

Spectrogram Concatenation

For [hydrophone spectral data PNG/PDF plots](#):

Spectrogram Concatenation: ☒ None (One File For Every Source Audio File) ☐ Daily (One File per Day (LTSA)) ☐ Weekly (One File per Week (LTSA)) ☐ Adjacent Files (for Five Minute or Less Spectrogram)

For [hydrophone spectral data MAT file data products](#) (hidden if [spectral data downsampling](#) non-default option is selected):

Spectrogram Concatenation: ☒ Concatenate (Until File Size Limits Reached) ☐ Concatenate Daily ☐ None (One File For Every Source Audio File)

Concatenate Daily

The spectrogram concatenation option allows users to group/concatenate spectral data into **PNG/PDF** plots and data (**MAT**) files. For plots, daily spectrograms are available, while the data files can be daily or unlimited duration concatenations. Spectral data is assembled into 1-minute box car averages (no overlap), accounting for the logarithmic scale of the data. The other options have an effect on this process as well: if multiple acquisition modes, channels, diversion or source file type data is present in the collation, these will be separated into different files so that dissimilar data is not combined.

Oceans 3.0 API filter: `dpo_spectrogramConcatenation=Daily`

Concatenate Weekly

The spectrogram concatenation option allows users to group/concatenate spectral data into **PNG/PDF** plots. Spectral data is assembled into 1-minute box car averages (no overlap), accounting for the logarithmic scale of the data. The other options have an effect on this process as well: if multiple acquisition modes, channels, diversion or source file type data is present in the collation, these will be separated into different files so that dissimilar data is not combined.

Oceans 3.0 API filter: `dpo_spectrogramConcatenation=Weekly`

Concatenate (Until File Size Limits Reached)

This is the default option for spectral **MAT** data files and is not available for **PNG/PDF** spectrogram plots. Data is accumulated/concatenated as much as possible, barring file size limits and frequency range compatibility.

Oceans 3.0 API filter: `dpo_spectrogramConcatenation=Concatenate`

None (One File For Every Source Audio File)

This is the default option for **PNG/PDF** spectrogram plots. This option will cause the accumulation/concatenation step to be skipped and one file for each source wav, hyd or fft file will be returned, often directly from the archive (Spectral **MAT** data files are archived along with **PNG** spectrograms for fast retrieval).

Oceans 3.0 API filter: `dpo_spectrogramConcatenation=None`

Concatenate Adjacent Files (for Five Minute or Less Spectrogram)

This option is only applicable for **PNG/PDF** spectrogram plots with a search range less than or equal to five minutes. If the search range is over five minutes the default option of None (One File For Every Source Audio File) is used. This option will produce one spectrogram for the search duration by reading multiple source audio files and concatenating their audio data together before calculating the resulting spectrogram.

Oceans 3.0 API filter: `dpo_spectrogramConcatenation=Adjacent`

File-name mode field

The Concatenation Daily option will add a -DAILY to the filename; the Concatenation Weekly option will add a -WEEKLY to the filename; the Concatenation (Until File Size Limits Reached) option will add a -CONCATENATE to the filename.