Supplementary Materials

Figure S1. (A) Daily rainfall during AMAZE-08. (B) Accumulated rainfall. The average yearly rainfall at the site is 2200 mm.

Figure S2. Photographs taken at top of tower looking across canopy, at top of tower looking down on sampling line, and at lower part of tower looking at horizontal connector of sampling line.

Figure S3. Ten-day HYSPLIT backtrajectories at 500, 1000, 2000, and 4000 m every 12 h from 7 February to 14 March 2008.

Figure S4. (top panel) Time series of meteorological quantities measured at TT34. "RH" is relative humidity and is scaled from 0 to 100%. "T" is temperature and is scaled from 20 to 40°C. The radius of the data point for wind direction (scaled from 0°N, to 90°E, to 180°S, to 270°W) represents the wind velocity. (middle panel) Time series of the concentrations of O_3 (0 to 20 ppb), NO (0 to 10 ppb), NO_x (0 to 10 ppb), and CH_3CN (0 to 1 ppb). (bottom panel) Time series of miscellaneous species, including (a) the particle number (0 to 1000 # cm^{-3}) measured on the laminar sampling inlet inside the container at TT34 by a condensation particle counter, (b) the concentration of CO_2 (300 to 500 ppb) measured in the sampling line extended from the container to the top of TT34, and (c) the intensity of photosynthetically active radiation (PAR; 0 to 600 W m^{-2}) measured at the top of K34. For each panel, vertical red bars indicate the intensity of rainfall. Time periods of background yellow represent local day, and time periods of background white represent local night. Time periods of background purple have been tagged as influenced by local (e.g., pickup of generator exhaust during nighttime stagnation)

or regional pollution (e.g., outflow from Manaus) based on multiple instrument measurements (e.g., high particle counts, high NO_x, and so forth). Events such as power loss are labeled at various times throughout the time series plot. Selected focus periods are also labeled.

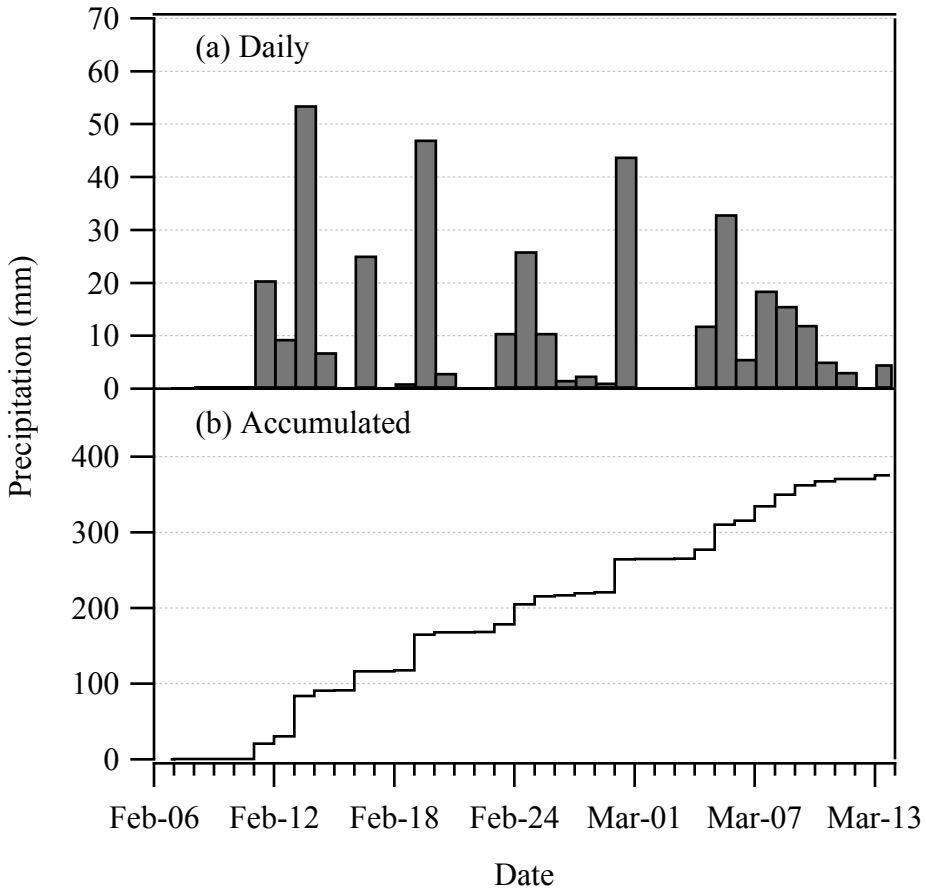
(a) Daily
(b) Accumulated
Precipitation (mm)
70
60
50
40
30
20
10
0
400
300
200
100
0
Feb-06
Feb-12
Feb-18
Feb-24
Mar-01
Mar-07
Mar-13
Date

Figure S1

Figure S2

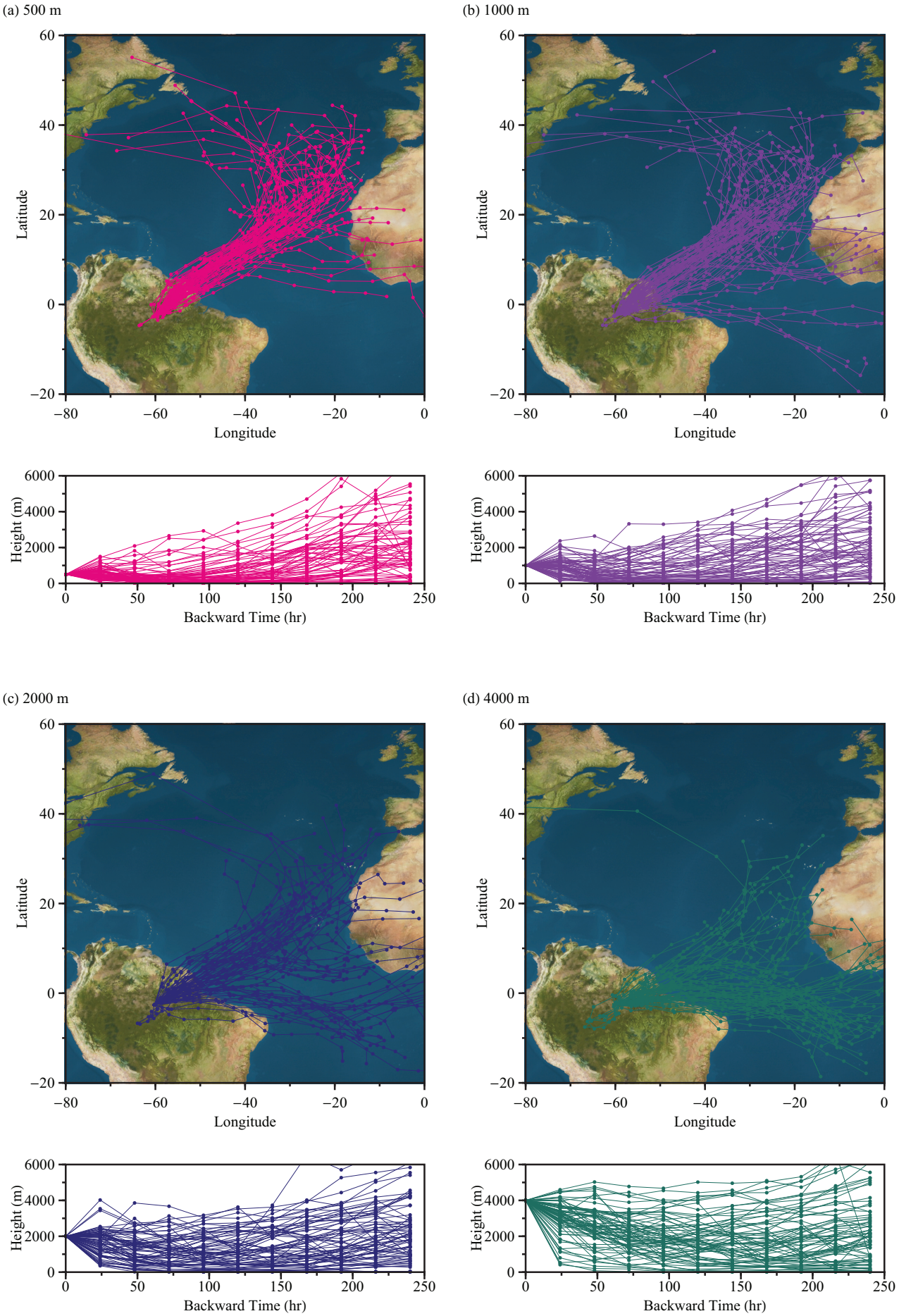
(a) 500 m
(b) 1000 m
(c) 2000 m
(d) 4000 m
Latitude
Longitude
Height (m)
Backward Time (hr)
60
40
20
0
−20
−80
−60
−40
−20
0
6000
4000
2000
0
0
50
100
150
200
250

Figure S3