State of the SOOS GCMD Portal

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EED2 Team, NASA’s Global Change Master Directory (GCMD)
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SOOS PORTAL UPDATE
SOOS Portal Content

Total # records: 4,593 (3%)

Total # records w/ Get Data links: 2,980 (68.19%)
SOOS Portal Usage

Last 12 Months (Feb 2017 - Feb 2018)

- Total Views: 3,344 (-15%)
- Total Visits: 763 (-11%)

Previous year (Feb 2016 - Feb 2017)

- Total Views: 3,954
- Total Visits: 858
SOOS Portal Content by Science Topic

- **BIOLOGICAL CLASSIFICATION**: 25%
- **BIOSPHERE**: 22%
- **OCEANS**: 10%
- **HUMAN DIMENSIONS**: 8%
- **CRYOSPHERE**: 7%
- **ATMOSPHERE**: 7%
- **LAND SURFACE**: 5%
- **TERRESTRIAL HYDROSPHERE**: 5%
- **AGRICULTURE**: 3%
- **CLIMATE INDICATORS**: 2%
- **PALEOClimATE**: 2%
- **SPECTRAL/ENGINEERING**: 1%
- **SUN-EARTH INTERACTIONS**: 1%
- **SOLID EARTH**: 2%
- **SOLAR/ENGINEERING**: 1%
- **SOLAR EARTH**: 1%
- **SPECTRAL/EARTH**: 1%

SOOS Portal Top Referrers
February 2017–February 2018

Legend:
1. Google
2. soos.aq
3. None
4. nasa.gov
5. yandex.ru
6. bing.com
7. nectar.org.au
8. wikipedia.org
9. polarprediction.net
10. isric.org
Portal Visits by Country
February 2017 – February 2018

Legend:
1. United States
2. Korea, Republic of
3. India
4. China
5. Italy
6. Australia
7. Peru
8. Canada
9. France
10. Chile
11. Great Britain
12. Iran
Portal Visits by City
February 2017 – February 2018

Legend:
1. SEOUL, SEOUL TEUKBYEOLSI, Korea, Republic of
2. SHANGHAI, SHANGHAI SHI, China
3. LIMA, LIMA PROVINCE, Peru
4. TEHRAN, TEHRAN, Iran
5. LISBOA, LISBOA, Portugal
6. BOLZANO, BOLZANO, Italy
7. MUMBAI, MAHARASHTRA, India
8. LIVERPOOL, LIVERPOOL, Great Britain
9. HOBART, TASMANIA, Australia
10. HUNTSVILLE, ALABAMA, United States
Top GCMD Portals
February 2017 – February 2018

SOOS Portal is #12 by number of visits/portal
GCMD STATUS

• DIF-9 to DIF-10 Transition
• GCMD Keyword Update
• DIF-10.3
Why Transition From DIF-9 to DIF-10?

• DIF-10 offers improvements to the DIF including:
  • New fields (Ex: Product_Level_ID)
  • Clarified fields (Ex: Parameters changed to Science_Keywords)
  • Restructured fields (Ex: Hierarchical representation of Platforms/Instrument).

• These changes serve to bring the DIF in compliance with NASA’s Unified Metadata Model (UMM) and integrate features requested by the IDN community.
## DIF9 – DIF10 Mapping (Required Fields)

<table>
<thead>
<tr>
<th>DIF-9 Fields</th>
<th>DIF-10 Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Center/Organization</strong></td>
<td><strong>Organization</strong></td>
</tr>
<tr>
<td>Data Set Progress</td>
<td>Data Set Progress</td>
</tr>
<tr>
<td><strong>Entry_ID</strong></td>
<td><strong>Entry_ID (Shortname)</strong></td>
</tr>
<tr>
<td><strong>Data Set Citation/Version</strong></td>
<td><strong>Entry_ID (Version)</strong></td>
</tr>
<tr>
<td>Entry_Title</td>
<td>Entry_Title</td>
</tr>
<tr>
<td>ISO Topic Category</td>
<td>ISO Topic Category</td>
</tr>
<tr>
<td><strong>Source/Sensor</strong></td>
<td><strong>Platform/Instrument</strong></td>
</tr>
<tr>
<td>Project</td>
<td>Project</td>
</tr>
<tr>
<td>Related URL</td>
<td>Related URL</td>
</tr>
<tr>
<td>Science Keywords</td>
<td>Science Keywords</td>
</tr>
<tr>
<td>Spatial Coverage</td>
<td>Spatial Coverage</td>
</tr>
<tr>
<td>Summary</td>
<td>Summary</td>
</tr>
<tr>
<td>Temporal Coverage</td>
<td>Temporal Coverage</td>
</tr>
<tr>
<td>None</td>
<td><strong>Product Level ID</strong></td>
</tr>
</tbody>
</table>

*RED fields indicate changes between DIF-9 and DIF-10*
DIF-9 to DIF-10 Transition Schedule

- **(2017-2018)**
  - Sent data Providers DIF-9 to DIF-10 QA/Triage Reports.

- **May 1, 2018**
  - Start migrating existing non-NASA EOSDIS DIF-9 records to DIF-10.

- **2019 (First quarter)**
  - Plan to have all metadata records transition.

- Providers need to submit new metadata in DIF-10 or any format compatible with NASA’s Common Metadata Repository (CMR).
  - Compatible formats: DIF-10, NASA ISO (MENDs), and UMM-JSON.

- docBUILDER supports DIF-10 format.
GCMD KEYWORD UPDATE
Keyword Version 8.6 Release

- Related URL:
  - Added: 32
  - Deleted: 4
  - Modified: 17

- Water Quality/Water Chemistry:
  - Added: 33
  - Deleted: 0
  - Modified: 24

If you are interested in becoming a keyword reviewer, please contact the ESO at eso-staff@lists.nasa.gov.
# Keyword Version 8.6 Release

## Table: List of Changes to Keywords (Release Version 8.6)

<table>
<thead>
<tr>
<th>Changes</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>67 keywords were added, 53 keywords were modified, 18 keywords were deleted</td>
<td></td>
</tr>
</tbody>
</table>

The rationale for the changes include: User Requests, Align With Common Terminology, User Search Behavior, Keyword Gap Analysis, New Variables Needed to Describe Data Sets, New Categories of Variables Needed to Distinguish Variables

### For Science Keywords Under (Terrestrial Hydrosphere > Water Quality/Water Chemistry):


- **Replace Keywords**: Acid Deposition with "Acid Rain", Phosphorus Compounds with "Phosphorous", Dissolved Solids with "Total Dissolved Solids", Water Potability with "Potability", "Benthic Index" with "Index of Biotic Integrity"


### For Related URL Keywords:

- **Add New Keywords**: Use Service API, GoTo Web Tool, USGS EarthExplorer, NOMADS, AppEEARS, Portal, Direct Download, Data Collection Bundle, Tabular Data Stream (TDS), Web Map Tile Service (WMTS), Instrument/Sensor Calibration Documentation, Case Study, Data Quality, Deliverables Checklist, Processing History, Production History, Product Quality Assessment, Product Usage, ReadMe, Data Recipe, Requirements and Design, Science Data Product Software Documentation, Science Data Product Validation, User Feedback Page, Data Citation Policy


- **Move Keywords from Different Type**: OPENAPD Data, GrADS Data Server (GDS), Web Coverage Service (WCS), THREDDS Data, Map Service, Service Chaining, Web Feature Service, Web Map Service, OpenSearch, Mobile App, Simple Subset Wizard (SSW), Subsetter, Map Viewer, Live Access Server

- **Delete Keywords**: Get Service, View Images, Alternate Access, KML, ECHO, EDG, OPENAPD Data (DDDS), REVERB, DIF, THREDDS Catalog, THREDDS Directory, OPENAPD Directory (DDDS), Access Web Service, Web Map for Time Series, SERF, Browse Sample, Data Contact, Data Center
Keyword Version 8.7 Proposed Topics (2019)

Cryosphere

Earth Science Services/Web Services
Keyword Landing Page

✓ Access the GCMD Keywords
✓ Submit a Keyword Request
✓ See the Keyword Release Announcements
✓ Review the Keyword Governance Document

https://earthdata.nasa.gov/about/gcmd/global-change-master-directory-gcmd-keywords
DIF-10 XML SCHEMA CHANGES
DIF-10.3 Updates (Spring 2018)

• Existing fields now required:
  • Data_Set_Progress and Product_Level_ID

• Add new sub-fields for:
  • Distribution: Average_Granule_Size and Total_Collection_Size
  • Access_Constraints: Description, Access_Control, Access_Control_Description
  • Use_Constraints: Description, License_Text, License_URL

• Made optional:
  • Metadata Dates: Data_Creation and Data_Last_Revision
  • Related_URL

• Allow:
  • “not applicable” in Dataset_Citation/Persistent_Identifier when value does not exist.
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