





The maximum width of the rift reached ~1300 m and gradually decrease as it approaches to the rift's tips. While the depth of the rift is about 40 m at its westernmost part and about 50 m at the central and eastern part. Three traverse elevation profiles across the rift were drawn to gain an insight into the depth of the rift (see Fig. 1 for location).

## 6. CONCLUSIONS

Two newly-developed large traverse rifts (Rift 1 and Rift 2) with length of more than 50 km are investigated in detail. Rift 1 had an abrupt change in 2006 with a propagation rate of more than 1.4 km d<sup>-1</sup> and Rift 2 had a similar event five years later in 2011 with an extending rate of 1.1 km d<sup>-1</sup>. Both of them were widening at an average rate of ~100 m a<sup>-1</sup> over the entire observation period. A reconstructed 3D model Rift 1 from ZY-3 images shows that the rift was 48 m deep on average in 2014. Continuous monitoring of the two rifts is needed in the future to better understand the calving mechanism in this region.

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