International Directory Network (GCMD) Version 9.8.2 Release Notes (October 2010)

I. Added Subfields to DIF/SERF Summary field

Discussion

Added two new subfields within the **Summary** field:

Abstract

Purpose

The **Summary**, currently a free-text field, will contain subfields: **Abstract** and **Purpose**. The subfields will permit a 1:1 mapping for the **Abstract** and **Purpose** fields when translating to/from DIF to ISO-19115 and the Federal Geographic Data Committee (FGDC) standards. This will greatly improve the accuracy of translations between standards.

Specifications:

The **Summary** field provides a brief description of the data set, along with why the data were collected. This information will allow potential users to determine if the data set is useful for their needs.

Abstract: A brief description of the data set.

Purpose: Describes the purpose and/or intended use of the data set.

Changes to XML Schema

- The **Summary** field is required.
 - **Abstract** field is required.
 - Purpose field is optional.
- The **Summary** field may not be repeated.

- Abstract and Purpose fields may not be repeated.
- XML Syntax Changes

Previous DIF/SERF Syntax:

<Summary>text</Summary>

New DIF/SERF Syntax:

<Summary>
<Abstract>text</Abstract>
<Purpose>text</Purpose>
</Summary>

XML Example:

<Summary>

<Abstract>

Synoptic Surface Observations (Office of Hydrology Format) is historical data set DSI-9659 archived at the National Climatic Data Center (NCDC). The Office of Hydrology (O/H) format was designed for use in implementing the National Weather Service River Forecast Service (NWSRFS) nationwide, and for calibration of hydrologic models. Parameters for this synoptic surface observations data set include: temperature, cloudiness, humidity, water vapor, evaporation, precipitation, sunshine, visibility, winds, water temperature, dew point, and thunderstorm occurrences. The period of record is 1948-1976.

</Abstract>

<Purpose>

To make a wide range of climatic data available to researchers and the public.

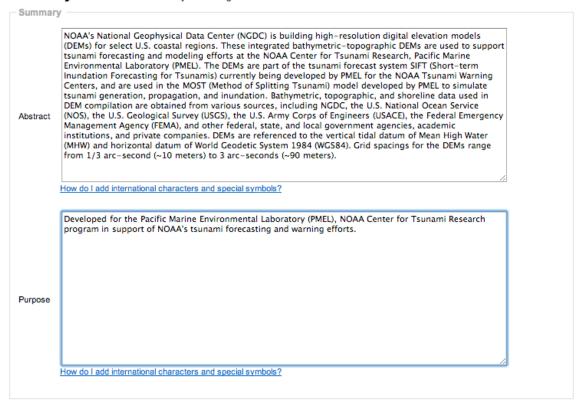
</Purpose>

</Summary>

Changes to docBUILDER to accomodate Subfields:

docBUILDER will offer two fields for editing text: **Abstract** and **Purpose**. See screenshot below:

Summary 0 : Enter a brief summary describing the data set.



Back Continue

Impact:

The text held in the **Summary** fields of the current IDN records will be automatically mapped to the new format. No action is required.

Metadata authors who use docBUILDER to create new records will be provided with the new extended options. Only metadata authors who develop DIF/SERF metadata externally may populate the **Summary** field in either the version 9.8.1 format or the 9.8.2 format. However, we recommend that partners begin adapting their systems to the 9.8.2 DIF and SERF XML schemas as soon as possible (See Resources).

Resources:

DIF Guide:

http://gcmd.gsfc.nasa.gov/User/difguide/

SERF Guide:

http://gcmd.gsfc.nasa.gov/User/serfguide/

DIF XML Schema:

http://gcmd.nasa.gov/Aboutus/xml/dif/dif_v9.8.2.xsd

SERF XML Schema:

http://gcmd.nasa.gov/Aboutus/xml/serf/serf_v9.8.2.xsd

II. Added Subfields to DIF/SERF Reference field

Discussion:

The **Reference** field, currently a free-text field, will contain subfields (listed below). The subfields will permit a more accurate mapping between fields when translating metadata between the DIF, ISO-19115 (ISO), and the Federal Geographic Data Committee (FGDC) standards.

The revised **Reference** field will provide metadata authors with the option to input text using subfields when documenting bibliographic references. A free-text field will continue to be available for metadata authors, who wish to copy and paste citations produced outside of docBUILDER into the **Reference** field.

Metadata authors are encouraged, but not required, to utilize the subfields when developing new metadata. When editing pre-existing documents, the free-text box and the subfields will be available simultaneously in docBUILDER for those authors who wish to transfer their citations to the new format. The new format offers many advantages over the free-text format:

- Streamlines translations of metadata to/from DIF to ISO-19115 and Federal Geographic Data Committee (FGDC) standards.
- Provides compliance with ISO standards while serving the directory.

- Enhanced Capabilities
 - Users may submit fielded queries within the Reference field (Example: "Display all data set descriptions where author J. Smith is cited in the Reference/Author field".
 - Functionality to display reference information in mulitiple reference formats (Examples: American Geophysical Union (AGU), American Psychological Association (APA), etc.)

Added 15 new subfields within the **Reference** field:

```
Author (s)
Publication Date
Title
Series
Edition
Volume
Issue
Report_Number
Publication_Place
Publisher
Pages
ISBN
DOI
Online Resource
Other_Reference_Details
```

Specifications:

Reference: Describes key bibliographic citations pertaining to the data set. Bibliographic citations may be provided in styles used by professional scientific journals such as Journal of Geophysical Research (JGR) and the Bulletin of the American Meteorological Society (BAMS).

Author: The name of the individual(s) or organization(s) with primary intellectual responsibility for the cited resource's development.

Publication Date: The publication/reference date for the cited resource. If the Publication Date is not known, please use "Unknown".

Title: The title (name) of the cited resource.

Series: The name of a resource series, or aggregate (collection) resource of which the cited resource is a part.

Edition: The version of a cited resource.

Volume: The order or sequence of a resource in a series or set.

Issue: The issue number of a resource (usually within a volume).

Report_Number: The unique number or code assigned to a resource by the issuing organization(s).

Publication_Place: The name of the city (and state or province and country if needed) where the resource was made available.

Publisher: The name of the individual(s) or organization(s) that made the resource available.

Pages: The range of pages or total number of pages of a cited resource.

ISBN: International Standard Book Number.

DOI: Digital Object Identifier.

Online_Resource: The URL of the online resource containing the cited resource.

Other_Reference_Details: Additional free-text reference information.

Changes to XML Schema:

- o The **Reference** field may be repeated.
- Individual subfields may not be repeated within a single "reference".
- DIF/SERF Syntax Changes

```
<Reference>
   <Author>Text up to 500 characters/Author>
   < Publication Date > Text up to 31 characters, yyyy-
mm-dd format suggested</Publication Date>
   <Title>Text up to 220 characters</Title>
   <Series>Text up to 220 characters</Series>
   <Edition>Text up to 31 characters</Edition>
   <Volume>Text up to 80 characters</Volume>
   < Issue > Text up to 80 characters < / Issue >
   <Report Number>Text up to 80
characters</Report_Number>
   <Publication Place>Text up to 80
characters</Publication Place>
   <Publisher>Text up to 500 characters</Publisher>
   <Pages>Text up to 31 characters
   <ISBN>Text up to 220 characters</ISBN>
   <DOI>Digital Object Identifier (DOI) up to 220
characters</DOI>
   <Online Resource>Uniform Resource Locator (URL)
up to 600 characters</Online Resource>
   <Other_Reference_Details>Text up to 220
characters</Other_Reference_Details>
   </Reference>
```

XML Examples:

Reference with subfields:

```
<Reference>
<Author>J. B. Blair, D. L. Rabine, and M. A.
Hofton</Author>
<Publication_Date>1999</Publication_Date>
<Title>The Laser Vegetation Imaging Sensor (LVIS): A
medium altitude, digitization-only, airborne laser altimeter
for mapping vegetation and topography.</Title>
<Series>Journal of Photogrammetry and Remote Sensing
</Series>
<Issue>54, 115-122</Issue>
<Other_Reference_Details>Instrument Citation
</Other_Reference>
```

Reference without subfields:

<Reference>

Ahmad, S. P., P. F. Levelt, P. K. Bhartia, E. Hilsenrath, G. W. Leppelmeier, and J. E. Johnson, Atmospheric Products from the Ozone Monitoring Instrument (OMI), Proceedings of SPIE conference on Earth Observing Systems VIII, San Diego, California, Aug 3-8, 2003.

http://disc.sci.gsfc.nasa.gov/acdisc/ozone/docs/omi-spie-2003.doc

</Reference>

Changes to docBUILDER to accomodate Subfields:

docBUILDER will offer the option to edit text within a freetext field or within subfields. See screenshot below:

The following screen capture displays a single Publication/Reference in docBUILDER's edit mode:

	O Publication/Reference			
	View Edits	Enter/Edit free-text		
	Free-Text —			
		How do I add international characters and special symbols?		
	_	OR		
		Enter/Edit subfields [for improved search and interoperab	ility with other metadata standards.]	
	▼ Click to close			
	Author(s) (required)	Mooley, D. A., Parthasarathy, B., Sontakke, N. A., and M.		
	Publication Date (required)	1981	YYYY (Four digit year)	
	Title (required)	Annual rain-water over India, its variability and impact :		
	Series	J. Climatol	Journal/Book/Proceedings	
	Edition			
	Volume			
	Issue	1		
Sub-Fields —	Report Number			
Jub-i leius	Publication Place			
	Publisher			
	Pages	167-186		
	ISBN			
	Publication DOI			
	Online Resource			
	Other Reference Details			
	_	How do I add international characters and special symbols?		

Impact:

Metadata authors who do **not** wish to take advantage of the new subfields do not need to take any further action.

The variety of reference formats held in the legacy metadata records make automated mapping impossible. Therefore the **Reference** field information held in the current GCMD/IDN metadata collection **cannot** be automatically mapped to the new format. As a result, authors who maintain their metadata in the GCMD/IDN and wish to leverage the new subfields should manually transfer their bibliographic citations to the new fields through docBUILDER. Metadata providers who produce and maintain their documents externally should use the DIF and SERF XML schemas for validation and the DIF/SERF guides as a reference (See Resources).

Resources:

DIF Guide:

http://gcmd.gsfc.nasa.gov/User/difguide/

SERF Guide:

http://gcmd.gsfc.nasa.gov/User/serfguide/

DIF XML Schema:

http://gcmd.nasa.gov/Aboutus/xml/dif/dif v9.8.2.xsd

SERF XML Schema:

http://gcmd.nasa.gov/Aboutus/xml/serf/serf_v9.8.2.xsd

III. Implemented "caching" feature to reduce Google Map latency

Discussion:

This feature was implemented to decrease the potential for latency in loading the Google map in the metadata display during peak Internet usage times. By caching Google maps on the server side, the browser does not access Google maps directly to view the map. Because the cached map is not interactive, users who wish to initiate the interactive map must initially click on the static map.

Specifications:

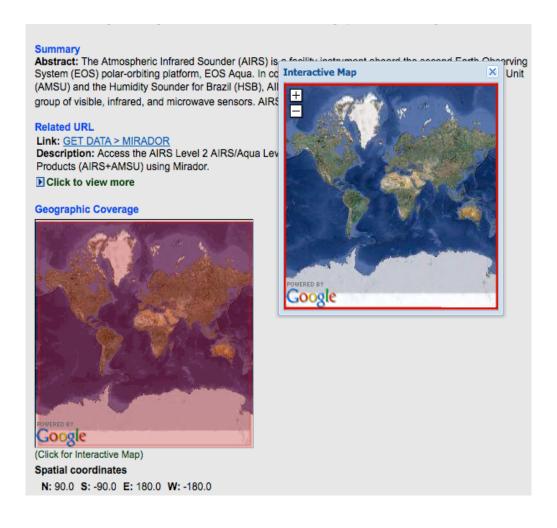
In the DIF display the Google Map is static. Users click on the map to reveal the interactive map as an in-line image.

Changes to XML Schema:

Not Applicable

Example:

The following screen capture displays the interactive map after the static map was chosen in the DIF display.



Impact:

No impact

IV. Provided support for short link to view individual Climate Diagnostic (CD) Visualization Records

Discussion:

Provides a direct link to view individual climate diagnostic records.

Specifications:

Added support for a direct link to access Climate Diagnostic visualization records.

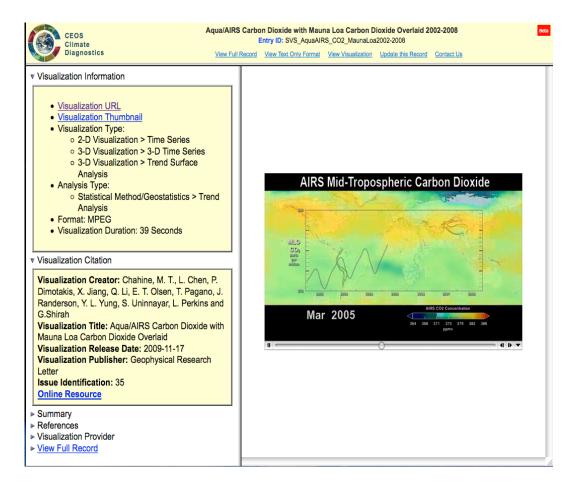
Syntax: http://gcmd.gsfc.nasa.gov/getcd.html?Entry_ID

Changes to XML Schema:

Not Applicable

Example:

The following screen capture shows a Climate Diagnostic record view upon following a direct link.



Impact:

No impact