Data Handling with PASSCAL Instrument Center
Data Archiving support at PASSCAL – Instrument Center

PASSCAL Data Delivery Policy
  Archiving
  Open stations
  Virtual network
  FORMS
    Mobilization form
    Demobilization Form
  PI – Home

Data Formats for archiving with PASSCAL & software used
  SEED – Passive Source
  HDF5 – Active Source

What we need to archive
  From Passive source
  From Active Source
Data Group support at PASSCAL

The Data Group: Lisa Foley, Mouse Reusch, George Slad and Eliana Arias-Dotson

Our contact information:

data_group@passcal.nmt.edu

What we do:

• Provide training on procedures and archiving of data for all PASSCAL experiments
• User support on data and software related to processing/archiving
• Data processing and archiving for Flexible Array Experiments
• Field support
Data Flow
IRIS policy states that all data collected by instruments from Passcal Facility should be submitted to the DMC so they can be accessed by other interested investigators after their proprietary period.

The data group at PASSCAL provides extensive support to collect, process and archive all data from any PASSCAL & FA experiments, before getting to the DMC.

We encourage the immediate archiving of the data as soon as possible. A grace period of 2 years after demobilization is giving to each experiment.

Open stations from passive experiments with five or more stations are part of a virtual network around the world.
Sources of Data

Passive Source
- Natural sources: earthquakes, ambient noise, tides, magma, fluids, etc
- Long terms (months/years)
- Broad band spacing (regional to global)
- Low frequency (0.001-1 Hz)
- Usually a few tens of instruments (Over 650 stations from FA Array, all TA stations)

Active Source
- Sources: explosions, air guns, sledge hammers, vibrators
- Short term (days to weeks)
- High frequency (2-80 Hz)
- Hundreds of instruments
- Closely spaced (a few FA experiments archived as assembled dataset)

Hybrids & RAMPS
- HYBRIDS – Combination of both PASSIVE AND ACTIVE
- RAMPS – Rapid Array Mobilization Program at PASSCAL
Formats to archive & Software used

Passive source
- **SEED**
  - Miniseed day files (waveforms & state of health channels)
  - Metadata or dataless

Active source
- **PH5** prefer format for archiving

Hybrids & RAMPS
- SEED, PH5 and/or combination of both

ANTELOPE/PASSCAL SOFTWARE

KITCHEN/PASSCAL SOFTWARE
So ... now what?

Should we contact that Data group?
<table>
<thead>
<tr>
<th>What to send to PASSCAL</th>
<th>Flexible Array</th>
<th>PASSCAL</th>
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</table>
| **When Passive Source** | When Passive Source  
- Raw data in an organized directory  
- Metadata information  
- Report or additional information that helps to understand the nature of the experiment | When Passive source data  
- mseed day volumes  
- metadata or dataless |
| **When Active Source**  | When Active Source  
- Shot/source information  
- Receiver/Station information  
- Report and general information about the experiment  
- Raw data | When Active Source ph5 file  
- all kef files  
- ph5*log file  
- Experiment Report  
- data_request. txt and key_file.txt |
| **Method - how** | Active of Passive Source :  
Via mail on a hard drive that can be provided by PASSCAL if needed.  
Hard drives should be mailed to Data Group | When Passive Source :  
Via ftp using Gui_DoFTP which will send the data to our in-house Control System  
- When Active Source :  
Via mail on a hard drive |
Forms and Resources

Principal Investigator Home Page

Welcome to the PI Home Page!

This page is for the use of Principal Investigators with ongoing or past PASSCAL-supported experiments.

Starting in September 2010, Principal Investigators wanting to request instruments must obtain a user account on the PASSCAL website.

Once a user account is created, PI’s will be able to request instruments, track existing requests, assign collaborator permissions to other PI’s, and more.

Additionally, PI’s with accounts will find that much required information for mobilization/demobilization/billing forms will be entered automatically.

Once your user account is Activated, you will be able to add or update your Contact Information.

PASSCAL will be creating new accounts for PI’s with active experiments.

If your account has already been Activated, please Log In using the ‘Username’ and ‘Password’ fields on the upper right.

NOTE: we are making the transition from the old database to a brand new database which allows access from the Web.

Please bear with us as we ‘sync’ the old and new databases.

If you find any errors, missing requests, wrong dates, etc. please notify PASSCAL software developer Dave Thomas at dthomas@passcal.nmt.edu.

Thanks for your patience during the transition!

Learn More with the new Scheduling Database User's Manual for PIs.

Request a User Account on the PASSCAL Website
SOFTWARE RESOURCES

The Software Group
Steve Azevedo, Bob Greschke, Lloyd Carothers, Kanglin Xu

Their contact information:
software@passcal.nmt.edu

- Open-source software for downloading seismic data from REF TEK RT72A, RT130 and RT125, and Quanterra Q330 recorders, for quality assessment, and for conversion to other data formats for analysis and archiving at the IRIS Data Management Center.

• PASSCAL SOFTWARE - PASSOFT
  • PQL II
  • Antelope
• Seismic Processing Workshop (SPW) Software
Questions?