

# Collection Level Metadata Fields

## Notes

1. These are fields that would be part of a federated search between ScienceBase, GDP, and NKN of project data.
2. These fields are for data discovery purposes. The plan is for each CSC affiliated systems to use the Required fields to exchange metadata. A "super-catalog" will be create that combines the harvested metadata.
3. Data include both existing datasets and CSC produced datasets. The requirements for CSC produced datasets are more robust.
4. Collection level indicates this is for an entire collection of data (rather than an individual piece of data).
5. Provide any comments or feedback using the comment feature in Confluence.
6. Appropriate metadata (ISO, FGDC, EML, etc) would accompany each dataset.

## Key for "Required" fields

- 1 = Required
- 2 = Recommended
- 3 = Conditional (Highly recommended depending on the data type)
- 4 = Optional

*Click on the heading to sort the column by that value.*

Attribute	Short Description	Endorsed Vocabulary	Required for All?	Required for CSC?	ISO CSW	ScienceBase
<a href="#">Title</a>	A short description of the dataset		1	1	apiso:Title	Title
<a href="#">Summary</a>	A one paragraph description of the dataset		1	1	apiso:Abstract	
<a href="#">Native ID</a>	The ID used by the source data		1	1	apiso:Identifier	
<a href="#">Naming Authority</a>	The system that the item came from		1	1		
<a href="#">Data Type</a>	Based on a list of allowed data formats by system	Yes	1	1	apiso:Type	

<a href="#">Date Created</a>	Date the dataset was created		1	1	apiso:CreationDate	
<a href="#">Creator Name</a>	Full name of the person who built/created the dataset		1	1		
<a href="#">Creator Email</a>	Email address of the person who built/created the dataset		1	1		
<a href="#">Keywords</a>	A comma separated list of key words and phrases.	Yes	2	1		
<a href="#">Keywords Vocabulary</a>	If you are following a guideline for the words/phrases in your "keywords" attribute, put the name of that guideline here -- share our controlled vocabularies	Yes	2	1		
<a href="#">Institution</a>	Normally used in place of creator name, this would be the agency or university that housed the primary PI	????	2	1		

<a href="#">Project</a>	The scientific project that produced the data. This is an inherited field if part of a project		2	1		
<a href="#">Project Parent</a>	If it exists, the overarching project this record belongs to (akin to BASIS Project --> Task --> Subtask hierarchy)		3	3		
<a href="#">Metadata Standard</a>	The metadata standard the source record exists as (FGCD, ISO, ...)	Yes	2	1		
<a href="#">Purpose</a>	See expert help on this -- there has to be something on this; what do we need for discovery of datasets that are most applicable to the focus area		2	2		
<a href="#">Data Applicability for Design Purpose</a>			2	2		

<a href="#">Numeric Data Accuracy</a>	If the record refers to a numeric collection, this would specify detection limits, r-values, or other accuracy metrics	Yes	3	3		
<a href="#">Status</a>	state; needed for interoperability	Yes	2	1		
<a href="#">Contributor Name</a>	The name of any individuals or institutions that contributed to the creation of this data.		2	2		
<a href="#">Contributor Role</a>	The role of any individuals or institutions that contributed to the creation of this data.	Yes	2	2		
<a href="#">Publisher Name</a>	The data publisher's name The publisher may be an individual or an institution.		2	2		
<a href="#">Publisher Email</a>	The data publisher's email. The publisher may be an individual or an institution.		2	2		

<a href="#">Location</a>	Required for geospatial data	Yes	3	3		
<a href="#">Latitude Minimum</a>	Required for geospatial data		3	3		
<a href="#">Latitude Maximum</a>	Required for geospatial data		3	3		
<a href="#">Longitude Minimum</a>	Required for geospatial data		3	3		
<a href="#">Longitude Maximum</a>	Required for geospatial data		3	3		
<a href="#">Vertical Minimum</a>	Required for geospatial data with z-axis		3	3		
<a href="#">Vertical Maximum</a>	Required for geospatial data with z-axis		3	3		
<a href="#">Time Coverage Start</a>	Required for datasets with time components		3	3		
<a href="#">Time Coverage End</a>	Required for datasets with time components		3	3		
<a href="#">Time Coverage Duration</a>	Required for datasets with time components		3	3		
<a href="#">Time Coverage Resolution</a>	Required for datasets with time components		3	3		

<a href="#">License</a>	Describe the restrictions to data access and distribution.		4	4		
<a href="#">Access Constraints</a>	Release conditions for the dataset	Yes	4	4		
<a href="#">Currentness</a>	Maintenance and update frequency		4	4		
<a href="#">History</a>	Provides an audit trail for modifications to the original data.		4	4		
<a href="#">Comment</a>	Miscellaneous information about the data		4	4		
<a href="#">Creator URL</a>	The URL of the dataset creator		4	4		
<a href="#">Processing Level</a>	A textual description of the processing (or quality control) level of the data		4	4		
<a href="#">Acknowledgement</a>	A place to acknowledge various type of support for the project that produced this data		4	4		

<a href="#">Long Name</a>	A long descriptive name for the variable (not necessarily from a controlled vocabulary)		4	4		
<a href="#">Standard Name</a>	A long descriptive name for the variable taken from a controlled vocabulary of variable names	Yes	4	4		
<a href="#">Standard Name Vocabulary</a>	The name of the controlled vocabulary from which variable standard names are taken. cf standard names	Yes	4	4		
<a href="#">Publisher URL</a>	The URL of the product publisher		4	4		
<a href="#">Date Modified</a>	The date on which this data was last modified.		4	4		
<a href="#">Date Issued</a>	The date on which this data was formally issued		4	4		

<a href="#">Latitude Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Latitude Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Longitude Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Longitude Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		



<a href="#">Vertical Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Vertical Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Vertical Positive</a>	Tells whether the vertical direction is positive or negative	Yes	4	4		
<a href="#">Units</a>	The units of the variables data values. This attributes value should be a valid udunits string	Yes	4	4		
Attribute	Short Description	Endorsed Vocabulary	Required for All?	Required for CSC?	Comments	
<a href="#">Title</a> (SB: title)	A short description of the dataset		1	1		
<a href="#">Summary</a> (SB : OPEN)	A one paragraph description of the dataset		1	1		

<a href="#">Native ID</a>	The ID used by the source data		1	1		
<a href="#">Naming Authority</a>	The system that the item came from		1	1		
<a href="#">Data Type</a>	Based on a list of allowed data formats by system	Yes	1	1		
<a href="#">Date Created</a> (SB:dateCreated)	Date the dataset was created		1	1		
<a href="#">Creator Name</a> (SB: Contact Name)	Full name of the person who built/created the dataset		1	1		
<a href="#">Creator Email</a> (SB: Contact Type)	Email address of the person who built/created the dataset		1	1		
<a href="#">Keywords</a>	A comma separated list of key words and phrases.	Yes	2	1		
<a href="#">Keywords Vocabulary</a>	If you are following a guideline for the words/phrases in your "keywords" attribute, put the name of that guideline here -- share our controlled vocabularies	Yes	2	1		

<a href="#">Institution</a>	Normally used in place of creator name, this would be the agency or university that housed the primary PI	????	2	1		
<a href="#">Project</a>	The scientific project that produced the data. This is an inherited field if part of a project		2	1		
<a href="#">Project Parent</a>	If it exists, the overarching project this record belongs to (akin to BASIS Project --> Task --> Subtask hierarchy)		3	3		
<a href="#">Metadata Standard</a>	The metadata standard the source record exists as (FGDC, ISO, ...)	Yes	2	1		
<a href="#">Purpose</a>	See expert help on this -- there has to be something on this; what do we need for discovery of datasets that are most applicable to the focus area		2	2		

<a href="#"><u>Data Applicability for Design Purpose</u></a>			2	2		
<a href="#"><u>Numeric Data Accuracy</u></a>	If the record refers to a numeric collection, this would specify detection limits, r-values, or other accuracy metrics	Yes	3	3		
<a href="#"><u>Status</u></a>	state; needed for interoperability	Yes	2	1		
<a href="#"><u>Contributor Name</u></a>	The name of any individuals or institutions that contributed to the creation of this data.		2	2		
<a href="#"><u>Contributor Role</u></a>	The role of any individuals or institutions that contributed to the creation of this data.	Yes	2	2		
<a href="#"><u>Publisher Name</u></a>	The data publisher's name The publisher may be an individual or an institution.		2	2		

<a href="#">Publisher Email</a>	The data publisher's email. The publisher may be an individual or an institution.		2	2		
<a href="#">Location</a>	Required for geospatial data	Yes	3	3		
<a href="#">Latitude Minimum</a>	Required for geospatial data		3	3		
<a href="#">Latitude Maximum</a>	Required for geospatial data		3	3		
<a href="#">Longitude Minimum</a>	Required for geospatial data		3	3		
<a href="#">Longitude Maximum</a>	Required for geospatial data		3	3		
<a href="#">Vertical Minimum</a>	Required for geospatial data with z-axis		3	3		
<a href="#">Vertical Maximum</a>	Required for geospatial data with z-axis		3	3		
<a href="#">Time Coverage Start</a>	Required for datasets with time components		3	3		
<a href="#">Time Coverage End</a>	Required for datasets with time components		3	3		

<a href="#">Time Coverage Duration</a>	Required for datasets with time components		3	3		
<a href="#">Time Coverage Resolution</a>	Required for datasets with time components		3	3		
<a href="#">License</a>	Describe the restrictions to data access and distribution.		4	4		
<a href="#">Access Constraints</a>	Release conditions for the dataset	Yes	4	4		
<a href="#">Currentness</a>	Maintenance and update frequency		4	4		
<a href="#">History</a>	Provides an audit trail for modifications to the original data.		4	4		
<a href="#">Comment</a>	Miscellaneous information about the data		4	4		
<a href="#">Creator URL</a>	The URL of the dataset creator		4	4		
<a href="#">Processing Level</a>	A textual description of the processing (or quality control) level of the data		4	4		

<a href="#">Acknowledgement</a>	A place to acknowledge various type of support for the project that produced this data		4	4		
<a href="#">Long Name</a>	A long descriptive name for the variable (not necessarily from a controlled vocabulary)		4	4		
<a href="#">Standard Name</a>	A long descriptive name for the variable taken from a controlled vocabulary of variable names	Yes	4	4		
<a href="#">Standard Name Vocabulary</a>	The name of the controlled vocabulary from which variable standard names are taken. cf standard names	Yes	4	4		
<a href="#">Publisher URL</a>	The URL of the product publisher		4	4		
<a href="#">Date Modified</a>	The date on which this data was last modified.		4	4	Luke - How about 3 (i.e. not 4)?	

<a href="#">Date Issued</a>	The date on which this data was formally issued		4	4	Issued? Not sure what that means.	
<a href="#">Latitude Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Latitude Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Longitude Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Longitude Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		



<a href="#">Vertical Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Vertical Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4		
<a href="#">Vertical Positive</a>	Tells whether the vertical direction is positive or negative	Yes	4	4		
<a href="#">Units</a>	The units of the variables data values. This attributes value should be a valid udunits string	Yes	4	4		

Attribute	Short Description	Endorsed Vocabulary	Required for All?	Required for CSC?	Comments
<a href="#">Title</a> (SB: title)	A short description of the dataset		1	1	
<a href="#">Summary</a> (SB: OPEN)	A one paragraph description of the dataset		1	1	
<a href="#">Native ID</a>	The ID used by the source data		1	1	
<a href="#">Naming Authority</a>	The system that the item came from		1	1	
<a href="#">Data Type</a>	Based on a list of allowed data formats by system	Yes	1	1	Luke (NKN): I don't think this should be required by ALL for discovery
<a href="#">Date Created</a> (SB: dateCreated)	Date the dataset was created		1	1	
<a href="#">Creator Name</a> (SB: Contact Name)	Full name of the person who built/created the dataset		1	1	
<a href="#">Creator Email</a> (SB: Contact Type)	Email address of the person who built/created the dataset		1	1	
<a href="#">Keywords</a>	A comma separated list of key words and phrases.	Yes	2	1	

<a href="#">Keywords Vocabulary</a>	If you are following a guideline for the words/phrases in your "keywords" attribute, put the name of that guideline here -- share our controlled vocabularies	Yes	2	1	
<a href="#">Institution</a>	Normally used in place of creator name, this would be the agency or university that housed the primary PI	????	2	1	
<a href="#">Project</a>	The scientific project that produced the data. This is an inherited field if part of a project		2	1	
<a href="#">Project Parent</a>	If it exists, the overarching project this record belongs to (akin to BASIS Project --> Task --> Subtask hierarchy)		3	3	
<a href="#">Metadata Standard</a>	The metadata standard the source record exists as (FGCD, ISO, ...)	Yes	2	1	

<a href="#">Purpose</a>	See expert help on this -- there has to be something on this; what do we need for discovery of datasets that are most applicable to the focus area		2	2	
<a href="#">Data Applicability for Design Purpose</a>			2	2	
<a href="#">Numeric Data Accuracy</a>	If the record refers to a numeric collection, this would specify detection limits, r-values, or other accuracy metrics	Yes	3	3	
<a href="#">Status</a>	state; needed for interoperability	Yes	2	1	
<a href="#">Contributor Name</a>	The name of any individuals or institutions that contributed to the creation of this data.		2	2	
<a href="#">Contributor Role</a>	The role of any individuals or institutions that contributed to the creation of this data.	Yes	2	2	
<a href="#">Publisher Name</a>	The data publisher's name The publisher may be an individual or an institution.		2	2	

<a href="#">Publisher Email</a>	The data publisher's email. The publisher may be an individual or an institution.		2	2	
<a href="#">Location</a>	Required for geospatial data	Yes	3	3	
<a href="#">Latitude Minimum</a>	Required for geospatial data		3	3	
<a href="#">Latitude Maximum</a>	Required for geospatial data		3	3	
<a href="#">Longitude Minimum</a>	Required for geospatial data		3	3	
<a href="#">Longitude Maximum</a>	Required for geospatial data		3	3	
<a href="#">Vertical Minimum</a>	Required for geospatial data with z-axis		3	3	
<a href="#">Vertical Maximum</a>	Required for geospatial data with z-axis		3	3	
<a href="#">Time Coverage Start</a>	Required for datasets with time components		3	3	
<a href="#">Time Coverage End</a>	Required for datasets with time components		3	3	
<a href="#">Time Coverage Duration</a>	Required for datasets with time components		3	3	
<a href="#">Time Coverage Resolution</a>	Required for datasets with time components		3	3	

<a href="#">License</a>	Describe the restrictions to data access and distribution.		4	4	
<a href="#">Access Constraints</a>	Release conditions for the dataset	Yes	4	4	
<a href="#">Currentness</a>	Maintenance and update frequency		4	4	
<a href="#">History</a>	Provides an audit trail for modifications to the original data.		4	4	
<a href="#">Comment</a>	Miscellaneous information about the data		4	4	
<a href="#">Creator URL</a>	The URL of the dataset creator		4	4	
<a href="#">Processing Level</a>	A textual description of the processing (or quality control) level of the data		4	4	
<a href="#">Acknowledgement</a>	A place to acknowledge various type of support for the project that produced this data		4	4	
<a href="#">Long Name</a>	A long descriptive name for the variable (not necessarily from a controlled vocabulary)		4	4	

<a href="#">Standard Name</a>	A long descriptive name for the variable taken from a controlled vocabulary of variable names	Yes	4	4	
<a href="#">Standard Name Vocabulary</a>	The name of the controlled vocabulary from which variable standard names are taken. cf standard names	Yes	4	4	
<a href="#">Publisher URL</a>	The URL of the product publisher		4	4	
<a href="#">Date Modified</a>	The date on which this data was last modified.		4	4	Luke - How about 3 (i.e. not 4)?
<a href="#">Date Issued</a>	The date on which this data was formally issued		4	4	Issued? Not sure what that means.
<a href="#">Latitude Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#">Latitude Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	

<a href="#"><u>Longitude Units</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Longitude Resolution</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Vertical Units</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Vertical Resolution</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Vertical Positive</u></a>	Tells whether the vertical direction is positive or negative	Yes	4	4	



<a href="#">Units</a>	The units of the variables data values. This attributes value should be a valid udunits string	Yes	4	4	
Attribute	Short Description	Endorsed Vocabulary	Required for All?	Required for CSC?	ISO CSW
<a href="#">Title</a>	A short description of the dataset		1	1	title
<a href="#">Summary</a>	A one paragraph description of the dataset		1	1	abstract
<a href="#">Native ID</a>	The ID used by the source data		1	1	
<a href="#">Naming Authority</a>	The system that the item came from		1	1	
<a href="#">Data Type</a>	Based on a list of allowed data formats by system	Yes	1	1	
<a href="#">Date Created</a>	Date the dataset was created		1	1	
<a href="#">Creator Name</a>	Full name of the person who built/created the dataset		1	1	
<a href="#">Creator Email</a>	Email address of the person who built/created the dataset		1	1	
<a href="#">Keywords</a>	A comma separated list of key words and phrases.	Yes	2	1	

<a href="#">Keywords Vocabulary</a>	If you are following a guideline for the words/phrases in your "keywords" attribute, put the name of that guideline here -- share our controlled vocabularies	Yes	2	1	
<a href="#">Institution</a>	Normally used in place of creator name, this would be the agency or university that housed the primary PI	????	2	1	
<a href="#">Project</a>	The scientific project that produced the data. This is an inherited field if part of a project		2	1	
<a href="#">Project Parent</a>	If it exists, the overarching project this record belongs to (akin to BASIS Project --> Task --> Subtask hierarchy)		3	3	
<a href="#">Metadata Standard</a>	The metadata standard the source record exists as (FGCD, ISO, ...)	Yes	2	1	

<a href="#">Purpose</a>	See expert help on this -- there has to be something on this; what do we need for discovery of datasets that are most applicable to the focus area		2	2	
<a href="#">Data Applicability for Design Purpose</a>			2	2	
<a href="#">Numeric Data Accuracy</a>	If the record refers to a numeric collection, this would specify detection limits, r-values, or other accuracy metrics	Yes	3	3	
<a href="#">Status</a>	state; needed for interoperability	Yes	2	1	
<a href="#">Contributor Name</a>	The name of any individuals or institutions that contributed to the creation of this data.		2	2	
<a href="#">Contributor Role</a>	The role of any individuals or institutions that contributed to the creation of this data.	Yes	2	2	
<a href="#">Publisher Name</a>	The data publisher's name The publisher may be an individual or an institution.		2	2	

<a href="#">Publisher Email</a>	The data publisher's email. The publisher may be an individual or an institution.		2	2	
<a href="#">Location</a>	Required for geospatial data	Yes	3	3	
<a href="#">Latitude Minimum</a>	Required for geospatial data		3	3	
<a href="#">Latitude Maximum</a>	Required for geospatial data		3	3	
<a href="#">Longitude Minimum</a>	Required for geospatial data		3	3	
<a href="#">Longitude Maximum</a>	Required for geospatial data		3	3	
<a href="#">Vertical Minimum</a>	Required for geospatial data with z-axis		3	3	
<a href="#">Vertical Maximum</a>	Required for geospatial data with z-axis		3	3	
<a href="#">Time Coverage Start</a>	Required for datasets with time components		3	3	
<a href="#">Time Coverage End</a>	Required for datasets with time components		3	3	
<a href="#">Time Coverage Duration</a>	Required for datasets with time components		3	3	
<a href="#">Time Coverage Resolution</a>	Required for datasets with time components		3	3	

<a href="#"><u>License</u></a>	Describe the restrictions to data access and distribution.		4	4	
<a href="#"><u>Access Constraints</u></a>	Release conditions for the dataset	Yes	4	4	
<a href="#"><u>Currentness</u></a>	Maintenance and update frequency		4	4	
<a href="#"><u>History</u></a>	Provides an audit trail for modifications to the original data.		4	4	
<a href="#"><u>Comment</u></a>	Miscellaneous information about the data		4	4	
<a href="#"><u>Creator URL</u></a>	The URL of the dataset creator		4	4	
<a href="#"><u>Processing Level</u></a>	A textual description of the processing (or quality control) level of the data		4	4	
<a href="#"><u>Acknowledgement</u></a>	A place to acknowledge various type of support for the project that produced this data		4	4	
<a href="#"><u>Long Name</u></a>	A long descriptive name for the variable (not necessarily from a controlled vocabulary)		4	4	

<a href="#">Standard Name</a>	A long descriptive name for the variable taken from a controlled vocabulary of variable names	Yes	4	4	
<a href="#">Standard Name Vocabulary</a>	The name of the controlled vocabulary from which variable standard names are taken. cf standard names	Yes	4	4	
<a href="#">Publisher URL</a>	The URL of the product publisher		4	4	
<a href="#">Date Modified</a>	The date on which this data was last modified.		4	4	
<a href="#">Date Issued</a>	The date on which this data was formally issued		4	4	
<a href="#">Latitude Units</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#">Latitude Resolution</a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	

<a href="#"><u>Longitude Units</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Longitude Resolution</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Vertical Units</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Vertical Resolution</u></a>	Further refinement of the geospatial bounding box can be provided by using these units and resolution attributes		4	4	
<a href="#"><u>Vertical Positive</u></a>	Tells whether the vertical direction is positive or negative	Yes	4	4	

<a href="#">Units</a>	The units of the variables data values. This attributes value should be a valid udunits string	Yes	4	4	
-----------------------	--	-----	---	---	--