



EOSDIS

NASA'S EARTH OBSERVING SYSTEM
DATA AND INFORMATION SYSTEM

Establishing Trust in Common (Centralized) Repositories – NASA's Common Metadata Repository (CMR)

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Overview of CMR Philosophy

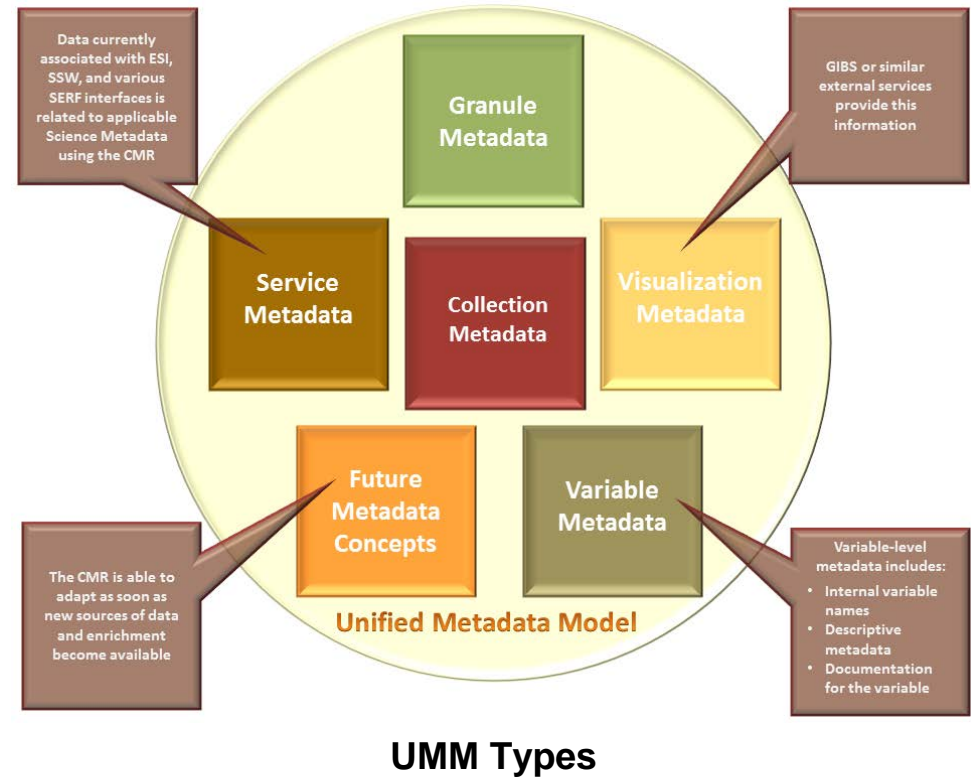
What is the Common Metadata Repository (CMR)?

The CMR is a high-performance, high-quality metadata repository for earth science metadata records. CMR manages the evolution of NASA Earth Science metadata by providing a central storage and access capability that streamlines current workflows while anticipating future capabilities.

- Metadata is owned by the provider!
- Consistency in metadata is important to the process the CMR uses to translate metadata to the UMM
- Validation is performed on ingest to ensure that metadata meets a quality standard
- Resources are available for providers who would like help with metadata curation – more on that later

Universal Metadata Model

- The goal of the UMM is to allow CMR to translate various formats of metadata back and forth without needing an individual mapping between each pair of formats
- Metadata needs to conform to the schema in order to be translated to UMM
- If metadata is formatted improperly, these errors may be magnified by translation
- UMM is regularly updated with improvements and new fields to support user needs and our growing metadata library



CMR Metadata Validation

- Validated at the time of ingest
- Validation ensures the metadata meets a quality standard (so it will translate between formats)
- If validation fails, you get an error and the ingest does not complete

- Why would validation fail?
 - Platform/instrument mismatch
 - Issues with temporal or spatial bounds

Supporting the Community - Metadata Curation

ARC Team

- Provides Metadata QA Reports to NASA Distributed Active Archive Centers
- Recommends Metadata Changes
- Offers Metadata Best Practices Documentation

GCMD/CMR Metadata Quality Team

- Maintains GCMD Keyword Changes
- Supports IDN (non-NASA) QA and Curation in CMR
- Maintains UMM Metadata Model and Mappings
- Maintains NASA's Metadata Standards

Teams:

Global Change Master Directory (GCMD)
Analysis and Review of CMR (ARC)

Discussion Topics

- Does the CMR's validation process attach the right level of rigor?
 - Do you have problems ingesting valid data? Is it too easy to ingest bad data?
- Are there common use cases where bad metadata is making its way past validation?

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