

700-500 Layer Total Precipitable Water Vapor for 00 UTC 20 Aug

NOAA SECROBLETEMENTS TS Kay 10 15 30 45 60 75

NOAA/NESDIS Blended TPW

00 UTC 20 Aug 2016



SFC & Satellite IR 00 UTC 20 Aug 2016

SFC & Satellite IR 18 UTC 20 Aug 2016

24 hr Observed Rainfall Through 12 UTC 21 Aug 2016



"A predecessor rain event (PRE), originally defined by <u>Cote (2007</u>, hereafter <u>Co7</u>), is an organized area of heavy rainfall [rainfall rates ≥100 mm (24 h)⁻¹] that develops in connection with water vapor originating in the vicinity of a tropical cyclone (TC), but is separated from the TC by a large distance (~1000 km). The large water vapor content in the environment of PREs [e.g., precipitable water (PW) values of 40–60 mm] contributed by the TC can favor large rainfall accumulations and flooding." In addition, it helps to have a focusing frontal boundary, which this Texas system had when it moved into Texas by 18 UTC on Saturday, August 20.

Prepared by Sheldon Kusselson