

IRIS Data Services
Data Acceptance Policy for Seismological Data from Permanent Networks¹

Policy version 3.4

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Introduction: IRIS Data Services operates a major internationally utilized seismological data center at the IRIS Data Management Center in Seattle and an unstaffed Auxiliary Data Center in the San Francisco Bay area. While about 50% of the data holdings come from NSF funded seismic networks and other efforts, approximately 50% of our holdings come from other sources. The contributions that non-NSF data sources make to the IRIS DMC are significant in volume and value to the U.S. and global scientific and educational communities. Resources at the DMC are limited and acceptance guidelines for new data sources are necessary to maintain a high level of service and to sustain management of data already in the archive. This policy provides guidance as to which data sources should be accepted. The Data Services Standing Committee (DSSC) recommends the following conditions and policies be approved for implementation by the IRIS Board as new data sources become available to the IRIS DMC.

Preconditions:

1. Provider must be willing to sign a *Data Provider Agreement* with IRIS that outlines responsibilities for each partner and details the services provided by the DMC.

2. Prior to the submission of data, complete and valid metadata describing all data to be contributed must be provided to the DMC in the form of a dataless SEED volume or a StationXML document.

3. Waveform data must be made available in miniSEED format including specific metadata that is captured in blockette 1000s and if necessary sample rate information in blockette 100s should also be included to make the miniSEED self-describing. If the network provider is capable of sending data to the DMC in real time, they must do this through a SeedLink server or another IRIS accepted streaming mechanism. If the data are not received with real time protocols in miniSEED format, (Earthworm packets, etc.) the IRIS DMC will create 512 byte miniSEED on arrival.

¹ This document will be reviewed annually at spring meetings of the IRIS Data Services Standing Committee

Support for Existing Data Sets at the IRIS DMC

Establishing a policy for what data sets are managed at the IRIS DMC will take into account established relationships between existing data contributors and IRIS. For networks that already contribute data to IRIS, IRIS will continue to accept contributions of a similar nature. For opportunities to accept new types of data generated by those networks, the following policy will provide guidance.

IRIS will actively work with network operators to find opportunities where funding in addition to the current NSF funding can be found to offset the costs of managing data from seismic networks.

Data Threshold

A data threshold of 10 terabytes per year is used to determine applicability of this policy. This applies to either data from a new network or data of a new type from an existing network.

For smaller data sets, those that would deliver less than 10 terabytes per year to the IRIS DMC, the DMC will, in general be able to accept these without additional financial support at the discretion of the IRIS Director of Data Services.

Acceptance of New Data Sets or New Data Types greater than the Data Threshold at the IRIS DMC

There are several factors that will be considered in determining whether or not the DMC will accept new data sources for management at the IRIS DMC. These include:

- The value of the data to the scientific community
- The data volume being considered and the overall cost to the DMC to manage these data.
- The availability of funds available to the IRIS DMC to support the new data sets or data types under consideration.

For data sets or data types greater than the data threshold, the DSSC will be consulted and the DSSC will make a recommendation regarding the acceptance of the data set for management at the IRIS DMC. The DSSC recommendation may include the need to have new funds identified to support the data from the new network or the new data type before the DMC begins receiving the data.

Data sets generated by organizations in the developing world

- Political obstacles continue to be an issue in some of the developing world, but financial capacities present severe constraints.
- The IRIS DMC will generally accept data contributions from the developing world at no cost to the network operator. IRIS will accept data from networks up to 100 stations at the discretion of the IRIS Director of Data Services provided the network signs a DPA.
- For networks larger than 100 stations, acceptance requires approval by the DSSC, which we believe would normally be granted.
- IRIS Regional Exchange of Earthquake Data (REED) funds, if available, may be used to support and assist telemetry needs of networks in developing countries at the discretion of the DS Director.

This document will be reviewed and updated annually at spring DSSC meetings. Any substantive changes to the policy recommended by the DSSC must be approved by the IRIS Board of Directors. Various costs may be adjusted as part of this review as storage costs decrease per unit of storage. Current versions of this and other policies can be found at <http://www.iris.edu/hq/programs/ds/#policies>