



Launch Mission Execution Forecast

Mission: Falcon Heavy STP-2

Issued: 24 Jun 2019/1000 EDT(1400 UTC)

Valid: 24 Jun 2019/2330-25/0330 EDT (25/0330-0730 UTC)

Synoptic Discussion: The upper-level ridge over the Southeast US persists with dry air aloft over the Florida Peninsula, resulting in very isolated shower and thunderstorm coverage along the seabreeze front during the afternoon, which will track toward the Space Coast due to weak westerly steering flow. Any activity that does develop however will quickly dissipate after sunset. The primary weather concerns for launch tonight continues to be lingering anvil and thick layer clouds from the isolated afternoon convection.

On Tuesday, the upper-level ridge will slide eastward, allowing for increased moisture and thus higher chances of afternoon thunderstorms which could extend into the evening hours, resulting in slightly higher chances of anvil and thick cloud layers during the launch window.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Cumulus	Few	2,500	4,000
Altostratus	Scattered	10,000	13,000
Cirrostratus	Scattered	25,000	27,000

Weather: None	Solar Activity: Low
Surface Visibility: 7 Miles	Pressure: 30.02 inHg
Liftoff Winds (MPH): 240° @ 10-15 (200')	RH: 85%
Temperature: 79°F	

Launch day probability of violating launch weather constraints: **20%**
Primary concern(s): Anvil Cloud Rule, Thick Cloud Layer Rule

Delay day probability of violating launch weather constraints: **30%**
Primary concern(s): Anvil Cloud Rule, Thick Cloud Layer Rule

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

Sunrise: 24/0627 EDT 25/0627 EDT	Sunset: 24/2023 EDT 25/2023 EDT	
Moonset: 24/1248 EDT 25/1340 EDT	Moonrise: 25/0133 EDT 26/0204 EDT	Illumination: 57% 50%

Next forecast will be issued: As Required