

NASA ISO for ESDIS

Introduction

NASA data and models are used to observe, characterize and understand Earth systems all around the world. Complete metadata are needed in order for users to discover, access, use and understand these data and models. The metadata must be available in standard forms that users and tools all over the world can understand. ESDIS is addressing this challenge by adopting International Metadata Standards developed by ISO Technical Committee 211. These standards cover metadata for data sets and services and include acquisition information, provenance, data quality, and other elements required for interoperable use and detailed understanding.

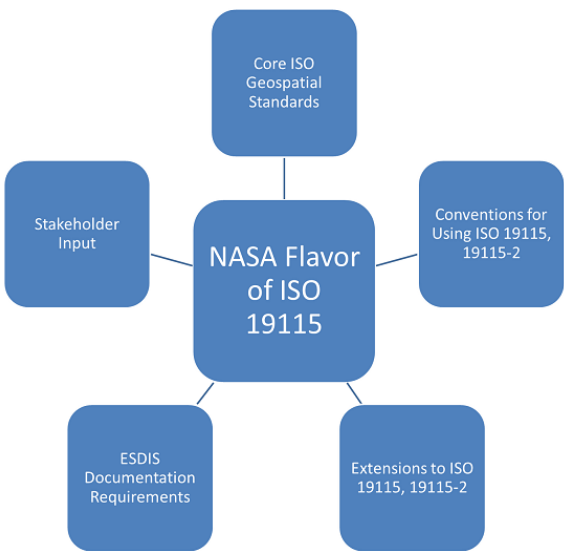
The ISO metadata standards are comprehensive and designed to be broadly applicable, so there is significant room for community-specific interpretations, applications, decisions, and, if need be, extensions. This wiki provides a place for the ESDIS community to share ISO metadata information, experiences and examples and to come to consensus on how we will best use the ISO Standards to address our documentation needs.

Check out the webinar about [implementing ISO 19115 standards into NASA Earth science data](#) that was held on February 19, 2015.

BEST PRACTICES

Explore the following links to get started learning about the NASA Best Practices for ISO:

- [NASA Base Metadata Requirements](#)
- [Addressing NASA Metadata Requirements with ISO Standards](#)
- [NASA ISO Conventions](#)
- [Downloads and Documents](#)



Core Elements of NASA Best Practices for ISO 19115

ISO METADATA BACKGROUND

- [Addressing NASA Metadata Requirements with ISO Standards](#)
- [ISO Objects, Identifiers, and References](#)
- [NASA Base Metadata Requirements — Guidelines for metadata required as a means of ensuring consistency in science data products.](#)
- [NASA Metadata and the New ISO 19115-1 Capabilities](#)

ISO METADATA EVALUATION

- [Additional Attributes in NASA Climate Data Initiative Metadata](#)
- [Aquisition Information in CMR Metadata](#)
- [Browse Graphic Content in CMR Metadata](#)
- [Citation Content in CMR Metadata](#)
- [Coverage Content Information in CMR Metadata](#)
- [Data Identification Fields In CMR - Required by NASA](#)
- [Extent Content in CMR Metadata](#)
- [Grid Spatial Representation Content in CMR Metadata](#)
- [Identifiers in CMR Metadata](#)
- [Keyword Content in CMR Metadata](#)
- [Lineage Content in CMR Metadata](#)
- [People and Organizations in CMR Metadata](#)
- [Quality Content in CMR Metadata](#)
- [Related Resource References in CMR Metadata](#)
- [Required UMM-Common Metadata Concepts in CMR Metadata Collections](#)

ISO METADATA GUIDANCE

- [Additional Attributes](#) — I need attributes in my metadata that are specific to my product
- [Aquisition Information](#) — *I need to provide information about the mission, and the platforms, instruments and sensors associated with the resource.*
- [Boilerplate Elements](#) — What elements are identical for metadata records produced by a particular group?
- [Citations](#) — I need to provide references for datasets and associated resources.
- [Dates](#) — I need to document different types of dates.
- [ECHO Data Quality Metadata](#)
- [ECHO Data Quality Metadata in ISO](#)
- [Extents](#) — I need to define the spatial, temporal, and vertical extents of resources associated with my metadata.
- [Identification Information](#) — I need to provide identification information for the metadata resource.
- [Identifiers](#) — I need to uniquely identify datasets as well as platforms, instruments, software, and other associated resources.
- [Improving Consistency of Data Quality Flags in CMR Metadata](#)
- [Individuals, Organizations, and Roles](#) — I need to identify people and organizations in different roles
- [ISO 19115-1 New Capabilities](#) — What new capabilities are provided by ISO 19115-1
- [Keywords](#) — I need to enable users to easily discovery my data set or service by adding keywords to my metadata.
- [Online Resources](#) — User Story: I need to connect online resource to my metadata
- [Quality Flags in CMR Metadata](#)
- [Quality Information](#) — I need to provide information about the quality of my data and how it was measured.
- [Related Resources](#) — I need to describe, identify and reference related resources
- [Scope](#) — I need to define the scope of resources described in my metadata