Using AWIPS to locate a dry line
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This TA-lite will look at a dryline in eastern New Mexico and western Texas. AWIPS can display a 4-panel that can be very useful in detecting surface boundaries. In this example the 4-panel includes the 11u-12u GOES image, visible imagery, IR window imagery, and GOES total precipitable water product.

The images here are from 18Z on April 12, 1999. The **first image** shows that FST (in SW Texas) is reporting a dewpoint of 50F. At that location the cursor readout tells us that the GOES TPW is 0.671" and the 11u-12u difference is 2.5C (AWIPS multiples the difference by 2 to stretch the data).
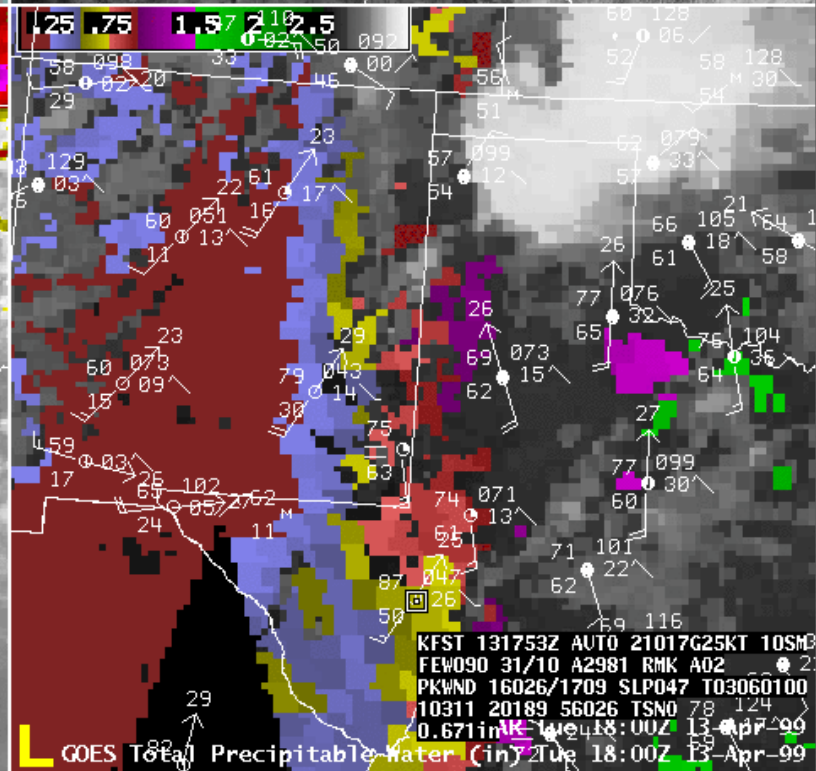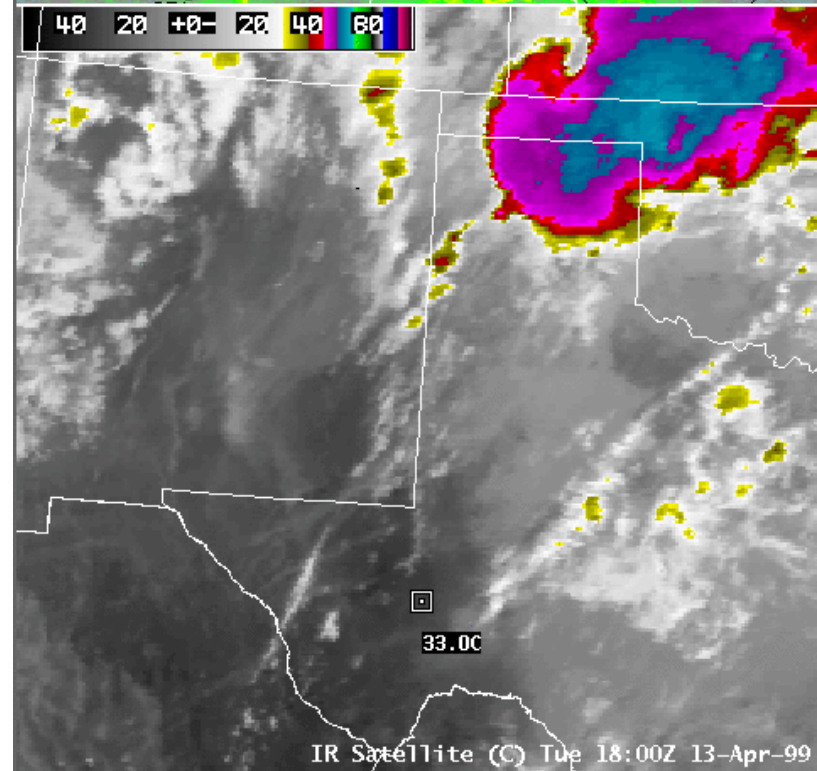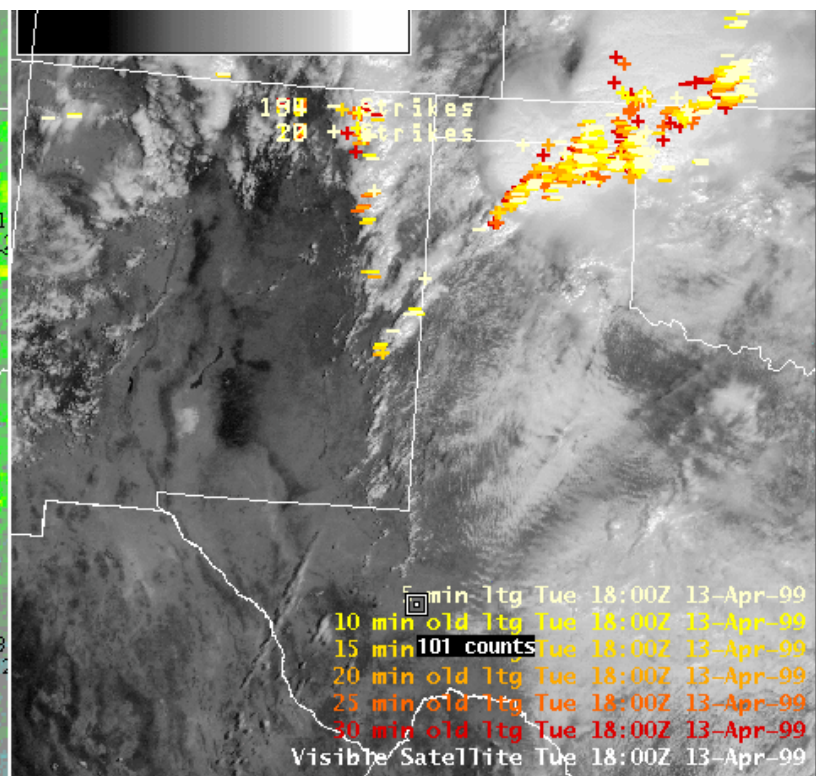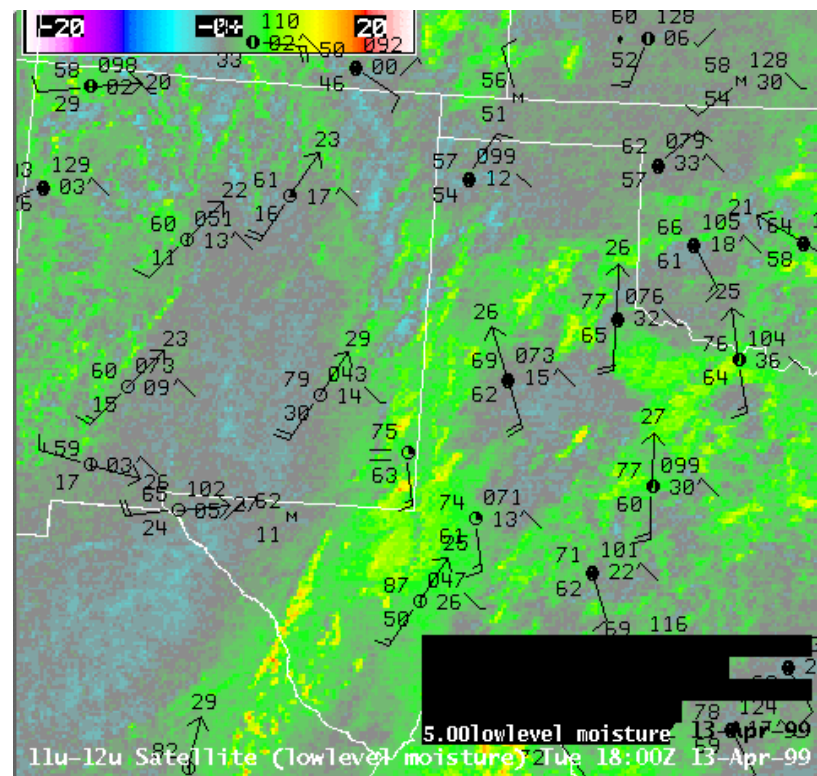
The **second image** shows that ROW (in SE New Mexico) is reporting a dewpoint of 30F. At that location the cursor readout tells us that the GOES TPW is 0.276" and the 11u-12u difference is 0.0C.

The **third image** shows that in the clear area near the Texas Panhandle the dewpoint is in the mid-60s. At that location the cursor readout tells us that the GOES TPW is 1.423" and the 11u-12u difference is 4.0C.
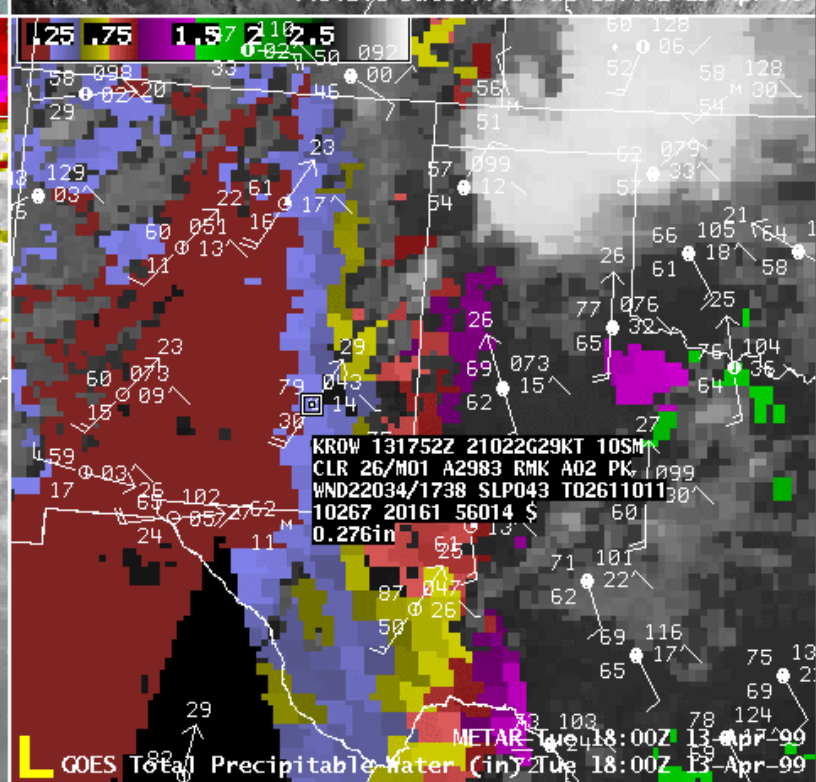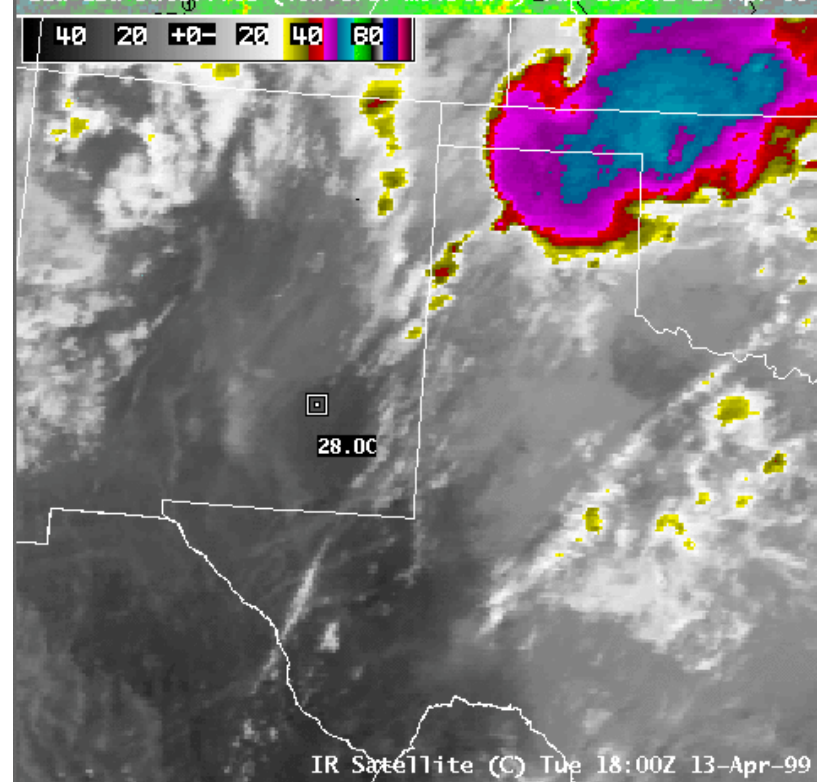
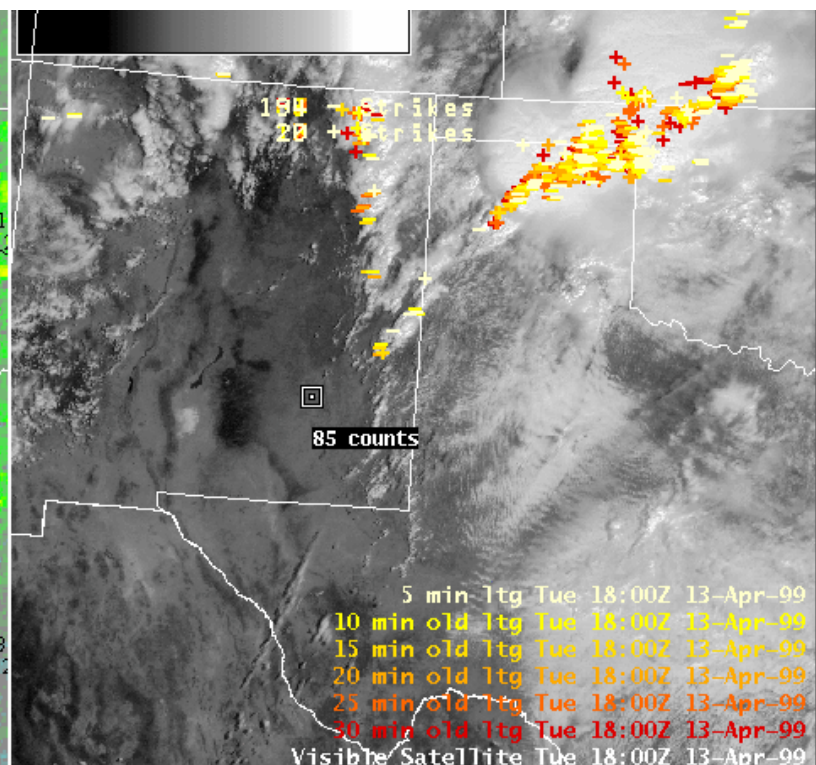This example shows that the GOES 11u-12u product can detect dry versus moist boundary layers. The GOES TPW can also be useful in detecting similar differences. The use of these satellite products with the surface data (METARs) can give a better view of the horizontal distribution of near surface moisture.

This is just a quick example to show how AWIPS makes it easy to combine satellite and surface data.

First Image:

Second Image:

Third Image:

llu-12u Satellite (lowlevel moisture) Tue 18:00Z 13-Apr-99

8.00lowlevel moisture

METAR Tue 18:00Z 13-Apr-99

199 + strikes
20 + strikes

94 counts

5 min ltg Tue 18:00Z 13-Apr-99
10 min old ltg Tue 18:00Z 13-Apr-99
15 min old ltg Tue 18:00Z 13-Apr-99
20 min old ltg Tue 18:00Z 13-Apr-99
25 min old ltg Tue 18:00Z 13-Apr-99
30 min old ltg Tue 18:00Z 13-Apr-99
Visible Satellite Tue 18:00Z 13-Apr-99

19.00

IR Satellite (C) Tue 18:00Z 13-Apr-99

NO DATA
1.423in

L GOES Total Precipitable Water (in) Tue 18:00Z 13-Apr-99

METAR Tue 18:00Z 13-Apr-99