



## **Source parameters of 2015 earthquake sequence occurred at the northwestern Romanian border**

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Between 19 July and 05 August, 2015 a seismic sequence occurred at the border region between the northwestern part of Romania and Ukraine. The largest event of 3.8 ML occurred on 19 July at a depth of 4.6 km. The sequence is the most significant seismic activity instrumentally recorded in the northwestern part of Romania, a region generally characterized by low seismic activity.. The location results, obtained by JHD and HYPO-DD techniques, show a NE-SW alignment along the Faget Fault. The focal depth estimation reveals a variation in depth delimiting two fault segments: one above 4 km depth, the other below 6 km depth. The hypocenter clustering is attributed to a non-breakable structure existing between the two segments. The fault plane solutions obtained using the first P-wave polarities and waveform inversion are consistent and show a strike slip fault plane solution.