

# ARM Data System Research Account @ Data Management Facility

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# DMF ARM Data System Research Account

- Is for the purpose of obtaining near-real time data in order to conduct preliminary analysis of proper instrumentation operation
- To support an experiment or operational need
- To participate in collaborations
- Code development
- Scientific analysis of ARM data

That need must be clearly stated in the request for a research system account.





# **Eligibility**

The following personnel are eligible for user accounts on the Data Management Facility (DMF):

- Any member of the ASR Science Team
- Any member of ARM Infrastructure, Engineering, Operations, or the Quality Control group
- ARM site field campaign visitors
- Users with need to participate in collaborations, analysis, or code development associated with ARM data
- Personnel with visiting or development instruments at an ARM site





### **Purpose**

The account must be for the purpose of obtaining near-real time data in order to conduct preliminary analysis of proper instrumentation operation; to support an experiment or operational need; or to participate in collaborations, code development, or scientific analysis of ARM data. That need must be clearly stated in the request for a research system account.

Because all data processing for all ARM Sites is done at the Data Management Facility (DMF), the DMF research computer should be the preferred choice for all research system account requests. The ARM site-specific research systems should be reserved preferentially for researchers participating in field campaigns and for those with site-specific needs. Special tasks for processing of very large data products should be proposed for the ARM Computing Cluster.





#### **Data Statement**

All quality-assured data are available from the Data Archive, usually within 24 hours of collection. Users should go to the Data Archive to request data as the primary source of validated data and data products.

Users can view (only) near-real time, quality-assured data (including diagnostics plots) by going to the Data Quality web page at <a href="http://dq.arm.gov/">http://dq.arm.gov/</a>. These data is usually available within one hour of collection from any instrument from any Site.

The data is provided to a research system account BEFORE final data quality checks are performed. Therefore, the data must be considered preliminary. Hence, research system accounts will be restricted to conduct preliminary analysis of proper instrumentation operation or to support an experiment, specialized data analysis or operational need.

The data user is responsible to acquire the data provided to them on a research system.

The only official source for ARM quality-assured data is the Data Archive.





# Agreement

# Account candidates should not share data collected on their research system account with anyone else.

Because data collected from a research system account is not quality assured, the data should be considered preliminary and therefore not used for algorithm development or research publications.





# **Research System Descriptions**

- Research computers are secure.
- User file space on research systems is <u>limited</u> and shared among a large number of users.
- Access to instrument measurements and data streams is read-only.
- Users may install and build software in their own user area as long as it:
  - o is related to the work in their justification
  - o does not adversely impact other users or production services
  - o does not introduce any cyber-security vulnerabilities (including webapps)
  - o is not peer-to-peer software.
- Access to the account from off-site is restricted to ssh (or sftp, scp) protocol version 2 only. Each access must be authenticated (ie .rhosts and similar files are not allowed).





### Request SARs Account

Users must request a DMF Research Account through the SARS system. Once approved, the DMF system administrator will contact the user with name and password.

https://www.db.arm.gov/SARS2/

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