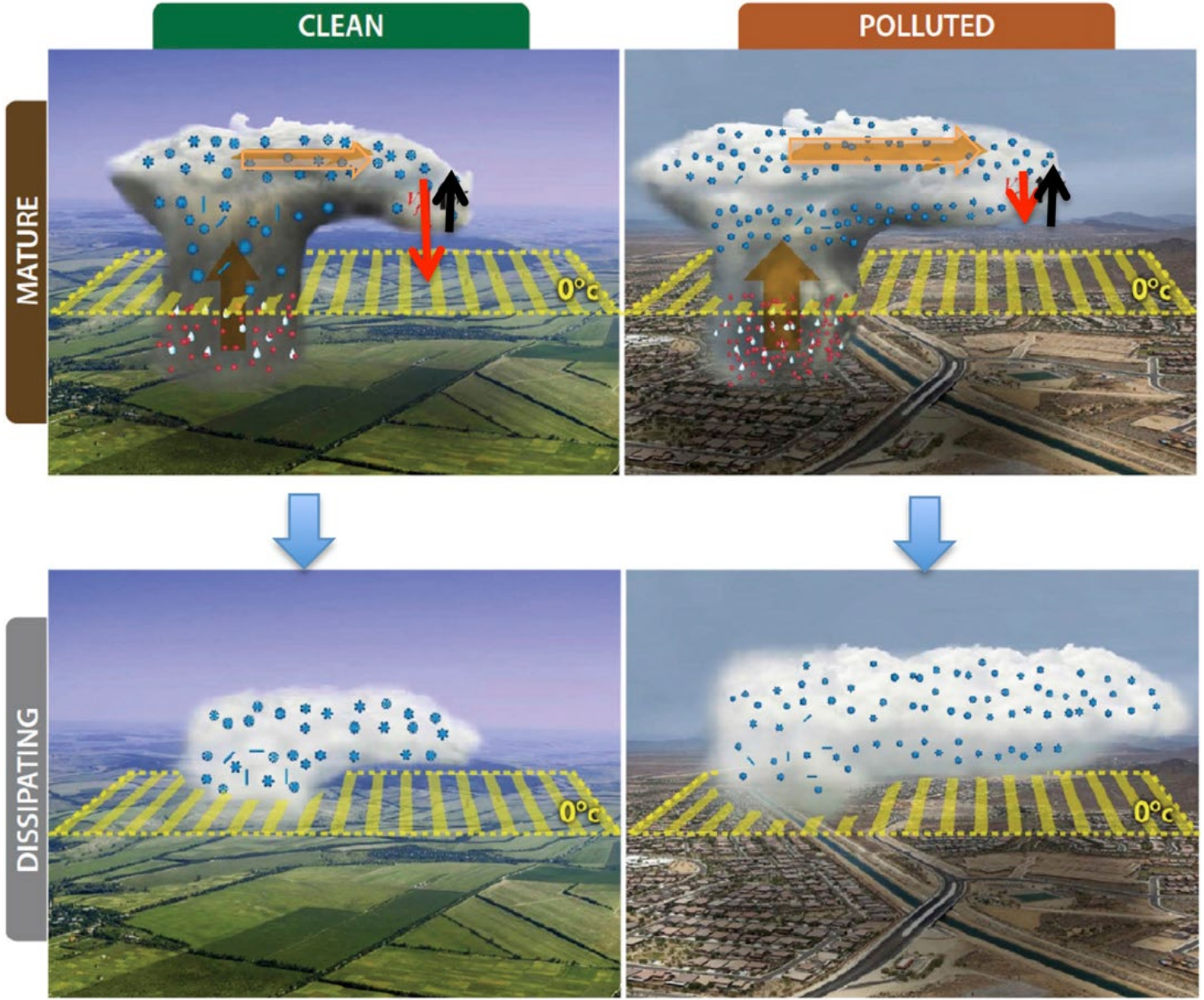
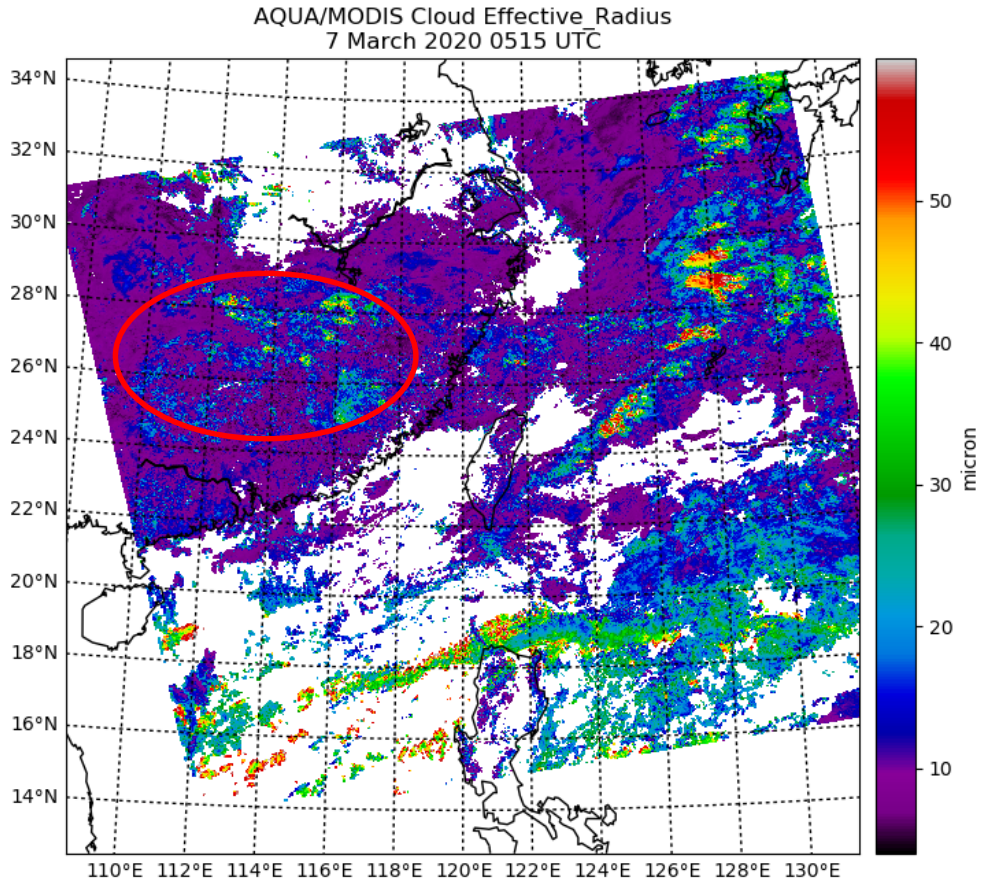
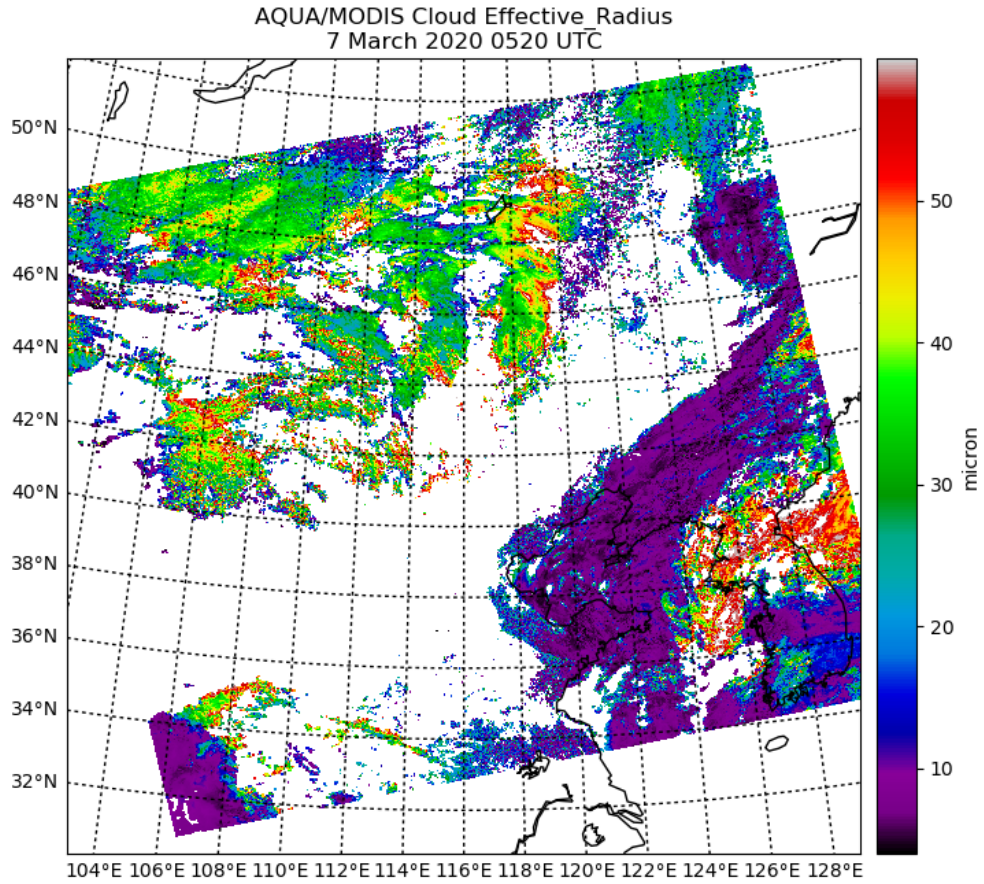
Conceptual Model of Cloud Invigoration



Early March Cloud Properties – AQUA/MODIS

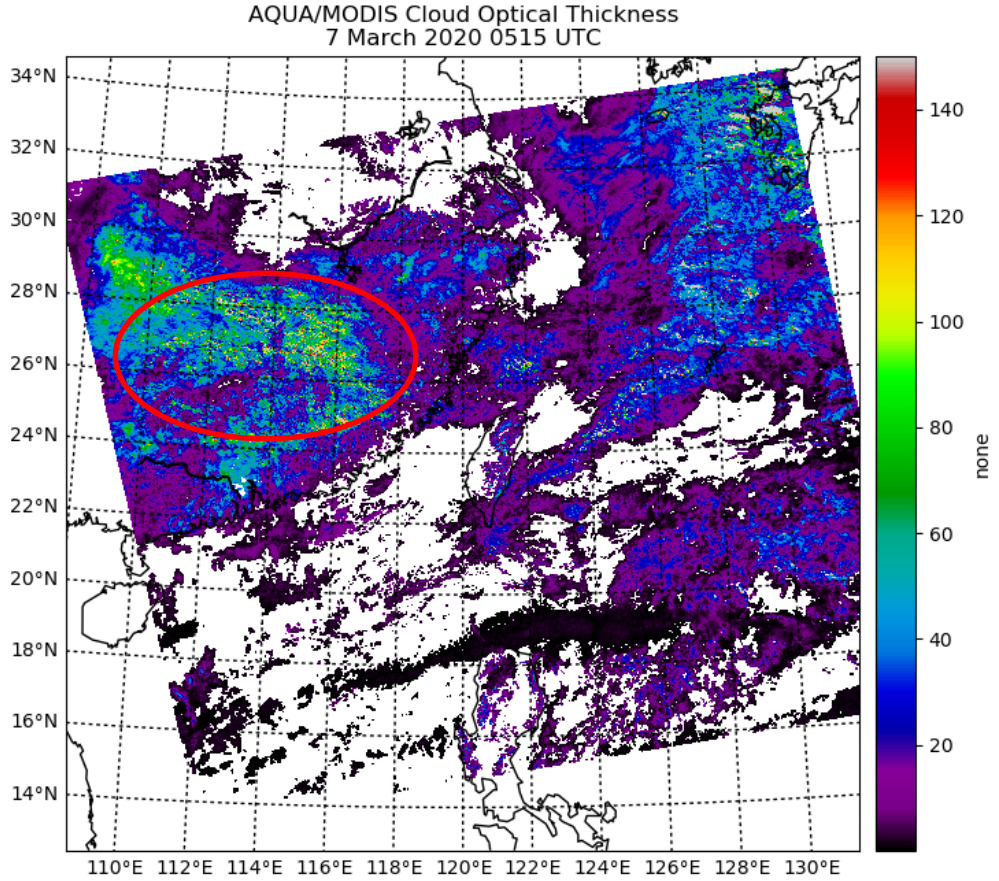
1315 LST

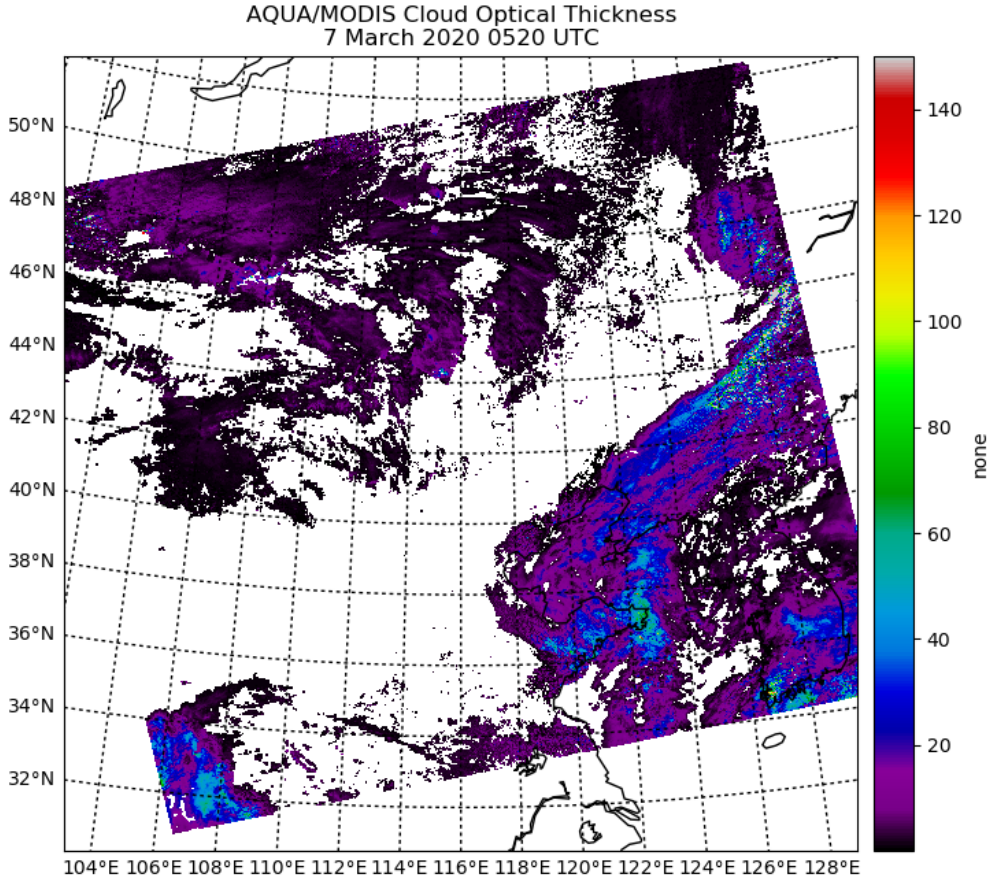




Early March Cloud Properties – AQUA/MODIS

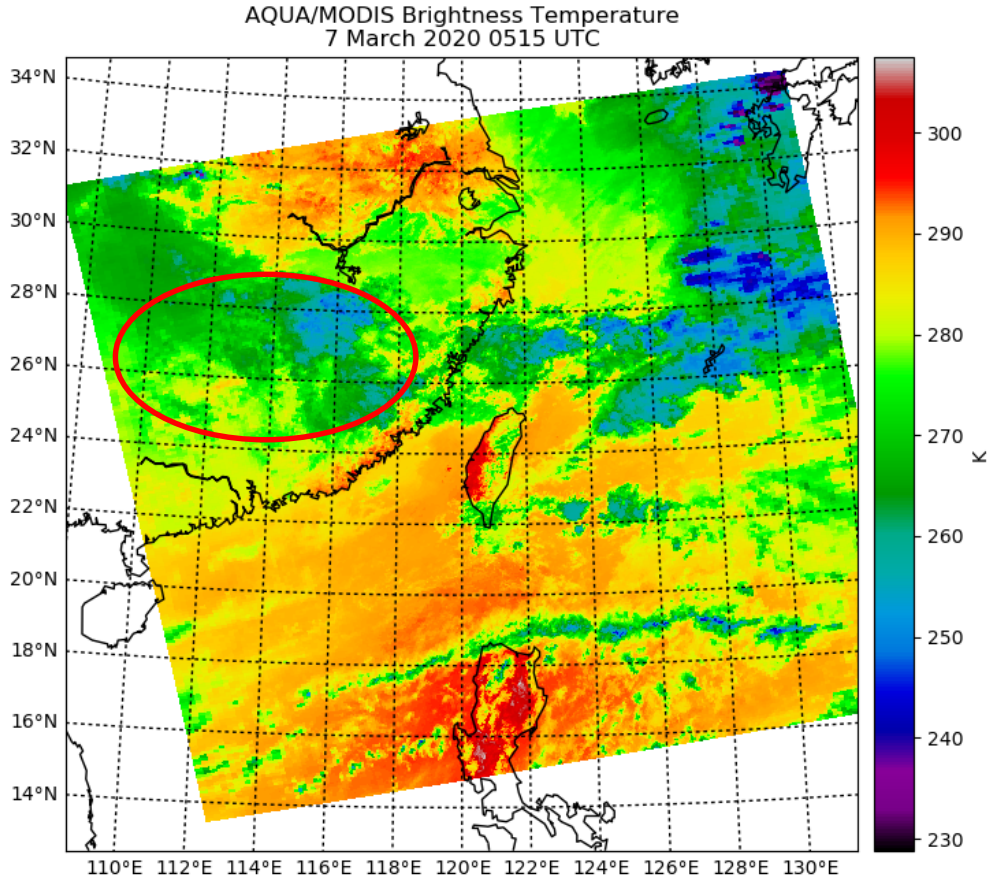
1315 LST

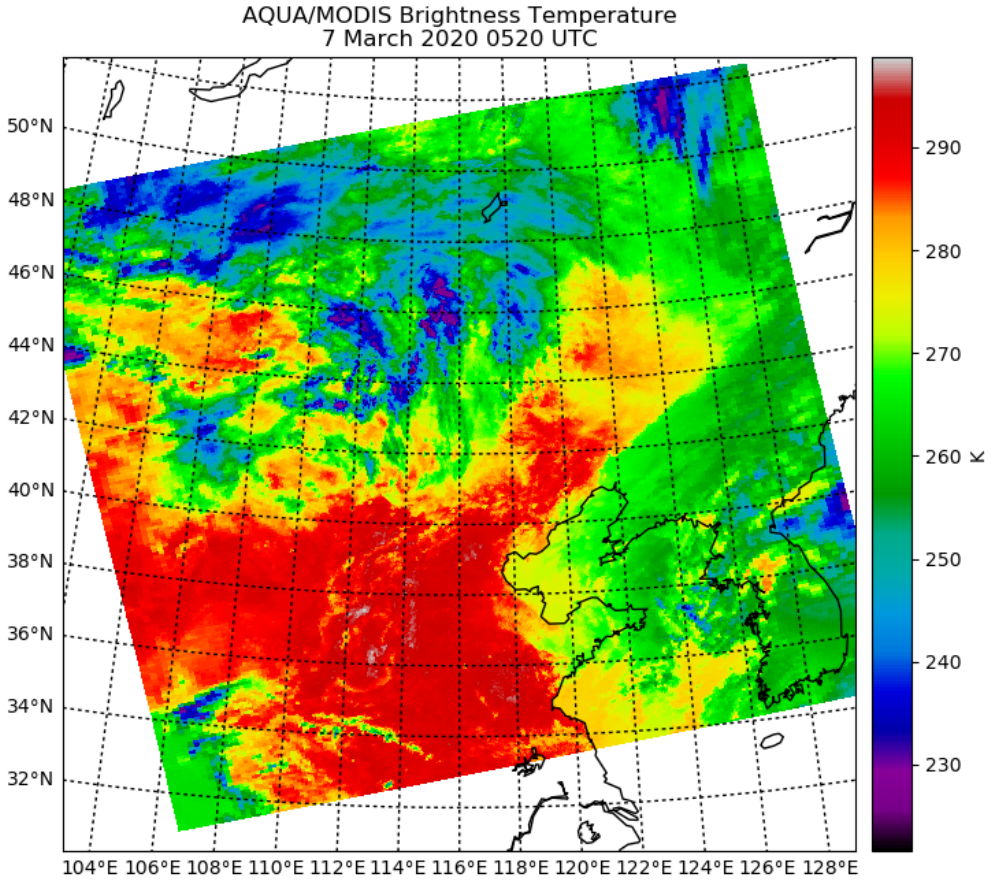




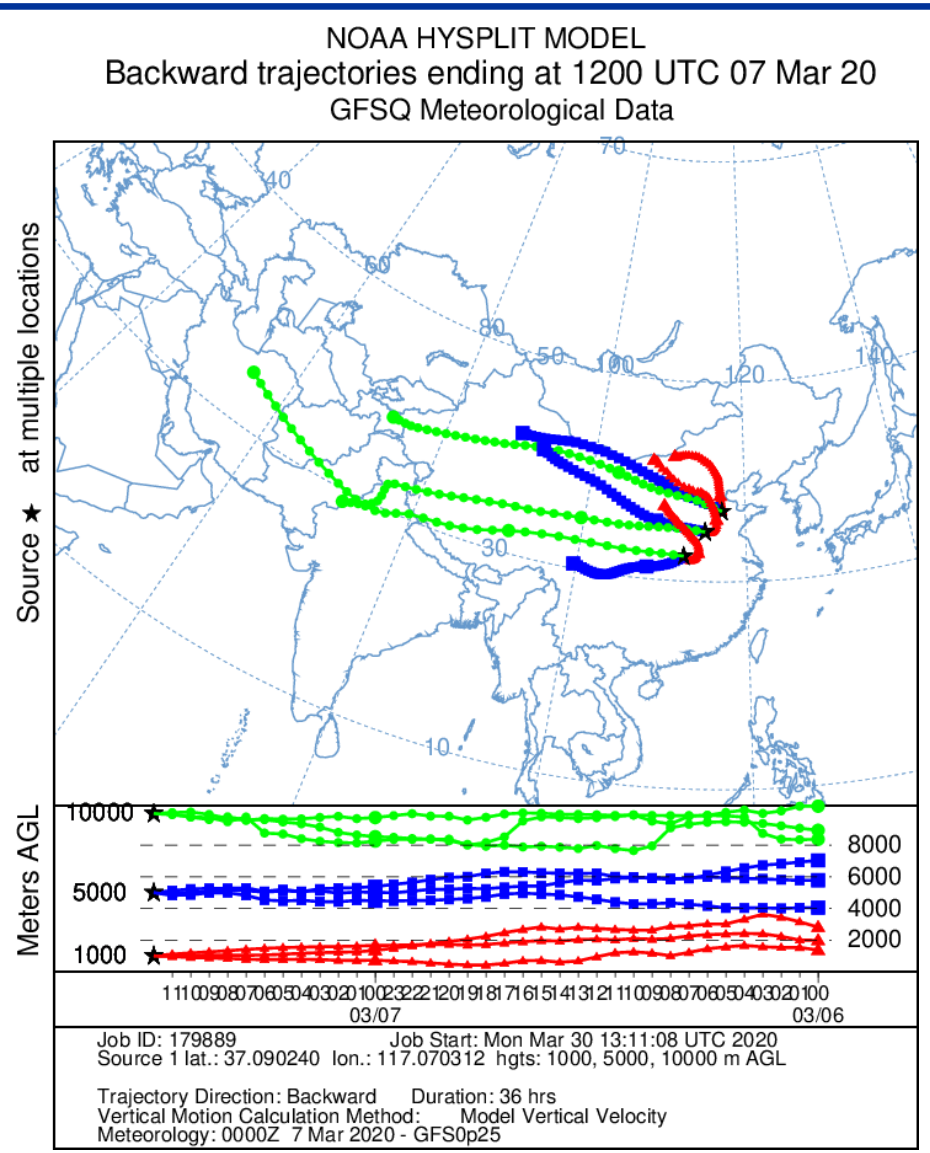
Early March Cloud Properties – AQUA/MODIS

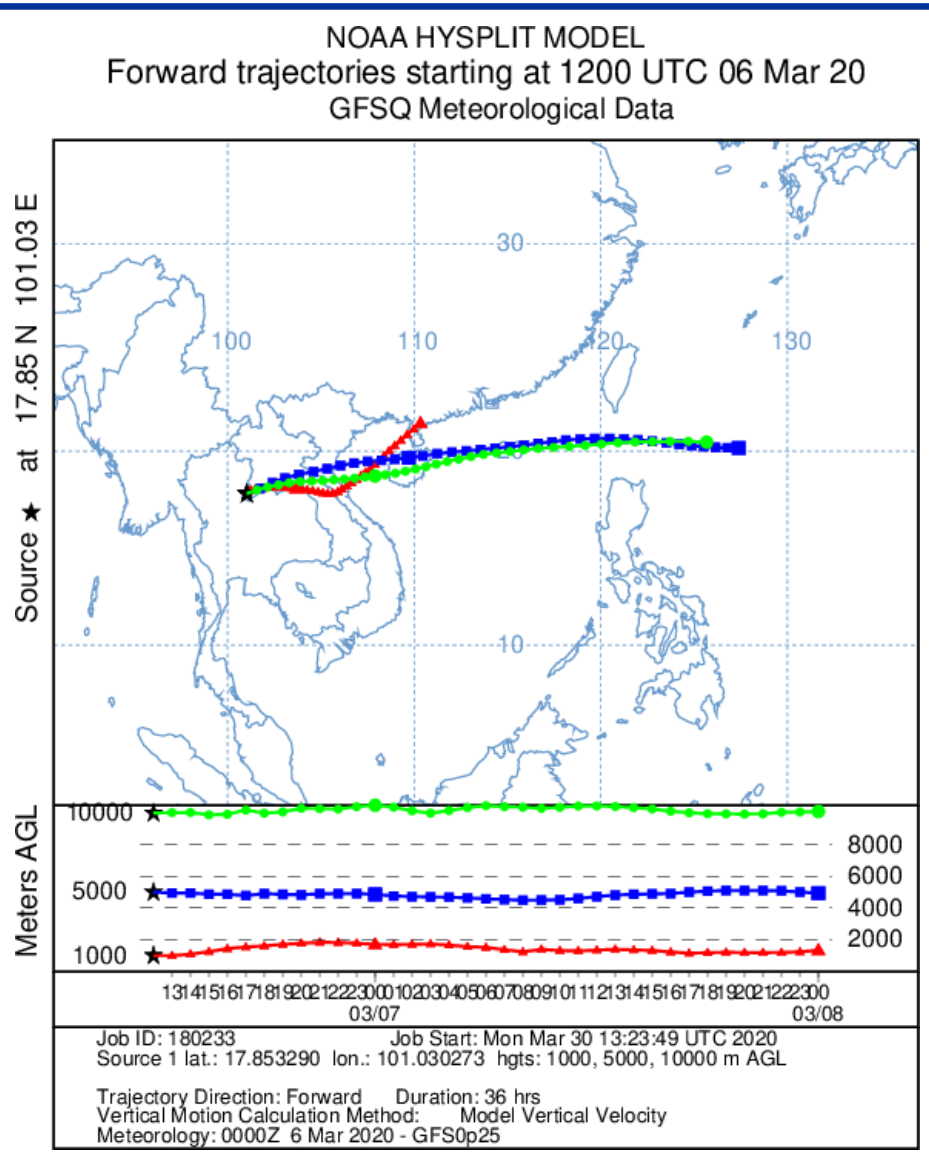
1315 LST





Trajectory Comparison





Discussion

- In general, over central China on 7 March 2020, large cloud optical thickness values correspond to small cloud effective radius values and cold cloud top temperatures.
- Small cloud effective radius values (< 30 µm) associated with large cloud optical thickness values for a particular cloud system signifies a polluted cloud with a large concentration of small cloud particles.
- In addition, this condition is associated with thicker clouds that are taller (colder cloud tops) and have longer lifetimes (more persistent), and possibly indicate the occurrence of the aerosol indirect effect of “cloud microphysical invigoration”.