



Launch Mission Execution Forecast

Vehicle: Falcon 9 Es'Hail-2

Issued: 14 Nov 2018/1330 UTC (0830 EST)

Valid: 15 Nov 2018/2046 – 2229 UTC (1546 – 1729 EST)

Synoptic Discussion: A frontal boundary is draped from the Eastern Seaboard through Northern Florida. A wave of low pressure will develop along this boundary tonight over Northern Florida and strengthen the system, initiating scattered showers along and ahead of the system. The result for Space Coast will be another day of warm temperatures and showers. The greatest chance for rain showers will be tonight as the surface low approaches the area before rapidly tracking northeast along the Eastern Seaboard. The movement of this feature will provide extra momentum to drag the slow-moving front through the area on Thursday. Strong high pressure will build in behind the front bringing cooler, dry air into Florida. Lingering cloud cover is expected for most of the day, but dwindling in coverage as the day progresses. The primary weather concerns are lingering Thick Cloud Layers and Cumulus Clouds associated with frontal passage. Maximum upper-level winds will be from the southwest at 90 knots at 40,000 feet.

On Friday, low temperatures will be near 53F with gusty winds in the morning, but beginning to weaken approaching the launch window. The primary weather concern is gusty winds remaining into the afternoon hours. Maximum upper-level winds will be from the southwest at 100 knots at 40,000 feet.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Cumulus	Few	2,500	6,000
Altostratus	Scattered	10,000	14,000
Cirrus	Broken	25,000	27,000

Weather:	Isolated Showers	Solar Activity:	Low
Surface Visibility:	7 miles	Pressure:	29.98 inHg
Liftoff Winds (MPH):	320° @ 12-17 (200')	RH:	75%
Temperature:	72°F		

Launch day probability of violating launch weather constraints: **40%**
Primary concern(s): Thick Cloud Layers Rule, Cumulus Cloud Rule

Delay day probability of violating launch weather constraints: **10%**
Primary concern(s): Liftoff Winds

Sunrise:	15/0645 EST 16/0646 EST	Sunset:	15/1729 EST 16/1729 EST
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Moonrise:	15/1309 EST 16/1345 EST	Moonset:	16/0024 EST 17/0117 EST	Illumination:	50% 60%
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Next forecast will be issued: As required