Toward NASA Best Practices for ISO 19115
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Abstract
NASA is rapidly evolving a series of best practices for ISO 19115. It is anticipated that these practices will allow stakeholders to more adequately describe, archive and catalog assets. They will also enable more efficient discovery, distribution, exploitation and interoperation of data.

NASA Best Practices for ISO
The NASA best practices for ISO 19115 incorporates a series of recommendations and requirements related to ISO 19115:2003 and ISO 19115-2. It also utilizes other forward-looking elements such as ISO 19115-1, lineage and has room for stakeholder outreach and feedback.

Additional Attributes
Additional attributes are often used by metadata authors to further describe the data represented. For example, ECHO uses additional attributes to document processing steps. However, with ISO, many additional attributes can be successfully mapped to standard ISO elements (Fig.1).

Data Quality
The ISO data quality components provide a means for the standardized comparison of observations and for determination of suitability for inclusion in the long-term record. The NASA best Practices for ISO 19115 data quality expands upon:

The 25% of attributes that do not map directly to ISO can usually be accounted for through a series of rule-based categorical mappings e.g. attributes that are in the “quality” category are mapped to quality information, or as depicted in Table 1.

Conclusion
Data quality, lineage, keywords and the treatment of additional attributes are all key components of the NASA best practices for ISO 19115. However, the best practices are more than this, they address the full implementation lifecycle and pertain to both future and legacy data systems. Utilizing the best practices will bring value added to data sets and will help ensure their uniformity and integration into the long term record.

Contact
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Keywords
The NASA implementation of ISO can accommodate multiple keyword types and sources e.g. GCMD keywords, AGU topics, CF names.