DISPLAY AND PRESENTATION OF METEOROLOGICAL SATELLITE IMAGERY

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Two phrases that are commonly used in displaying and discussing meteorological satellite imagery are "the big eye in the sky doesn't lie" and "a picture is worth a thousand words." These statements, however, are only true if the phrase "to a qualified satellite meteorologist" is added.

All meteorological satellite pictures should be geographically gridded and labeled correctly. The photos should also be lettered professionally commensurate with the quality of the received imagery. A plain satellite photo can sometimes be more impressive than a poorly marked one. Conversely, a professionally lettered poor product (toilet paper quality) can be equally more effective than a sloppily marked glossy print.

Enhancement of the meteorological satellite imagery by use of a few techniques can add to any presentation and briefing to the decision maker. Later on, these same photo products can be used for publication or made into slides or vugraphs for seminars and post-analysis discussion. In near real time operational use of imagery, grease pencil only should be used on the products so the marks can be wiped off later. Precut lettering of data type, date, and mission can be placed...
on the imagery upon receipt, or placed appropriately on poster boards before the briefing.

This author recommends scrap or precut poster boards within easy access to the satellite meteorologist. In addition, black or white lettering of meteorological vehicle, imagery type and mission can be obtained from any graphic section. Prestype and Chart Pak ribbon lettering sheets should be used directly on the imagery. These graphic sheets have replaced the tedious Leroy sets in the lettering business. These sheets contain black and white letters, symbols, and meteorological codes. At the Air Force Eastern Test Range (AFETR) in Florida, specially designed prestrap sheets have been made; incorporating many of the most common words and symbols (Figure 1). Removal of these rubbed letters is a cinch. A piece of scotch or masking tape can erase any mistake and not leave a trace.

Examples of gridded and lettered satellite imagery from the National Oceanic and Atmospheric Administration and Air Weather Service satellites are displayed in Figures 2 and 3, using the techniques discussed above.

Authors who do not have access to these materials should send in their satellite photographs with marked acetate overlays, and these will be annotated for you. Ed.

The NOAA 2 infrared imagery shown above was received on the morning of 27 Nov 1972. It clearly shows a shallow cold front from Cuba northeastward through the Bahamas. This rapidly moving front had tops from 6,000 to 8,000 feet as reported by radar in southern Florida. The cold high cirrus clouds stand out on the imagery. This cirrus cloudiness marked the jet stream and had bases at 36,000 feet. The IR indicated tops at 45,000 feet. There were no clouds beneath the cirrus. The cold southeastern U.S. is also visible. Surfaces temperatures were near freezing in these states.

Figure 2. NOAA-2 Infrared data received at the AFETR in near real time on 27 November 1972.
Figure 3. DMSP Infrared data received at the AFETR in near real time on 12 March 1976.