Short guide to naming variables
NOAA/World Data Service for Paleoclimatology
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The WDS-Paleo uses a nine-part variable name, along with a variable abbreviation, to describe each column of data in a data table. This guide provides instructions for creating variable names. Spreadsheets with example inputs for the nine fields are also provided for seven common archive types: Climate Reconstructions, Corals and Sclerosponges, Fire History (Charcoal), Ice cores, Paleoceanography, Paleolimnology, and Speleothems.

General instructions

- Nine fields collectively form the variable "long name," and the variable abbreviation is called the "short name." The short name is used when a shortened form of the variable name is needed, for example as headers at the top of the data table.
- Each column of data in a data table must have a long name and short name, as defined in the bullet above, that are unique within the data file.
- Not all of the nine fields must be used for each variable; in fact some variables, particularly age and depth variables, will employ only a few of the fields.
- There are three required fields: "What," "Units," and "Data Type." The more complete the variable description is, however, the more useful it will be to others.
- The nine fields comprising the long name are separated by commas. Ensure there is a comma separating each category, even where no value exists. If a comma is needed within one of the nine fields, enclose it in quotation marks.
- Avoid abbreviations and acronyms within the long name.

Specific instructions

"Short name": Abbreviation of variable

- Spaces are not allowed. Use period or dash instead.
- Keep these short – about 12 characters or less.

"What" (REQUIRED)
- Describe what was measured.

"Material"
- For all NOAA-Paleo archive types except Climate Reconstructions, describe the material on which measurements were made.
- For the Climate Reconstructions archive type, describe attributes such as the surface type or height/depth to which the reconstruction applies.

"Error"

- Use ONLY for data series that are measurements of uncertainty or error. A variable that makes use of this field is always used in conjunction with another variable to which the error measurements applies.
- For example, a reconstruction of sea surface temperature is reported with additional columns recording the one standard deviation lower bound and upper bound errors for each reconstructed data point. The first four components of the variable names for these three columns of data would be the following:

What	Material	Error	Units
Temperature	sea surface		degrees Celsius
Temperature	sea surface	one standard deviation lower bound	degrees Celsius
Temperature	sea surface	one standard deviation upper bound	degrees Celsius

- If the error is reported as a constant, this information should be placed in the "Description and Notes" portion of the template rather than in the data table.

"Units" (REQUIRED)

- Provide the units of measurement.
- Common abbreviations (e.g., those in the CGS system) are allowed.

"Seasonality"

- Describe either (1) the specific part of the annual cycle that has been explicitly reconstructed from raw data or (2) the time window (eg, Annual, Mar, Dec-Mar) over which aggregation of raw sub-annually resolved data has occurred.
- Do not use this field for interpretations or inferences of seasonality.
- Abbreviate month names using the first three letters of the month.
- Leave blank for Age and Depth Variables.

"Archive" (REQUIRED; NOT USED FOR AGE AND DEPTH VARIABLES)

- Valid entries are: Borehole, Climate Forcing, Climate Reconstructions, Corals and Sclerosponges, Fauna, Fire History, Historical, Ice Cores, Insect, Instrumental, Lake Levels, Loess, Other Collections, Paleoceanography, Paleoclimatic Modeling, Paleolimnology, Plant Macrofossils, Pollen, Speleothems, and Tree Ring.
- It is possible to use different NOAA-Paleo archive types within the same data table. For example, use "Coral and Sclerosponge" for delta 18O data, and "Reconstructions" for reconstructed sea surface temperature.

"Detail"

- Provide information about alterations or transformations made to the raw data.
- Multiple details may be provided; separate each with a semicolon.

"Method"

- Provide information about the instrument, analytical technique, or reconstruction method used.
- Multiple methods may be provided; separate each with a semicolon.

"Data Type" (REQUIRED)

- Define whether data are numeric ("N") or character-based ("C").