CaCOFI Koslow Lab .csv Processed Data Header Definitions

Process_ID: Process identifier: A number intended to be unique for each <u>analysis</u> <u>export</u> on any one PC which can be used to identify, retrospectively, the exported files which originated from the same <u>analysis</u>.

Interval: Horizontal interval along ship track

Layer: Vertical layer (m)

Sv_mean: Mean Volume backscattering (dB)

NASC: Nautical area scattering coefficient (s_A) in units (m^2/nmi^2). It is the area backscattering (s_a) scaled up from a square meter to a square nautical mile, such that $s_A = 4\pi (1852)^2 s_a$

Height_mean: Mean height of the layer in meters

Depth_mean: Mean depth of the vertical layer in meters

Layer_depth_min: Minimum or upper depth of the layer in meters

Layer_depth_max: Maximum or lower depth of the layer in meters

Ping_S : The <u>number</u> of the first <u>ping</u> in the <u>domain</u> which was <u>analyzed</u> (S for Start).

Ping_E: The number of the last ping in the domain which was analyzed (E for End).

Dist_M: mean distance along the transect in meters

Date_M: Date in the format: Year (4 digits), Month (2 digits), Day (2 digits)

Time_M: Time The local time of the middle <u>ping</u> in the <u>domain</u> which was <u>analyzed</u> (M for middle).

Lat_M: Latitude

Lon_M: Longitude

Noise_Sv_1m: Volume backscattering noise threshold per square meter

Minimum_Sv_threshold_applied: This is a threshold applied for the integration, so anything below that threshold is noise or not wanted, i.e. a threshold applied to exclude the plankton or smallish low scattering particles.

Maximum_Sv_threshold_applied: This is a threshold applied for the integration, so anything above that threshold is noise or not wanted, i.e. to

separate krill for example.

Standard_deviation: The standard deviation of all sample values in the <u>domain</u> which was <u>analyzed</u>. This is calculated in the linear domain (not the dB domain).

Thickness_mean: Mean thickness of the layer

Range_mean: Depth range in meters of the layer

Exclude_below_line_range_mean: Everything that is below the line is eliminated, this line is applied to exclude the backscatter from the bottom.

Exclude above_line_range_mean : everything above that line is eliminated, this line is used to discard the top 10-20 m due to noise and unreliable data.