

AVE Met Briefing
Sunday, November 7, 2004
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Ames AVE forecasting page is
<http://bocachica.arc.nasa.gov/AVE/Forecasting.html>

SUMMARY

Today

This morning upper level cloudiness and moisture have been streaming into north central Texas from the ridge extending into central Colorado and a second band of subtropical moisture pushing in across southern New Mexico.

Monday and Tuesday

The GFS cloud fraction plots (cf. http://bocachica.arc.nasa.gov/AVE/rh_omega_plots.html) for Monday afternoon and Tuesday evening show total cloudiness overspreading most of Texas and into the Deep South and then into the plains generally as if forecasts the slow-moving cutoff low to move NNE to neighborhood of Grand Junction, CO by 00Z. If this verifies, this cloudiness would affect the more western AURA track on Monday and potentially could affect the more eastern track on Tuesday, particularly the south end over the central Gulf. However, as per the Houston forecast discussion (see below), the GFS seems to be wetter and moving the cutoff low and its associated weather rather more aggressively than the other models.

At lower levels, the weak cold front will tend to clear out the low levels over the Gulf on Monday and Tuesday.

Below are the current NWS forecasts:

Southeast Texas Zone Forecast
National Weather Service Houston/Galveston TX
430 AM CST Sun Nov 7 2004

<http://www.srh.noaa.gov/hgx/productview.php?pil=HGXFPHGX&version=0>

Today	Partly cloudy. Highs in the lower 80s. SW winds 5 to 10 mph
Tonight	Partly cloudy. Lows in the lower 50s. N winds to 10 mph.
Monday	Partly cloudy. Highs in the mid 70s. NE winds 5-10 mph.
Monday night	Partly cloudy. Lows in the upper 40s. NE winds 5-10 mph.
Tuesday	Partly cloudy. Highs in the lower 70s. NE winds 5-10 mph..
Tuesday night	Partly cloudy. Lows in the upper 40s.
Wednesday	Partly cloudy with a 20% chance of showers and thunderstorms. Highs in the mid 70s.
Wednesday night	Mostly cloudy with a 20% chance of showers and thunderstorms. Lows in the upper 50s.
Veterans day	Mostly cloudy with a 30% chance of showers and thunderstorms. Highs in the upper 60s.
Thursday night	Partly cloudy with a 20% chance of showers in the evening. Lows in the upper 40s.
Friday	Partly cloudy. Highs in the upper 60s.
Friday night	Partly cloudy. Lows in the upper 30s.
Saturday	Partly cloudy. Highs in the lower 60s.

Area Forecast Discussion

National Weather Service Houston/Galveston TX

0530 AM CST Sun Nov 7 2004

<http://www.srh.noaa.gov/hgx/productview.php?pil=HGXAFDHGX&version=0>

Not many changes to ongoing forecast. Still looks like we'll get a little drier air filtering into the area Monday and Monday night behind a weak frontal boundary. Still some model differences as to the extent of moisture return and when onshore flow will set up in advance of the next stronger front still penciled in for Thursday. GFS tries to bring 1.5" precipitable waters and some precip along the old frontal boundary/warm front on Wednesday and none along the front on Thursday. Best ETA can do is around 1" on Wednesday. Going to trend this forecast toward drier ETA for now because GFS also looks way too progressive regarding the movement of the cutoff low/trof later in the week (ECMWF...Canadian...ensembles and climatology support slower movement).

So overall...low end PoPs ahead of the front Wednesday/Thursday. Then below normal temps through the weekend. Cloud cover & PoPs depend on position of the trof out west. Again...prefer slower movement so will hold off mentioning anything till Sunday at the earliest.

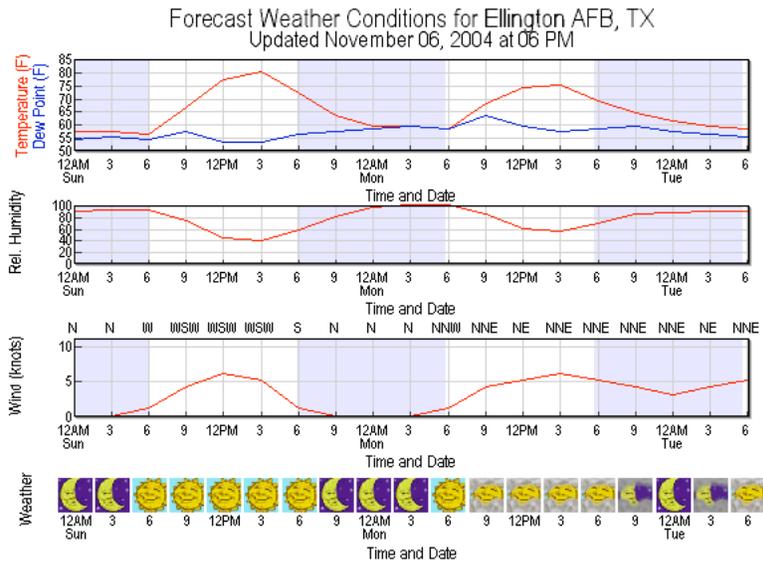
Aviation...

Ground fog occurring this morning in rural areas with Bay City and Wharton sites down below 5sm. Will keep TEMPO group in for KLBX early this morning. Scattered low clouds have formed along the coast but expect these to dissipate by 16Z. Forecast model soundings and cross sections are slightly more favorable for fog Sunday night. However...still think fog will be shallow and confined to rural areas. Will put fog in KLBX TAF but confidence too low elsewhere.

Marine...

Winds picked up a little bit overnight but expect speeds to decrease after sunrise as surface high settles over the waters. Weak cold front will cross the coastal waters early Monday...resulting in NE winds for the first part of the week. Went with GFS solution as think there will be enough pressure gradient to bring winds up to around 15 knots late Monday/Tuesday. So speeds will be increased in CWF Monday night/Tuesday and direction will be changed from south to northeast. Brief period of return flow expected Wednesday. Will bring strong cold front across the waters Thursday afternoon...still a little slower than GFS solution..

Ellington Forecast from the Weather Underground



[This graphic pasted from <http://www.wunderground.com/MOS/DisplayMOS.asp?AirportCode=KEFD&SafeCityName=Ellington&StateCode=TX>]