

Figure S1. a) GOES 15 visible band image (11:45 PST (18:45 UTC) on 02 Aug 2016) with the overlaid flight path of FASE RF08. b) Zoomed in view of the satellite image to highlight the clear-cloudy border.

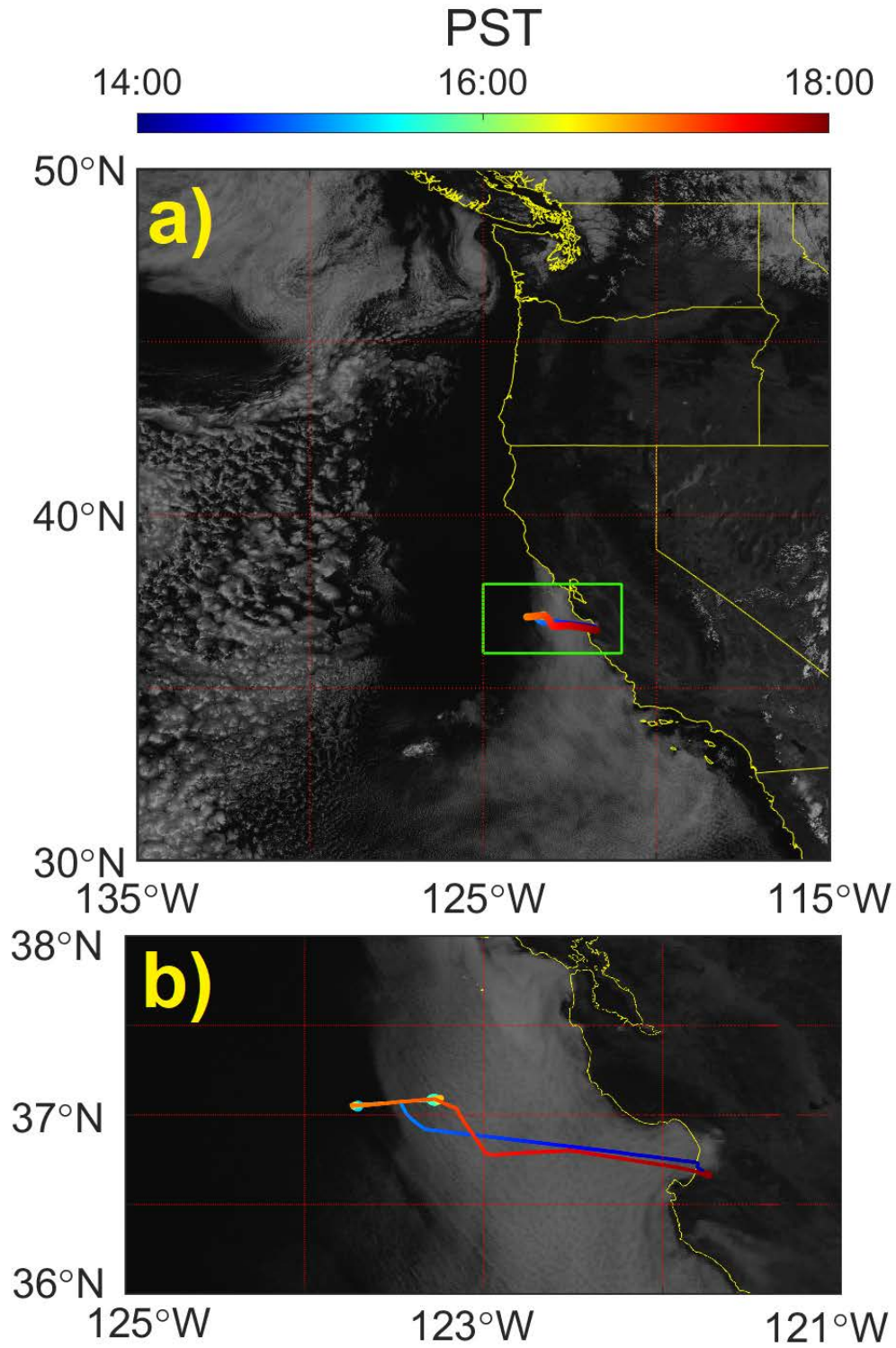


Figure S2. Same as Figure S1 except for FASE RF09B (image from 15:15 PST (22:15 UTC) on 03 Aug 2016).

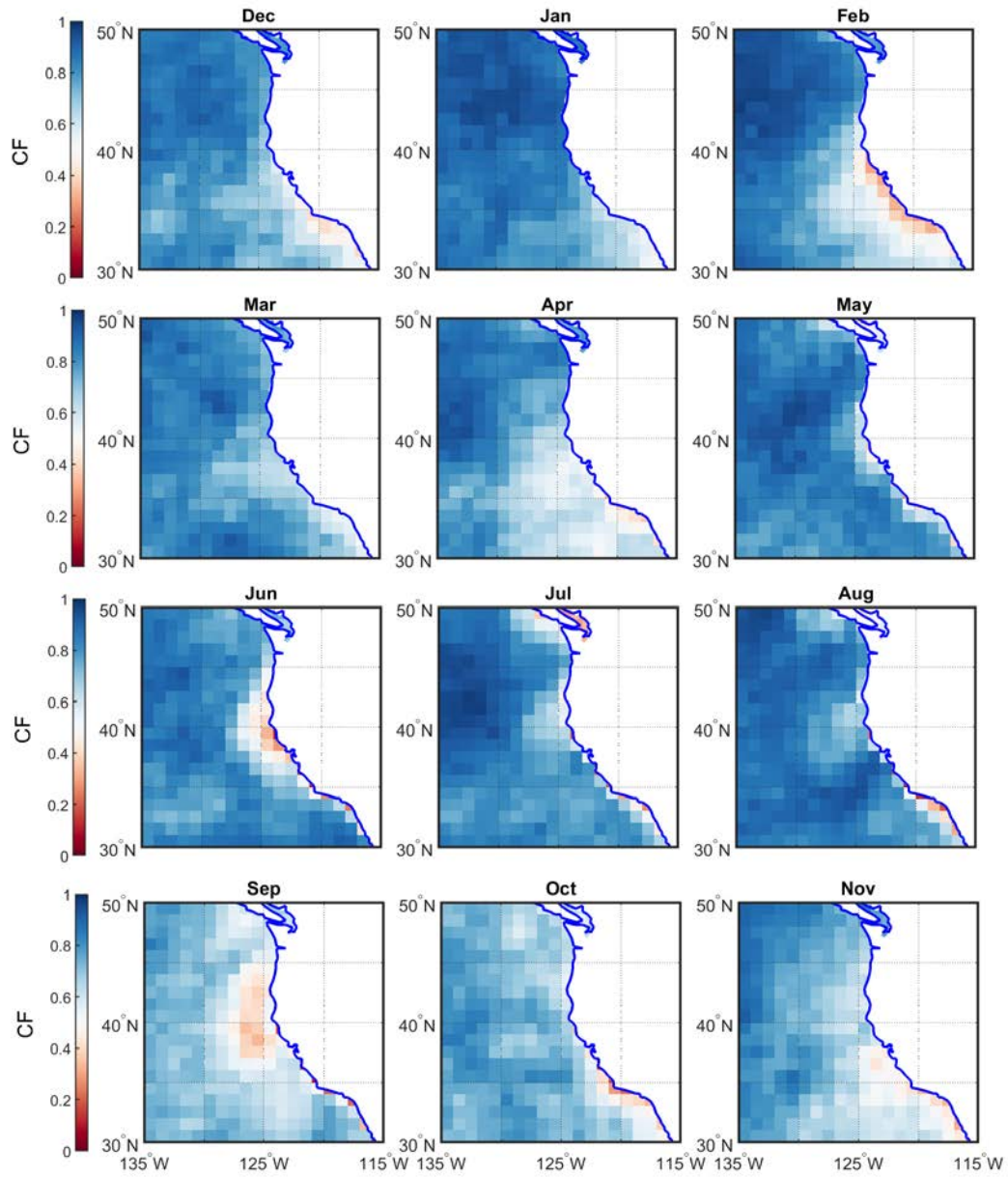


Figure S3. Average monthly cloud fraction (CF) for 2018 obtained from MODIS Terra Level 3 (Collection 6.1).

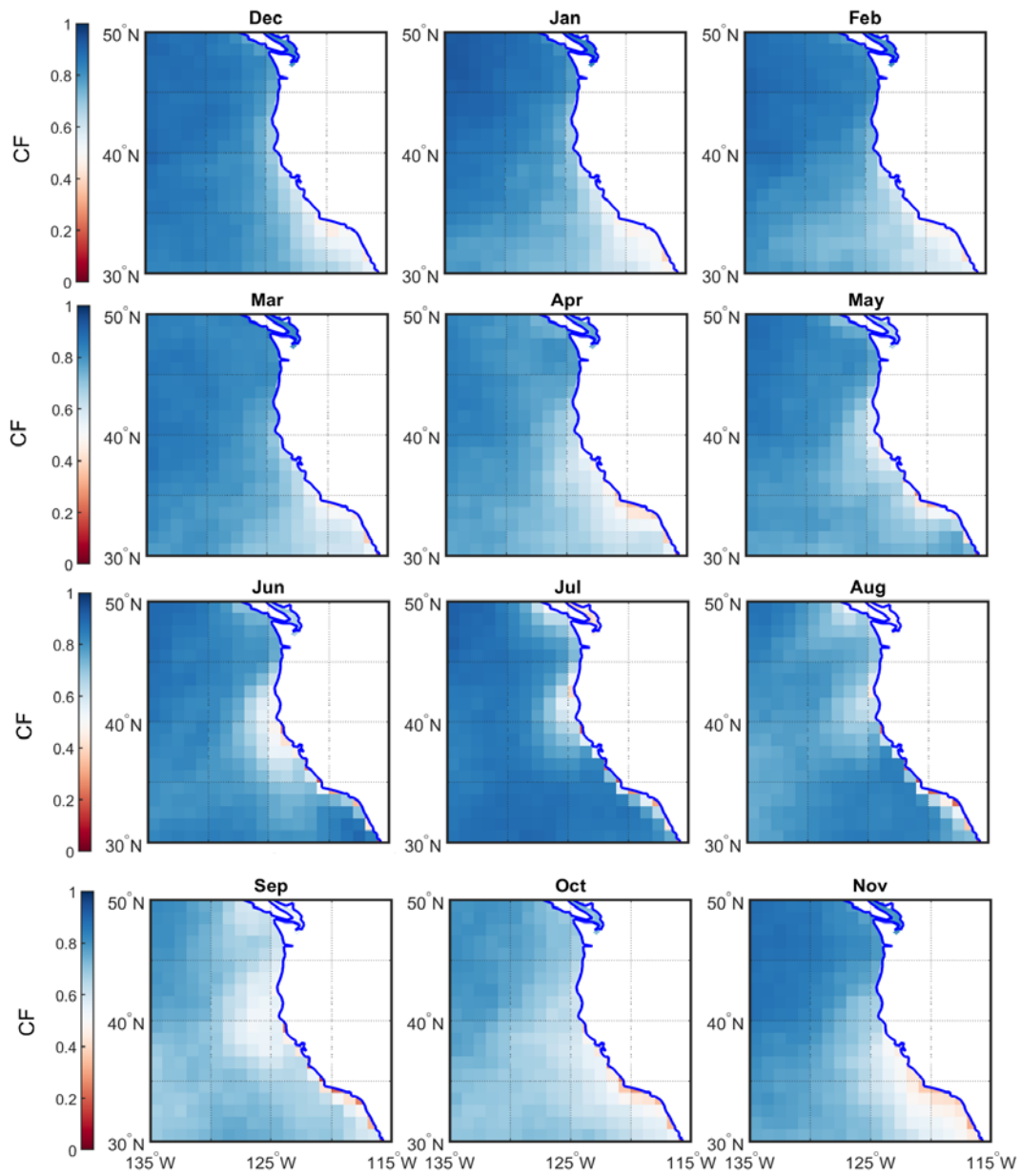


Figure S4. Average monthly cloud fraction (CF) for 2009 through 2018 obtained from MODIS Terra Level 3 (Collection 6.1).

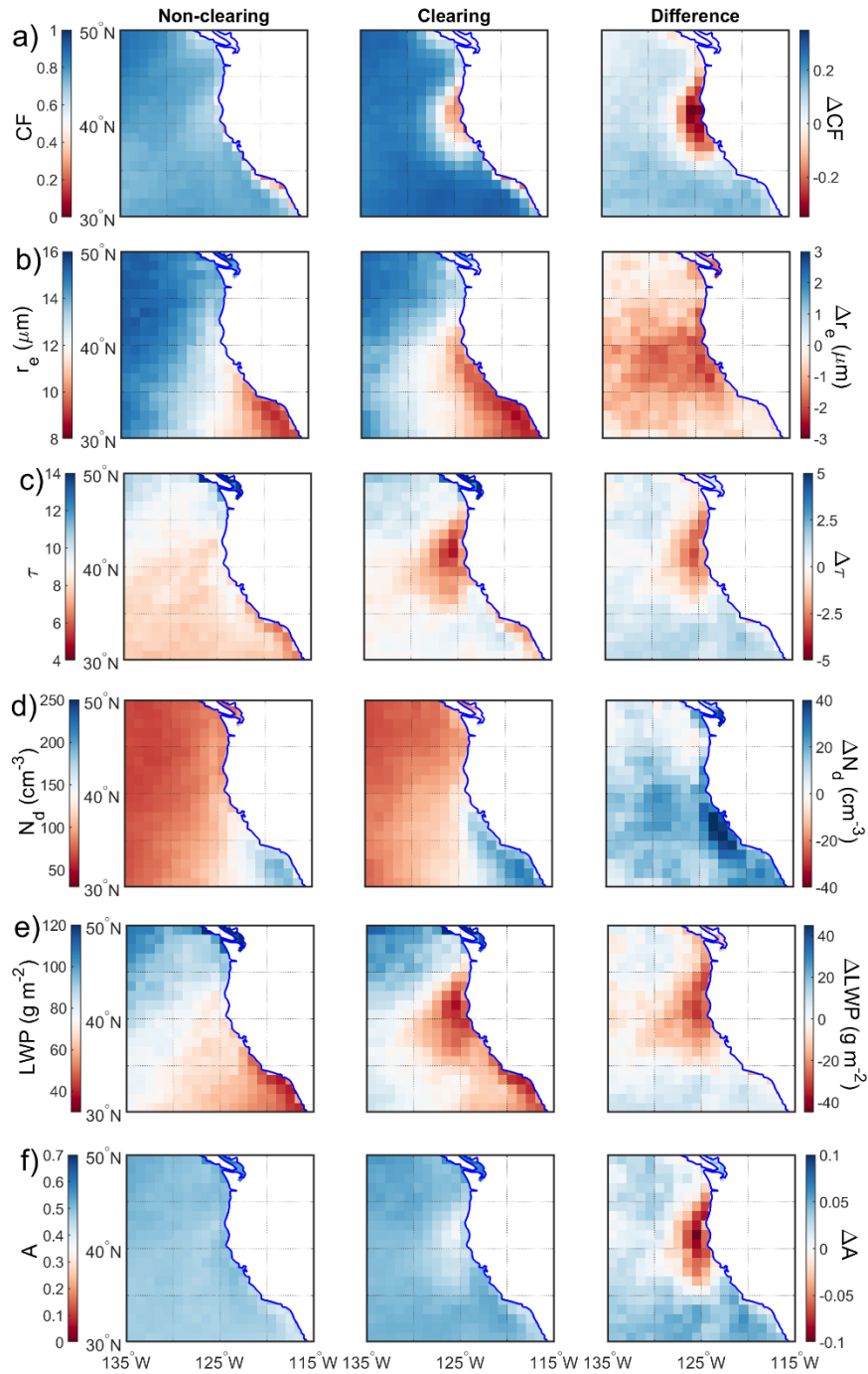


Figure S5. Average cloud parameters for non-clearing and clearing days obtained from MODIS Aqua Level 3 (Collection 6.1) data: a) cloud fraction day (CF), b) cloud top droplet effective radius (r_e), c) cloud optical thickness (τ), d) cloud droplet number concentration (N_d), e) cloud liquid water path (LWP), and f) cloud albedo (A). Differences (clearing minus non-clearing) are shown in the farthest right column with separate color scales. Values from any instances of clear pixels were omitted from the analysis to produce these figures.