



Launch Mission Execution Forecast

Vehicle: Atlas V AV-076 SBIRS GEO Flight-4

Issued: 17 January 2018 / 1300Z (0800 EST)

Valid: 19 January 2018 / During Window (UTC)

Launch Weather Team: (321) 853-8484

Synoptic Discussion: A relatively dry cold front pushes into Central Florida today. The pressure gradient tightens this afternoon and evening with strengthening winds. For MLP Roll this morning, the weather is favorable with north-northwest winds peaking in the mid-teens (230 ft) during the roll period. Winds trend up during the afternoon and become breezy late evening with peaks in the mid to upper 20s (230 ft). There is a slight threat of an isolated shower; no lightning is expected. On launch day, high pressure with favorable weather persists with cold morning temperatures. Winds remain elevated from the north overnight through mid-morning with peaks in the mid to upper 20s (230 ft) and low to mid-20s by late morning. Through the afternoon, winds become from the north and continue to trend down with peaks in the mid to upper teens during the window. There is a slight threat of an isolated shower. Concerning solar weather, there is a low threat of proton flux exceeding constraints. The primary concern for launch is Cumulus Clouds coming in off the Atlantic. In the event of a 24 hour delay, the pressure gradient relaxes as high pressure builds into the peninsula. Winds continue to trend down becoming from the north-northeast with peaks in the low to mid-teens during the window. There is a slight threat of an isolated shower. The primary concern for launch is Cumulus Clouds.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Cumulus	Scattered	2,500	5,000
Cirrostratus	Scattered	30,000	32,000
Weather: Isolated Coastal Showers			
Visibility: 7 miles		Solar Activity: Low	
Wind: 360° @ 12-16 KT (230')		Pressure: 30.30INS	
Temperature: 49° - 50° F		RH: 85%	

Launch day overall probability of violating weather constraints: 10%

Primary concern(s): Cumulus Clouds

24-hour delay overall probability of violating weather constraints: 10%

Primary concern(s): Cumulus Clouds

Sunrise:	17/0716 EST	Sunset:	17/1750 EST		
	18/0716 EST		18/1750 EST		
	19/0716 EST		19/1751 EST		
Moonrise:	17/0734 EST	Moonset:	17/1831 EST	Illumination:	17 Jan 0%
	18/0815 EST		18/1924 EST		18 Jan 1%
	19/0855 EST		19/2017 EST		19 Jan 4%

Next forecast will be issued: As Required