

Supplementary Online Material

Table S1. Latitude and longitude of 15 regions selected for the detailed analysis

Station №	Latitude (deg)	Longitude (deg)
1	58°S to 48°S	31°W to 20°W
2	58°S to 48°S	43°W to 31°W
3	56°S to 48°S	44°E to 64°E
4	55°S to 47°S	71°E to 91°E
5	15°S to 5°S	70°E to 83°E
6	67°S to 55°S	159°W to 145°W
7	35°S to 25°S	135°W to 125°W
8	56°S to 46°S	100°W to 90°W
9	30°S to 20°S	25°W to 15°W
10	30°N to 40°N	159°W to 145°W
11	15°S to 5°S	159°W to 145°W
12	15°S to 5°S	135°W to 125°W
13	15°N to 25°N	160°E to 178°E
14	55°S to 45°S	140°W to 125°W
15	40°N to 50°N	25°W to 15°W

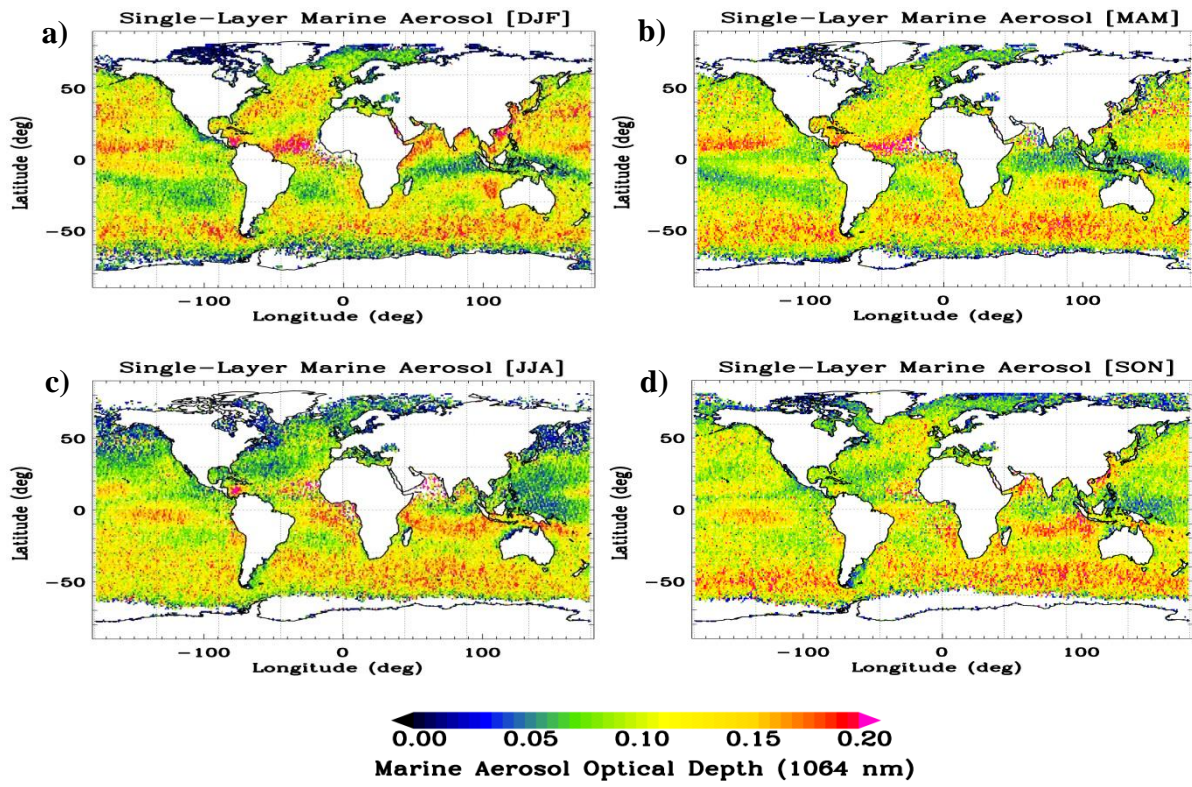


Fig. S1. Global distribution of $1^\circ \times 1^\circ$ degree averaged CALIPSO level 2 version 3.01 mean AOD_{1064} for “clean marine” single-layer aerosols. Layer optical depths are averaged for boreal winter (DJF), spring (MAM), summer (JJA), and fall (SON) from June 2006 to June 2010.