

Launch Mission Execution Forecast

Vehicle: Atlas V AV-063 MUOS-5

Issued: 22 June 2016/1200Z (0800 EDT) **Valid:** 24 June 2016 / 1430Z – 1514Z **Launch Weather Team:** (321) 853-8484

Synoptic Discussion: Favorable weather continues through launch as high pressure persists over Central Florida with a morning coastal shower threat. Moisture trends up tomorrow (Thursday) with an in-flux of moisture from the south. With the increase in moisture, isolated showers and thunderstorms are possible near the coast by late morning as the seabreeze develops and migrates to the interior by early to mid-afternoon. For MLP Roll Thursday, light southerly to southwesterly winds are expected through the roll period. By late morning and with diurnal heating, winds become on-shore as the seabreeze develops and serves as a focus for showers with a low threat of isolated thunderstorms near the coast before transitioning inland by early to mid-afternoon. On launch day, similar conditions persist with isolated coastal showers during the count. By late morning and early afternoon, showers and isolated thunderstorms develop near the coast then migrate inland with the seabreeze early to midafternoon. Light southerly to southwesterly winds during the count become southerly during the window with gusts in the 10 to 12 kt range (230'). Concerning solar weather, there is a low threat of proton or electron flux exceeding constraints through the launch opportunities. The primary concern for launch is Cumulus Clouds. Thunderstorms are possible after the window with afternoon and evening thunderstorms favoring the interior. In the event of a 24-hour delay, similar conditions are expected. The primary concern for a 24-hour delay is Cumulus Clouds.

<u>Clouds</u>	<u>Coverage</u>	Bases (feet)	Tops (feet)
Cumulus	Scattered	3,000	15,000
Cirrostratus	Scattered	30,000	33,000

Weather: Isolated Showers

Visibility: 7 miles Solar Activity: Low

Wind: 180° @ 08-12 KT (230') Pressure: 30.09INS

Temperature: 83° - 84° F **RH:** 80%

Launch day overall probability of violating weather constraints: 20%

Primary concern(s): Cumulus Clouds

24-hour delay overall probability of violating weather constraints 20%

Primary concern(s): Cumulus Clouds

23/0626 EDT 23/2023 EDT

Sunrise: 24/0626 EDT 25/0626 EDT 24/2024 EDT 25/2024 EDT

22/2211 EDT 23/0924 EDT 23 June 92% **Moonrise:** 23/2256 EDT **Moonset:** 24/1022 EDT **Illumination**: 24 June 86%

23/2256 EDT **Moonset:** 24/1022 EDT **Illumination**: 24 June 86% 24/2339 EDT 25/1122 EDT 25 June 78%

Next forecast will be issued: 23 June 2016, 0800 EDT