

Finding Waveform Data for Events in the ISC Bulletin

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For many types of further study of earthquakes, the next step after finding appropriate events is to retrieve waveform data. In the on-line Bulletin available from its web site, the ISC provides links to sets of waveform segments that other data centres have assembled for events of particular interest. In addition, the ISC has started to implement mechanisms for extracting data from continuous waveform archives. The system first provides the user with a summary of data available at the time of the event, based on inventory messages solicited from various waveform archives. The user provides parameters to control the channels and time intervals to be requested, and is presented with an HTML form of the available segments that match their parameters. When a user submits this single waveform request form, often without need to modify parameters for each station, the ISC despatches request messages to multiple waveform archives on behalf of the user.

This service is intended to complement other existing services. "Waves-4-U" provides information about how soon data are available from many AutoDRM servers, for example, while the ISC service helps users to request waveforms from archives where data remain on-line indefinitely. "NetDC" provides access to broadband waveforms from archives participating in the Network Data Centre programme, while the ISC service provides access also to short period data that are available from a rapidly growing number of AutoDRM e-mail servers.

The initial version of the system requires users to specify waveform parameters individually for each event of interest to them. Possibilities for enhancement include assembling a "shopping basket" of events for which a user could request data with a uniform set segment control parameters or creating "segmentation profiles" that users might apply to individual events.