

Launch Mission Execution Forecast

Vehicle: Falcon 9 ZUMA Issued: 7 Jan 2018/1400 EST(1900 UTC) Valid: 7 Jan 2018/2000 – 2200 EST (8/0100-0300 UTC)

<u>Synoptic Discussion</u>: Winds across the Space Coast have become northeasterly, bringing in clouds off the water. These clouds will thicken and become more prevalent after sunset and through the day tomorrow. The primary weather threat remains a slight risk of cumulus clouds developing with the onshore flow. Maximum upper-level winds will be from the northwest at 90 knots near 40,000 feet.

On Monday, weather will continue to deteriorate as the next frontal system approaches the Panhandle. Winds will become southeasterly and showers will become widespread as the atmosphere destabilizes. The primary weather concerns for Monday remain the cumulus cloud rule and thick cloud layers rule. Maximum upper-level winds will be from the southwest at 95 knots near 40,000 feet.

| <u>Cloud</u> | <u>Clouds</u> | | <u>Coverage</u> | | eet) | Tops (feet) | | |
|---|----------------------------------|---------------------|-----------------|--|------|--------------------------|-------------------|-----|
| | | | tered tered | 3,000 22,000 | | | 8,000 25,000 | |
| Surface Vis Liftoff Winds | | 7 Miles 070° @ 2 | 0 P25 (200 | | | Low 30.35 inHg 75% |) | |
| Launch day probability of violating launch weather constraints: 10% Primary concern(s): Cumulus Cloud Rule | | | | | | | | |
| Delay day probability of violating launch weather constraints:Primary concern(s):Cumulus Cloud Rule and Thick Cloud Layers Rule | | | | | | | | 30% |
| Sunrise: | 7/0716 E 8/0716 E | - | Sunset: | 7/1742 EST 8/1743 EST | | | | |
| Moonrise: | 6/2254 E 7/2352 E 9/0048 E | EST | Moonset: | 7/1134 EST 8/1210 EST 9/1246 EST | IIIu | imination: | 63% 50% 42% | |
| Next forecast will be issued: | | | s Required | | · | | | |