

# Getting Data from the ARM Archive

Orientation for new  
Science Team Members



# ARM Shopping Cart Tutorial

- Available at:  
[http://dev.www.arm.gov/data/arm\\_orderData\\_tutorial.html](http://dev.www.arm.gov/data/arm_orderData_tutorial.html)



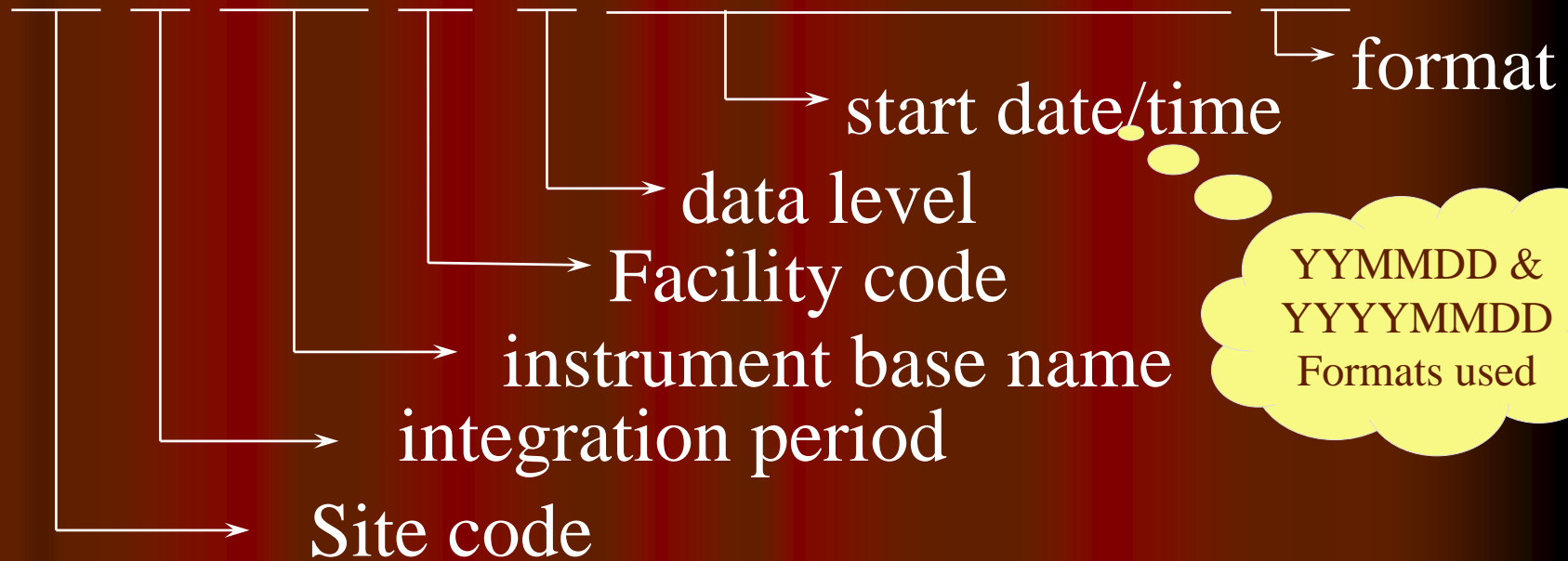
# Types of Quality Information

- Automated products
  - QC flags
    - inserted in data files during processing
  - Summaries of flags (data color)
- Manual products
  - Data Quality Reports (DQRs)
    - web accessible reports; delivered as html files after data requests (more later); event driven and problem-based
  - Instrument Mentor Monthly Summary Reports
    - web accessible; linked to instrument web pages.
  - Data Quality Assessment Reports

sgp30@%\$#&!!!

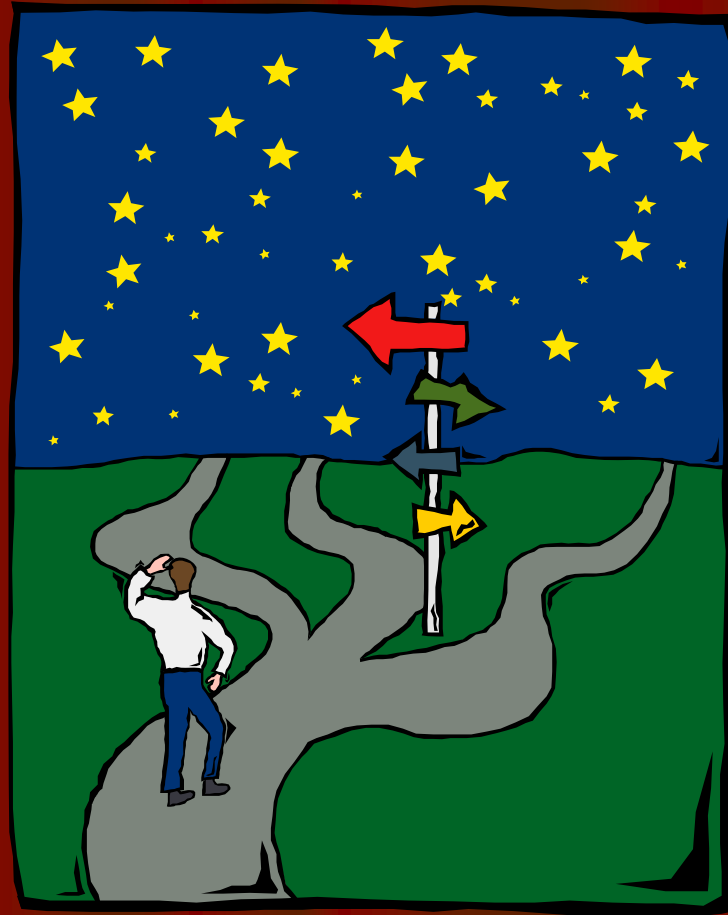
(or, making sense of the ARM file naming convention)

sgp30smosE1.a1.20000311.000000.cdf



YYMMDD &  
YYYYMMDD  
Formats used

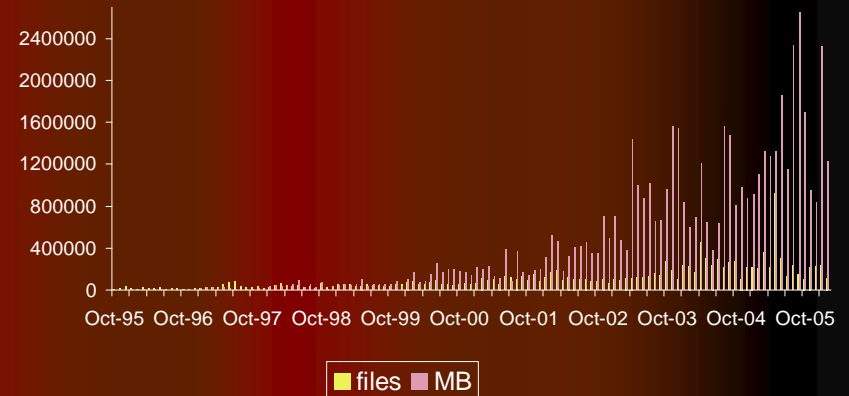
# Archive Overview



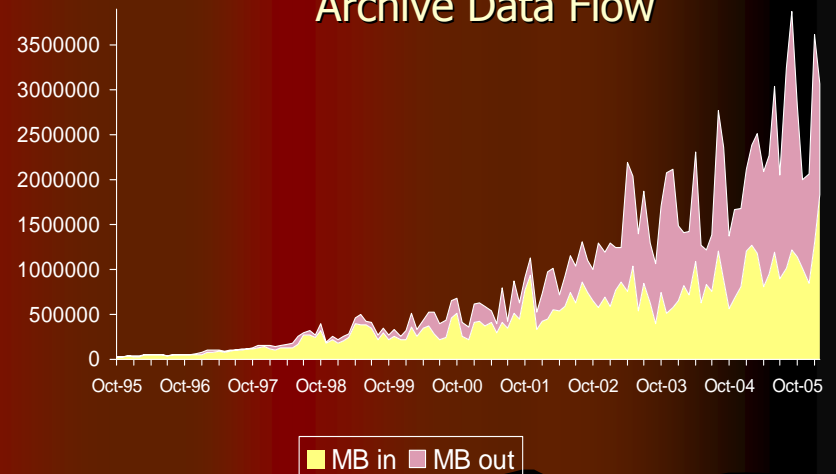
# You are NOT alone...

- 3 sites
- 10's facilities
- 100's data sources
- 100's data users
- 1000's measurement types
- 1,000,000's data files
- 1,000,000,000's measurements
- 10,000,000,000,000's bytes

Request Statistics From Archive



Archive Data Flow



# Accessing Data from the Archive

- User interface options
  - ARM Data Browser
  - Catalog Interface
  - Thumbnail Browser
  - Web Shopping Cart
  - IOP Data Browser
  - *Contact Us.....*
    - *1-888-ARM-DATA, armarchive@ornl.gov*
- Archive guts and trivia (sanitized view)
- Continuous data distribution
  - "Standing Orders"

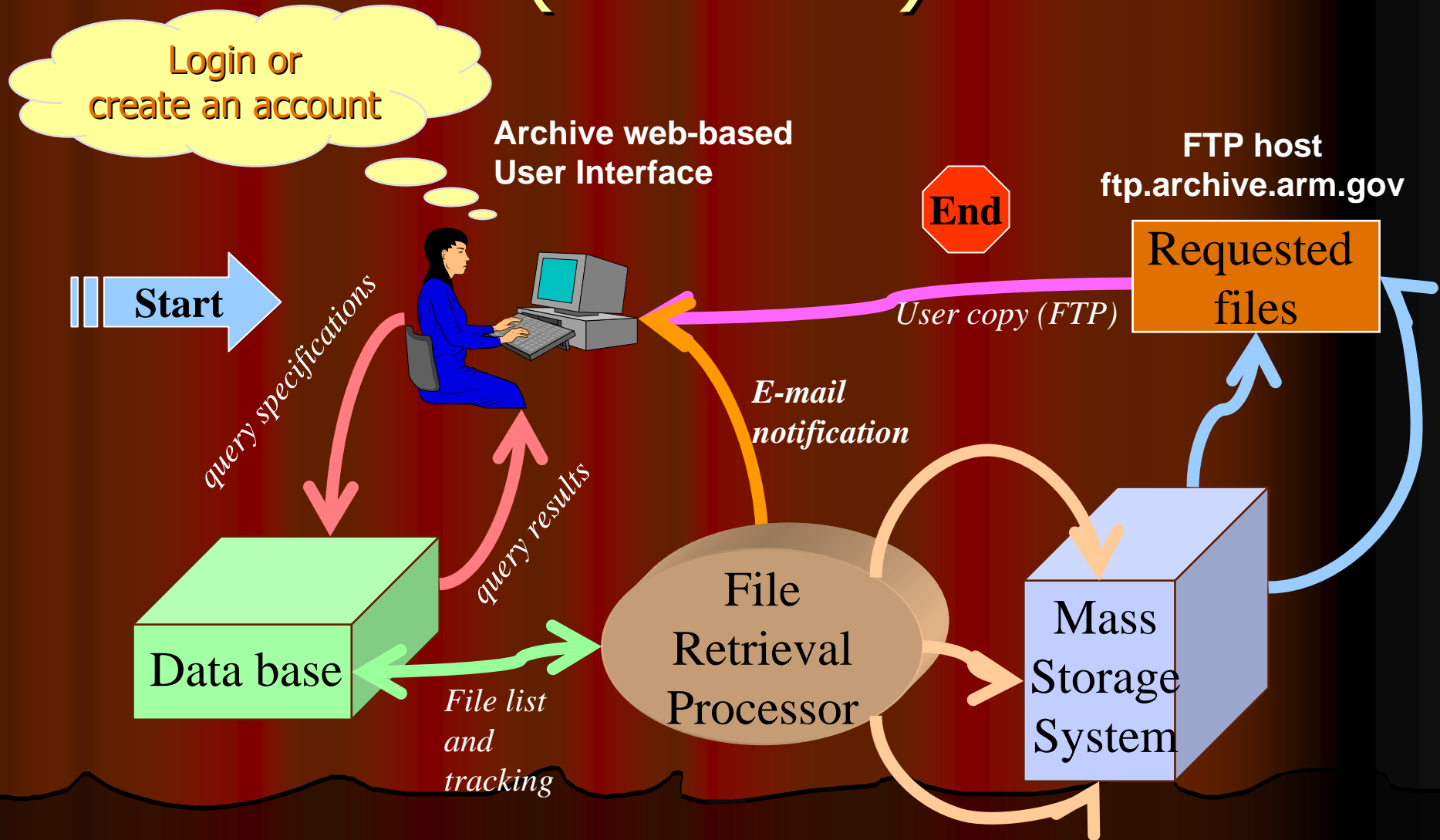


# Comparison of User Interface Options

Interface name	Accessible data	" <i>Shopping</i> " approach ( <a href="mailto:armarchive@ornl.gov">armarchive@ornl.gov</a> , 1-888-ARM-DATA)
ARM Data Browser	Routine ARM data	<i>"I know what I want. Do you have it?"</i> Searching with predefined selection criteria.
Catalog Interface	Routine ARM data	<i>"I am not sure what I want. I need to see what you have available."</i> Browsing a hierarchy of availability summaries.
Thumbnail Browser	Most routine ARM data	<i>"I will know what I want when I see it."</i> Searching with a combination of predefined selection criteria and visual review of data plots
Web Shopping Cart	Routine ARM data and some IOP data	<i>"I need to read about what you have, then I will decide."</i> Discover areas of interest by browsing the ARM web documentation and collect items of interest.
IOP Data Browser	IOP, special, PI, and beta data	<i>"I need to look in the odd parts bin."</i> Direct access to IOP data. Navigate /year/site/iop directory tree. Also use narrow Google search.



# You and the Archive 'Guts' (Sanitized)



# Overall Interface Scheme

Identify "data of interest"  
(answer questions)

Display summary results from search  
(# files, # DQRs, # QLs)


Display detailed information  
(file list, DQRs, color map, QLs)

Order files

# Interface Demonstrations



# ARM Data Browser



**ARM Data Browser**

[My Account](#) | [Log out](#) | [Help](#)

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Home
Site
Date Range
Search Path
Category
Instruments
Facilities
Data Selection Summary

*Southern Great Plains*

### Data Selection Summary

(show/hide search criteria)

**Current search criteria:**

Site: Southern Great Plains

Start Date: 01/10/2006

End Date: 03/05/2006

Searchpath: Instruments

Category: 1. Radiometric  
2. Surface Meteorology

Instruments: 1. Microwave Water Radiometer (MWR): water liq. & vapor along line of sight (LOS) path  
2. Multi-Filter Radiometer (MFR): upwelling irradiance at 25-meter height  
3. Surface Meteorological Observation Station (SMOS): 30-min averaged data

Facilities: 1. E8-Coldwater, KS  
2. C1-Central Facility, Lamont, OK  
3. E14-Lamont, OK CF2

[Print or save this page](#) | [Email this page](#)

You can list the associated files [?](#), view the data quality color calendar [?](#),  
 view data quality reports (DQR) [?](#), or view quick looks (QL) [?](#)

[List files to order](#) | [Quality Color Summary](#) | [DQ Reports](#) | [Quick looks](#)

**Navigation**

- [Site](#)
- [Date Range](#)
- [Search Path](#)
- [Category](#)
- [Instruments](#)
- [Facilities](#)
- [Summary Page](#)
- [Place Order](#)

**Interface Help**

- [View interface help documentation](#)

**ARM Documentation**

- [Data Stream](#)
- [Data First](#)
- [Data Quality Color Calendar](#)
- [Data Quality Report \(DQR\)](#)
- [Quick Looks \(QL\)](#)

**Summary Table**

Data Stream Name	Data Stream <a href="#">?</a> Information	Full Date Range	Estimated Archive Results (01/2006 to 03/2006)			
			Files	Size(MB)	DQR Days	QLs
sgp30smosE8.b1	Surface Meteorological Observation Station (SMOS): 30-min averaged data	04/01/2001 - 03/03/2006	62	1.1	0	60
sgpmfr25mC1.b1	Multi-Filter Radiometer (MFR): upwelling irradiance at 25-meter height	04/01/2001 - 03/02/2006	61	30.6	0	60
sgpmwrfosE14.b1	Microwave Water Radiometer (MWR): water liq. & vapor along line of sight (LOS) path	03/21/2001 - 03/02/2006	61	29.000004	0	60

**Note:**

**Results** : statistics are estimates based on monthly summaries

**Data Streams** : The highest [data to use](#) data streams are selected for any given date. Multiple data streams may result

**Full Date Range** : Valid date range for a data stream. Data streams with different data levels or with different date ranges are possible.

**DQR Days** : Number of days in the data selection time range that have one or more significant DQRs (red or yellow data quality limitations). Other, less critical, informational DQRs may also be available.



# ARM Thumbnail Browser



## Thumbnail Browser

[Shopping Cart](#) | [Retrieve View](#) | new | [My Account](#) | [Log Out](#) | [Help](#)







[Home](#) | [Site/Facility](#) | [Date Range](#) | [Category](#) | [Instruments](#) | [Measurements](#) | [Thumbnails](#)

(show/hide search criteria or Date Range function)

to    
mm-dd-yyyy                      mm-dd-yyyy

[Previous](#) | 1 2 3 4 5 6 7 8 9 10 [Next](#)      Customize view to  days

(Note: ALL: Search across all datastreams and measurements. NEW: Search across all current active data streams. Click on thumbnail image to play a three-minute preview of the data and to see the datastream.)

Move	Datastream/ Measurement	ALL VIEW	10/31/2004	11/01/2004	11/02/2004	11/03/2004	11/04/2004	11/05/2004	11/06/2004
▼	sgp30ebbrE9.b1 q	<input type="checkbox"/>							
▼	sgp30smosE9.b1 m	<input type="checkbox"/>							
▼	sgp30smosE9.b1 precip	<input type="checkbox"/>							
▲	sgpwatsE9.b1 soilwatpot_E	<input type="checkbox"/>							

[Previous](#) | 1 2 3 4 5 6 7 8 9 10 [Next](#)

Select all files for all the listed datastreams:   
(from 10/10/2004 to 03/12/2005)

# Display Thumbnails

**ARM** Atmospheric Radiation Measurement

Shopping Cart Retrieve View

Home Site/Facility Date Range Cate

show/hide search criteria

10/10/2004 to 03/12/2005  
mm/dd/yyyy mm/dd/yyyy

Previous 1 2 3 4 5 6

(Note: ALL - Select all files for entire date range and all datastreams; VIEW - Select all thumbnail image displays the corresponding quick look

Move Rows	Datastream/Measurement	ALL VIEW	10/10/2004	10/11/2004	10/12/2004	10/13/2004
▼ ▲	sgp30ebbrE9.b1 q	<input type="checkbox"/>				
▼ ▲	sgp30smosE9.b1 rh	<input type="checkbox"/>				
▼ ▲	sgp30smosE9.b1 precip	<input type="checkbox"/>				
▼ ▲	sgpswatsE9.b1 soilwatpot_E	<input type="checkbox"/>				

Previous 1 2 3 4 5 6 Ne

Select all files for all the listed datastreams:  
(from 10/10/2004 to 03/12/2005)

Add to Shopping Cart View Shopping Cart and Or

http://www.archive.arm.gov - QuickLook - Mozilla Firefox

Data Quality Information and Quick Look for sgp30ebbrE9.b1 (10/12/2004)

Close this window

Data Quality Color: (show/hide)

Measurement	Auto QC Color	DQR Color
Average soil heat flow at the surface	<input type="checkbox"/>	<input type="checkbox"/>
Heat flux, latent, at 1.5-m height, 30-min intervals	<input type="checkbox"/>	<input type="checkbox"/>
Heat flux, sensible, at 1.5-m height, 30-min intervals	<input type="checkbox"/>	<input type="checkbox"/>
Radiation, net	<input type="checkbox"/>	<input type="checkbox"/>

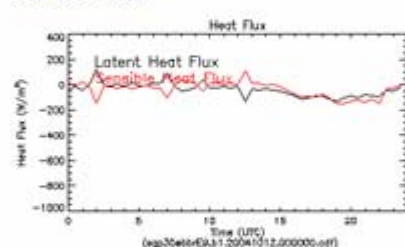
Missing Undetermined Review Pending Good Suspect Incorrect

Data Quality Report:

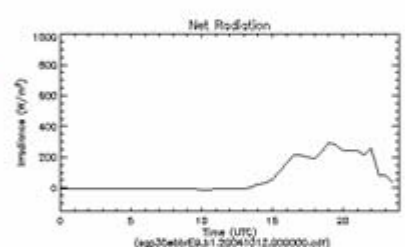
- 0050719.0 : SGP/EBBR/E9 - Improved EBBR CR10 Program (details)
- 0051112.6 : SGP/EBBR/E9 - metadata corrections (details)

Data Quick Look:

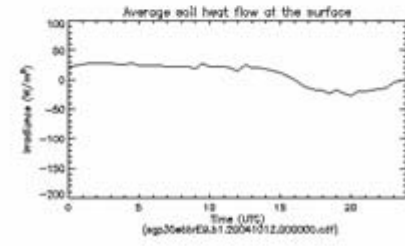
Heat Flux



Net Radiation



Average soil heat flow of the surface



Done

### Measurement Code Descriptions

q	Radiation, net
rh	Humidity, relative, at 2-m height, 30-min intervals
precip	Precipitation, 30-min intervals
soilwatpot_E	Soil Water Potential, East Profile

# Thumbnail Browser – Catalog Interface

**ARM** Atmospheric Radiation Measurement  
**Thumbnail Browser**

Shopping Cart Retrieve View My Account Log Out Help

Home **Site/Year** Category/Facility Type Instrument/data Level Facility/Month Data Streams Measurements Thumbnails

**Number of Quick Look Files in Archive by Year and Site**  
*(Click on a non-zero cell in the table to choose a Site/Year and proceed to the next level of detail)*

Site	Years Available													
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Southern Great Plains	<a href="#">375</a>	<a href="#">1256</a>	<a href="#">2829</a>	<a href="#">11480</a>	<a href="#">19476</a>	<a href="#">28236</a>	<a href="#">29799</a>	<a href="#">30489</a>	<a href="#">73836</a>	<a href="#">87904</a>	<a href="#">86625</a>	<a href="#">87430</a>	<a href="#">75346</a>	<a href="#">13903</a>
North Slope Alaska	0	0	0											<a href="#">937</a>
Tropical Western Pacific	0	0	0											<a href="#">2133</a>
Point Reyes, California	0	0	0											
Nuamey, Niger, Mobile Facility	0	0	0											

**Facility Type**

Instrument Category	Facility Type			
	Central	Extended	Boundary	Intermediate
Aerosols	<a href="#">58</a>	<a href="#">822</a>	0	0
Airborne Observations	0	0	0	0
Atmospheric Profiling	<a href="#">552</a>	<a href="#">60</a>	<a href="#">358</a>	<a href="#">111</a>
Atmospheric Carbon	0	0	0	0
Cloud Properties	<a href="#">345</a>			
Derived Quantities and Models	<a href="#">110</a>			
Ocean Observations	0			
Other	0			
Radiometric	<a href="#">657</a>	<a href="#">4124</a>	<a href="#">178</a>	0
Satellite Observations	0	0	0	0
Surface Meteorology	<a href="#">418</a>	<a href="#">1789</a>	<a href="#">2</a>	
Surface/Subsurface Properties	<a href="#">123</a>	<a href="#">2895</a>		

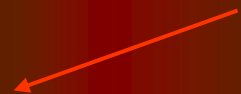
**Instrument**

Instrument	Data Level
Microwave Radiometer (MWR): 5-minute average integrated vapor and liquid water	<a href="#">55</a>
Microwave Radiometer (MWR): brightness temps and water amounts, 1-minute avg	<a href="#">55</a>

**Facility**

Facility	Month		
	Jan	Feb	Mar
Central Facility, Lamont, OK(C1)	<a href="#">28</a>	<a href="#">25</a>	<a href="#">2</a>

**Thumbnail Page**



# ARM Catalog Browser





# Logical Flow of Catalog Interface

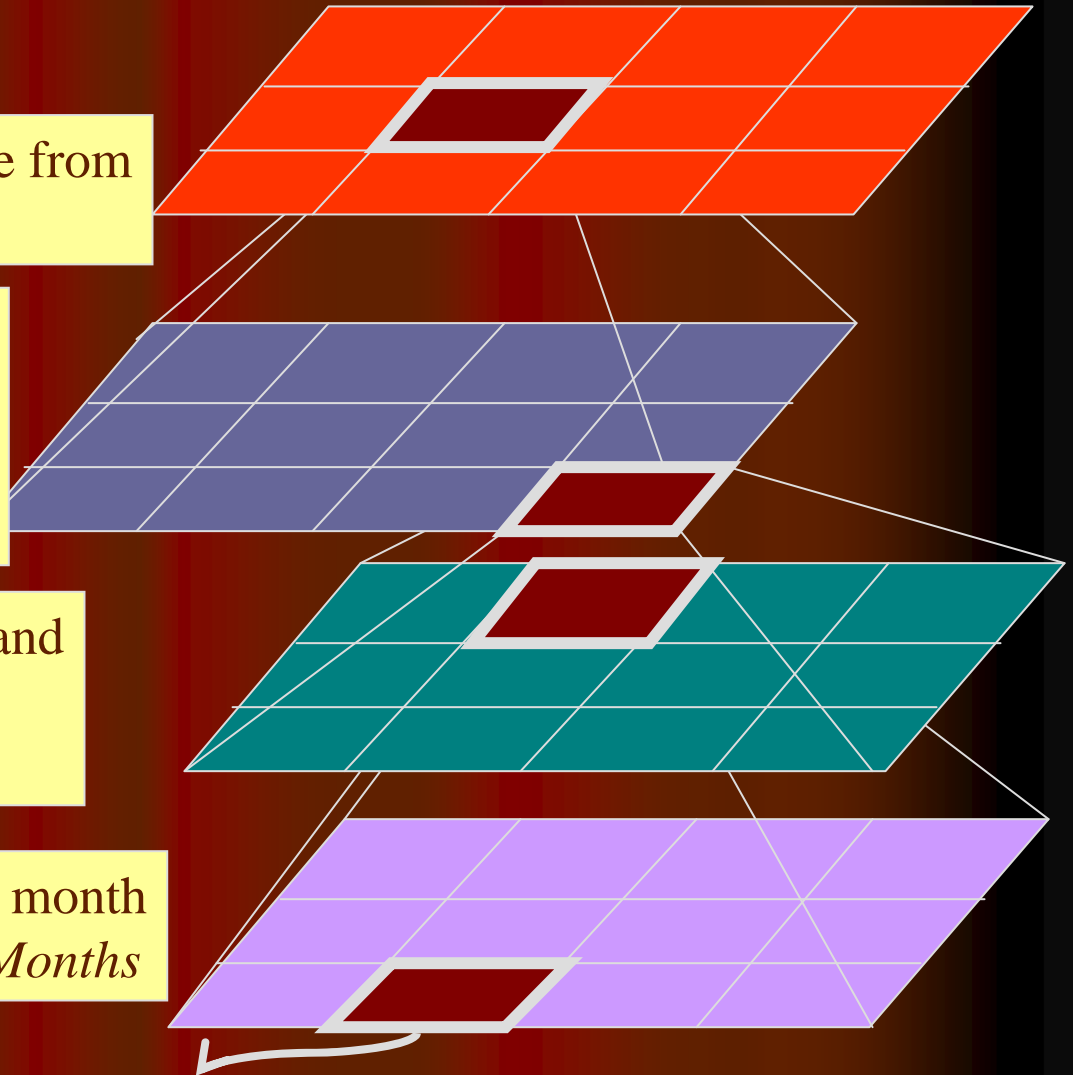
*Step 1: select a year and a site from a table of  $Years \times Sites$*

*Step 2: select a facility type and instrument category from a table of  $Instrument\ category \times Facility\ type$*

*Step 3: select an instrument and a data level from a table of  $Instruments \times Data\ levels$*

*Step 4: select a facility and a month from a table of  $Facilities \times Months$*

*Data added to 'shopping cart'*



# Features of Catalog Tables

**A:** Title of the Table; showing selection categories

**A** Number of Files in Archive by Instrument Category and Facility Type

(Click on the appropriate link to change a previous selection)

Current Selections  
 Year: 2002  
 Site: Southern Great Plains

**E:** Number of data files per category (0 = no data)

**B:** Links to higher selection screens

(Click on a non-zero cell in the table below to choose the Instrument Category/Facility Type and proceed to the next level of detail)

Number of Files in Archive

**C:** values of previously selected criteria

Instrument Category	Facility Type				
	Central	External	Boundary	Extended	Intermediate
Instruments	2058	9	0	0	0
(Sign, Temporary, or Otherwise)	9833	262	7211	372	0
Stations	4906	13153	0	0	0

**D:** Categories with links to additional ARM documentation

Surface Flux and Surface Characterization Systems (Non-radiometric)  
 and Humidity Sensors  
 Humidity Sounding Systems

**F:** Link to shopping cart; for review of previous selections

[View Shopping Cart](#)

**G:** Exit from interface

[Exit](#)

# Catalog Browser (1)

**Number of Files in Archive by Year and Site**

*(Click on a non-zero cell in the table to choose a Site/Year and proceed to the next level of detail)*

**Number of Files in Archive**

Years Available

Site	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<a href="#">Southern Great Plains</a>	<a href="#">15203</a>	<a href="#">66539</a>	<a href="#">70907</a>	<a href="#">112717</a>	<a href="#">168204</a>	<a href="#">210660</a>	<a href="#">245935</a>	<a href="#">250283</a>	<a href="#">248341</a>	<a href="#">262495</a>	<a href="#">231251</a>	<a href="#">188144</a>	<a href="#">170197</a>	<a href="#">25227</a>
<a href="#">Global Earth Coverage</a>	0	0	0	<a href="#">4348</a>	<a href="#">4950</a>	<a href="#">4471</a>	<a href="#">4744</a>	<a href="#">5302</a>	<a href="#">4754</a>	<a href="#">4752</a>	<a href="#">4742</a>	<a href="#">4487</a>	<a href="#">2435</a>	<a href="#">49</a>
<a href="#">North Slope Alaska</a>	0	0	0	<a href="#">241</a>	<a href="#">1906</a>	<a href="#">14972</a>	<a href="#">21212</a>	<a href="#">26326</a>	<a href="#">30263</a>	<a href="#">29875</a>	<a href="#">33421</a>	<a href="#">30045</a>	<a href="#">29047</a>	<a href="#">2432</a>
<a href="#">Tropical Western Pacific</a>	0	0	0	<a href="#">2245</a>	<a href="#">10393</a>	<a href="#">12469</a>	<a href="#">28363</a>	<a href="#">30125</a>	<a href="#">29538</a>	<a href="#">41486</a>	<a href="#">40335</a>	<a href="#">35657</a>	<a href="#">31235</a>	<a href="#">4210</a>
<a href="#">Surface Heat Budget of the Arctic</a>	0	0	0	0	<a href="#">1645</a>	<a href="#">6622</a>	0	0	0	0	0	0	0	0
<a href="#">Niamey, Niger</a>	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">703</a>	<a href="#">1441</a>
<a href="#">Point Reyes, California</a>	0	0	0	0	0	0	0	0	0	0	0	0	<a href="#">6300</a>	<a href="#">181</a>

[View Shopping Cart](#)   [Exit](#)   [Help](#)

**Number of Files in Archive by Instrument Category and Facility Type**

*(Click on the appropriate link to change a previous selection)*

Current Selections

[Year](#) 2006

[Site](#) Tropical Western Pacific

*(Click on a non-zero cell in the table below to choose the Instrument Category/Facility Type and proceed to the next level of detail)*

**Number of Files in Archive**

Instrument Category	Facility Type	
	Central	External
<a href="#">Aerosols</a>	<a href="#">366</a>	0
<a href="#">Atmospheric Profiling</a>	<a href="#">748</a>	53
<a href="#">Cloud Properties</a>	<a href="#">1928</a>	0
<a href="#">Derived Quantities and Models</a>	<a href="#">121</a>	81
<a href="#">Radiometric</a>	<a href="#">2055</a>	0
<a href="#">Surface Meteorology</a>	<a href="#">183</a>	0

# Catalog Browser (2)

**Number of Files in Archive by Instrument and Data Level**

(Click on the appropriate link to change a previous selection)

**Current Selections**  
[Year](#) 2006  
[Site](#) Tropical Western Pacific  
[Instrument Category](#) Radiometric  
[Facility Type](#) Central

(Click on a non-zero cell in the table below to choose the Instrument/Data Level and proceed to the next level of detail)

**Number of Files in Archive**

Instrument Code *	Data Level **			
	a0	a1	b1	c1
15swfanalskyradllong	0	0	0	24
1swfanalskyradllong	0	0	0	24
aerich1	0	0	121	0
aerich2	0	0	121	0
aeriengineer				
aeribleclouds				
aerisummary				
gndrad20s				
gndrad60s				
mfrsr				
mwrls	0	0	184	0
mwrtip	0	178	0	0
skyrad20s	185	0	0	0
skyrad60s	0	0	184	0

Number of Files in Archive

Facility	Month		
	Jan	Feb	Mar
Central Facility, Manus I., PNG (C1)	32	28	2
Central Facility, Nauru Island (C2)	31	28	2
Central Facility, Darwin, North Australia (C3)	31	28	2

[View Shopping Cart](#)   [Exit](#)   [Help](#)

**\* Instrument Code Descriptions**

15swfanalskyradllong	Short Wave Flux Analysis: 15-min resolution on SKYRAD
1swfanalskyradllong	Short Wave Flux Analysis: 1-min resolution on SKYRAD
aerich1	Cloud Interferometer (AERI): chi

## Description of Archive Files

(Click on the appropriate link to change a previous selection)

**Current Selections**  
[Year](#) 2006  
[Site](#) Tropical Western Pacific  
[Instrument Category](#) Radiometric  
[Facility Type](#) Central  
[Instrument](#) skyrad60s  
[Data Level](#) b1  
[Facility](#) Central Facility, Nauru Island  
[Month](#) Feb  
 Files 28  
 Total Size (MB) 8.950

## Add files to your Shopping Cart?

Click "Yes" to add the current set of files to your collection. Either button returns to the previous page (Facilities/Month).

## Contents of Shopping Cart

This is a summary of your current collection of files.

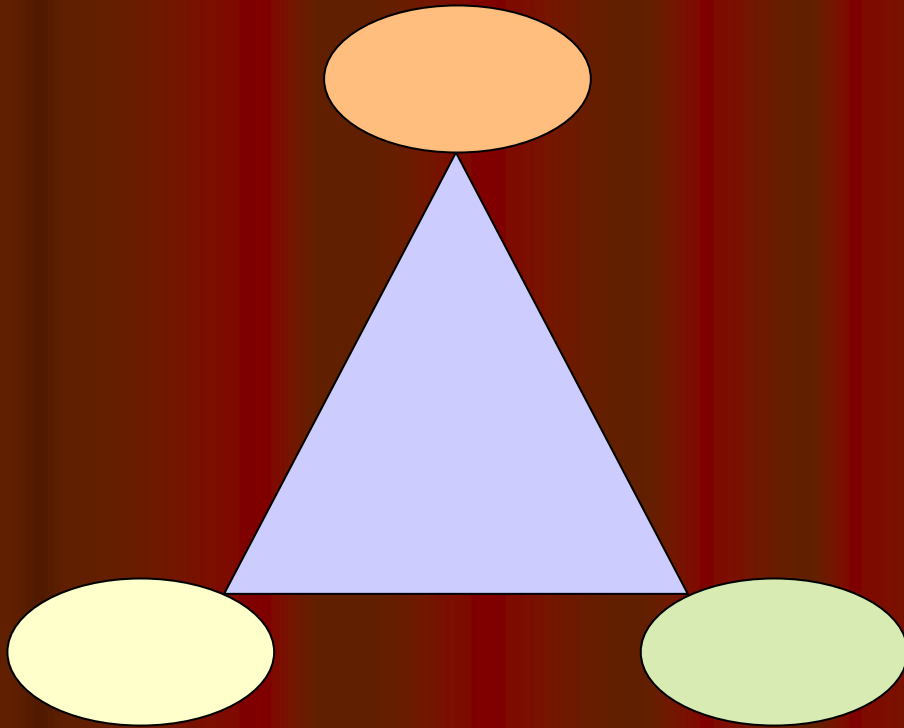
Site	Year	Month	Instrument	Facility	Level	Files	Size (MB)	
twp	2006	Feb	skyrad60s	C2	b1	28	8.95	<a href="#">Remove?</a>
twp	2006	Jan	skyrad60s	C3	b1	31	9.91	<a href="#">Remove?</a>
twp	2006	Mar	skyrad60s	C2	b1	2	0.64	<a href="#">Remove?</a>
<b>Total</b>						61	19.50	

[Submit Request to Archive](#)

[Return](#)

[Help](#)

# Types of ARM Data



# ARM Data Types - overview

- Continuous data (stored offline, accessible by requests from user interface)
  - ARM collected data
  - Value added products
  - External data
- Special data (stored online, accessible from web interface)
  - Field Campaign (IOP) data
  - Beta data
  - PI generated data products

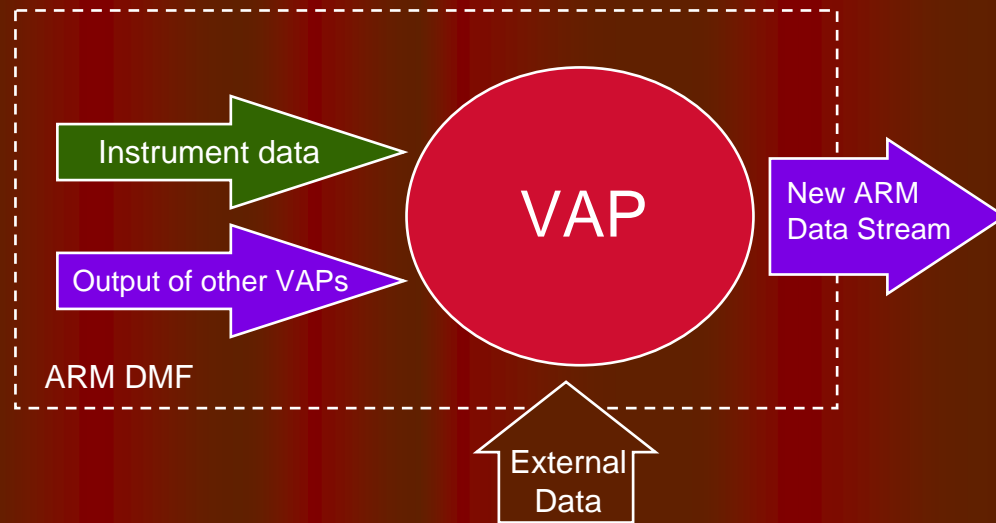
# ARM Data Types – more detail

[armarchive@ornl.gov](mailto:armarchive@ornl.gov)  
1-888-ARM-DATA

- ARM collected data
  - RAW data files
    - Available upon request, but not accessible from User Interface
    - Minimal documentation; user beware
    - Wide variety of formats; many are binary
  - Processed data files
    - Accessible from user interfaces
    - Common formats include NetCDF and HDF
- Value added products (VAPs)
  - Include one or more of the following
    - Advanced algorithms
    - Multiple data inputs
    - Input from long-time periods
  - ARM produces some VAPs to improve the quality of existing measurements. In addition, when more than one measurement is available, ARM also produces "best estimate" VAPs.

# More on VAPS...

- VAPs are products from automated analytical procedures (models, retrievals, etc.) that are run in the ARM data system
- Inputs come from instruments, other VAPs, and/or external data
- Output is a new ARM data stream

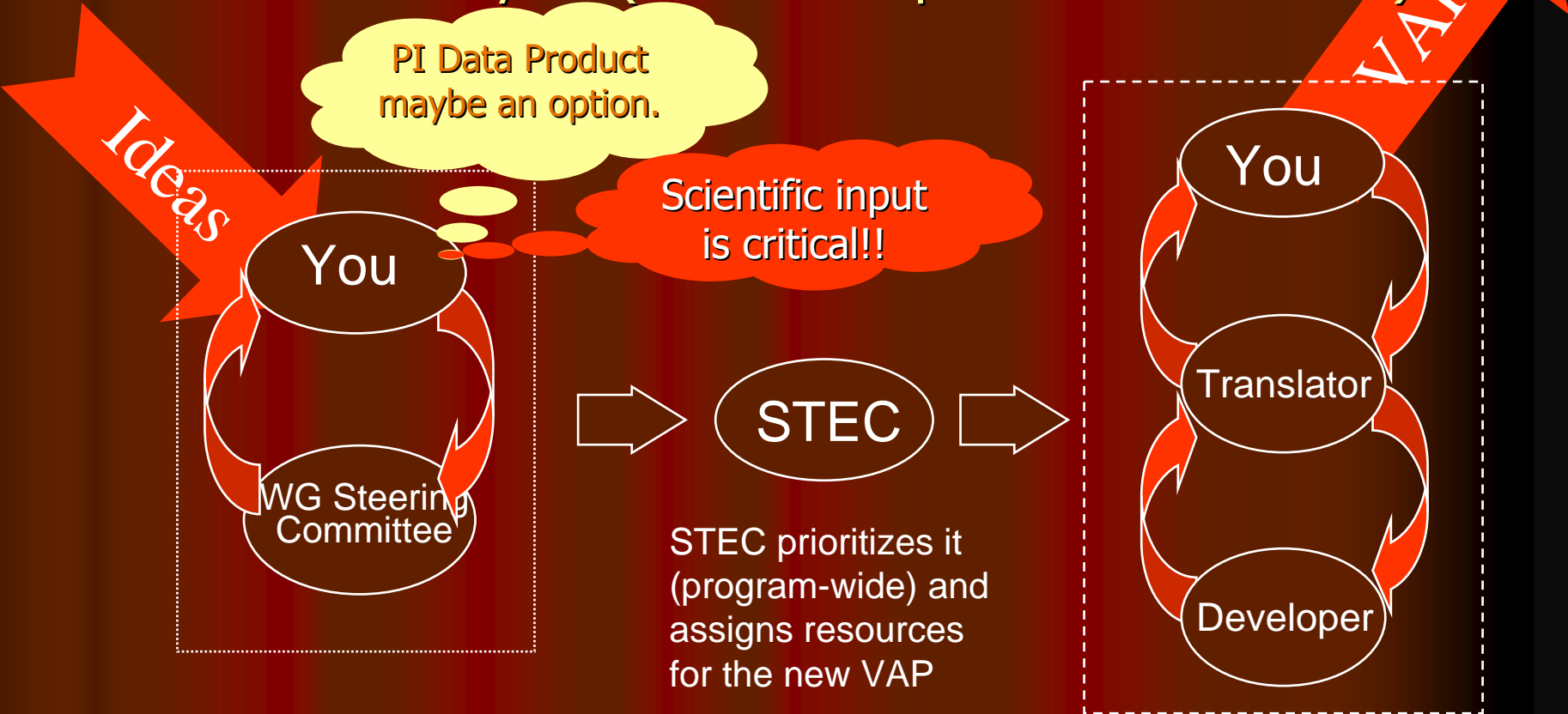


- ARM wants your input. Please note "*Procedure for Submitting Science and Research Products to the Data Archive*" at: [http://www.arm.gov/data/pi\\_procedure.stm](http://www.arm.gov/data/pi_procedure.stm)



# Still more on VAPS...

ARM needs you! (For VAP inspiration and advice.)



Scientist gets idea for new model or algorithm and presents it to the WG. The WGSC prioritizes the idea and contacts the STEC

Translator works with the Scientist to further define the algorithm, and then interacts with the Developer to implement the VAP. Translator and the Scientist then evaluate and document.

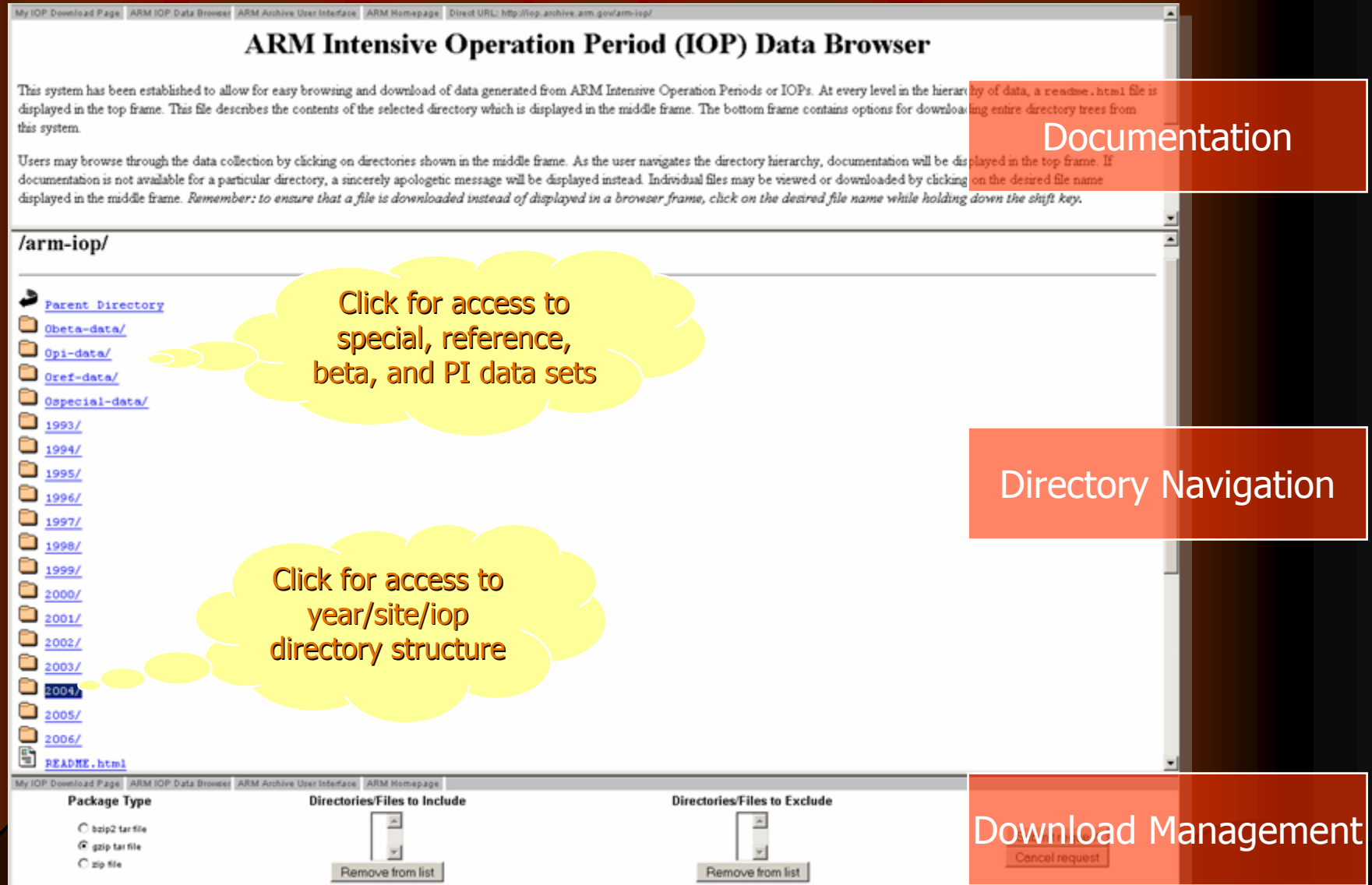
# ARM Data Types – still more detail

- External data
  - Generated by other programs (e.g., NOAA weather models, NASA satellites, etc.)
  - Many formatted into NetCDF consistent with ARM style
  - Specialized subsets specific to ARM sites
    - Geographic clips of global data
- Field Campaign Data
  - Special experiments (e.g., M-PACE, 2003 Aerosols, etc.)
  - Stored online in separate data structure
- PI generated data products
  - Considered useful to ARM users
  - Provided “at will” by a researcher
  - Supported by the researcher

# ARM IOP Data Browser



# IOP Data Browser – “home page”



**ARM Intensive Operation Period (IOP) Data Browser**

This system has been established to allow for easy browsing and download of data generated from ARM Intensive Operation Periods or IOPs. At every level in the hierarchy of data, a [readme.html](#) file is displayed in the top frame. This file describes the contents of the selected directory which is displayed in the middle frame. The bottom frame contains options for downloading entire directory trees from this system.

Users may browse through the data collection by clicking on directories shown in the middle frame. As the user navigates the directory hierarchy, documentation will be displayed in the top frame. If documentation is not available for a particular directory, a sincerely apologetic message will be displayed instead. Individual files may be viewed or downloaded by clicking on the desired file name displayed in the middle frame. *Remember: to ensure that a file is downloaded instead of displayed in a browser frame, click on the desired file name while holding down the shift key.*

**/arm-iop/**

- [Parent Directory](#)
- [Obeta-data/](#)
- [Opi-data/](#)
- [Oref-data/](#)
- [Ospecial-data/](#)
- [1993/](#)
- [1994/](#)
- [1995/](#)
- [1996/](#)
- [1997/](#)
- [1998/](#)
- [1999/](#)
- [2000/](#)
- [2001/](#)
- [2002/](#)
- [2003/](#)
- [2004/](#)
- [2005/](#)
- [2006/](#)
- [README.html](#)

**Package Type**

- tar.gz tar file
- gzip tar file
- zip file

**Directories/Files to Include**

**Directories/Files to Exclude**

**Annotations:**

- Documentation (points to README.html)
- Directory Navigation (points to the directory list)
- Download Management (points to the package type and include/exclude sections)

# IOP Data Browser – IOP View

My IOP Download Page | ARM IOP Data Browser | ARM Archive User Interface | ARM Homepage | Direct URL: <http://iop.archive.arm.gov/arm-iop/2004/usa/mpace/>

## Mixed-Phase Arctic Clouds Experiment (M-PACE)

### Executive Summary

Significant, interrelated, atmospheric, oceanic and terrestrial changes have been occurring in the Arctic in recent decades. These changes are broad-ranging, impacting every part of the arctic environment. Arctic clouds have been identified as playing a central role in several hypothesized feedback processes. Yet, nowhere in the Northern Hemisphere are the interactions among clouds, the over- and underlying atmosphere, and the ocean surface more complex, have a greater potential climatic impact, and, at the same time, less understood than they are at high latitudes.

The recent SHEBA experiment revealed that mixed-phase clouds appear to dominate the low-cloud fraction within the Arctic. Moreover, it was found that the Arctic mixed-phase clouds are distinct from their lower latitude cousins. Unfortunately, SHEBA did not manage to produce a comprehensive data set needed to study these poorly understood arctic clouds. Numerical modeling studies suggest that the ice phase heavily influence cloud evolution, and the cloud microphysics also are intimately tied to cloud-scale dynamics and the underlying surface energy budget (i.e. sea ice coverage and thickness). Moreover, the radiative characteristic of these clouds are not fully understood.

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[Parent Directory](#)

[README.html](#)  
File last modified: Wed Nov 16 21:10:22 2005 UTC  
File size: 6627 bytes  
File description: HyperText Markup Language document

[ameriflux-sfcflux/](#)

[aux-data/](#)

[bahrman-metar/](#)

[daniel-nir/](#)

[demott-cfdc/](#)

[eloranta-hsri/](#)

[heymfield-cpi/](#)

[kok-cvi/](#)

[long-sfcflux/](#)

[mather-parasl/](#)

[minnis-visst/](#)

[morrisset/](#)

Click for access to more data sub-directories

---

My IOP Download Page | ARM IOP Data Browser | ARM Archive User Interface | ARM Homepage

<b>Package Type</b>	<b>Directories/Files to Include</b>	<b>Directories/Files to Exclude</b>	
<input type="radio"/> bzip2 tar file	<input type="text" value=""/>	<input type="text" value=""/>	<input type="button" value="Submit request"/>
<input checked="" type="radio"/> gzip tar file	<input type="button" value="Remove from list"/>	<input type="button" value="Remove from list"/>	<input type="button" value="Cancel request"/>
<input type="radio"/> zip file			



# IOP Data Browser – Download Bulk Data

MPACE CSI data. Final data processing 1/17/2005

All condensed water concentrations are expressed in mg/m3.

Flight data notes:

20040929: First research data flight. CSI baseline is high

20040930: Initial part of flight data is very good. Heavy ice

20041005: Initial data shows considerable water contamination

20041006: Initial shifting baseline. Data from 18:29:00-18:30:00

20041008: Excellent data set. From data start to 20:33:00

### My IOP Download Page

Welcome back **Giri Palanisamy!**

Shown below are the IOP data packages which have been constructed for you. Clicking on the file name will transfer the file to your computer. Clicking on **Content listing** will display an index of the files. Files which are still being constructed may not be downloaded and are denoted by the blinking **Under construction...** label. This page will automatically reload every 60 seconds to provide updated status information.

If the links to any files below do not function properly, try browsing your download directory directly at <http://ftp.arm.gov.uk>. Be careful not to download any files which are still under construction.

[request 30359 20060320 120002.tar.gz](#)  
Modification Time: Mon Mar 20 12:00:02 2006  
133120 bytes  
[Content listing](#)

Page created at Mon Mar 20 12:00:17 2006

/arm-iop/2004/nsa/mpace/kok-

[Parent Directory](#)

[20040929\\_CWC.txt](#)  
File last modified: Mon Jan 17 19:00:00 2005 UTC  
File size: 90869 bytes  
File description: Text file

[20040930\\_CWC.txt](#)  
File last modified: Mon Jan 17 19:06:04 2005 UTC  
File size: 88944 bytes  
File description: Text file

[20041005\\_CWC.txt](#)  
File last modified: Mon Jan 17 19:06:08 2005 UTC  
File size: 186018 bytes  
File description: Text file

[20041006\\_CWC.txt](#)  
File last modified: Mon Jan 17 19:06:13 2005 UTC  
File size: 225790 bytes  
File description: Text file

Your IOP data order has been submitted. Your Order ID is **30359**.

Electronic mail will be sent to you when the requested data have been packaged up and are ready for download. The data will be available for download from the [My IOP Download Page](#).

Thank you for using the ARM IOP Data Archive.

### ARM IOP Data Archive

The requested data are approximately 376 KB in size.

The data will be packaged into a tar file compressed with gzip so the actual download size may be considerably less.

To confirm this order, please click **Submit Confirmed Order**, otherwise, click **Cancel**.

My IOP Download Page | ARM IOP Data Browser | ARM Archive User Interface | ARM Homepage

**Package Type**

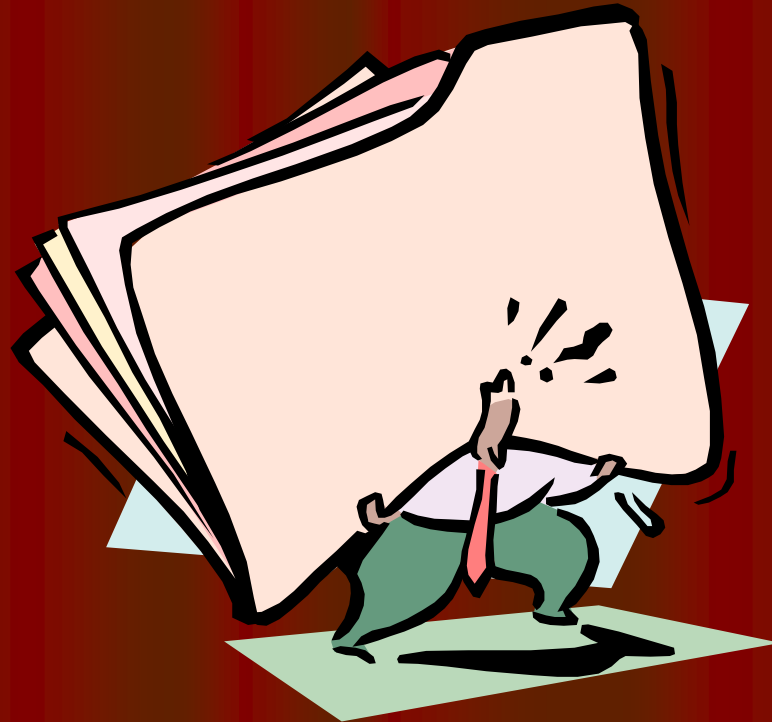
bzip2 tar file  
 gzip tar file  
 zip file

**Directories/Files to Include**

- 
- 
- 

**Directories/Files to Exclude**

"Yes, I always want it."  
(Standing Orders)

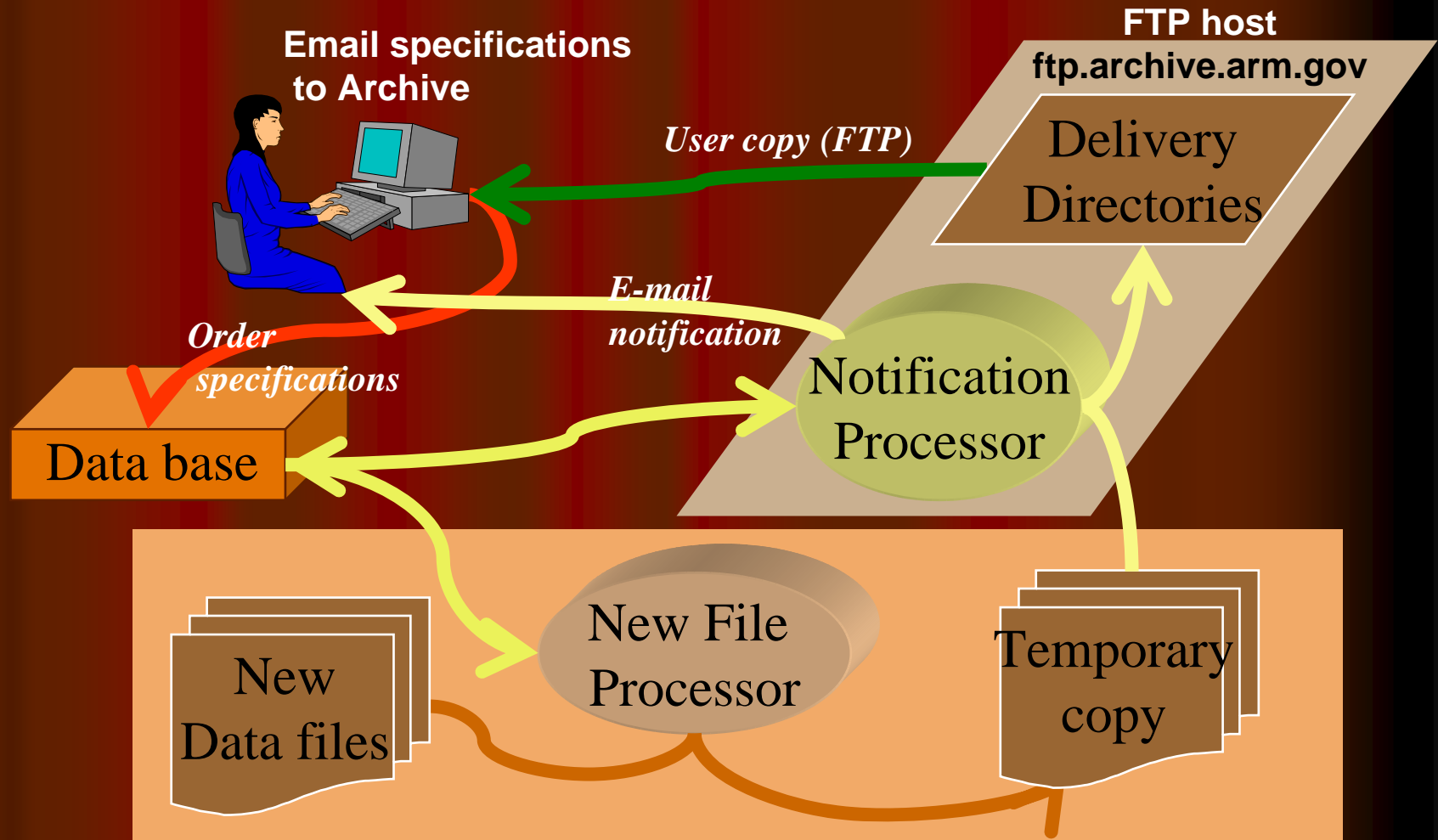


# “Standing Orders”: Data Distribution Upon Arrival

- A “Standing Order” is an open request for access to a copy of all new files arriving at the Archive
  - Matching a user-specified set of data streams
  - Arriving during a delivery period
- Designed for users wanting to:
  - Access data shortly after Archival
  - Build their own complete collection of selected data streams



# Standing Order Processing



# Standing Order Information

- Online documentation
  - <http://www.archive.arm.gov/docs/standing-orders.html>
- Send request:
  - What data streams?
  - What delivery frequency?
  - To: [armarchive@ornl.gov](mailto:armarchive@ornl.gov)
- More details in reference section of handout

# Contact Us at . . .

- ARM Information

- <http://www.arm.gov>
- [info@arm.gov](mailto:info@arm.gov)
- 1-888-ARM-DATA (1-888-276-3282)

- Archive Assistance

- [armarchive@ornl.gov](mailto:armarchive@ornl.gov)
- Call "1-888-ARM-DATA"
- FAX 1-865-574-4665

