

## **Launch Mission Execution Forecast**

Vehicle: Falcon 9 TESS

**Issued:** 14 Apr 2018 / 1100 EDT (1500 UTC) **Valid:** 16 Apr 2018 / 1832 EDT (2232 UTC)

Synoptic Discussion: Southeasterly low-level winds are bringing light rain showers over the Space Coast this morning. Elsewhere, a vigorous cold front is moving through the western Gulf Coast states. By Sunday afternoon this front will makes its way into Central Florida. There is a chance for strong storms Sunday evening before the system pushes south by early Monday morning. Skies will clear rapidly behind the front and winds will become gusty out of the west. The primary launch day weather concern is lingering strong winds behind the front. Maximum upper-level winds will be from the west at 70 knots near 36,000 feet.

On Tuesday, mostly clear skies will persist and winds will continue to decrease as the frontal system pushes further to the southeast. The primary weather concern for a Tuesday attempt remains liftoff winds. Maximum upper-level winds will be from the northwest at 50 knots near 40,000 feet.

<u>Clouds</u> <u>Coverage</u> <u>Bases (feet)</u> <u>Tops (feet)</u>

Stratocumulus Few 2,500 3,000

Weather: None

Surface Visibility: 7 miles Solar Activity: Low

**Liftoff Winds (MPH):** 290° @ 20-25 (200') **Pressure:** 30.03 inHg

Temperature: 69°F RH: 55%

Launch day probability of violating launch weather constraints: 20%

Primary concern(s): Liftoff Winds

Delay day probability of violating launch weather constraints: <10%

**Primary concern(s):** Liftoff Winds

**Sunrise**: 16/0656 EDT 17/0655 EDT Sunset: 16/1949 EDT 17/1949 EDT

 Moonrise:
 16/0733 EDT 17/0815 EDT
 Moonset:
 16/2036 EDT 17/2139 EDT
 Illumination:
 1% 3%

Next forecast will be issued: 15 April 2018