

National Weather Service Fact Sheet

EMWIN in North Texas



What is EMWIN?

The Emergency Managers Weather Information Network, or EMWIN, is a service provided by the National Weather Service (NWS) and the Federal Emergency Management Agency. EMWIN is a digital broadcast of all NWS products. EMWIN's primary purpose is to provide NWS-produced information, including observations, forecasts, and warnings, to local emergency managers.

EMWIN Broadcasts

The EMWIN data stream is broadcast using three primary methods: via GOES satellite; through an internet-based network; and, in some local areas, over the air on VHF radio. Data which is broadcast on EMWIN includes the text-based products listed above, along with satellite images, weather maps, and other graphics. In areas with VHF radio broadcasts, local graphics such as lightning detection maps and radar pictures may be inserted into the data stream. The data is sent using a priority system, where watches and warnings are assigned the highest priority, routine forecast products have a medium priority, and graphics have the lowest priority. If a warning is issued while a large graphics image is being sent, the national EMWIN control program will interrupt the graphic, send the warning, then resume the graphic. As a result, high-priority products are received one to two minutes after they are transmitted.



How to Receive the EMWIN Signal

Reception of EMWIN from the GOES satellite is the most direct and reliable method, but it is also the most expensive. Satellite systems include an antenna, a receiver/demodulator, and software to decode and display the data. These systems typically cost around \$1,100, not including the display computer. If you are in range of an EMWIN radio broadcast, then you need a modified radio scanner, the demodulator, and software. Radio systems cost around \$300 (plus computer). Radio reception systems may be suitable for storm spotters and others who don't have full time access to an antenna/computer system. The map at left shows the areas of north Texas EMWIN radio coverage. The internet system does not require a demodulator or antenna, but it is subject to the interruptions and slowdowns seen with the internet in general.

Once the system of choice is set up and operational, there is no recurring subscription cost for the data. While the local emergency management community is the primary target of EMWIN, the data is public domain material and is available for use by schools, hospitals, storm spotters, and anyone with a need for weather information.

For more information on EMWIN in north Texas, visit the EMWIN web site at:
<http://www.srh.noaa.gov/fwd/emwin.html>