



Launch Mission Execution Forecast

Vehicle: Falcon 9 Dragon CRS-15

Issued: 28 June 2018/1030 EDT (1430 UTC)

Valid: 29 June 2018/0542 EDT (0942 UTC)

Synoptic Discussion: Westerly winds will keep the sea breeze pinned much closer to the Space Coast this afternoon and storms that develop inland will also migrate towards the Spaceport. An upper-level shortwave trough is moving slowly into northern Florida, bringing added instability and a slight risk for isolated strong storms. This trough may also cause the storms to last longer into the evening than the previous few days. Still, there is only a slight weather concern that cumulus or anvil clouds will linger into the launch window. Upper-level winds will be light with maximum speeds from the west at 20 knots near 37,000 feet.

During the day Friday, upper levels will begin to dry, lowering storm chances along the Space Coast. Over the remainder of the weekend, the ridge axis will begin to move back north, allowing a boundary to push into the area. The main launch weather concern Sunday is thick clouds associated with this boundary. Maximum upper-level winds will be from the north at 35 knots near 40,000 feet.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Stratocumulus	Scattered	2,500	4,000
Cirrostratus	Scattered	28,000	30,000

Weather:	None	Solar Activity:	Low
Surface Visibility:	7 miles	Pressure:	30.02 inHg
Liftoff Winds (MPH):	230° @ 8-12 (200')	RH:	92%
Temperature:	76°F		

Launch day probability of violating launch weather constraints: 10%
Primary concern(s): Cumulus Cloud Rule, Anvil Cloud Rule

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

Sunrise:	29/0628 EDT 30/0628 EDT 1/0629 EDT	Sunset:	29/2024 EDT 30/2024 EDT 1/2024 EDT
-----------------	--	----------------	--

Moonrise:	28/2052 EDT 29/2137 EDT 30/2220 EDT	Moonset:	29/0738 EDT 30/0829 EDT 1/0921 EDT	Illumination:	98% 95% 90%
------------------	---	-----------------	--	----------------------	-------------------

Next forecast will be issued: As Required