

## WRITE A CLIMATE DIAGNOSTIC



Version 2: Nov 2010

The Climate Diagnostics Directory offers climate diagnostic visualizations that can be easily interpreted by decision makers. The Climate Diagnostic format is based on the Directory Interchange Format (DIF). A Climate Diagnostic entry holds a collection of fields, which detail specific information about the visualization. Six fields are required for the entry, while others expand upon and clarify the information. Several are free-text fields, while others require the use of controlled keywords (sometimes known as "valids"). These keyword "valids" are maintained within the GCMD database, where validation for mandatory fields and keywords takes place. The Societal Benefit Areas (SBAs) are maintained by the Global Earth Observation System of Systems (GEOSS) project. Every Climate Diagnostic in the directory is tagged with one or more of the Societal Benefit Areas. These controlled keywords provide normalized searches for users. In the table below, the terms in orange indicate required fields. Those in yellow are highly recommended. Fields in green are recommended, but not required and may expand upon or clarify the visualization.

Field:	Definition:
Entry ID:	The "Entry_ID" is the unique identifier of the metadata record.
Entry Title:	The "Entry_Title" is the title of the visualization described by the metadata.
Parameters (Science Keywords):	The "Parameters" field allows for the specification of Earth science keywords that are representative of the visualization being described.
Visualization Provider:	The "Visualization Provider" is the data center, organization, or institution responsible for distributing the visualization.
Visualization Description:	The "Visualization_Description" field provides a brief description of the Climate Diagnostic along with the purpose of the entry.
File Attributes:	The "File_Attributes" field allows the author to provide information needed for finding the visualization and that will enable the display of a sample image within the Climate Diagnostic record.
Visualization Citation:	The "Data_Set_Citation" field allows the author to properly cite the data set producer.
Personnel:	"Personnel" defines the point of contact for more information about the Visualization or the metadata.
Instrument:	The Instrument or "Sensor_Name" is the name of the instrument used to acquire the data that generated the visualization.
Platform:	The Platform or "Source_Name" is the name of the platform used to acquire the data that generated the visualization.
Temporal Coverage:	The "Temporal_Coverage" field specifies the start and stop dates of the visualization.
Paleo-Temporal Coverage:	For paleoclimate or geologic data, "Paleo_Temporal_Coverage" is the length of time represented by the data collected.
Spatial Coverage:	The "Spatial_Coverage" field specifies the geographic and vertical (altitude, depth) coverage of the data used in the visualization.
Location:	The "Location" field specifies the name of a place on Earth, a location within the Earth, a vertical location, or a location outside of Earth covered by the visualization.
Data Resolution:	The "Data_Resolution" field specifies the resolution of the

	visualization, which is the difference between two adjacent
	geographic, vertical, or temporal values.
Quality:	The "Quality" field allows the author to provide
	information about the quality of the data in generating the
	visualizaton or any quality assurance procedures followed
	in producing the data use to generate the visualization
	described in the metadata.
Use Constraint:	The "Use_Constraints" field allows the author to describe
	how the visualization may or may not be used after access
	is granted to assure the protection of privacy or
	intellectual property.
Societal Benefit Areas:	Describes the GEOSS theme that is applicable to this
	visualization.
Related URL:	The "Related_URL" field specifies links to Internet sites
	that contain information related to the visualization.
Revision Area:	The "Revision_History" allows the author to provide a list
	of changes made to the climate diagnostic record over
	time.
(Ancillary) Keyword:	The "Keyword" field allows authors to provide any words
	or phrases needed to further describe the visualization.
Originating Center:	The "Originating_Center" is the organization or
	visualization producer who originally generated the
	visualization.
References/Publications:	The "Reference" field describes key bibliographic citations
	pertaining to the Climate Diagnostic.
Creation Date:	The "Creation_Date" specifies the date the metadata
	record was created.
Revision Date:	The date the metadata record was last revised. The
	"Revision_Date" is automatically populated by the
	authoring tools.

Climate Diagnostic Visualization Record Writer's Guide, 2010. Global Change Master Directory. National Aeronautics and Space Administration.