## A LEE LAKE EFFECT

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In the great lakes region of the United States, cold dry air from Canada moves across the water surfaces, picks up moisture, and precipitation in the form of snow or rain falls on the leeward areas especially in New York State.

An opposite phenomenon occurs in the lee of southern U.S. lakes in the spring when these bodies of water are cooler relative to the surrounding air mass.

In this case, moisture laden air dries as it moves across the lake surface. On the lee side land areas, cumulous cloud formation is depressed or absent for a notice-

able distance dependent on the strength of the gradient level and surface wind flow as well as the air mass characteristics in addition to the lake temperature.

Visual GOES EAST satellite photos for this spring (1982) show this lee lake phenomenon especially evident near Lake Okeechobee.

When cumulous cloud lines are not obvious, the lee lake effect itself is an indicator of wind flow and speed.

<u>Clear skies</u> are easy to forecast during these occurrences and could be operationally significant for a number of tests i.e., solar research studies.



