



Launch Mission Execution Forecast

Mission: Falcon 9 AMOS-17

Issued: 5 Aug 2019/1200L

Valid: 6 Aug 2019/1853-2021L (06/2253Z-04/0021Z)

Synoptic Discussion: Typical southwesterly flow regime expected to continue for the next couple of days. The ridge axis associated with the Bermuda high will remain south of the Space Coast area resulting in the southwest flow regime. Meanwhile, upper level trough over the northern Gulf of Mexico is expected to lift slowly northeastward through midweek. Expect showers and thunderstorms to develop along the east and west coast sea breeze fronts. The eastern sea breeze is not expected to move inland much and this will keep these storms confined to the coast. The western sea breeze should move across the peninsula during the afternoon and the associated showers and thunderstorms will approach the Space Coast by late afternoon. As has been the case the past couple of days, the storms are expected to diminish just before sunset. This indicates there is a higher chance for weather violation at the beginning of the launch window with improving conditions during the latter half of the window. The primary concerns for weather violation are the Lightning Rule and the Thick Cloud Layer Rule.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Cumulus	Scattered	2,500	15,000
Altostratus	Broken	15,000	23,000
Cirrostratus	Overcast	25,000	30,000

Weather:	Scattered Showers/Thunderstorms	
Surface Visibility:	7 Miles	Solar Activity: Low
Liftoff Winds (MPH):	170° @ 15-20 (200')	Pressure: 29.91 inHg
Temperature:	81°F	RH: 79%

Launch day probability of violating launch weather constraints: **60%**
Primary concern(s): Lightning Rule and Thick Cloud Layer Rule

The probability of violation does not include mission & launch vehicle specific upper-level wind criteria.

Sunrise: 06/0647 EDT

Sunset: 06/2009 EDT

Moonrise: 06/1240 EDT

Moonset: 07/0027 EDT

Illumination: 38%

Next forecast will be issued: 6 August 2019