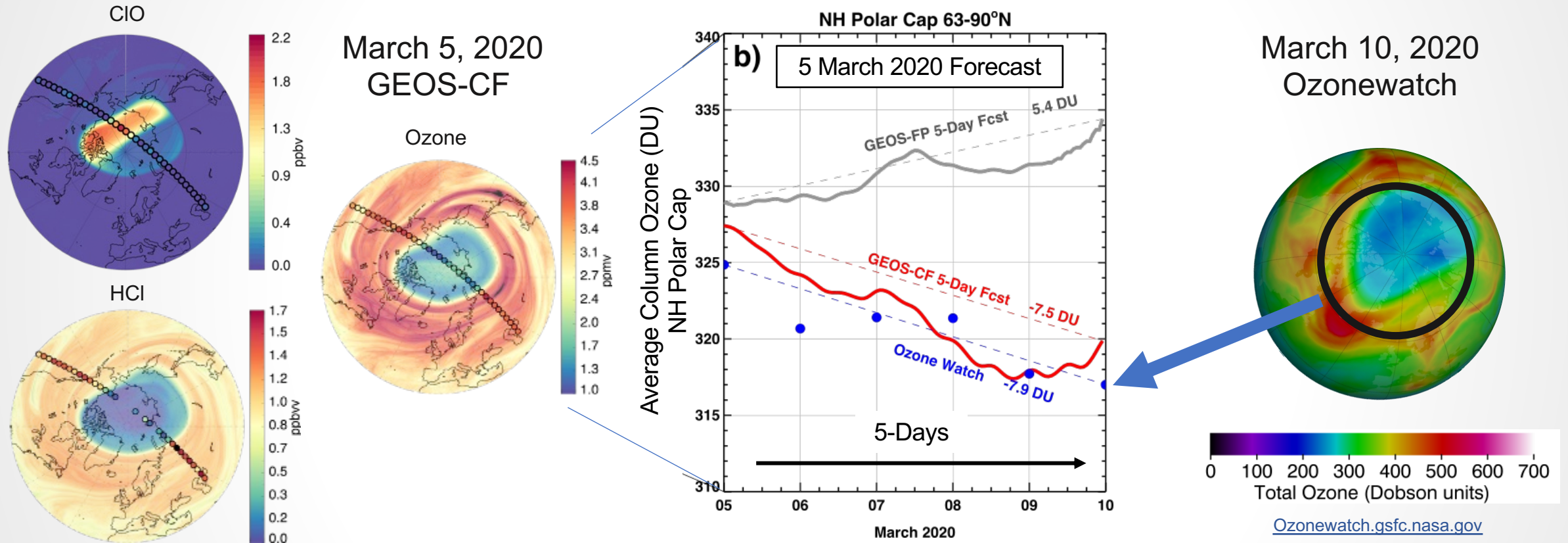


Stratospheric Ozone Forecasts Are Realistic When Using the Chemical Mechanism in the GEOS-CF System



While both are initially constrained by MLS and OMI ozone observations, the inclusion of a stratospheric chemical mechanism in GEOS-CF leads to improved ozone forecasts compared to GEOS-FP, which uses a linear relaxation scheme for ozone. This allows GMAO to provide realistic stratospheric ozone forecasts during anomalous dynamic and chemical situations, such as the northern hemisphere winter 2020 polar vortex.