

ISC Data Collection Policy

Discussed and reviewed at the ISC Governing Council in Berlin on July 13, 2023; adopted on September 5, 2024 as the result of a formal on-line vote by the Governing Council with 51 of 71 in favour, two abstentions, and no votes against.

The ISC mission is dependent on receiving parametric event-based waveform measurements and event parameters from regional, national, and international data reporters. This approach has several advantages:

- The ISC aims to build upon the added value of many agencies coming together and sharing their parametric and waveform data. Therefore, the ISC should not spend its resources to do work that is best performed by national monitoring institutions who are motivated by their national needs.
- It is too large an effort for the ISC to process the waveforms of \sim 10,000 stations even with a minimal degree of analyst review.
- Waveforms of a large fraction of all stations are not openly available.

By using openly available waveforms and waveforms made available to the ISC we aim to supplement the ISC products by:

- filling the existing data gaps (for example, by picking depth phases and first onset polarities, calculating SNR, etc.),
- trying to homogenize existing procedures (for example, by making teleseismic IASPEI-compliant amplitude measurements),
- performing some of the work that could be done by national agencies but is not being done or does not appear to be their priority (for example, teleseismic wave onset picking using waveforms of African stations),
- computing the standard event parameters in poorly monitored areas (for example, in oceanic areas or countries with no established national seismic monitoring),
- calculating advanced standardised global event parameters not routinely reported by other agencies (for example, source parameters by means of the ISC-FM or the ISC-PPSM techniques).

Where required by the national agencies or individual networks, we shall conclude a data sharing agreement or a memorandum of understanding. Such a document may include:

- a list of products the data supplier provides to the ISC and relevant timing of each product,
- how these products need to be identified among other data (ROR ID, DOI, URL, etc.),
- supplier's confirmation that they have a right to collect the data they provide,
- supplier's data license, if unavoidable; the ISC will seek free and open terms for further distribution of data that it receives,
- statement that the ISC uses and openly re-distributes the data given by the supplier.