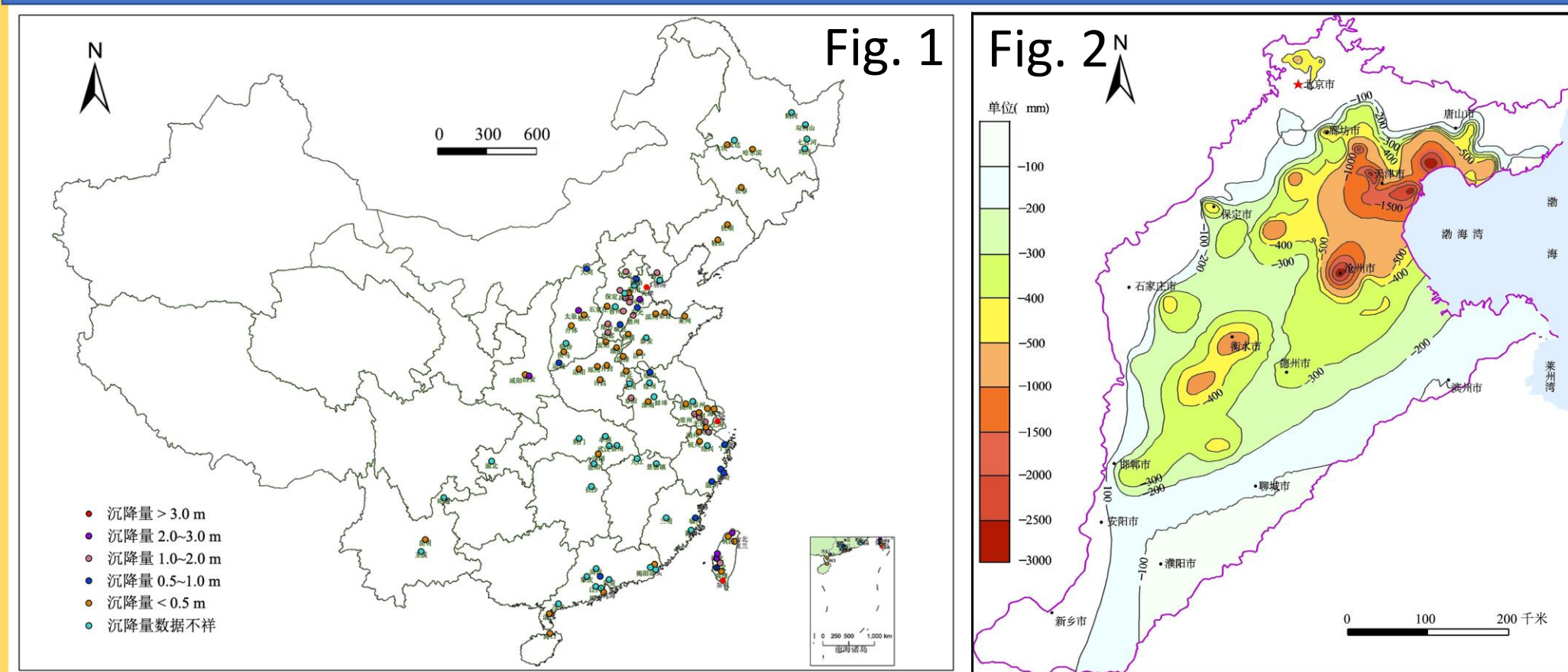


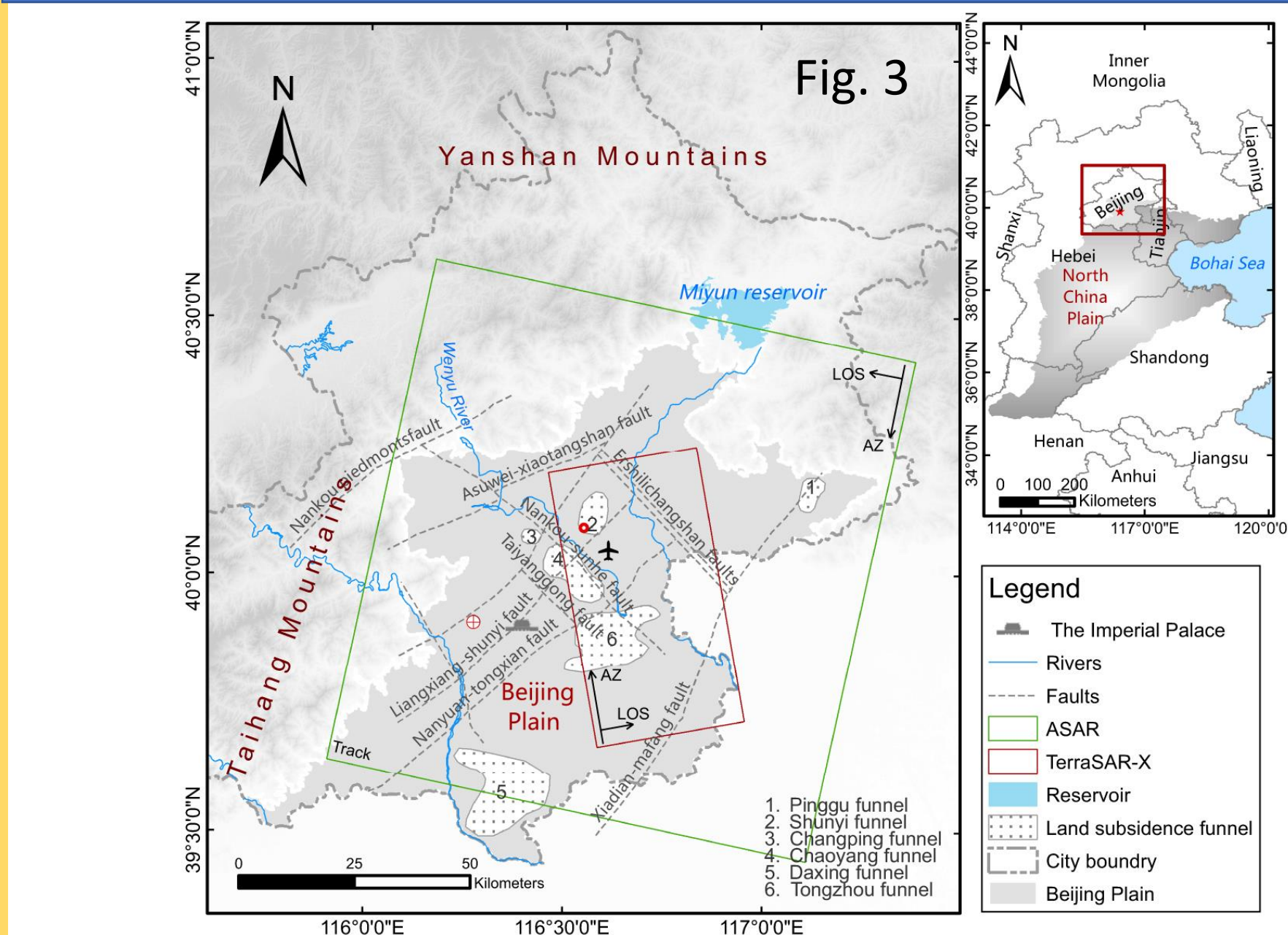
Evolution of land subsidence over Beijing, China revealed by MT-InSAR technology

Introduction



Regional land subsidence is an integrated systematic issue related to multidisciplinary and being of global focus, and has been being a serious threat to the urban infrastructure, high-speed railway and the utilization of underground space, and restricting the sustainable development of society.

Study area



The study of the regional subsidence evolution in Beijing Plain is of great significance: it is necessary to reveal the regional land subsidence evolution law under the background of Integration of Beijing-Tianjin-Hebei and the South-to-North Water Diversion.

Data sets and methods

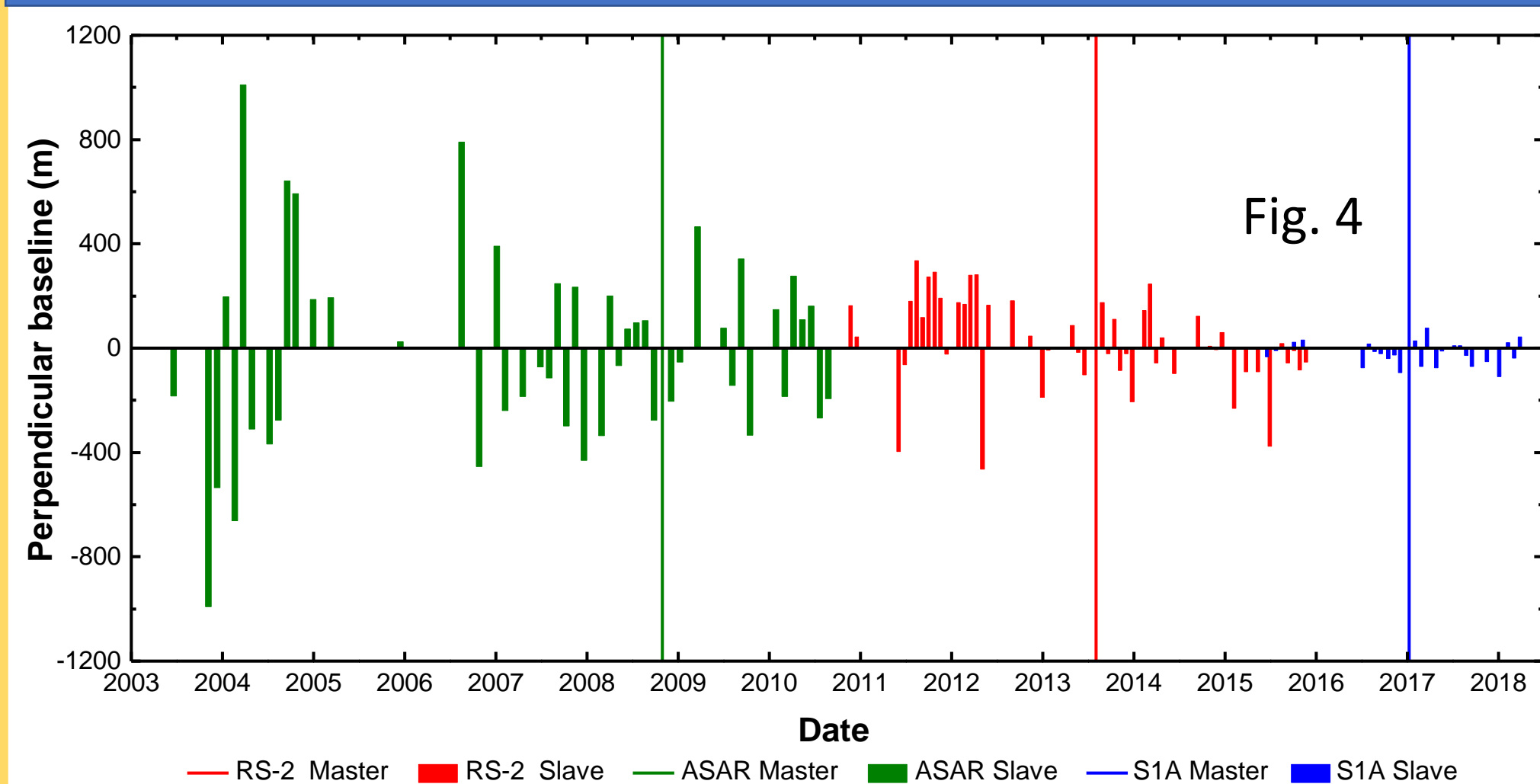
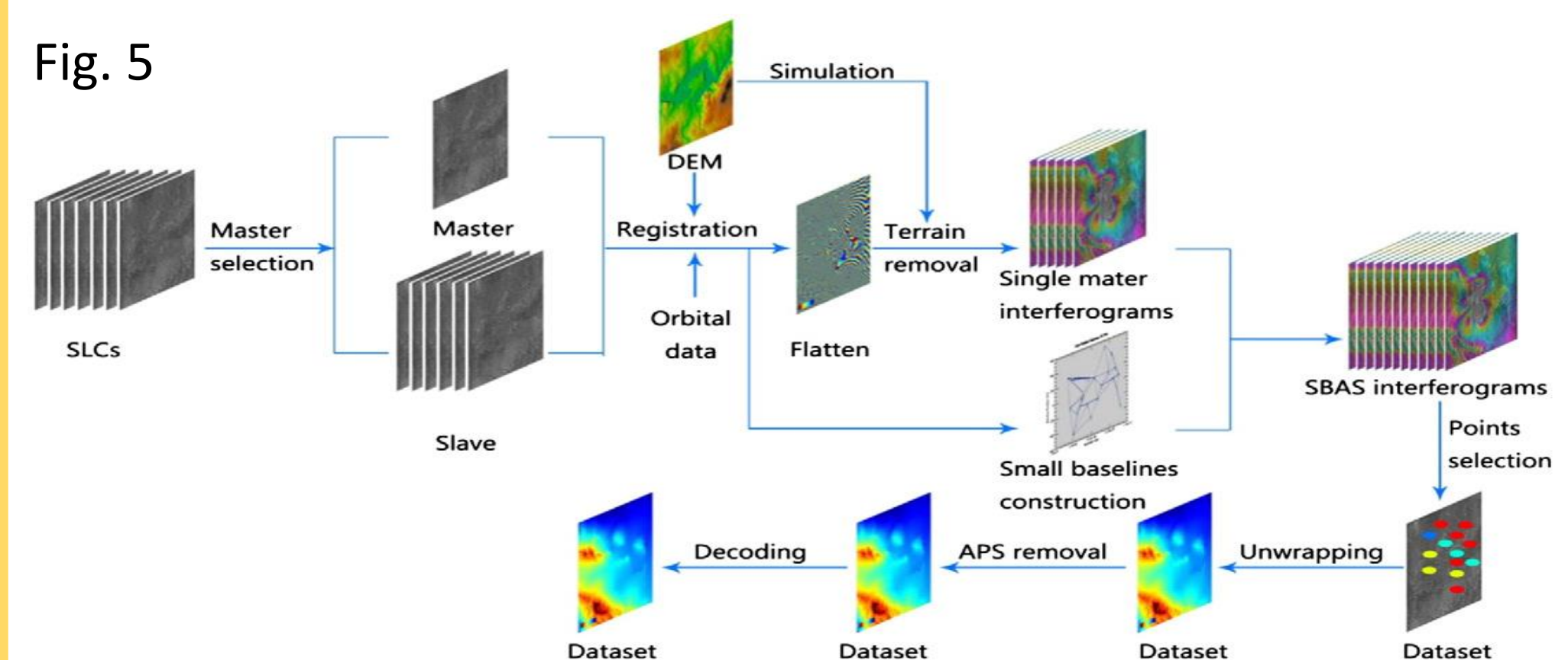


Fig. 5



Results

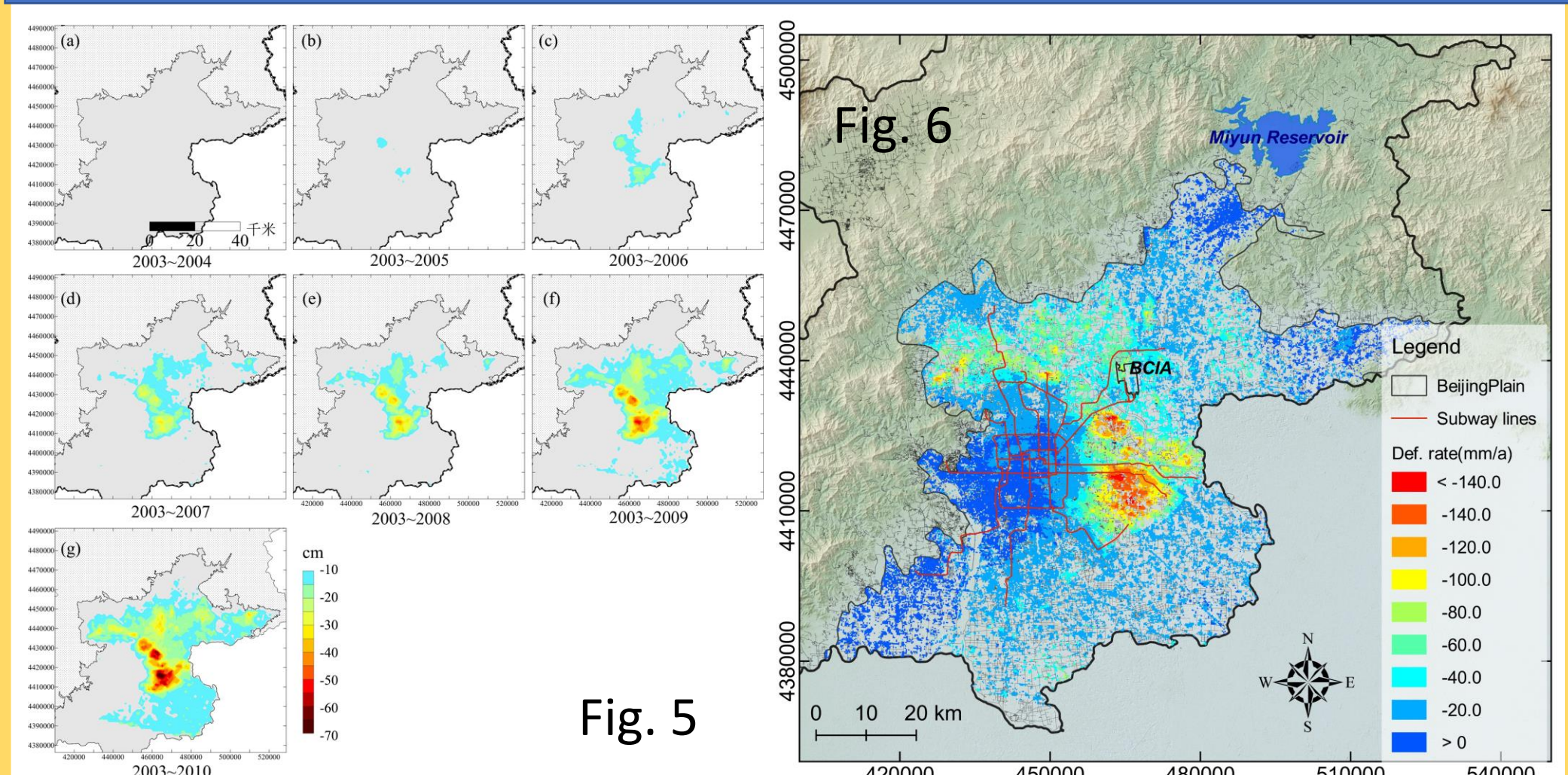


Fig. 5

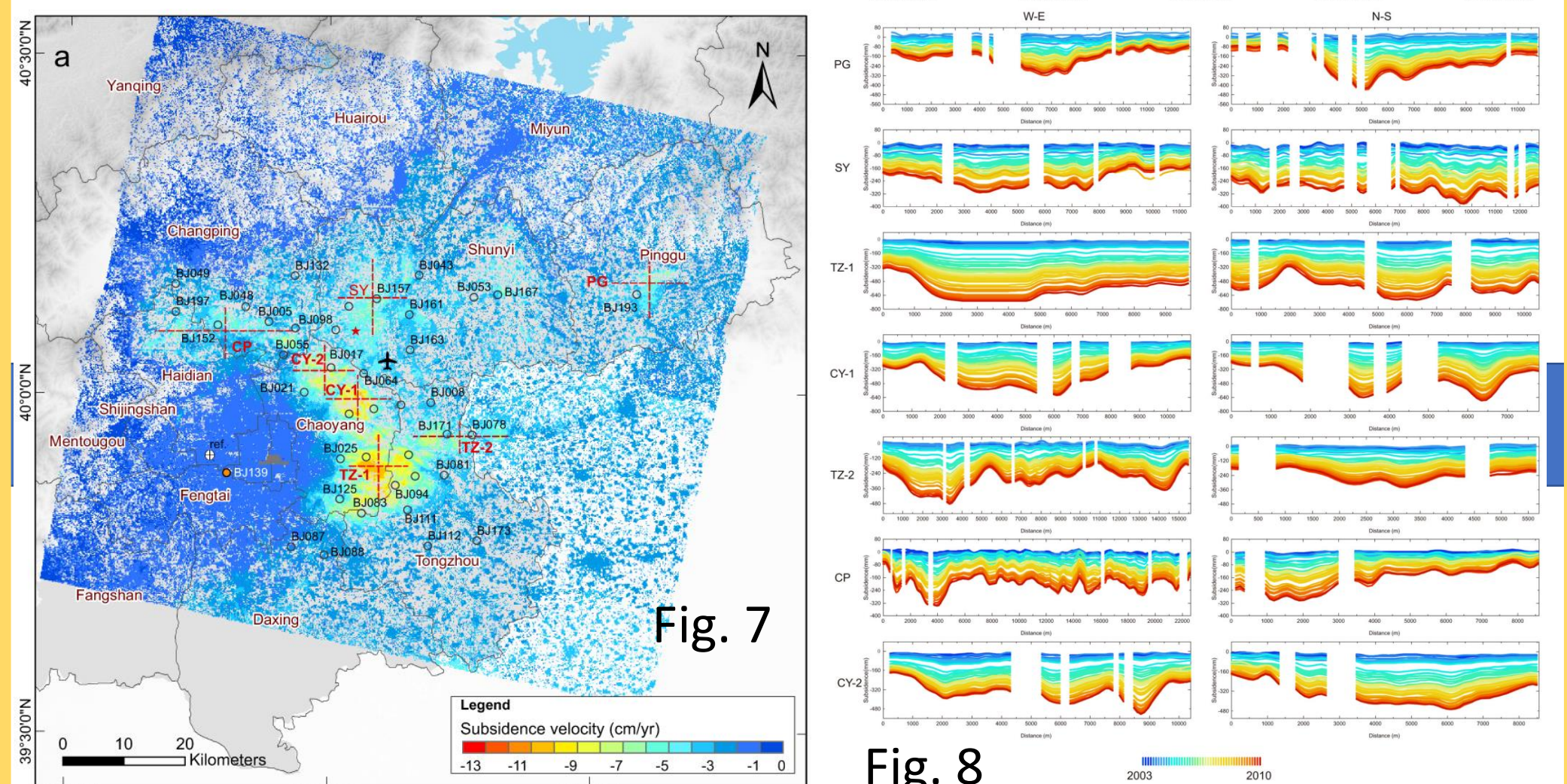


Fig. 7

Fig. 8

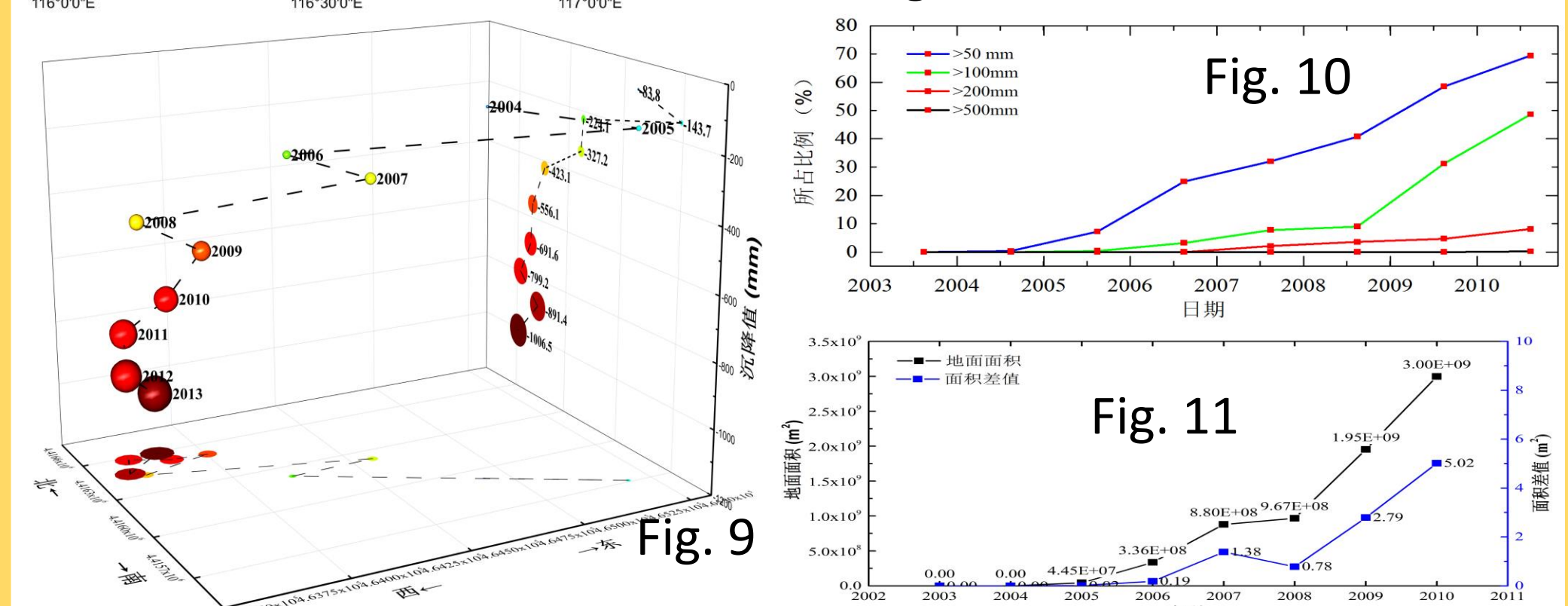


Fig. 9

Fig. 10

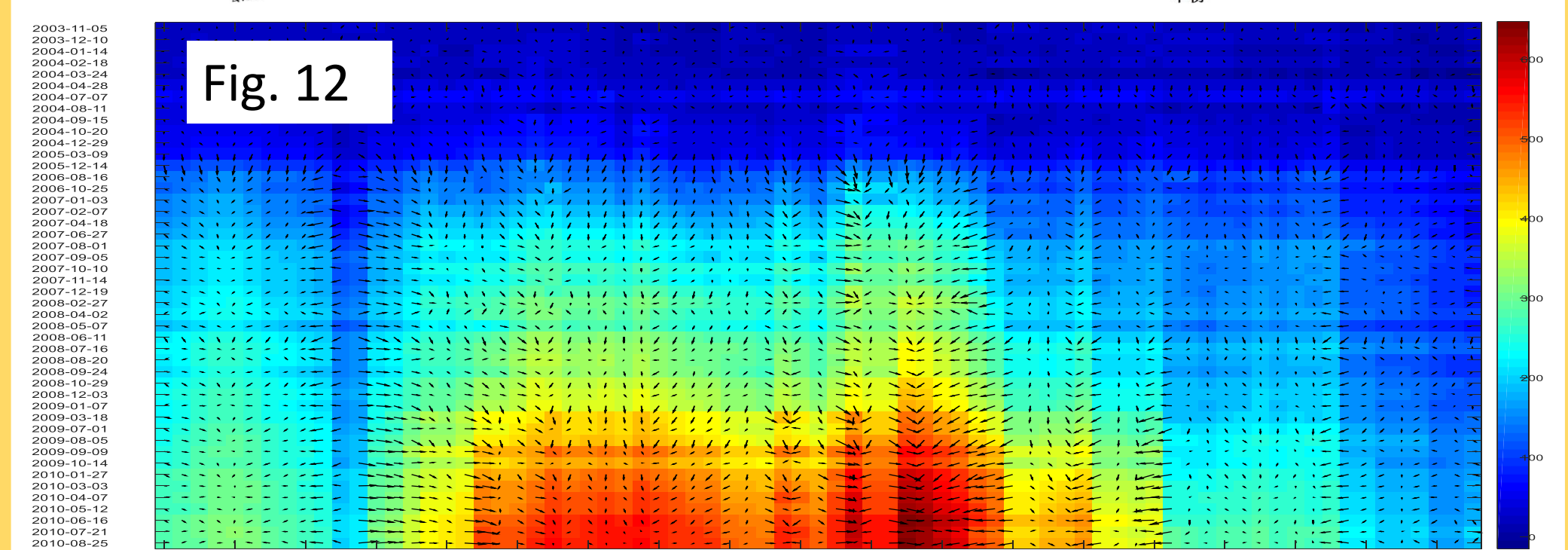


Fig. 12

Fig. 11

The spatial clustering degree of the land subsidence in the Beijing Plain was 0.04 with a standard deviation of 0.13, which indicates an overall heterogeneity in spatial. Subsidence areas spread along the northwest-southeast direction, and then expands to both the east and west sides. The regional geological structure has obvious control effect on the spatial distribution of land subsidence areas, and the development of the land subsidence is gradually uneven in time and spatial.

RLSG from CNU:

The Regional Land Subsidence research Group (RLSG) has been devoted to the analysis and research on the evolution characteristics and genetic mechanism of land subsidence in the Beijing-Tianjin-Hebei region for many years and has published a series of papers. If you are interested, please feel free to contact us by:

https://www.researchgate.net/profile/Beibei_Chen6
https://www.researchgate.net/profile/Mingliang_Gao

