



A Weather-Ready Nation

HAPA Project Report

Volume 3, Issue 4, November 12, 2016

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.**



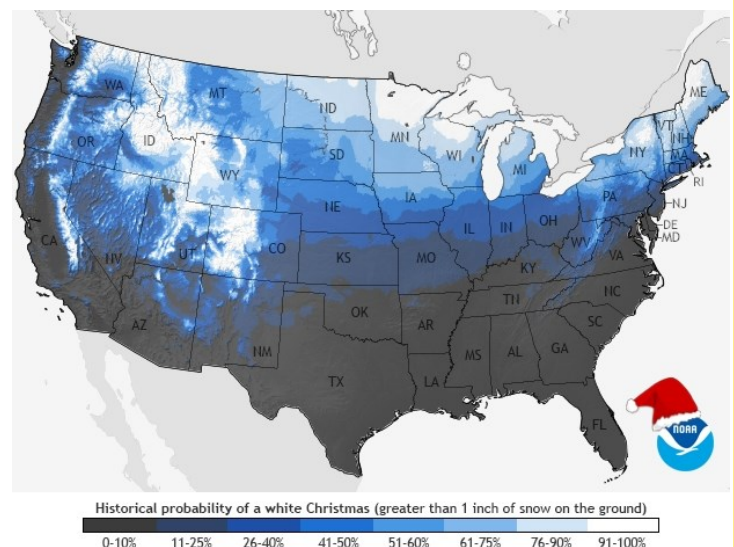
WFO New Orleans/Baton Rouge, LA

Outlook does offer opportunity for White Christmas in some places

There was a great deal of rearranging of furniture in the office and we are finally getting back to normal, so this latest report is about a week tardy. Since last report, we managed to get through the Thanksgiving Weekend without too many weather issues locally. There were, however, some travel delays at some of the aviation hub cities due a storm system that moved through the Midwest States, but these were relatively minor and mitigated pretty easily. Some severe thunderstorm activity did erupt on the 29th, with an isolated tornado touching down and causing damage in the metro New Orleans west bank area of Westwego. Most notable on a national scale was the devastating and catastrophic wildfires that sweep through portions of the Tennessee Great Smoky Mountains National Park and the Gatlinburg, TN area. A strong storm system was producing strong winds 40 to 50 mph with gusts as high as 87 mph aided in the rapid spread of the fires, along with on-going dryness and drought conditions during the pre-dormancy season. The fire was initially reported to start on November 23rd, but really raced through the area with the high winds that occurred on the 28th and 29th.

Looking ahead to the holiday season, there is a some indications of perhaps a few locations possibly seeing a white Christmas this year, maybe as far south as the Gulf States, but confined to the northernmost tier of counties of Mississippi, Alabama into Tennessee.

The technique does not offer much in the way of determining how cold an air mass may actually be or if it will be cold enough to even snow. But the technique does key on pattern recognition for the type of weather system needed to produce snow. So with the caveat that if temperatures are cool enough to support snow generation, then the weather system should be capable of generating some snow flurries and light accumulations. The image to the right is the climatological probabilities of experiencing a White Christmas across the United States. Could some areas exceed this expectation this year? Time will tell.



Outlooks and dates for consideration

Dec 12 [4 days out]: This feature is in the official forecast timeframe, but could have some impactful weather in the southeast U.S. as a storm system develops in the Plains States and draws gulf moisture northward. Should not be too out of hand, but could have some spotty strong to severe thunderstorms and maybe some sea fog issues closer to the gulf coast as an Arctic air mass will be flushing out prior to the system's arrival.

Dec 14 [6 days out]: Could be some winter weather impacts in the central Plains and Midwest States.

Dec 20 [12 days out]: Another storm system may bring renewed winter weather impacts into the middle and eastern parts of the nation just prior to the winter solstice.

Dec 25 [17 days out]: Not too many weather impacts are expected for this holiday, but a subtle feature may bring some seasonal light flurries and low end accumulations to the Tennessee Valley and the northern portions of the Gulf States.

Dec 30 [23 days out]: An indication for some colder than normal air along with some energy in the southern states that could be problematic on or around this date for the Gulf States.

Jan 02 [26 days out]: Another winter storm system that should impact the middle tier of states.

Jan 08 [31 days out]: The first in a series of strong cold fronts that could place a large portion of the country east of the Rockies in below normal temperatures. Same can be said for two other systems projected to pass through the nation on **Jan 15 [38 days out]** and **Jan 23 [46 days out]**.

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

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December 2016

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

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				

Next report is scheduled for December 21st to look at the Holiday stretch one last time, and to peek into the early days of 2017.

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