## **Editorial**

INSTRUMENTATION: A LOOK BACKWARD SUGGESTED

Douglas W. Beadle Feature Editor for Instrumentation

As every meteorologist knows, the profession is often, if not constantly subjected to criticism about the accuracy of weather forecasts. This seems to be true even for those not involved in operational forecasting.

What has this got to do with instrumentation? Perhaps it is the unintentional fault of the meteorological community that the general public does not understand the uses and limitations of instrumentation and observational techniques.

Probably no element is more important in forecasting than the thousands of observations and masses of data that are gathered hourly around the world. Yet it seems to be the least understood by consumers of the forecast product. Possibly it is this lack of understanding which filters back to the forecaster in the form of criticism.

Advances in meteorology, combined with the accelerated pace of technology have left people unfamiliar with science tangled in a jumble of terms and voluminous quantities of CRT displays.

The media, in particular, have made extensive use of radar and satellite data, but may fail to fully explain what the displays show or worse yet, explain them incorrectly. This careless interpretation may result in the layman misunderstanding their actual capabilities. The obvious and needed trend toward remote sensing will make increased use of these products inevitable and understanding them a necessity.

Large changes in temperature and other meteorological parameters over relatively small distances or inconsistent readings also raise questions if they are not properly explained at the time they are reported. The training of most persons does not permit them to determine what differences are due to actual changes and what differences are due to reporting or observation errors.

Meteorology requires a basic understanding of atmospheric processes and we cannot expect total sympathy from the layman who does not understand them. At the same

time we should take care that the usage of technical terms does not become overwhelming and alienate the public from the profession.

Possibly the meteorologist should take a moment to look backward and determine exactly what the public understands and misunderstands about weather. If there is a gap to be bridged this single step may offer a partial solution.

## Satellite

SHUTTLE EXHAUST TRAIL

by Henry W. Brandli Chairman, Satellite Meteorology Committee

The Goes-East Sensors were timed perfectly to capture the exhaust trail of the third U.S. Space Shuttle launch. Figure 1 shows the Goes-East visual view of the exhaust trail and surrounding area around Cape Canaveral, Florida at 1600 GMT. (22 MAR 82).

