

Ordering ARM Data:

A Logical Integration of the Data Archive and ARM Program Website

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NEED:

The Problem

- Data stored in the ARM Data Archive, not accessible from www.arm.gov
- Archive's website completely separate from the ARM website
- Interfaces complicated for novice users
- Information on the main ARM website not always consistent with the information on the Archive's website

The Challenge

- Integrate the main ARM website with the Data Archive website to create a seamless, more user-friendly, data-ordering experience
- Use the Archive's database as a shared back-end
- Edit the Archive database so the content is "web ready"
- Implement a way for users to "shop" for and order data from the main ARM website
- Create a team comprised of developers from three labs
- Do it in less than one fiscal year!

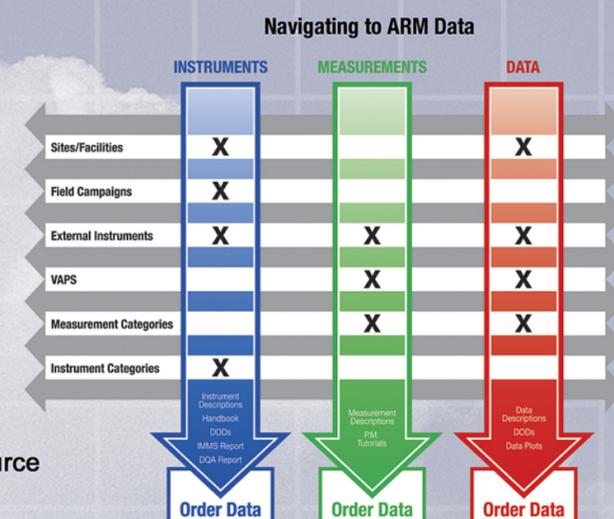
DEVELOPMENT:

The Solution

Develop a new interface for data ordering from www.arm.gov

- Include ability to "order data" from all pages that relate to data
- Collect all the variables needed to place an order:
 - Site
 - Facility
 - Measurements
 - Instruments
 - Datastream
 - Date Range
- Limit the number of "clicks" to place an order

Provide consistent information across ARM sites using an integrated data source



The ARM website has been designed to guide users to the data they need, whether they are looking for data in terms of instruments, locations, measurements, or specific data streams. This flow chart represents the types of relational information that guides users to the data they need (represented by the "Xs" in the chart above).

DATA ORDERING PROCESS:

- 1 To begin placing an order for ARM data, go to the ARM website and select either the **Instruments**, **Measurements**, or **Data** tab.
- 2 In this example, we will begin by selecting the **Instruments** tab. Click the "Order Data" button to begin the data ordering process.
- 3 Once in the Cart, select which site location you would like to order data from.

- 4 Continue to refine your order by selecting the appropriate date range and facilities. Once you have defined and selected the data streams you would like to order, click the "Save to Cart" button.
- 5 To place your order, log in with your Archive user name. If you do not yet have an account, you can sign up for a free account at this time.
- 6 After placing your order, you will receive an email message containing a link to the FTP server where you can download your data.

Don't forget! Refer back to www.arm.gov for technical contacts and documentation about the data.

The Result

- Developed a different kind of ordering interface
- Used AJAX (Asynchronous JavaScript And XML) approach and J2EE (Java 2 Platform, Enterprise Edition) technologies
- Created a "less linear", faster, easier to use interface

ARE WE DONE YET?

- Continuing to refine the ordering system and further integrate IOP information
- Exploring ways to make our data model more robust
- Documenting processes for adding new datastream information to the database
- Continuing to perform user testing to improve our users' experience

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