



## STS-130 Launch Weather Forecast

**Vehicle:** STS-130, Endeavour / ISS Node 3 / Cupola  
**Issued:** 5 February 2010 / 1215Z (0715 EST)  
**Valid:** 7 February 2010 / 0934 – 0945Z (0434 – 0445 EST)  
**Launch Weather Team:** (321) 853-8484

**Synoptic Discussion:** A low pressure system is impacting the Gulf Coast with an associated cold front stretching into the Gulf of Mexico. A line of showers and thunderstorms is evident with the front. Kennedy Space Center (KSC) winds are from the southeast and are currently gusting over 20 knots at Complex 39A, and will continue to increase through the day. Tonight, the line of storms in the Gulf will move through Florida with the cold front causing showers and thunderstorms in the KSC area. By Saturday morning, there will be lingering clouds and light precipitation, but the weather will improve through the day. By launch time, winds will still be gusty from the northwest, but should stay below the launch and abort landing wind constraints. **Our primary concern for launch is wind at complex 39A.** The pressure gradient decreases on Monday and the winds decrease; therefore, the only concern for weather Monday and Tuesday is a chance for a low-cloud ceiling.

<u>Clouds</u>	<u>Coverage</u>	<u>Bases (feet)</u>	<u>Tops (feet)</u>
Stratocumulus	1/8 Few	3,000	3,400
<b>Weather:</b>	None		
<b>Visibility:</b>	7 miles		
<b>Wind:</b>	330 @ 13 Peak 20 Knots (60 foot pad winds)		
<b>Temperature:</b>	48°F	<b>RH:</b> 74%	<b>Dewpoint:</b> 40°F

<b>Probability of KSC weather prohibiting launch:</b>	<b>20%</b>
<b>Probability of KSC weather prohibiting tanking:</b>	<b>0%</b>
<b>Primary concern(s):</b> Launch pad winds	
<b>Probability of KSC weather prohibiting launch for 24-hour delay:</b>	<b>20%</b>
<b>Probability of KSC weather prohibiting tanking:</b>	<b>0%</b>
<b>Primary concern(s):</b> Low-cloud ceiling	
<b>Probability of KSC weather prohibiting launch for 48-hour delay:</b>	<b>20%</b>
<b>Probability of KSC weather prohibiting tanking:</b>	<b>5%</b>
<b>Primary concern(s):</b> Low-cloud ceiling	

<b>Sunrise:</b>	7/0707 EST	<b>Sunset:</b>	7/1807 EST	
	8/0706 EST		8/1808 EST	
	9/0705 EST		9/1809 EST	
<b>Moonrise:</b>	7/0215 EST	<b>Moonset:</b>	7/1239 EST	<b>Illumination:</b> 7 Feb: 33%
	8/0313 EST		8/1330 EST	8 Feb: 24%
	9/0401 EST		9/1424 EST	9 Feb: 16%

**Next forecast will be issued:** As needed