

File Naming Best Practices

The most important things to remember about file naming are to **be consistent and descriptive** in naming and organizing your files so that it's obvious where to find a file and what it contains.

Information to consider including in file names

1. Project or experiment name or acronym
2. Location/spatial coordinates
3. Researcher name/initials
4. Date or date range of experiment
5. Type of data
6. Conditions
7. Version number of file
8. Three-letter file extension for application-specific files

These are suggestions; include whatever information will allow you to distinguish your files from each other and clearly indicate to you what is in them.

Other tips for file naming

1. A good format for dates is YYYYMMDD (or YYMMDD). This makes sure all your files stay in chronological order, even over many years.
2. Don't make file names too long; longer names do not work well with all types of software.
3. Special characters should be avoided: ~ ! @ # \$ % ^ & * () ` ; < > ? , [] { } ' " ' "
4. For sequential numbering, use leading zeros to ensure files sort properly. For example, use "0001, 0002...1001, etc" instead of "1, 2...1001, etc."
5. Do not use spaces, because they are not recognized by some software. Instead use underscores (file_name), dashes (file-name), no separation (filename), or camel case (FileName).

Consider including a README.txt file in your directory that explains your naming convention along with any abbreviations or codes you have used.

Check out more information about File Naming Best Practices on the Data Management Services web site at http://bit.ly/file_naming.

Exemplar of a Good File Naming System

Professors Douglas McCauley and Fiorenza Micheli led this research project.

The research

The project involved installing approximately 180 tiles in an underwater area near the Palmyra Atoll in the South Pacific Ocean and leaving them in place for a specified amount of time. At the end of that time, the tiles were retrieved for analysis. Researchers photographed the tiles in place during the research and then again after they were retrieved. The images below show one particular tile in place during the study (left) and then again after retrieval (right).



Info tracked & the convention used

The researchers wanted to track several things about the tiles:

1. **Study site.** Indicated by the name, ex. FR3, FR7, FR9.
2. **Depth of the water.** Indicated by S (shallow), M (middle), or D (deep).
3. **Date.** Indicated by YYMMDD.
4. **Tile number.** Indicated on the tile.
5. **Tile treatment.** Indicated by C (caged) or U (uncaged).
6. **Number assigned to photo by camera.**
7. **Whether the post-removal photo was of the entire tile or a tile section.** Indicated by W (whole area), A (upper right), B (lower right), C (lower left), or D (upper left).

Example: FR3S.140623.129C.2653.W.JPG

This was image 2653 of whole, uncovered tile 129 from study site 3 in shallow water, taken on June 23, 2014.

For more details about this exemplar, check out the File Naming Done Well Case Study on the Data Management Services web site at http://bit.ly/naming_exemplar.