

Launch Mission Execution Forecast

Vehicle: Falcon 9 Telstar-18V

Issued: 8 Sep 18: 1130 EDT(1530 UTC)

Valid: 9 Sep 18: 2328-10/0328 EDT (10/0328-0728 UTC)

Synoptic Discussion: A final day of easterly flow across Central Florida will allow the east coast sea breeze to move inland rapidly, making the primary afternoon thunderstorm risk along the western third of the peninsula. Winds will become southwesterly Sunday as a frontal boundary pushes into the Southeast. This will keep the sea breeze pinned closer to the Space Coast and make afternoon and evening thunderstorms more likely over the Spaceport. The launch weather concerns are cumulus and thick clouds lingering over the area from the day's convection. Max upper-level winds will be southwesterly at 20 knots at 38,000 feet.

On Monday, the frontal boundary will make its way into the Gulf Coast States, keeping the winds southwesterly, which will make the day's thunderstorm activity favor the eastern areas of Central Florida. The primary weather concerns remain thick and cumulus cloud rules remaining from the evening storms. Maximum upper-level winds will be from the southwesterly at 50 knots near 40,000 feet.

| <u>Clouds</u> | Coverage | Bases (feet) | Tops (feet) |
|---------------|-----------|--------------|-------------|
| Cumulus | Scattered | 3,000 | 8,000 |
| Altostratus | Scattered | 12,000 | 16,000 |
| Cirrostratus | Broken | 25,000 | 28,000 |

Weather: Isolated Showers

Surface Visibility: 7 Miles Solar Activity: Low

Liftoff Winds (MPH): 180° @ 10-15 (200') **Pressure:** 29.91 inHg

Temperature: 77°F RH: 85%

Launch day probability of violating launch weather constraints: 40%

Primary concern(s): Thick Cloud Layer Rule, Cumulus Cloud Rule

Delay day probability of violating launch weather constraints: 40%

Primary concern(s): Thick Cloud Layer Rule, Cumulus Cloud Rule

Moonrise: 9/0649 EDT 10/0754 EDT | **Moonset**: 9/1953 EDT 10/2033 EDT | **Illumination**: 0% 1%

Next forecast will be issued: As Required