



The Goddard Core: A Metadata Framework for Web Site and Beyond

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Outline



- **What is metadata?**
- **What is the Goddard Core?**
- **How does the Goddard Library use it with web sites?**
- **What is the DAS framework?**
- **What are the benefits?**

What is Metadata?



- Data about data
- “Header information”
- Common standards like those used in library catalogs: author, title, etc.

What is the Goddard Core?



- **Goddard Core Metadata Element Set**
 - Based on the ISO Standard for Descriptive Metadata (Dublin Core)
 - Extends the Dublin Core to 24 qualified descriptive elements. There are additional Administrative Elements. Preservation Elements are being developed.
 - Enables custom classification of GSFC-specific content
 - Examples: Contributor.RNO, Contributor.Webmaster
 - **Goddard Core was extended to accommodate GSFC project-specific needs**
 - Supports evaluation and resource discovery of project-oriented information
 - Examples: Subject.Instrument, Subject.Competencies
- information@work**

Goddard Core Metadata Elements



Descriptive Set

<i>Element Name</i>	<i>Definition</i>
Title	The name of the resource.
Creator	The name of the entity that authored, photographed, presented or otherwise created the resource.
Creator Employee	The name of the employee or person who authored, photographed, presented or otherwise created the resource.
Creator Organization	The organization under whose auspices the resource was created.
Subject Organization	The name of an organization that is the topic of the content of the resource.
Subject – Mission/Project	The name of a mission or project that is the topic of the content of the resource.
Subject - Competency	The name of the vocational or technical specialty that is relevant to the content of the resource.
Subject - Instrument	The name of the scientific equipment or platform that is the topic of the content of the resource.
Subject – Business Purpose	The business purpose for which the content of the resource was prepared.
Subject - Industries	The name of an industry sector that is a topic of the content of the resource.
Uncontrolled Subject (Keywords)	Terms describing the topic of the resource that are not controlled (i.e., keywords).
Description	Information useful in evaluating the relevant of the resource to the user's need. This information may include but is not limited to abstracts, tables of content, reference to a graphic representation of the content or a free-text account of the content.
Publisher Organization	The name of an entity responsible for producing or distributing the resource.
Publisher Code	The organizational code for the entity responsible for producing or distributing the resource.
Date	A date that is relevant to the life cycle of the resource.
Content Type	The genre, resource type or document type of the resource
Format	The technical structure of the resource as indicated by the Mime type.

Meta-Tagging for Web Pages



- Required metadata fields for Goddard Sites

Web Guidelines	Goddard Core
Title	Title
Description	Description
Orgcode	Creator.code
Content-owner	Contributor.contentowner
RNO – Responsible NASA Official	Contributor.rno
Webmaster	Contributor.webmaster

information@work

Metadata Input Form

Goddard Core Metadata Template - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

Goddard Core Metadata Template

Help:

- ◆ [Definitions of the Goddard Core elements](#)
- ◆ [DC Elements, Reference Version](#)

ID

1 TITLE of the resource to be described

2 CREATOR (Name of the person or organization primarily responsible for creating the intellectual content)

Creator Employee

Creator Code

3 SUBJECT (Your own keywords describing the topic of the resource, *one per box*)

Subject Missions Projects

<input type="text" value="Terra"/>
<input type="text" value="Landsat 7"/>
<input type="text" value="Aura"/>
<input type="text" value="Aqua"/>
<input type="text" value="ICESat"/>
<input type="text" value="Earth Observing System"/>

Subject Competencies

Done

DAS Search Page

Digital Asset System at Goddard Library - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Digital Asset System at The Goddard Library

Welcome to the Digital Asset System (DAS) at NASA Goddard Space Flight Center Library

This Goddard Library project focused on Digital Preservation and Knowledge Management.
The DAS searches 94813 digital objects such as web pages, images, and videos.

Search for Digital Objects

Search for: in:

[About](#) | [Help](#) | [Home](#)

Responsible NASA Official: Robin
Head, Library Information Services

- All
- Creator.Code
- Creator.Employee
- Description
- Format
- Keyword
- Record No.
- Subject Competencies**
- EOS Taxonomy
- NASA Taxonomy
- Title
- Title, Description, Keyword
- Type

Home

About

Comment

Accessibility

Internet

NASA Taxonomy Search Page

Engineering
Aerospace engineering
Electrical engineering
Mechanical engineering
Bioengineering
Life Sciences
Agriculture
Biology
Botany
Ecology
Genetics
Geobiology
Physiology
Zoology
Biotechnology
Cellular Biotechnology
Macromolecular Biotechnology
Biotechnology Research
Earth Sciences
Atmosphere
Biosphere
Cryosphere
Geosphere
Hydrosphere
Systems, Interactions, Feedback Loops
Current Issues
Earth in Space
Geochemistry
Geology
Geophysics

Search for: []
AND []
AND []

in: NASA Taxonomy []
All []
All []

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Responsible NASA Official: Robin Dixon
Head, Library Information Services Branch

Sample Search Results

Digital Asset System at Goddard Library - Microsoft Internet Explorer

File Edit View Favorites Tools Help

 Digital Asset System at The Goddard Library

Displaying 1 to 10 of 70

View	Metadata	Type	Title	Subject.Competencies	Creator	Code
		Image	Comparing Two Satellite Sensors	EOS.Instruments, EOS.Sensors, NASA.Earth Sciences		
		Web page	Space Geodesy Networks and Sensors Calibration Office	NASA.Earth Sciences, NASA.Geosphere, NASA.Physics, EOS.Calibration, EOS.Sensors		920.1
		Video	The NPOESS preparatory project (NPP)	NASA.Physics, EOS.Sensors	Bob Murphy	920
		Web page	NPOESS Preparatory Project Sensors	NASA.Earth Sciences, EOS.Sensors, EOS.Instruments, EOS.Observatory		429
		Video	MODIS performance	EOS.Sensors, EOS.Calibration	William Barnes	
		Web page	Comparison of L7 and EO-1 Sensors	EOS.Spacecraft, EOS.Instruments, EOS.Sensors		427
		Web page	Ultra Sensitive Photon Sensors @ GSFC Technology	NASA.Technology		500
		Web page	ASAS Sensor and Tilting Platform Details	EOS.Sensors, EOS.Instruments, NASA.Earth Sciences, NASA.Physics		920
		Video	Understanding Our World of the Future: Mastering ...	EOS.Sensors, NASA.Technology, NASA.Earth Sciences	Gran Paules	
		Web page	NASA IPO-REP Office	NASA.Technology, EOS.Sensors, EOS.Instruments		402

Done Internet

Preserving Web Sites



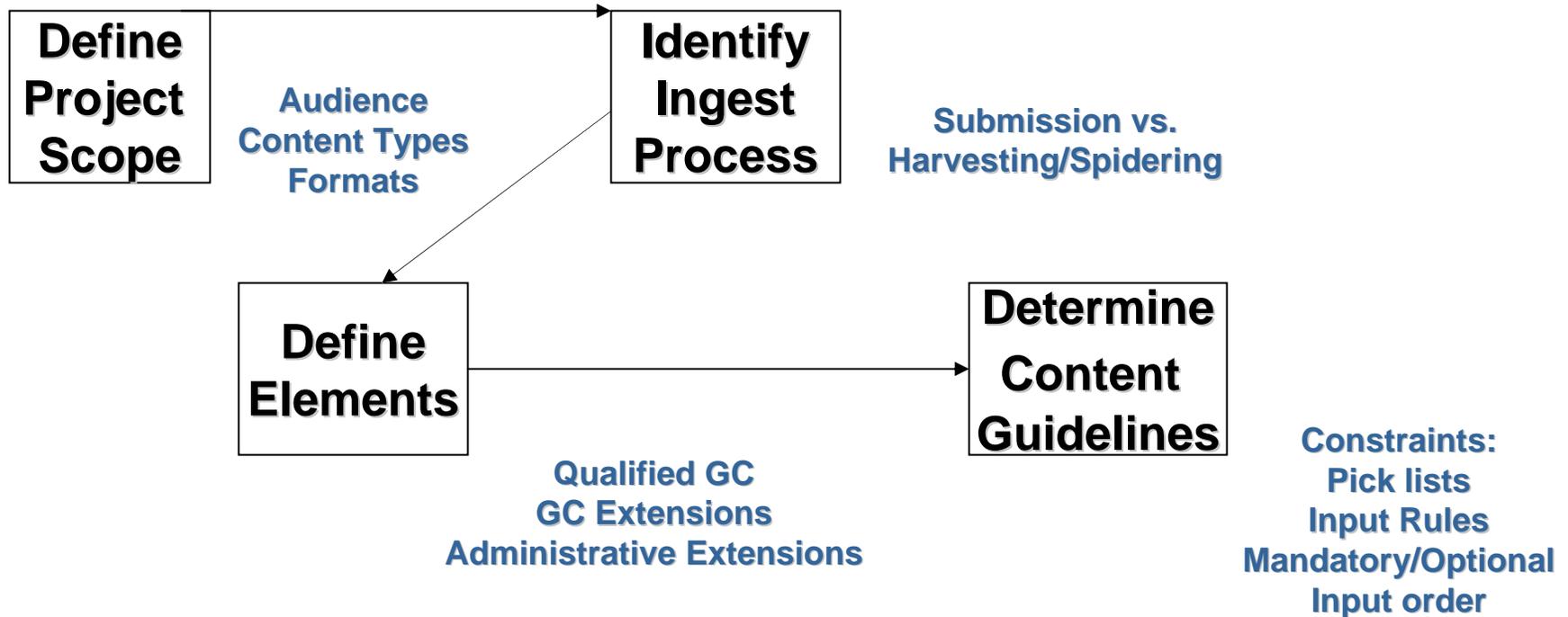
- **Capturing project Web Sites**
- **Metadata Creation**
 - Extract and map from available meta-tags
 - Inherit from these meta-tags to lower level sites that don't have any based on rules
 - Manually add remaining metadata
- **Store metadata in separate file to preserve the original web site**

Taxonomy/Controlled Vocabulary



- NASA Taxonomy developed by JPL serves as the primary taxonomy for the Digital Asset System
- Project-specific taxonomies/controlled vocabularies include:
 - Earth Observing System (EOS)
 - Landsat
 - Swift
- Web Content specific controlled vocabularies include:
 - Content Type
 - Format

Digital Asset System Framework Process



Landsat-Specific Controlled Vocabulary



■ Subject.MissionProject

- ERTS
- Landsat 1
- Landsat 2
- Landsat ...
- Landsat Data Continuity Mission (LDCM)
- Future Landsat Missions

■ Subject.Instrument

- RBV
- MSS
- Follow-on

■ Subject.Competencies

■ Applications

- Agriculture
- Boreal Forests

■ Spacecraft

- Attitude
- Solid State Recorder (SSR)

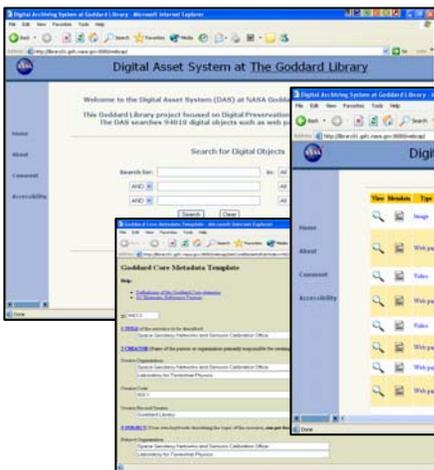
■ Audience

- Application
- Education
- State and Local Government

Benefits of Applying Goddard Core Metadata



- Organize and manage content across collections and formats
- Re-use & re-purpose web content
- Provide metrics for web content
- Support access, display, and personalization
- Aids long term preservation and access



The Library's Digital Asset System



Metadata Review Group Team Award Photo

MRG Team
One NASA Peer Award

information@work



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