NOAA-5 Views Dust Storm

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A dust storm, reminiscent of the 1930s, is imaged in two successive passes of the NOAA-5 satellite on 24 February 1977. High westerly winds from the Pacific picked up dust as far west as New Mexico and swirled it as high as 4500 m over Texas. Shown in the photograph are huge concentrations over Texas and as far east as Georgia, with a tongue swinging >160 km down into the Gulf of Mexico.

The dust cloud originated from the precious top soil

of several midwestern states parched by the area's long drought. The storm continued, although later less severe, for an entire week.

The satellite sensor that detected this storm is called the Very High Resolution Radiometer (VHRR). This sensor has a spatial resolution of 1 km in the visible channel (0.6–0.7 μm) and 1 km in the infrared (10.5–12.5 μm). These types of data are available in real time to all countries of the world. The only requirement is that the user must either build or buy the necessary ground receiving equipment.

The ground station used to receive these data is called the Local User Terminal for Meteorology and is located at the Goddard Space Flight Center in Greenbelt, Md. •

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