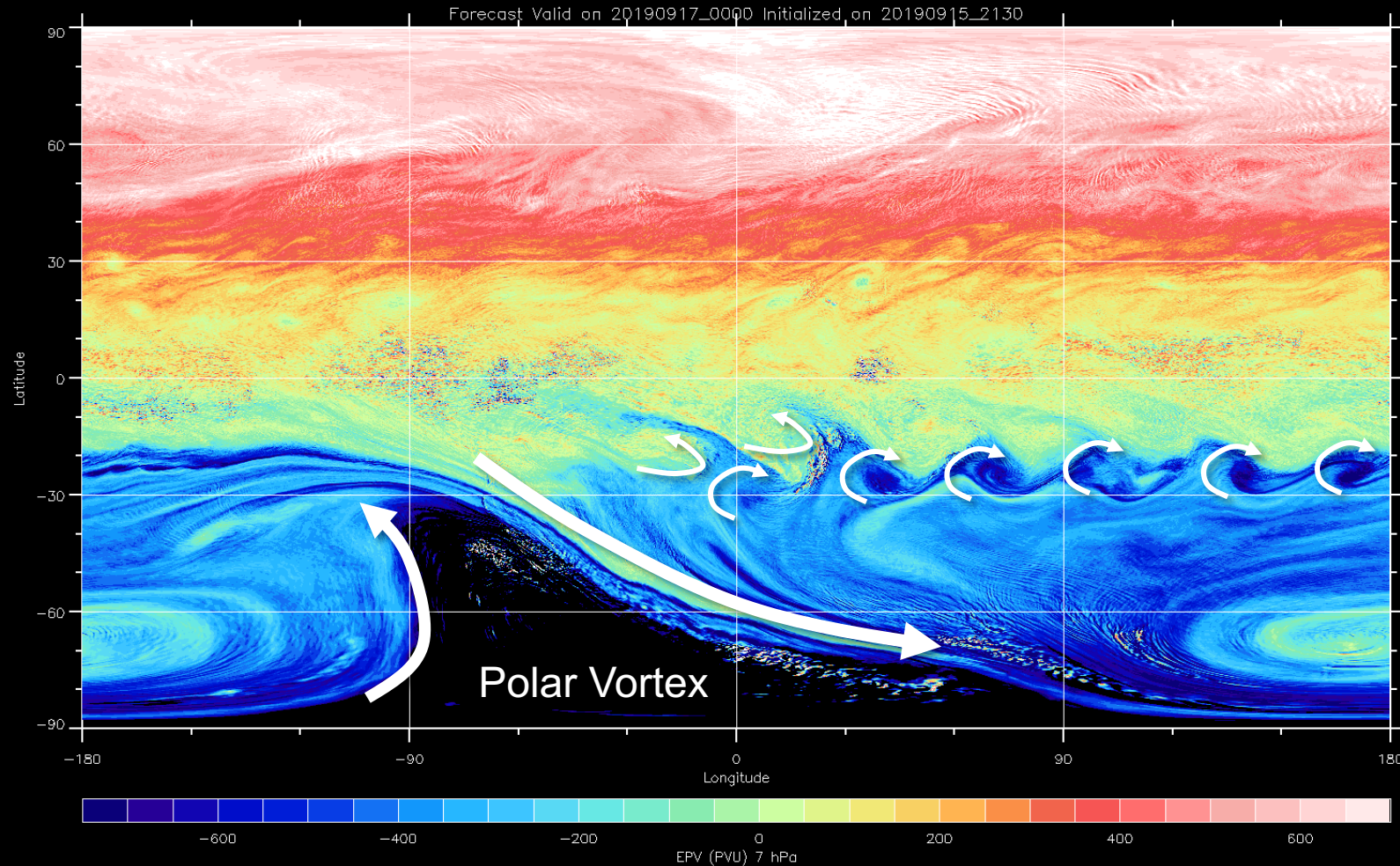


An Unusual Train of Waves in the Southern Hemisphere Stratosphere



Waves in the atmosphere, like waves at the beach, can fold over, or “break”. An example of global-scale breaking, that deforms the polar vortex (darkest color) and moves air from the tropics (green and yellow) to the pole created by the polar vortex, has created a chain of six smaller breaking regions. These breaking waves act to mix air from different latitudes.

A 10-day forecast, initialized on 16 September, 2019, examines Ertel Potential Vorticity (EPV) at 7 hPa, near the middle of the stratosphere, taken from an experimental high resolution version of NASA GMAO GEOS, global circulation model.