

## PICTURE OF THE MONTH

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The variation in the amount of solar energy absorbed by different types of surfaces is one of the primary causes of great differences in local cloud distributions. Fair weather cumulus, common during the summer, form when warm air parcels rise from the heated land. These convective clouds seldom form over relatively cool bodies of water. Prior to daily coverage by weather satellites, the extent and persistence of this river or lake effect was observed frequently only by those who lived near or traveled over such areas.

An example of the distribution of clouds resulting from differential heating in the Great Lakes area is shown in figure 1. This ESSA 5 photograph was taken at 2054 GMT, (1454 CST) August 4, 1967. Scattered to broken fair weather cumulus prevail over most of the area. Many of the individual cumulus cloud elements along the left side of the picture are too small to be resolved by the camera, and thus give the area a gray appearance. Numerous dark, cloud free regions such as E and F correspond to lakes or swampy areas.

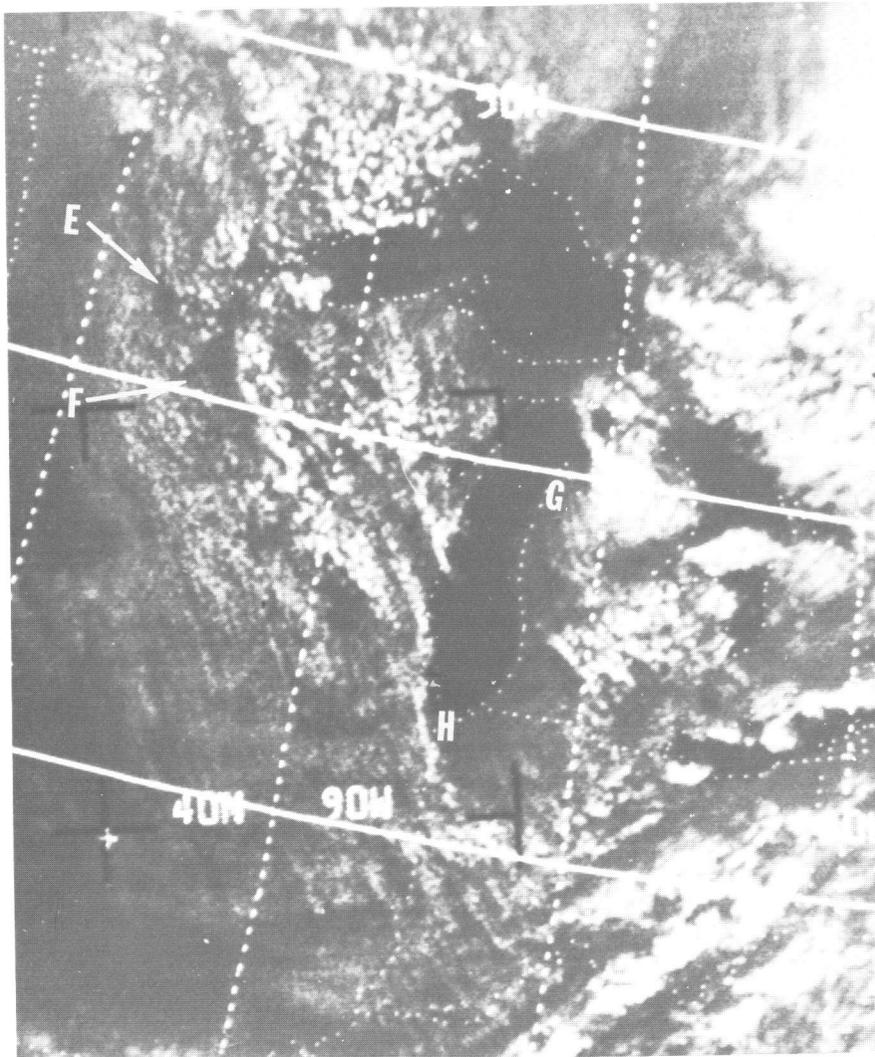


FIGURE 1.—ESSA 5 orbit 1348, frame 5, August 4, 1967, 2056 GMT.

