



Launch Mission Execution Forecast

Vehicle: Falcon 9 Dragon CRS-10

Issued: 17 Feb 2017 1300UTC (0800EST)

Valid: 18 Feb 2017 1501UTC (1001EST)

Synoptic Discussion: Cold temperatures this morning will quickly give way to a beautiful, sunny day over the Space Coast. Also today, an upper-level trough generating clouds and precipitation over the central Gulf of Mexico is slowly moving east and strengthening. On Saturday, this upper-level trough will bring moisture over the Florida peninsula. The clouds and isolated rain will steadily progress eastward through the day, although the most significant weather will not make it to the Spaceport until after the launch window. The primary weather concern for launch is the thick cloud cover associated with the upper-level trough. Maximum upper-level winds will be from the southwest at 110 knots at 35,000 feet.

On Sunday the cloudiness and rain associated with the upper-level trough will continue to slowly move east, diminishing through the countdown. The main weather concern will be cumulus clouds associated with lingering instability. Max upper-level winds will be northwesterly at 80 knots near 34,000'.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Stratocumulus	Few	3,000	6,000
Alto cumulus	Scattered	15,000	18,000
Cirrostratus	Broken	28,000	30,000

Weather: None	Solar Activity: Low
Surface Visibility: 7 miles	Pressure: 30.06 inHg
Liftoff Winds (MPH): 170° @ 10 P15 (200')	RH: 64%
Temperature: 70°F	

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

Delay day probability of violating launch weather constraints: **30%**
Primary concern(s): Cumulus Cloud Rule, Flight Through Precipitation

Sunrise: 18/0658 EST
19/0657 EST

Sunset: 18/1815 EST
19/1816 EST

Moonrise: 18/0029 EST
19/0120 EST

Moonset: 18/1146 EST
19/1226 EST

Illumination: 50%
42%

Next forecast will be issued: As Required