**The five most important facts regarding the GOES-R fog/low cloud and cloud type products (derived using MODIS as a proxy for GOES-R)**

1. The ***probability of MVFR*** product reports the probability that the cloud ceiling is < 3000 feet, **regardless of surface visibility.** The ***probability of IFR*** product reports the probability that the cloud ceiling is < 1000 feet, **regardless of surface visibility.**
2. The probability of MVFR and the probability of IFR can only be determined if high clouds, which at times will obscure low cloud layers, are **NOT** present (areas in which the probability of MVFR and probability of IFR cannot be determined due to high clouds are shown as light gray in your AWIPS display).
3. The probability of MVFR and the probability of IFR will always be 0.0% or not determined in the sun terminator region (85o < solar zenith angle < 90o). Currently, the fog depth is only available when the solar zenith angle > 90o.

GOESR_AWG_fog_and_cldtype_quick_facts_AK_Region.tif

1. The cloud type product determines which of the following categories the **highest** cloud layer belongs to: liquid water (Tcld > 0oC), supercooled liquid water (Tcld ≤ 0oC), mixed phase (both supercooled liquid water and ice are present), thick ice (opaque cloud with glaciated top), thin ice (usually cirrus), and multilayered ice (highest cloud layer is composed of ice and it likely overlaps a lower cloud layer of undetermined phase).

AWIPS_cldtype_colorbar.tiff

1. For opaque clouds, the cloud phase information provided by the cloud type product only pertains to the top most portion of the cloud.