

Launch Mission Execution Forecast

 Mission:
 Falcon 9 Starlink 6-13

 Issued:
 30 Aug 2023 / 0930L (1330Z)

 Valid:
 31 Aug 2023 / 1931 – 2330L (31/2331 – 01/0330Z)



Forecast Discussion: Major Hurricane Idalia made landfall earlier this morning in the Big Bend region along Florida's Gulf coast. It will continue to move quickly off to the northeast into South Georgia and the coastal Carolinas over the next 24 hours. The Spaceport will continue to see squally weather through the remainder of today, with conditions gradually improving into this evening.

Conditions will ease overnight as Idalia pulls away, dragging a trailing trough behind it into the Central Peninsula into Thursday. This feature will provide the focus for activity going into the day on Thursday, especially as Idalia merges with a frontal boundary across the southeastern US and shoves it into the vicinity of the Spaceport late in the day. Though showers and storms will be possible at any point, more daytime heating will bring a maximum of activity in the late afternoon, with west-southwest flow focusing any ongoing activity towards the coast into the evening hours. Where exactly the boundary sets up along with any other trailing bands behind the storm will determine exactly how long showers and storms may be ongoing late Thursday evening and into the primary launch window. A decrease in activity is expected, but the possibility of a combination of showers/debris clouds/anvil lingering through much of the window can't be ruled out.

Idalia is expected to curve off the Carolina coast very slowly on Friday, with disagreement on how quickly this maneuver can pull the front through and bring drier air. For now, the forecast calls for the trailing front to linger, with another round of afternoon and evening storms into the backup window Friday afternoon and evening. However, with drier air on the doorstep and less upper level support, it is expected that activity will wane much more quickly than on Thursday.

Launch Day	Probability of Violating Weather Constraints ¹								
	80%→40% Primary Concerns: Surface Electric Fields Rule, Cumulus Cloud Rule, Anvil Cloud Rules								
	Weather Conditions						Additional Risk Criteria ²		
	Weather/Visibility: Sct St	torms / 6 mi.	Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low	
	Temp/Humidity: 82°F /	/ 83%	Cumulus	Broken	2,500	14,000	Booster Recovery Weather:	Low	
	Liftoff Winds (200'): 220° 5	5 - 10 mph	Altostratus	Overcast	12,000	24,000	Solar Activity:	Low	
	Probability of Violating Weather Constraints								
24-Hour Delay	60%→30% Primary Concerns: Anvil Cloud Rules, Surface Electric Fields Rule, Cumulus Cloud Rule								
	Weather Conditions					Additional Risk Criteria			
	Weather/Visibility: Sct St	torms / 6 mi.	Туре	Clouds Coverage	Base (ft)	Tops (ft)	Upper-Level Wind Shear:	Low	
	Temp/Humidity: 80°F /	/ 80%	Cumulus	Broken	2,500	12,000	Booster Recovery Weather:	Low	
	Liftoff Winds (200'): 040° 10 - 15 mph		Altostratus	Broken	19,000	24,000	Solar Activity:	Low	
tes	 The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each ris 								
Ň	See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information								
Next	Next Forecast Will Be Issued As Needed								