Launch Mission Execution Forecast

Mission: Falcon 9 Starlink 10-38
Issued: 30-Apr-26 / 1300L (1700Z)
Valid: 01-May-26 / 1333 – 1733L (1733 – 2133Z)
02-May-26 / 1310 – 1710L (1710 – 2110Z)

Forecast Discussion: A ridge axis over the Gulf will slowly migrate eastward into the Atlantic on today, as a frontal boundary pushes into southern Georgia and the Florida Panhandle. Over the Spaceport, warmer temperatures and westerly flow will continue for the end of the week before the frontal passage early Sunday morning. For the launch window on Friday, showers may develop along the sea breeze which will be pinned to the coastline due to offshore flow. The Cumulus Cloud Rule will be the primary concern with sea breeze development, with secondary Thick Cloud Layers Rule concerns due to the boundary proximity to the north.

On Saturday, a low-pressure center will develop along the Carolina Coastline and drag a cold front across central Florida overnight into Sunday morning. Increased winds and showers with embedded thunderstorms are possible along the boundary. Ahead of the front, sea breeze-enhanced shower development is possible during backup opportunity, making the Cumulus Cloud Rule the primary concern toward the beginning of the window, with increased probability for thick clouds as upper-level moisture increases later in the window. Prefrontal winds will also be elevated, causing slight concern for liftoff winds.

Launch Day

Probability of Violating Weather Constraints[1]

20%

Primary Concerns: Cumulus Cloud Rule , Thick Cloud Layers Rule

Weather Conditions

Weather/Visibility:	Isol Showers / 7+ mi
Temp/Humidity:	84°F / 65%
Liftoff Winds (200'):	120° 10 - 15 mph

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Scattered	4,000	15,000
Altocumulus	Scattered	22,000	27,000

Additional Risk Criteria[2]

Booster Recovery Weather:	Low
Solar Activity:	Low

24-Hour Delay

Probability of Violating Weather Constraints[1]

20%→40%

Primary Concerns: Cumulus Cloud Rule , Thick Cloud Layers Rule , Liftoff Winds

Weather Conditions

Weather/Visibility:	Sct Showers / 7+ mi
Temp/Humidity:	89°F / 60%
Liftoff Winds (200'):	230° 24 - 28 mph

Clouds

Type	Coverage	Base (ft)	Tops (ft)
Cumulus	Scattered	4,000	18,000
Altostratus	Broken	20,000	28,000

Additional Risk Criteria

Booster Recovery Weather:	Low
Solar Activity:	Low

Notes

1. *The Probability of Violation (PoV) is the chance of a range or customer constraint violation occurring at any random time during the launch window.*
2. *Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.*

See Launch FAQ https://45thweathersquadron.nebula.spaceforce.mil/pages/launchForecastSupport.html ***for more information***

Next Forecast Will Be Issued	As Required