

# ADCP Plot Limits

For *Nortek* and *RDI* ADCP daily current plot products (PNG and PDF formats)

The image shows a configuration interface for ADCP plot limits. It consists of four rows of radio button options:

- Horizontal current plot limits (m/s):** Options include 'Automatic (10th to 90th percentile in steps)', 'Automatic (rounded up to nearest 5 cm/s)', and fixed limits: +/- 0.025, +/- 0.05, +/- 0.1, +/- 0.2, +/- 0.5, +/- 0.75, +/- 1.0, +/- 2.0, +/- 5.0.
- Vertical current plot limits (m/s):** Options include 'Automatic (10th to 90th percentile in steps)', 'Automatic (rounded up to nearest 5 cm/s)', and fixed limits: +/- 0.025, +/- 0.05, +/- 0.1, +/- 0.2, +/- 0.5, +/- 0.75, +/- 1.0, +/- 2.0, +/- 5.0.
- Lower Backscatter Plot Limit (counts):** Options include 'Automatic (min/max steps of 20)' and fixed limits: 0, 20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220.
- Upper Backscatter Plot Limit (counts):** Options include 'Automatic (min/max steps of 20)' and fixed limits: 20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240.

## Horizontal / Vertical Current Plot Limits

This option allows the user to select automatic or fixed limits for ADCP daily current plots. The limits are on the colour axis of the daily current plots for either horizontal currents (East u, North v) or vertical currents (Up w) and are symmetric about zero (to support the diverging colour map, maintaining zero as white). The fixed limits have the benefit of being consistent from plot to plot, while the automatic limits can vary. The automatic (10th to 90th percentile) limit does attempt to maintain stable, suitable limits; the limit is selected from the same set of fixed limits that is available to the user by finding the limit that is greater than or equal the 90th percentile of one-side horizontal or vertical current data.

- Automatic (10th to 90th percentile in steps)  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0`
- Automatic (rounded up to nearest 5 cm/s)  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=-1`
- +/- 0.025  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0.025`
- +/- 0.05  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0.05`
- +/- 0.1  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0.1`
- +/- 0.2  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0.2`
- +/- 0.5  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0.5`
- +/- 0.75  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0.75`
- +/- 1.0  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=1.0`
- +/- 2.0  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=2.0`
- +/- 5.0  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=5.0`

## File-name mode field

Selecting a limit option other than 'Automatic (10th to 90th percentile)' or 'Automatic (no clipping, rounded up to nearest 5 cm/s)' will append to the file-name a '-Limit', following by the two limits selected, without the decimal point or trailing zeros. If one of the limits is Automatic (10th to 90th percentile in steps), 'Auto' will appear. If one of the limits is Automatic (rounded up to nearest 5 cm/s), AutoNoSat will appear. Examples: '-Limit0105', '-Limit021', '-Limit05Auto', '-LimitAuto5', '-LimitAutoNoSat5'.

## Lower Backscatter Plot Limit

This option allows the user to select automatic or fixed for the lower limit on ADCP daily current plots. The limits are on the colour axis of the backscatter plots within the daily current plots, the limits are not symmetric which allows for the lower and upper backscatter plot limits to be set independently. The fixed limits have the benefit of being consistent from plot to plot, while the automatic limits can vary.

- Automatic (min/max, steps of 20)  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=-1`
- 0  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=0`
- 20  
[Oceans 2.0 API filter:](#) `dpo_horizontalcurrentplotlimits=20`

- 40  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=40`
- 60  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=60`
- 80  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=80`
- 100  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=100`
- 120  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=120`
- 140  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=140`
- 160  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=160`
- 180  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=180`
- 200  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=200`
- 220  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=220`

#### Lower Backscatter Plot Limit

This option is very similar to the above but sets the upper colour limit on the backscatter plots.

- Automatic (min/max, steps of 20)  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=-1`
- 20  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=20`
- 40  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=40`
- 60  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=60`
- 80  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=80`
- 100  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=100`
- 120  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=120`
- 140  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=140`
- 160  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=160`
- 180  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=180`
- 200  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=200`
- 220  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=220`
- 240  
Oceans 2.0 API filter: `dpo_horizontalcurrentplotlimits=240`