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Ceilometer cloud statistics files from the 2005 NSF/NOAA RICO cruise aboard the R/V Seward Johnson
Readme for RICO*_ceilo_time_a.txt* where time = 30s, 10-min or 1-hr

The program Dana_ceilo7_epi_03.m was run to process raw ceilometer daily files. This program reads all available files and writes a new file (RICO*_ceilo_30s_a.txt)* that contains the basic cloud base height information:

1 Julian date
2 N, where N=number of cloud layers (0-3) or a code (4-5) for marginal clouds
3 Height of the first layer (NaN unless N>0)
4 Height of the second layer (NaN unless N>1)
5 Height of the third layer (NaN unless N>2)

The program then computes cloud statistics at 10-min and 60-min time resolution. New files are written on these statistics with the following data columns

The data file RICO*_ceilo_10min_a.txt* and RICO*_ceilo_1h_a.txt*

1 Julian date
2 Number of samples
3 Number of clear samples
4 Number of one cloud layer samples
5 Number of multiple cloud layer samples
6 Number of samples with N=4, obscured
7 Number of samples with N=5, partially obscured
8 Clear fraction
9 Cloudy fraction
10 Cloudy fraction including obscured
11 Median cloud height (m)
12 Height with 16% clouds lower
13 Height with 16% clouds higher