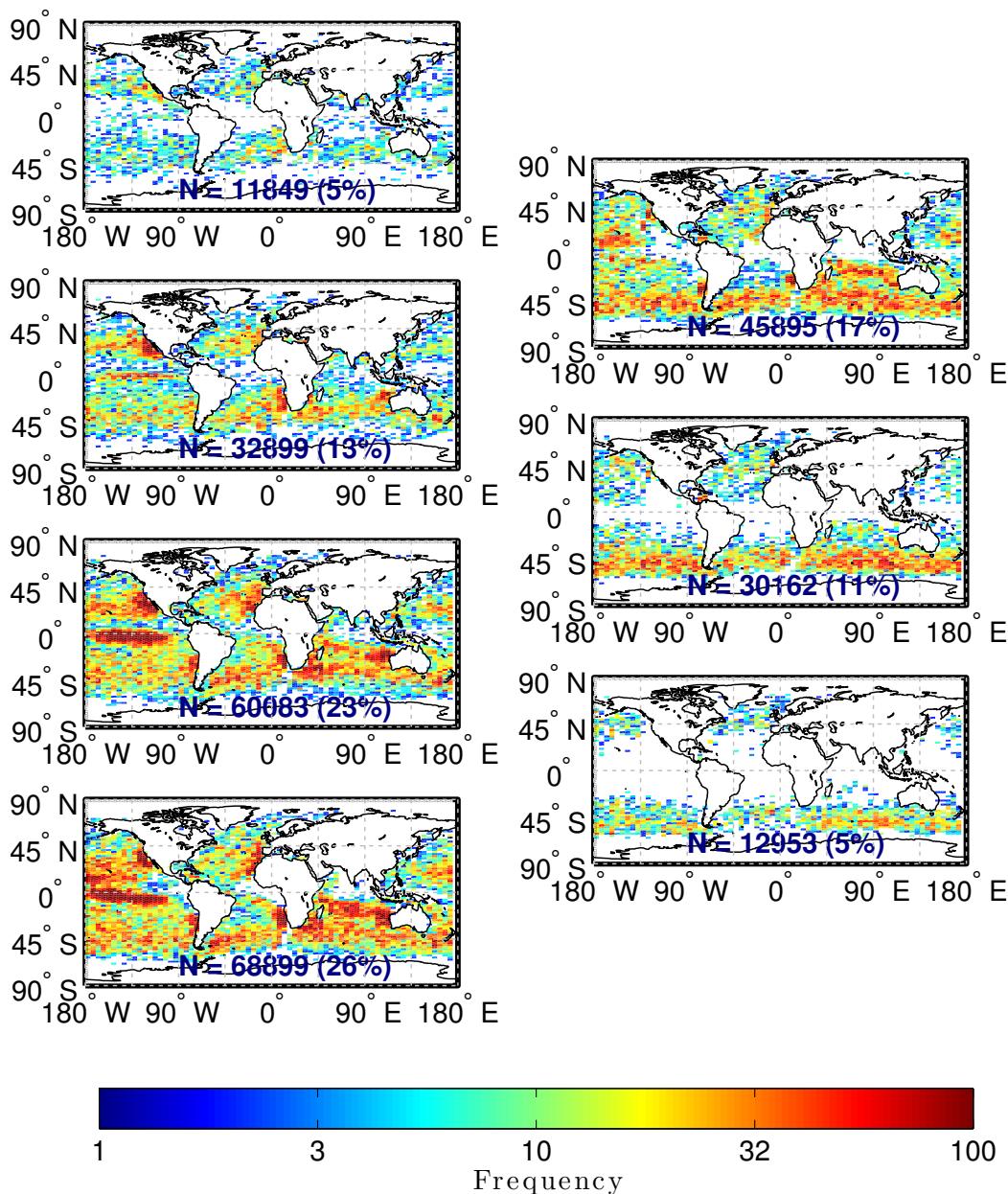


## Supplementary Information



**Fig S1.** CALIOP retrieval counts for each  $2^\circ \times 5^\circ$  latitude longitude grid cell and different wind speed regimes. Total number and percent of total (in parenthesis) is also reported for each wind regime. Wind speed regimes for column 1 from top to bottom, are 0-4, 4-6, 6-8, and 8-10  $m s^{-1}$  and column 2 from top to bottom are 10-12, 12-15, and  $>15 m s^{-1}$ .