

# PISTON 2019 Daily Science Summary

**14 September Daily Summary:**

**Still suppressed**

**PISTON 2, R/V Sally Ride**

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Today was possibly the quietest day of the cruise yet, in terms of precipitation observed by SEAPOL. Although moisture has returned to the upper levels of the atmosphere (as evidenced by both soundings and solid deck of altostratus which remained overhead all day), the 800 – 500mb level remains quite dry (Figure 1). With the exception of a cluster of mostly weak convection (tops < 6km) which moved through from 15-18Z, the radar remained nearly absent of even the tiniest warm shower.

To the NW of the ops area, 95W started the day off looking quite organized, likely on the edge of tropical storm status. However, after about 1000Z, a glance at satellite imagery indicates it went through a rapid weakening (Fig. 2). Some forecast models projected 95W to make an about-face and return to the operations area, however no model seemed to show rapid weakening in the nearest 24 hours. So the future of the monsoon depression remains in question, as well as the model ability to forecast such evolution.

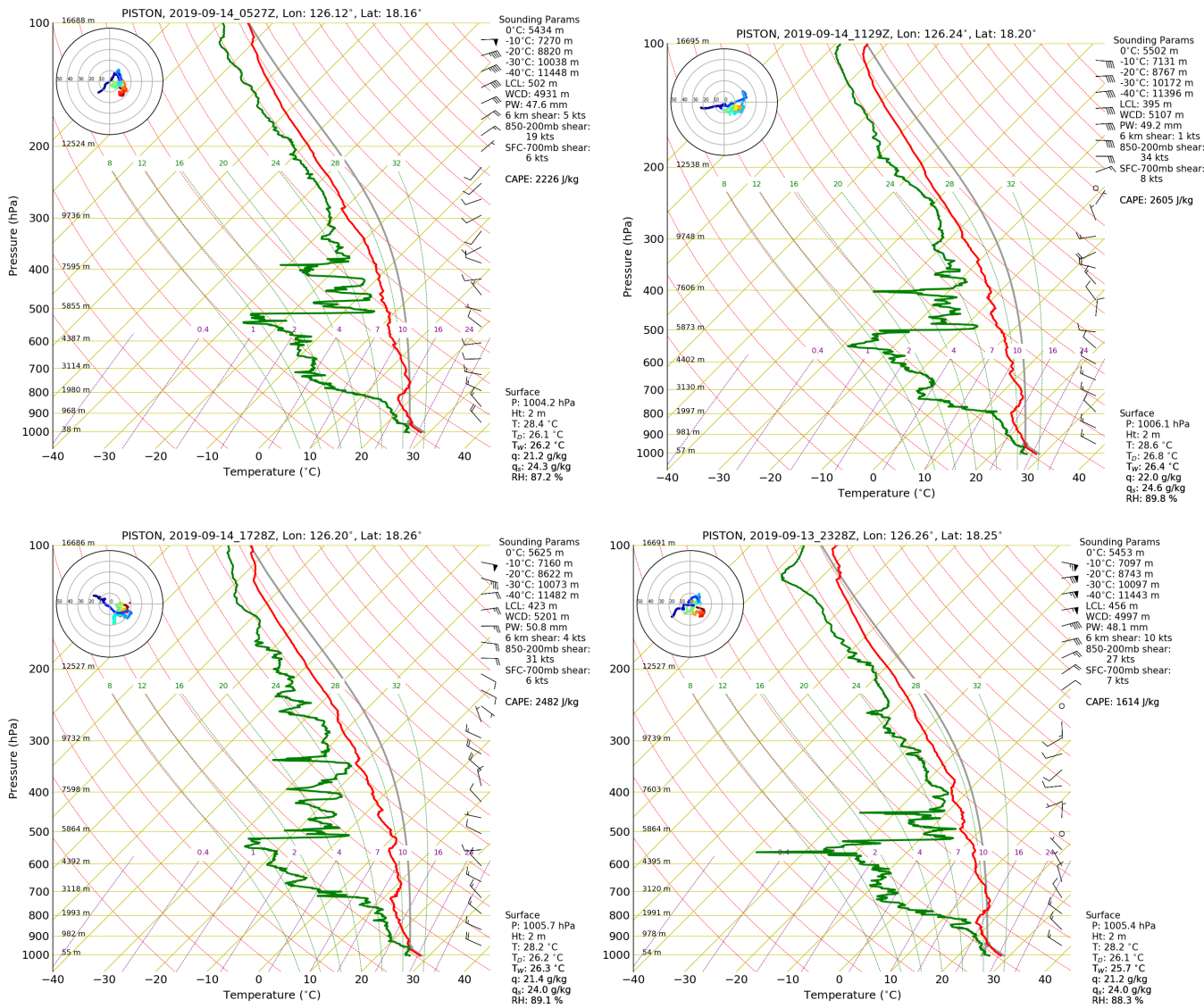


Fig. 1: 00,06,12,18Z Soundings

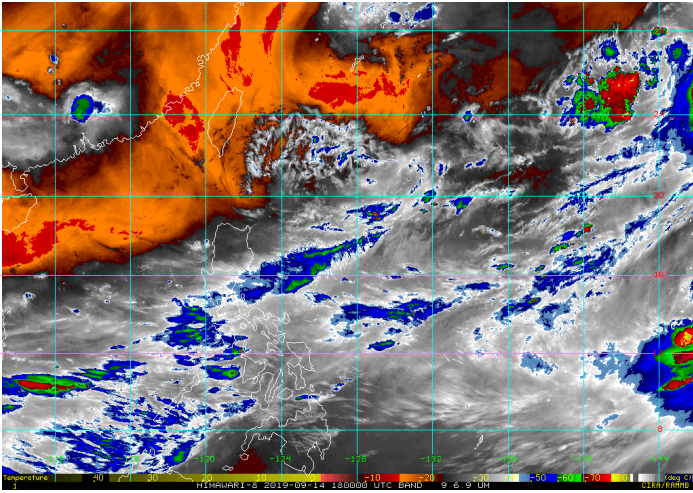
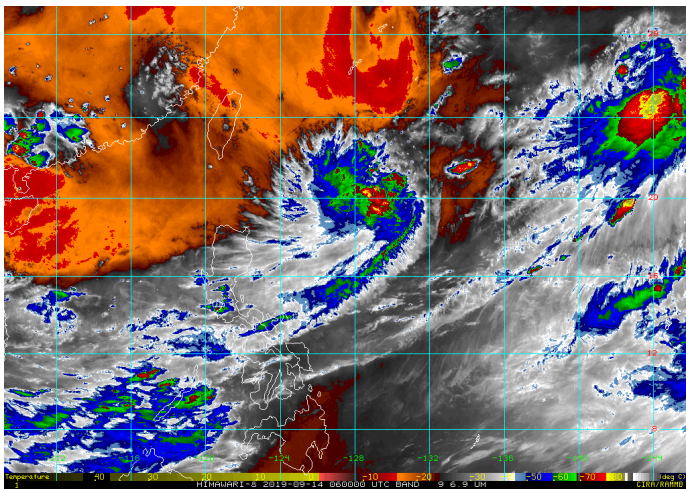


Fig. 2: Water vapor satellite imagery at 06 and 18Z