

No.	Question	Options	Guidance notes	Response
Description				
1.1 Author				
1.1a	Intellectual Property Right holder		Provide name and address	
1.2 Dataset				
1.2a	Title		Provide a long (up to 120 characters) and short version (less than 32 characters) of the title.	<i>Modern Era Retrospective-analysis for Research and Applications (MERRA)</i>
1.2b	Description		Provide 200-500 word description, highlighting the key distinguishing features of the dataset. This text will be used in the DDC entry.	<i>MERRA products are generated using Version 5.2.0 of the GEOS-5 DAS with the model and analysis each at 1/2x2/3 degrees resolution. Three-dimensional analyses are generated every 6 hours, and 3- dimensional diagnostics, describing the radiative and physical properties of the atmosphere, are 3-hourly. The product suite includes analyses on the native vertical grid as well on pressure surfaces. Two-dimensional data, including surface, fluxes, and vertical integrals, are produced hourly. The product suite includes monthly and monthly diurnal files. The MERRA production is being conducted in 3 separate streams, 1979 - 1989; 1989 - 1998; 1998 - present.</i>
Authority				
2.1 Use by the IPCC				
2.1a	Has the dataset been used in an IPCC Assessment or Special Report, e.g., in a figure or table or discussed in text?	Yes	List report name(s), table/figure/page number(s)	AR5 WG1 Box 2.3
2.1b	Is dataset used in any other IPCC-related documents or materials?	Not Known	List document name(s), table/figure/page number(s)	
2.2 Documentation				
2.2a	Is the dataset documented in detail in a peer-reviewed journal article or as a peer-reviewed dataset?	Yes	Provide full citation and list Thomson-Reuter impact factor (or other standard influence factors) for journal if available.	<i>Rienecker, Michele M., and Coauthors, 2011: Merra: nasa's modern-era retrospective analysis for research and applications. J. Climate, 24, 3624-3648. doi: http://dx.doi.org/10.1175/JCLI-D-11-00015.1</i>
2.2b	Is the dataset documented in detail in a peer-reviewed book chapter, report or technical document?	Not Known	Provide full citation. List type of peer review if known; list type of book, report, or document, e.g., if part of a series; provide evidence of credibility of authors or publisher (e.g., UN organization)	
2.2c	Is the dataset documented in detail in a non-peer reviewed document, web site, or other resource?	Yes	Provide citation or links. Describe quality control or other review processes used (e.g., crowd sourcing); provide evidence of credibility of authors or publisher (e.g., UN organization)	http://disc.sci.gsfc.nasa.gov/mdisc/ http://disc.sci.gsfc.nasa.gov/mdisc/documentation/README.MERRA.pdf
2.2d	Has there been significant discussion of the dataset in the scientific literature?	Not Known	Provide citations to criticisms and responses where relevant.	
2.2e	Are the uncertainties associated with the data documented.	Not Known	Provide link(s) or reference(s) and indicate what sort of uncertainty information is provided?	
2.3 Lineage				
2.3a	Is the dataset produced by or under the direction of a national or international body or group?	Yes	List scientific body or group	<i>Goddard Earth Data and Information Services Center</i>
Significance Relative to the IPCC Community				
3.1 Interest in the data				
3.1a	Has an IPCC Working Group or the TFI used or expressed an intention of using this data?	Yes	Indicate which group(s) and/or other body. Provide reference and quote relative passage.	AR5 WG1 Box 2.3
3.1b	Have DDC users expressed interest in these data?	Not Known	Indicate numbers and/or types of users. Provide user metrics or examples of queries.	
3.1c	Are there strong reasons for considering the data relevant to the DDC user community?	Yes	Give reasons, backed by references. References from gray literature should have accompanying justification, as for IPCC reports.	AR5 WG1 Box 2.3
3.2 Uniqueness				
3.2	Are other datasets available with the same or overlapping variables?	No	Indicate other datasets and degree of overlap; provide links.	
Stability of Data and Data Provider				
4.1 Curation				
4.1a	Does the provider have a published data policy?	Not Known	Provide link or citation	
4.1b	Does the provider have a succession plan for this dataset?	Not Known	List organization(s) with long-term responsibility for the dataset (e.g., government agency, library, archive); provide a link to the plan or other documentation of the agreement	
4.1c	Is there an explicit funding model for the dataset or data provider?	Not Known	Indicate type (e.g., subscription-based, government-supported, submitter fees) and give link.	
Quality Control				
5.1 Meta-data and quality control				
5.1a	Does detailed meta-data exist for this data, in accordance with relevant national or international meta-data standards	Not Known	Indicate relevant standards (e.g. NASA's Directory Interchange Format) and provide a link to the metadata.	

5.1b	Is there a stated quality assurance process or procedure for the dataset?	Not known	Indicate if relevant quality assurance standards are met (e.g., ISO9000) and give links.	
5.1c	Is there a regular validation or calibration process or procedure for the data?	Not Known	Indicate frequency and/or most recent date and give links	
5.1d	Is technical/usage guidance available?	No	Give links	
5.2 Data updates and version control				
5.2a	Is the data subject to updates?	Not known	List frequency	
5.2b	Is there a clear version control process and tracking of data provenance?	Not Known	Describe version control and data provenance procedures	
5.2c	Are previous versions of the dataset accessible?	Not Known	List previous versions	
Accessibility				
6.1 Access requirements				
6.1a	Are the data available on-line for download?	All	Give links	http://disc.sci.gsfc.nasa.gov/daac-bin/DataHoldings.pl
6.1b	Are data made available in one or more standard (preferably open) formats?	Yes	List the formats available (at least one standard format is required);	HDF
6.1c	Are there restrictions (beyond user registration and acceptance of terms of use) on data use, re-dissemination, or reuse?	Not Known	If applicable, specify the type of restrictions and give relevant links	
6.1d	Is the data available for free or for a charge?	Free	if applicable, give link to price structure	
6.2 Additional information				
6.2a	Is user registration required or requested?	No	Give relevant links;	
6.2b	Is attribution required or requested?	Yes	Give relevant links;	http://disc.sci.gsfc.nasa.gov/additional/citing-our-data
6.2c	Are versions of the data available through open interfaces (e.g., OGC Web Services, REST, SOAP)?	Yes	List interfaces and give links for specifications	http://disc.sci.gsfc.nasa.gov/daac-bin/DataHoldings.pl
6.2d	Are levels of service (e.g., bandwidth, up time) adequate?	Not known	Give links, e.g., to up time metrics	
6.2e	Is user support available (e.g., help desk, frequently asked questions)?	yes	List user support services and links	http://disc.sci.gsfc.nasa.gov/mdisc/documentation/README.MERRA.pdf Users can contact staff with questions on the data, data processing and science. Send questions to merra-questions@lists.nasa.gov .
6.2f	Is documentation available in English?	yes	Give links	See section 2.2 (Documentation)
6.2g	Is documentation available in other languages	Not known	List languages (with links)	
6.2h	What is the spatial domain of the dataset		Specify bounding latitudes and longitudes	