



# Instructions for Contributing to the International Tree Ring Data Bank (ITRDB)

The World Data Service for Paleoclimatology manages the International Tree-Ring Data Bank (ITRDB), the world's largest public archive of tree ring data. The ITRDB includes raw ring width, wood density, and site growth index chronologies. For access to the ITRDB visit: [www.ncei.noaa.gov/products/paleoclimatology/tree-ring](http://www.ncei.noaa.gov/products/paleoclimatology/tree-ring)

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## Step 1 - Prepare Data File(s)

### Raw Data Files (REQUIRED)

- These are, for example, measurements of tree ring width or partial width in units of .01mm or .001mm, or wood density in units of gram per decimeter. Each file consists of raw measurements from each series (e.g., a tree or a sample) for a given site. A site may have more than one measurement file. For example, if contributing partial ring width measurements, the earlywood, latewood, and total ring-width measurements should be in separate, labeled files.
- All files should be in the Tucson decadal format (see [Section III, Format for Tree-Ring Data Files, of the ITRDB Documentation](#)) and have the extension of ".rwl"
- Missing values are allowable, using the code "-8". Note that this is not a "missing ring" designation, but rather identifies years with no measurement within a series. Missing rings should be measured as 0 (zero) values.
- Note that contributors should leave the file header empty, as all of its pertinent information will be entered within the Excel template below. Our data managers will populate the header for you.

### Processed Data Files (Site Chronologies; optional)

- Standardized chronology files have the extension of ".crn".
- Data are stored as 3 or 4-digit numbers, with a value of 1000 representing mean growth, a minimum value of 0 (no growth), and no defined maximum. There is only one time series per file, in contrast to the raw data files. Missing value code is 9990.
- Note that contributors should leave the file header empty, as all of its pertinent information will be entered within the Excel template below. Our data managers will populate the header for you.
- For additional format specification, please refer to [Section III \(Format for Tree-Ring Data Files\) of the ITRDB Documentation](#).

## Step 2 - Provide Metadata for Site(s)

- Fill out the "ITRDB" tab of the [Excel Contribution Template](#) and delete other tabs. Each row of the excel sheet should correspond to a .rwl file.
- Refer to our [standardized species code list](#) for the appropriate species code. Notify [paleo@noaa.gov](mailto:paleo@noaa.gov) if a species code is not listed.
- Note: There is an "Example-ITRDB" tab in the excel template for reference.

## Step 3 - Submit Data

Please send completed excel contribution template and data file(s) as email attachments to [paleo@noaa.gov](mailto:paleo@noaa.gov). If you do not receive confirmation of receipt of your contribution within three business days, please phone +1 828-271-4800. Please contact us at either the phone number or email address above for any questions or further assistance.

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NOTE: From 2019 forward, NCEI Paleoclimatology has produced NOAA Template versions of the original "Tucson Decadal" format described above. The NOAA Template versions are text files with metadata headers over tab-delimited data columns. Filenames are SITECODE\*-rwl-noaa.txt or SITECODE\*-crn-noaa.txt, and contain the same data as the original Tucson decadal files named SITECODE\*.rwl or SITECODE\*.crn.

