

Temporal Extent Content in ISO Metadata

Interim Collection Comparison Report for Big Earth Data Initiative

Metadata Source: NASA Common Metadata Repository

Metadata Dialect: ISO 19115-2

Evaluation Target: Temporal Extent Elements

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The ESDIS Common Metadata Repository (CMR) recognizes the importance of documenting the temporal extent of the resource described by the metadata. Temporal Extent fields are represented by the Temporal Extent concept in the UMM-Common metadata model.

The table below shows the distribution of Temporal Extent fields represented in ISO 19115-2 for CMR metadata collections. This table provides a comparison of the fields utilized by NASA CMR metadata collections for describing spatial extent content.

We examined 2158 metadata records from 16 collections extracted from the CMR during October 2015. A value of 1 or more typically (although not necessarily) indicates that the element is included one or more times in each record in a collection. A value < 1.0 is typically the percentage of records in a collection that include the metadata element. Empty cells which indicate a value of 0 are shaded in pink. Pink cells indicate the element is completely missing from the collection.

The analysis below shows that the Time Period Begin, Time Period End, Temporal Element Identifier, and Time Period Identifier are populated for most of the collections evaluated. One interesting observation is that the Time Period Begin field is populated in 15 of the collections, and the Time Period End field is populated in just 10 of the collection. The ASF collection does not include any Temporal Element fields at this time.

Table 1: Distribution of Temporal Extent fields in CMR metadata collections

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