

**Guidance notes:**

- 1 Please select one of the options in column C (where applicable) and enter further information in column E.
- 2 Where applicable, give additional information requested in column E, replacing the italicised text.
- 3 Do not enter information in the blue cells.

No.	Question	Options	Guidance notes	Response
<b>Description</b>				
<b>1.1 Author</b>				
1.1a	Intellectual Property Right holder		Provide name and address	<i>Pacific Northwest National Laboratory (PNNL)</i>
<b>1.2 Dataset</b>				
1.2a	Title		Provide a long (up to 120 characters) and short version (less than 32 characters) of the title.	Historical Anthropogenic Sulfur Dioxide Emissions
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.	This data set provides annual estimates of anthropogenic global and regional sulfur dioxide emissions spanning the period 1850–2005 using a bottom-up mass balance method, calibrated to country-level inventory data. Emissions by source category (coal, petroleum, and biomass combustion, smelting, fuel processing, and other processes) are available for 142 countries and regions.
<b>Authority</b>				
<b>2.1 Use by the IPCC</b>				
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)	<i>IPCC Special Report on Emission Scenarios 2000, IPCC3</i> <a href="http://www.ipcc.ch/ipccreports/sres/emission/index.php?idp=82">http://www.ipcc.ch/ipccreports/sres/emission/index.php?idp=82</a>
2.1b	Is dataset used in any other IPCC-related documents or materials?	not known	List document name(s), table/figure/page number(s)	
<b>2.2 Documentation</b>				
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>Smith, Steven J. E. Conception, R. Andres, J. Lurz. (2004). Historical Sulfur Dioxide Emissions, 1850-2000: Methods and Results. Pacific Northwest National Laboratory Report, PNNL-14537, Smith, Steven J, van Aardenne, Z Klimont, R J Andres, A Volke, and S Delgado Arias. (2011). Anthropogenic Sulfur Dioxide Emissions: 1850-2005, Atmospheric Chemistry and Physics, 11:1101-1116.</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)	<a href="http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/metadata">http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/metadata</a>
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?	
<b>2.3 Lineage</b>				
2.3a	Is the dataset produced by or under the direction of a national or international body or group?	Yes/no/not known	List scientific body or group	
<b>Significance Relative to the IPCC Community</b>				
<b>3.1 Interest in the data</b>				
3.1a	Has an IPCC Working Group or the TFI used or expressed an intention of using this data?	not known	Indicate which group(s) and/or other body. Provide reference and quote relative passage.	
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?	not known	Give reasons, backed by references. References from gray literature should have accompanying justification, as for IPCC reports.	
<b>3.2 Uniqueness</b>				
	Are other datasets available with the same or overlapping variables?	not known	Indicate other datasets and degree of overlap; provide links.	
<b>Stability of Data and Data Provider</b>				
<b>4.1 Curation</b>				
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.	
<b>Quality Control</b>				
<b>5.1 Meta-data and quality control</b>				
5.1a	Does detailed meta-data exist for this data, in accordance with relevant national or international meta-data standards	Yes	Indicate relevant standards (e.g. NASA's Directory Interchange Format) and provide a link to the metadata.	<a href="http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/metadata">http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/metadata</a>
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.	<a href="http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/metadata#Data_Quality_Information">http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/metadata#Data_Quality_Information</a>
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?	not known	Give links	
<b>5.2 Data updates and version control</b>				
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	
<b>Accessibility</b>				
<b>6.1 Access requirements</b>				
6.1a	Are the data available on-line for download?	Yes	Give links	<a href="http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/data-download">http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/data-download</a>
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);	.xls
6.1c	Are there restrictions (beyond user registration and acceptance of terms of use) on data use, re-dissemination, or reuse?	No	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	
<b>6.2 Additional information</b>				
6.2a	Is user registration required or requested?	neither	Give relevant links;	
6.2b	Is attribution required or requested?	requested	Give relevant links;	<a href="http://sedac.ciesin.columbia.edu/citations">http://sedac.ciesin.columbia.edu/citations</a>
6.2c	Are versions of the data available through open interfaces (e.g., OGC Web Services, REST, SOAP)?	not known	List interfaces and give links for specifications	
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)?	not known	List user support services and links	
6.2f	Is documentation available in English?	Yes	Give links	<a href="http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/docs">http://sedac.ciesin.columbia.edu/data/set/haso2-anthro-sulfur-dioxide-emissions-1850-2005-v2-86/docs</a>
6.2g	Is documentation available in other languages	Yes/no/not known	List languages (with links)	
6.2h	What is the spatial domain of the dataset		Specify bounding latitudes and longitudes	Global
Suggested improvements to this questionnaire				
Number	Section/row			