

Data Provider Agreement
For contributors of data to the IRIS DMC
Policy Version 1.3
June 15, 2014

Introduction: In 1988, the IRIS Data Management Center (DMC) was established and began managing data from primarily the IRIS Global Seismograph Network (GSN) program. As it matured, data from other IRIS programs (i.e. PASSCAL) and USGS global networks started being managed at the IRIS DMC. Beginning with primarily IRIS programs and our close collaborators in the GSN the IRIS DMC has expanded and now nearly 50% of the data it manages comes from non-IRIS sources. These represent valuable contributions to both IRIS and the international seismological research community, but a recent external review panel recommended IRIS Data Services (DS) establish a formal agreement between IRIS DS and data providers. This document will better articulate the responsibilities of IRIS DS as well as the data contributor in this collaboration.

Note: IRIS will not handle restricted data unless a clearly defined release date not exceeding 3 years is identified

Scope: This agreement applies only to contributions of non-quality-assured data (Level 0) and quality-assured (level 1) data. It is not intended to cover higher-level products (Levels 2-4) that contain knowledge products derived from the basic waveform data.

Network Contributor Obligations:

The network contributor realizes that the value of the seismological data it generates may serve multiple purposes. A majority of seismic data is generated for local, regional, or national monitoring of earthquakes, but the data can be repurposed to support scientific research in many unanticipated ways. By providing the data to the IRIS DMC, the contributing network promotes the broader distribution and long-term management of the data it generates, and creates a global, virtual record of ground motion in space and time.

In order to maximize the utility of the data for new purposes and to make the data as high quality as possible the **Network Operator agrees to:**

1. Provide the waveform data in *miniSEED* (data-only) format, always including the Data Only SEED blockette (blockette 1000) and, if needed, additional blockettes such as Data Extension blockette (blockette 1001) and the Sample Rate blockette (blockette 100) if the sample rate cannot be adequately represented in the miniSEED Fixed Section of Data Header (FSDH).
2. Metadata containing required information about the seismic stations (latitude, longitude, site name, etc) and seismic channels (geographic coordinates, effective times of operations, etc) must be provided in either dataless SEED (header-only) format or, in the future and as required by IRIS, in FDSN StationXML Format.
3. Network operator agrees to maintain the dataless SEED or StationXML volumes to properly reflect the current “best” version of station metadata, and the network must proactively provide this metadata to the IRIS DMC either on demand, (when problems are discovered) or when changes are made to network configurations (hardware or new stations).
4. When possible, data will be provided in real time using the SeedLink protocol. SeedLink is an open, non-proprietary format that is available from the IRIS DMC at no cost to network operators.

5. Other real time protocols currently supported by the IRIS DMC can be used if and only if IRIS agrees to an accepted protocol. The Operator must understand that the IRIS DMC will convert any data to miniSEED that is not already delivered in that format.
6. If no real time connections are available, data can be sent to the DMC using the miniseed2dmc application available from the IRIS DMC.
7. If no high capacity Internet link exists from the network operators location, then data can be sent by physical media such as DVD.
8. The network operator agrees to routinely interact with the IRIS DMC to insure that their network data are being managed properly at the IRIS DMC, and in the case where discrepancies are found, the network operator will contact the Director of Operations at the IRIS DMC.

Obligation of IRIS Data Services:

In return for sharing data openly, the **IRIS DMC agrees to** provide the following services to the network operator:

1. Receive waveform data and metadata for the network and use it to populate the appropriate database systems at the IRIS DMC.
2. Ensure the data are secure and available in perpetuity by routinely curating the data and transcribing data on a routine cycle to new media as necessary.
3. Maintain multiple copies of the data sets to protect from loss or damage to any single physical copy.
4. Expose the contributed waveform data and metadata to all users of the IRIS DMC through its suite of access tools.
5. Process the data through the quality assurance systems in place at the IRIS DMC and report problems identified to the network operator.
6. Provide statistics as to the volumes of data distributed for the relevant network(s) to the network operators. Reports to the second level IP address or email address can be provided if the network requests this information.

Agreed to by

Seismic Network (printed)

FDSN Network Code

Organization or Operator (printed)

Network Manager Signature

IRIS Director of Data Services
Dr. Tim Ahern

Network Manager Name (printed)

Network Manager Title (printed)

Date _____

Date _____