THE 1972 BLIZZARD-BURST AT THE EASTERN SNOW CONFERENCE IN OSWEGO

by

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"The 1972 Eastern Snow Conference was held at Oswego, New York. A 'blizzard-burst' broke out during the conference adding not only 'local color' but lengthening the stay of some attendees. Actually, the storm period was an interesting interval in the especially noteworthy winter of 1971-72. -----" [2]

Two papers entered in the PROCEEDINGS of the 1972 ANNUAL MEETING covered many aspects of the storminess at the time of the Meeting and as well many other parts of the Winter. Except for a single color transparency, no charts and no illustrations were included with either paper. Several examples of such illustratory material were included by the author in the Introduction to Volume 1 to the CLIMATE AND SNOW CLIMATOLOGY of OSWEGO, NEW YORK and in the December 1972 WEATHERWISE. Rather than repeat such material it was decided to present a slide showing on the 1972 "Conference Storm" with a few additional slides from some of the other parts of the winter. While the author was in the area of the Conference, circumstances prevented attendance at the scheduled session. Mr. Raymond Falconer generously offered to read caption material while a portion of the planned slide presentation was shown. Some of the more technical slides of pertinent weather charts and satellite photos were omitted. All photos shown were made by the author.

Figure 1 is a print from the 17th slide shown by Mr. Falconer. It shows the entrance to the Holiday Inn where the conference was held at about 1645 on Saturday, the 5th of February. The main part of the storminess ceased shortly after 1630 so that by 1645 the visibility increased sharply to almost 1/4 mile.

One outstanding feature of the blizzard-burst was the atmospheric pressure pattern recorded by a microbaragraph located at the State University College at Oswego and corroborated by a similar instrument nearby. Figure 2 shows an extracted sketch of the trace from the College instrument. The "V" pressure features shown have appeared on traces of some barographs in the area since our "Lake Effect Snow Situation" studies began in 1963. A number of reportings have been made. Usually one to three of these dips are noted, sometimes together, sometimes over a period of several hours. Just the poftion of the extracted record here shows eight. When weather sensing equipments have been fortunately located where these features could pass closely, a

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2 From the Abstract in the announcement for the Thirtieth Meeting

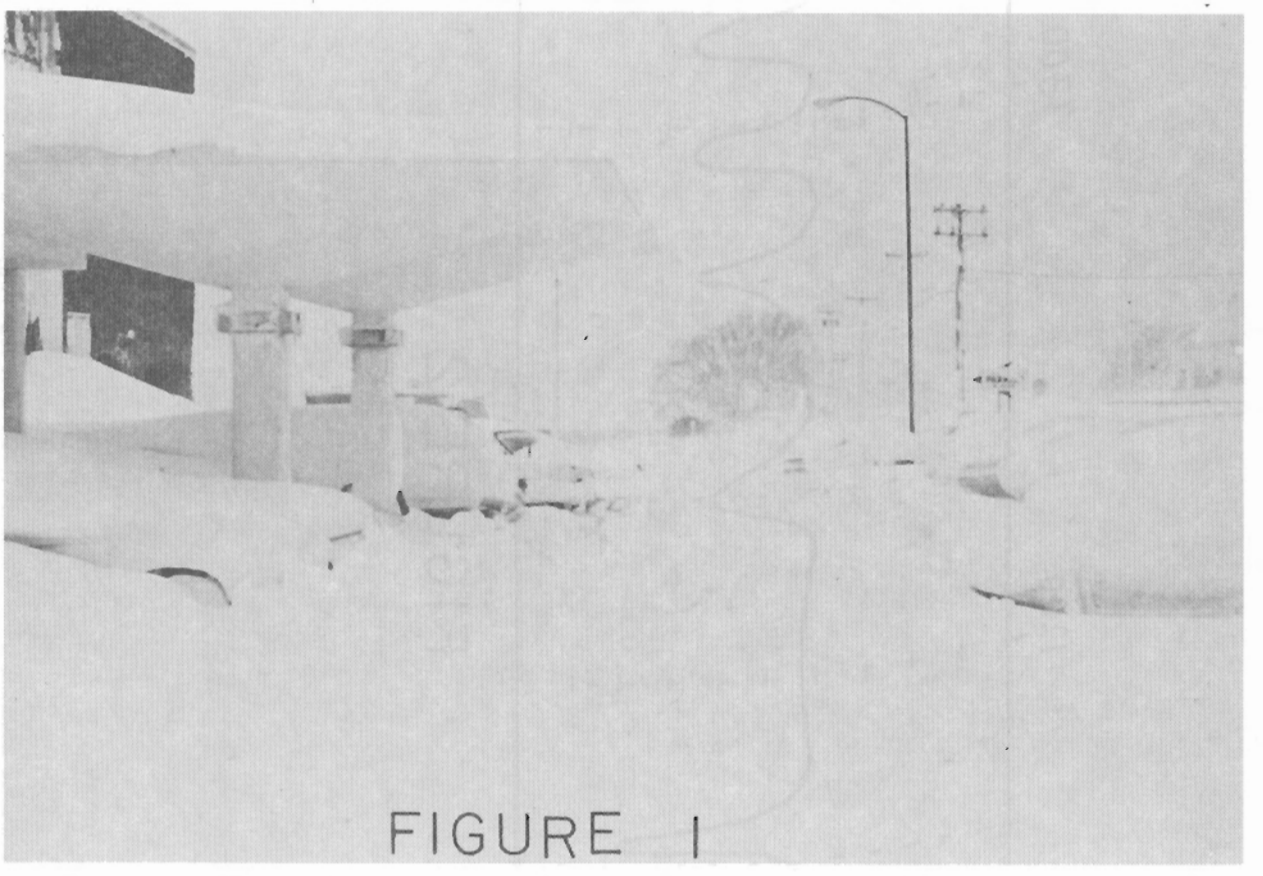

FIGURE 1

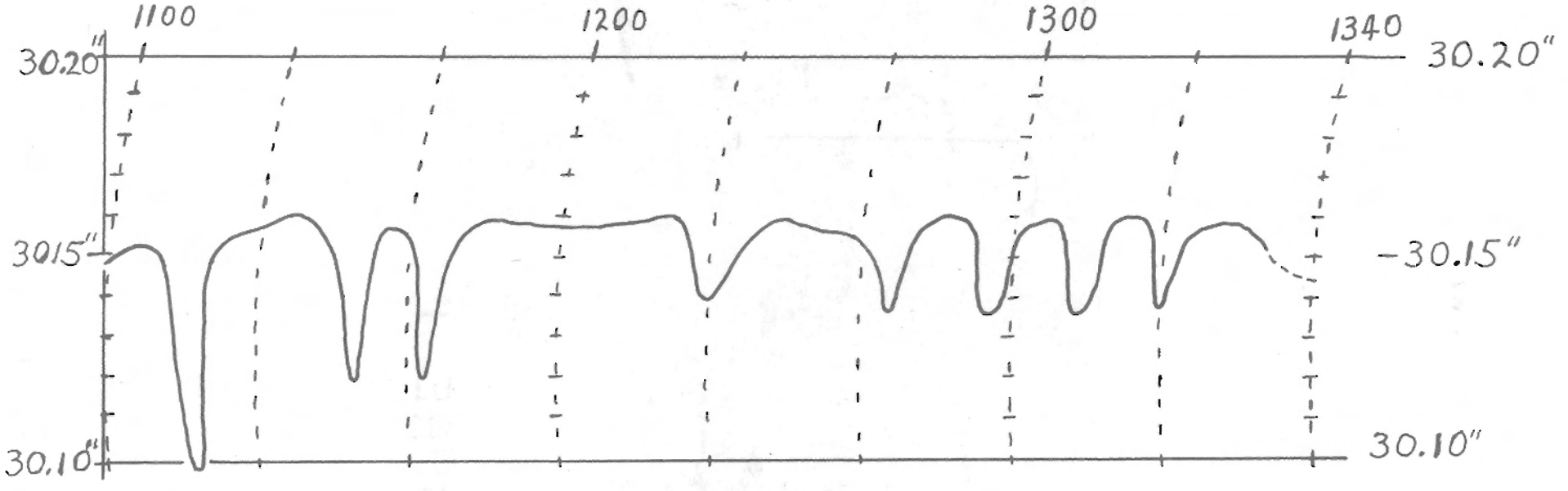

FIGURE 2

variety of weather changes have been noted including cyclonic and anti-cyclonic wind shifts, precipitation and visibility variations, rapid temperature fluctuations, and even sound and other attributes suggestive of vortex, perhaps tornado-like, systems.

These "V" features are believed to be meso-systems which develop in and move along, the wind shift or convergence zones associated with the special cloud streets demarcating the lake effect snow bandings so common in the Oswego Area. Brief inspections of available satellite photos for the blizzard-burst period suggest that the associated cloud banding was perhaps 30 miles wide from north to south. However, the real heavy snowband underneath was but 8 to 12 miles wide based upon many checks to nearby locations during the storm.

Most of this peculiar barometric action took place from 1100 to 1340 of February 5th, roughly the worst part of the storm as observed at the Conference Site. True visibilities were close to ZERO for several hours. Slide 14 shown by Mr. Falconer was taken at 1215 toward the Inn sign only about 40 feet away. The sign was visible with difficulty. Snowfalls were exceptionally heavy with snowflakes averaging close to 1/2 inch. Periods of blowing and drifting took actual visibilities down to ZERO.

While these meso-features have shown on barographs and continuous strip recordings, a recent weather satellite photo received through Dr. Walter A. Lyons of the University of Wisconsin-Milwaukee provided a different dimension. Figure 3 is a copy of a picture from the Earth Resources Technology Satellite (ERTS-1) at 0930 CST, 19 October 1972 covering the Southern part of Lake Michigan. Within a NNE/SSW cloud street may be seen the suggestion of a small low pressure system (vortex) approaching the vicinity of Chicago. The Chicago (under cloud) lakefront was receiving 3 to 4 inches of snowfall. Some snowfall covering the Gary, Indiana (from the night earlier) may easily be seen.

During the 4th and 5th the cloud street over the Oswego Area was believed oriented nearly west to east, about 30 miles wide, and possessing a heavy snowband underneath some 12 to 20 miles wide. According to Dr. Lyons the Chicago instance revealed no special changes in the atmospheric pressure field, Figure 2 shows some rather striking pressure changes for Oswego.

The snowfall during the Conference Period can only be estimated due to the high winds at times, Somewhere near 55 inches is believed reasonable, perhaps even consdrvative.

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FIG 3