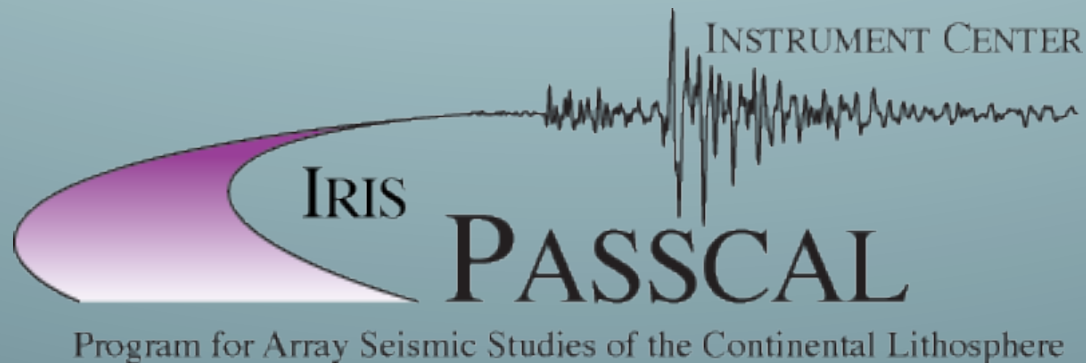


Data Handling with PASSCAL Instrument Center



Outline

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

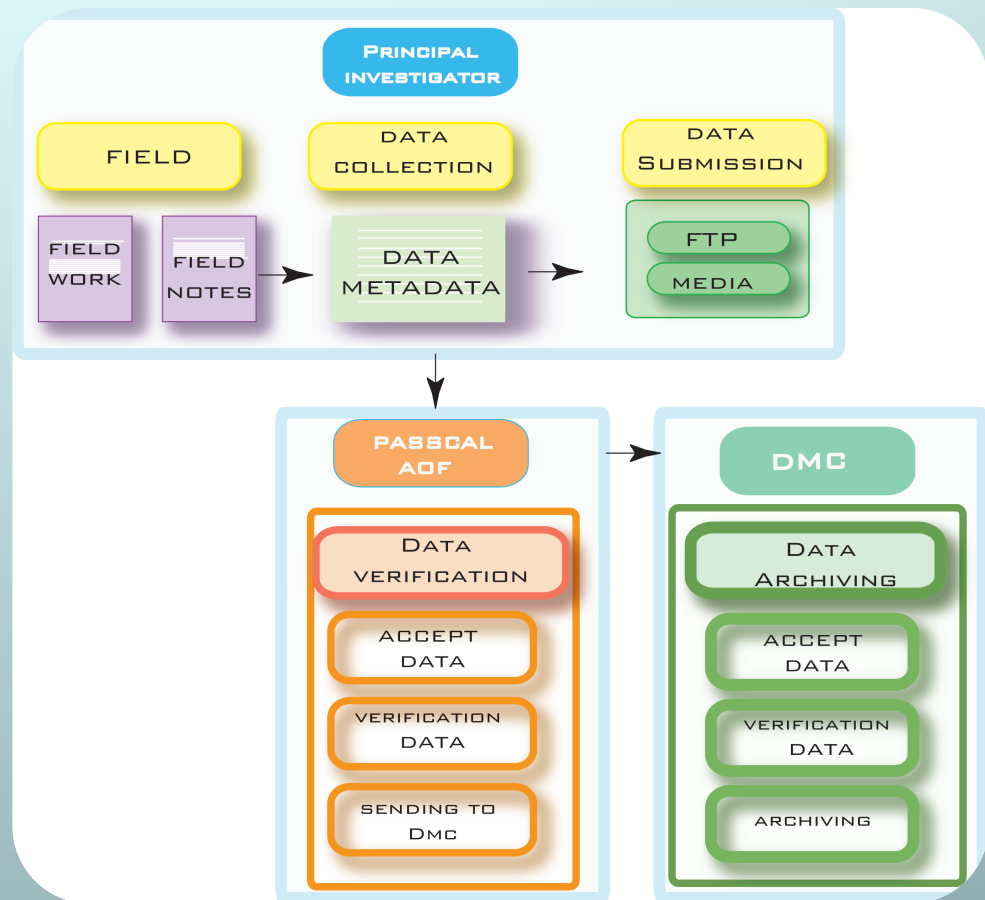
The Data Group: Lisa Foley,
Mouse Reusch, George Slad and
Eliana Arias-Dotson

Our contact information:

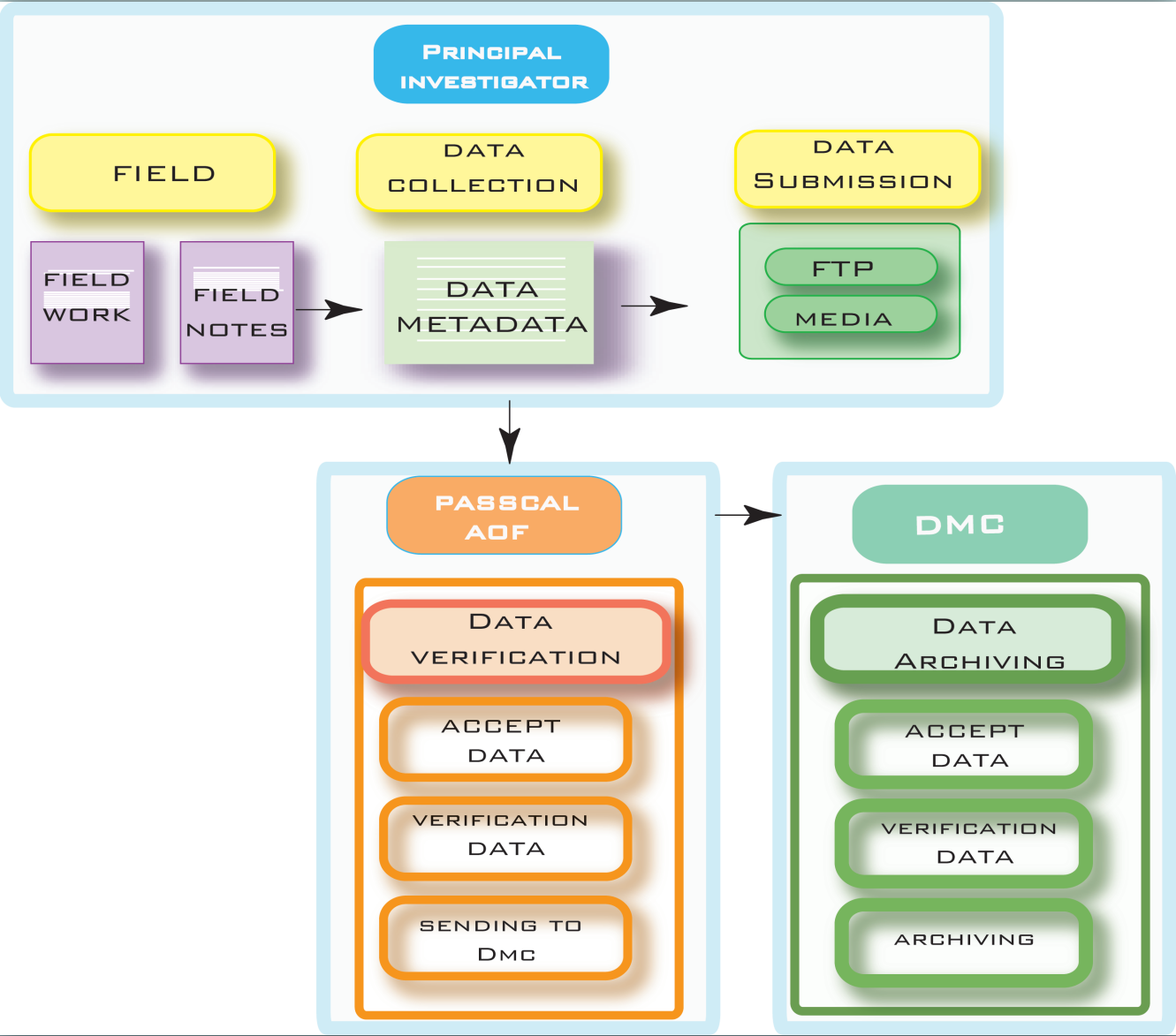
data_group@passcal.nmt.edu

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



PASSCAL DATA DELIVERY POLICY

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



*ANTELOPE/
PASSCAL
SOFTWARE*

Active source

- **PH5** prefer format for archiving



*KITCHEN/
PASSCAL
SOFTWARE*

Hybrids
&
RAMPS

- SEED, PH5 and/or combination of both

So ... now what?



Should we contact that
Data group?

What to archive

	Flexible Array	PASSCAL
What to send to PASSCAL	<p>When Passive Source</p> <ul style="list-style-type: none"> •Raw data in an organized directory •Metadata information •Report or additional information that helps to understand the nature of the experiment <p>When Active Source</p> <ul style="list-style-type: none"> •Shot/source information •Receiver/Station information •Report and general information about the experiment •Raw data 	<p>When Passive source data</p> <ul style="list-style-type: none"> •mseed day volumes •metadata or dataless <p>When Active Source ph5 file</p> <ul style="list-style-type: none"> •all kef files •ph5*log file •Experiment Report •data_request. txt and key_file.txt
Method - how	<p>Active of Passive Source :</p> <p>Via mail on a hard drive that can be provided by PASSCAL if needed.</p> <p>Hard drives should be mailed to Data Group</p>	<p>When Passive Source :</p> <p>Via ftp using Gui_DoFTP which will send the data to our in-house Control System</p> <p>•When Active Source :</p> <p>Via mail on a hard drive</p>

Forms and Resources

The screenshot shows the IRIS PASSCAL website interface. At the top, there is a navigation bar with links for Contact, Staff Directory, Employment, Sitemap, and a search box. The main header features the IRIS PASSCAL logo and the text "Program for Array Seismic Studies of the Continental Lithosphere". Below the header is a secondary navigation menu with categories like Home, General Information, Instrumentation, Data Archiving, Polar, Expt. Schedule (highlighted), USArray, Forms, and Software. A left sidebar contains a tree view of the site structure, including Home, General Information, Instrumentation, Data Archiving, Polar, Expt. Schedule (with sub-items: Summary, Details, Calendar, P.I. Home Page, Comments, Questions?), USArray, Forms, and Software. Below this is a "Quick Links" section with links for Recent Posts, Recent News, and Archived News. The main content area is titled "Principal Investigator Home Page" and includes a welcome message, a paragraph about user accounts, a note about the database transition, and a link to request a user account. The footer contains contact information for the IRIS PASSCAL Instrument Center at New Mexico Tech and logos for IRIS and New Mexico Tech.

IRIS PASSCAL
Program for Array Seismic Studies of the Continental Lithosphere

Home General Information Instrumentation Data Archiving Polar Expt. Schedule USArray Forms Software

● Home
● General Information
● Instrumentation
● Data Archiving
● Polar
● Expt. Schedule
 ● Summary
 ● Details
 ● Calendar
 ● P.I. Home Page
 ● Comments, Questions?
● USArray
● Forms
● Software

Quick Links
● Recent Posts
● Recent News
● Archived News

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/rebilling 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 PIs 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 'synch' 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](#)

Home General Information Instrumentation Data Archiving Polar Expt. Schedule US Array Forms Software

IRIS PASSCAL Instrument Center
New Mexico Tech
100 East Road, Socorro, NM 87801
Telephone (575) 835-5070
Fax (575) 835-5079

IRIS NEW MEXICO TECH
SCIENCE-ENGINEERING-RESEARCH-UNIVERSITY

[Principal Investigator home page](#)
[Mobilization form](#)
[Demobilization Form](#)
[Data Evaluation Form](#)

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?