

# MONTHLY WEATHER REVIEW

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## Introduction to Picture of the Month Series

Meteorological satellites are currently transmitting pictures of the earth's cloud distributions at a rate in excess of 500 pictures per day. Since the inception of the TIROS program, up to the present time, over 145,000 pictures have been received. It is difficult to overestimate the value of these pictures not only for operational forecasting and tracking of severe tropical storms; but also for meteorological research, for, after all, the cloud distributions are a direct effect of certain physical processes which were going on in the atmosphere.

Tantalizing questions are presented to the meteorologist working with TIROS photographs, almost every time he looks at a new set of pictures. Yet, until now, only limited use has been made of this wealth of information. Scientists in the Meteorological Satellite Laboratory of our Center have used about 700 pictures in research notes and articles. Other studies have made at least a partial use of the satellite pictures, but this does not begin to exhaust the research possibilities.

For a long time to come, satellite cloud pictures will furnish the only means of covering on a global scale the

patterns of weather. Therefore, any effort which can be expended to learn how to interpret these cloud pictures in terms of more conventional meteorological parameters will be of great use in the operational application of these pictures, which is the primary function of our Center.

We are taking many different avenues to acquaint meteorologists as well as scientists in other fields with the great potential of satellite pictures. One of the methods commences here with the first of a series of "Picture of the Month" to be published in the *Monthly Weather Review*. This series will represent particularly puzzling phenomena which have defied any simple interpretation. Also in this series will be published pictures of unusual quality suggesting a potential for other applications, such as geography, oceanography, etc. Together with the picture we will present an informative legend giving as much documentation as possible, such as synoptic background, and, where possible, interpretation. We welcome inquiries from all interested scientists, particularly in universities, who would like to work on the interpretation of such pictures.

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