



A Weather-Ready Nation

HAPA Project Report

Volume 3, Issue 7, January 18, 2017

Disclaimer

This is an EXPERIMENTAL project report based on the Hovmoller Analysis and Prognostics Approach (HAPA) conducted at the WFO New Orleans/Baton Rouge Forecast Office (WFO LIX). This report is a means of bringing situational awareness to large scale events and potential impacts that may require decision support or emergency response activities in the foreseeable future. This project is NOT a long range forecast product for day-to-day conditions. HAPA is an interpretative method of integrating established numerical model guidance, climatological and earth systems monitoring and subject matter expertise from various sources to provide an outlook to potential weather hazards in the 8 to 60 day range. The intended audience of this report is media, NWS partners, stakeholders, and the general public. **Users must refer to the latest official NWS forecasts and outlooks for any decision-making activities.**



WFO New Orleans/Baton Rouge, LA

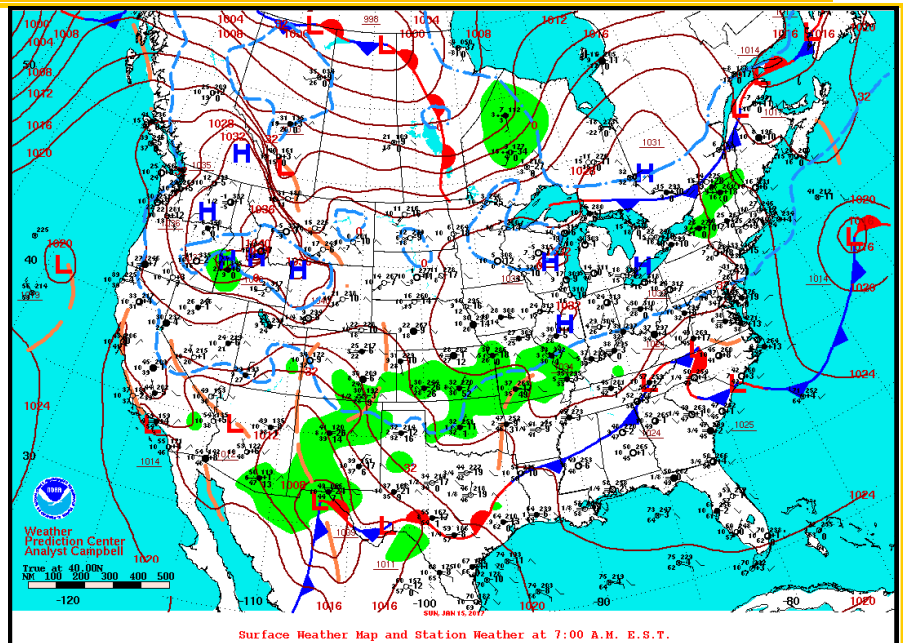
Anatomy of an Ice Storm

In the last HAPA report, there was a mention for potential winter weather in the southern states on or around January 16th. This was not too bad of a forecast with a 24 day lead time in that much of the impactful weather occurred on the 15th and spilled over into the 16th, and the area of impact was farther north in the colder air bottled up over the Plains States.

So what did happen? An Arctic air mass pushed out of Canada into the central and southern United States. The cold air modified and retreated northward to the central Plains States and the Tennessee

Valley. Warm gulf air covered the Gulf States from Texas through Florida. Meanwhile, a strong storm system moved out of the Desert Southwest into the Plains States and caused precipitation that fell in the form of sleet and freezing rain in a rather wide swath where surface temperatures were just below freezing. The hardest hit areas extended from western Kansas through Missouri where most surfaces were ice-coated. The weather caused the NFL to reschedule the AFC Divisional Playoff game start time from noon to the evening hours in Kansas City to stay out of the icy conditions for the safety of the fans arriving at the stadium.

The Hovmoller approach is unable to determine with minimal degree of certainty, what type of weather would occur, but does offer a pattern recognition opportunity that can be conditioned on whether temperatures are adequate to support wintry weather results. Additionally, severe weather did occur in the warm air across Texas on the 15th and continuing into the 16th, when damaging winds and a weak tornado touched down in the greater Houston area, resulting in some minor property damage.



Outlooks and dates for consideration

Jan 21 [3 days out]: In the official forecast window, but this does appear to be a severe weather potential, as mentioned as early as 24 days out.

Jan 26 [8 days out]: Another period of inclement weather with a system the moves across the Gulf South.

Feb 03 [16 days out]: A shot at cold weather as a strong cold front sweeps through the nation.

Feb 05 [18 days out]: Super Bowl Sunday looks to be weather-free across the Gulf States, with host city, Houston TX likely to have partly cloudy skies and mild to warm temperatures, based on latest assessments.

Feb 11 [24 days out]: The first weekend of the parade season—with 5 walking or boat parades on tap. There could be some weather to possibly influence the actual roll times of some of these events.

Feb 17-19 [30-32 days out]: The full weekend of parades about the New Orleans metro area appear to be weather-free at this time.

Feb 22 [35 days out]: Two parades scheduled on this date may some weather impacts to consider, as a weather system may move through the region on this date. The other parade days through Bacchus Sunday do not have any indications of impactful weather at this time.

Feb 27 [40 days out]: Lundi Gras may be a wet day with some storminess around the region.

Mardi Gras [41 days out]: Currently appears any weather impacts from Lundi Gras would move out of the area for a cool but fair weather day.

A more detailed, technical explanation of these outlooks are available upon request to the e-mail address below.

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January 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

Next report is scheduled for Feb 2, 2017.

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