Clarifying and Implementing a Stricter DOD Definition Across Datastreams
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Objective:
A DOD (data object design) definition has been developed to provide consistency in structure across ARM data streams and to document data history.

Issues with current DOD history:
The DOD History page:
http://science.arm.gov/tool/dod/showdod.php
- Tracks both content and structure.
- Needs Custom Configuration

Definition of DOD:
All dimension, attribute and variable types and names are considered part of a DOD. A change in any part of the DOD is considered a version change.

Outcomes:
ACRF enforces greater consistency in data
Downstream users benefit (DQ, VAPs, scientists)
Identify inconsistencies across datastreams
Datastream development is more efficient
BODS interface, updated libraries
Improved data analysis tools for ACRF and ARM
Visual Datastream history tool (below)

Inconsistencies across datastreams:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>long_name</th>
</tr>
</thead>
<tbody>
<tr>
<td>atm_pres</td>
<td>average atmospheric pressure</td>
</tr>
<tr>
<td>atmos_pressure</td>
<td>Atmospheric pressure</td>
</tr>
<tr>
<td>pres</td>
<td>Atmospheric pressure</td>
</tr>
<tr>
<td>pres</td>
<td>Pressure</td>
</tr>
<tr>
<td>pres</td>
<td>Retrieved pressure profile</td>
</tr>
</tbody>
</table>

Database schema: prototype update for DSDB

Attribute Value Tracking Datastream View (prototype)

sgpmfrsrE11b1

[Diagram showing datastream history]