

National Weather Service Product Description Document (PDD) Google Maps™ for Polygon-based Warnings

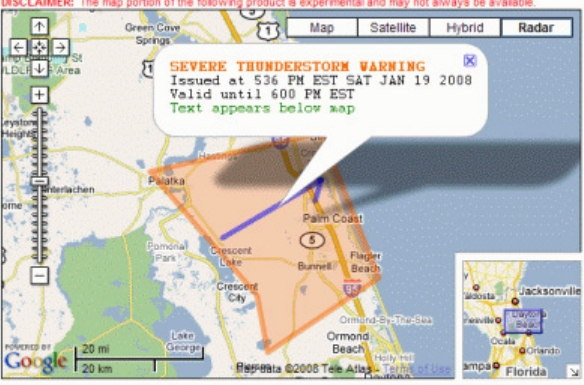
Part 1 - Mission Connection

1. Product Description: NWS has the responsibility to make its weather, water, and climate information widely available to taxpayers using commonly accepted standards and technologies. Currently, the NWS provides warning information for all NWS county warning areas on the NWS Internet pages.

The National Weather Service Southern Region and the National Weather Service Offices in Jacksonville, FL, and Miami, FL, have developed a method to display warning polygon information on Google Maps™ enabled pages. These pages allow users to see areas covered by warnings, as well as zoom to road level and overlay radar data. In addition, warning text is displayed beneath the map with coding information removed.

The following is an example image with associated descriptions:

DISCLAIMER: The map portion of the following product is experimental and may not always be available.



SEVERE THUNDERSTORM WARNING
Issued at 536 PM EST SAT JAN 19 2008
Valid until 600 PM EST
Text appears below map

SEVERE THUNDERSTORM WARNING
NATIONAL WEATHER SERVICE JACKSONVILLE FL
536 PM EST SAT JAN 19 2008

THE NATIONAL WEATHER SERVICE IN JACKSONVILLE HAS ISSUED A

- SEVERE THUNDERSTORM WARNING FOR...
EASTERN PUTNAM COUNTY IN NORTHEAST FLORIDA
FLAGLER COUNTY IN NORTHEAST FLORIDA
SOUTHEASTERN ST. JOHNS COUNTY IN NORTHEAST FLORIDA
- UNTIL 600 PM EST
- AT 535 PM EST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A SEVERE THUNDERSTORM CAPABLE OF PRODUCING DAMAGING WINDS IN EXCESS OF 60 MPH. THIS STORM WAS LOCATED NEAR ANDALUSIA...AND MOVING NORTHEAST AT 65 MPH. A TORNADO WARNING REMAINS IN EFFECT FOR AREAS NORTH OF THIS SEVERE THUNDERSTORM WARNING.
- OTHER LOCATIONS IN THE WARNING INCLUDE BUT ARE NOT LIMITED TO HASTINGS...BUNNELL...PALM COAST...FLAGLER BEACH...MARINELAND AND CRESCENT BEACH.

THIS IS A DANGEROUS STORM. IF YOU ARE IN ITS PATH...PREPARE IMMEDIATELY FOR DAMAGING WINDS...DESTRUCTIVE HAIL...AND DEADLY CLOUD TO GROUND LIGHTNING. PEOPLE OUTSIDE SHOULD MOVE TO A SHELTER... PREFERABLY INSIDE A STRONG BUILDING BUT AWAY FROM WINDOWS.

REPORT SEVERE WEATHER OR DAMAGE TO THE NEAREST LAW ENFORCEMENT AGENCY OR YOUR COUNTY EMERGENCY MANAGEMENT.

A TORNADO WATCH REMAINS IN EFFECT UNTIL 1000 PM EST SATURDAY EVENING FOR NORTHEASTERN FLORIDA.

Dynamic Google Map

The National Weather Service has begun issuing warnings defined by polygons which are drawn by NWS meteorologists to define maximum threat area. The map shown here will display the warning polygon with the shaded area defining the region under the warning. The user may use the controls on the left side of the map to zoom into an area of interest or pan the map in any direction. Panning can also be accomplished by left clicking within the map and dragging the cursor. Warning type and valid times are indicated in the information bubble. This bubble can be closed by clicking the in the upper right hand corner of the bubble. The storm motion is indicated by the blue arrow. Radar data is also overlayed on the map. This data can be removed by clicking on . It can be redisplayed by clicking on .

Warning Text

This is the actual text-based warning or statement which has been stripped of coding information and has vital warning information highlighted in red.

THIS IS AN OLD WARNING AND
IS NO LONGER IN EFFECT

2. Feedback Method: Comments will be compiled through March 1, 2008 and will be evaluated by the appropriate NWS Program Team. Feedback will be obtained through the survey which will be linked off of the office severe weather pages.

http://weather.gov/survey/nws-survey.php?code=_____

Technical or webpage architecture questions may be addressed to:
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Douglas.Gaer@noaa.gov.

Google Maps questions may be addressed to Keith.Stellman@noaa.gov.

Part 2 - Technical

1. Format and Science Basis: The polygon overlays are produced by decoding polygon vertex latitude and longitude coordinates from text statements and warnings. Radar overlays are produced from RIDGE radar KML files produced by the National Weather Service. Displaying a graphical representation of NWS warning polygons on a high quality and user-interactive base map allows better communication of valid warning areas to the public and best utilizes the new polygon warning methodology.

2. Availability: This service will be available 24 hours/day, seven days a week by visiting either <http://www.srh.noaa.gov/jax/severe> (for Jacksonville) or <http://www.srh.noaa.gov/mfl/severe.php> (for Miami). Severe thunderstorm warnings, tornado warnings, special marine warnings, flash flood warnings, and severe weather statements will have Google polygon pages which are linked from icons on the severe weather tables on each severe weather page.

3. Additional Information: This experimental service will be tested on the NWS Jacksonville and NWS Miami web pages.