Using AWIPS to locate a fire and smoke plume
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This TA-lite will look at a detecting fires and smoke plumes using AWIPS. AWIPS can be very useful in combining various data sets to detect fires and the associated smoke plume(s).

This first figure shows how visible and fog/reflectivity product imagery can be combined with METARs. You can clearly see in the visible imagery that there is alot of smoke in the area. When fading to the fog/reflectivity product it is easy to see the "hot spots" of the major fires east of KACV and between KRDD and KCIC. In the area east of KACV there is extensive white see in the visible. Is this a low cloud or smoke? When fading to the fog/reflectivity product we see no signature of low (water) cloud. Therefore this must be very thick smoke.

A loop of the visible imagery with METARs (toggle on/off using the checkbox) shows that only a few METARs in the region are reporting smoke. The visible imagery make it easy to track the smoke plumes. This information can then be used in both aviation and public forecast products.

This is just a quick example to show how AWIPS makes it easy to combine satellite and surface data to track smoke plumes and detect fires.