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THE EARTHQUAKE DATASETS AND SERVICES MAINTAINED BY THE INTERNATIONAL SEISMOLOGICAL CENTRE (ISC)

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The International Seismological Centre (ISC) continues with its long-term mission of producing the most complete, comprehensive and homogeneous summary of instrumentally recorded seismicity on a global scale, based on seismic bulletin reports from ~150 seismic networks worldwide, included those run by the IIEES and the University of Tehran.

Several associated datasets such as the ISC-GEM, ISC-EHB, GT and the Event Bibliography further expand the ISC Bulletin data for use in different research fields. Recent upgrades include the releases of:

- Rebuilt ISC Bulletin (Storchak et al., 2017) for the 1964-1984 period, where all hypocentres and teleseismic magnitudes have been recomputed using the current standard event location procedure (Bondar and Storchak, 2011), ak135 velocity model and all reported seismic phases; previously missing data from permanent and temporary deployments have been added;
- 5th and 6th versions of the ISC-GEM catalogue (Di Giacomo et al., 2018) most notably extended and advanced with several thousands of earthquakes occurred during the analogue seismograph recording period and the earthquake source parameters sourced from individual scientific articles;
- Re-worked and reviewed ISC-EHB dataset (Weston et al., 2018) for 2000-2015;
- First ISC-authored set of fault plane solutions (Lentas, 2018) for moderate earthquakes that occurred during 1938-1984 and 2011-2016; this also marked the beginning of routine use of freely available waveforms at the ISC to automatically determine and make available the polarities of first motions of P-waves, corresponding fault plane solutions as well as mixed polarity warnings to station operators.

We show examples of these recent improvements to the ISC data in the region of Iran.

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