

# Spectral Probability Density (SPD) PSD Range

For hydrophone [spectral probability density plot](#) (*PNG* and *PDF*) data products only:

Spectral Probability Density PSD range:  Automatic  40 to 160 dB  20 to 140 dB  40 to 140 dB

## Automatic

In this *default option*, it sets the Y-axis range for the Power Spectral Density to the min/max of the data extended to the next 10 dB interval.

[Oceans 2.0 API filter](#): `dpo_spectralProbabilityDensityPSDRange=0`

## Manual fixed limit settings

This option will cause the spectral probability density plot to use a fixed value, as chosen, for the y-axis range. Using a fixed range is useful for comparing multiple plots.

[Oceans 2.0 API filter](#): `dpo_spectralProbabilityDensityPSDRange={40_160,20_140,40_140}`

## File-name mode field

Spectral probability density plots generated with the manual limits will have a file mode modifier added to their file names of the format: `<-YLIM><option>` where `<option>` is the value as chosen, with ' to ' replaced by '\_'.