4. Weather Patterns of March 13 - 20 1982

This report is an excerpt from the United States Geological Survey (USGS) and National Oceanic and Atmospheric Administration (NOAA) report titled “Floods of March 1982 in Indiana, Ohio, Michigan, and Illinois”. The map is directly from the report.

The warm front moved north of the region on March 12th bringing with it light to moderate rainfall and rapid snowmelt. Runoff was 100 % because the saturated ground was frozen. The flooding began at Fort Wayne on March 12th as the snow melted and the rainfall began across the Maumee River Basin.

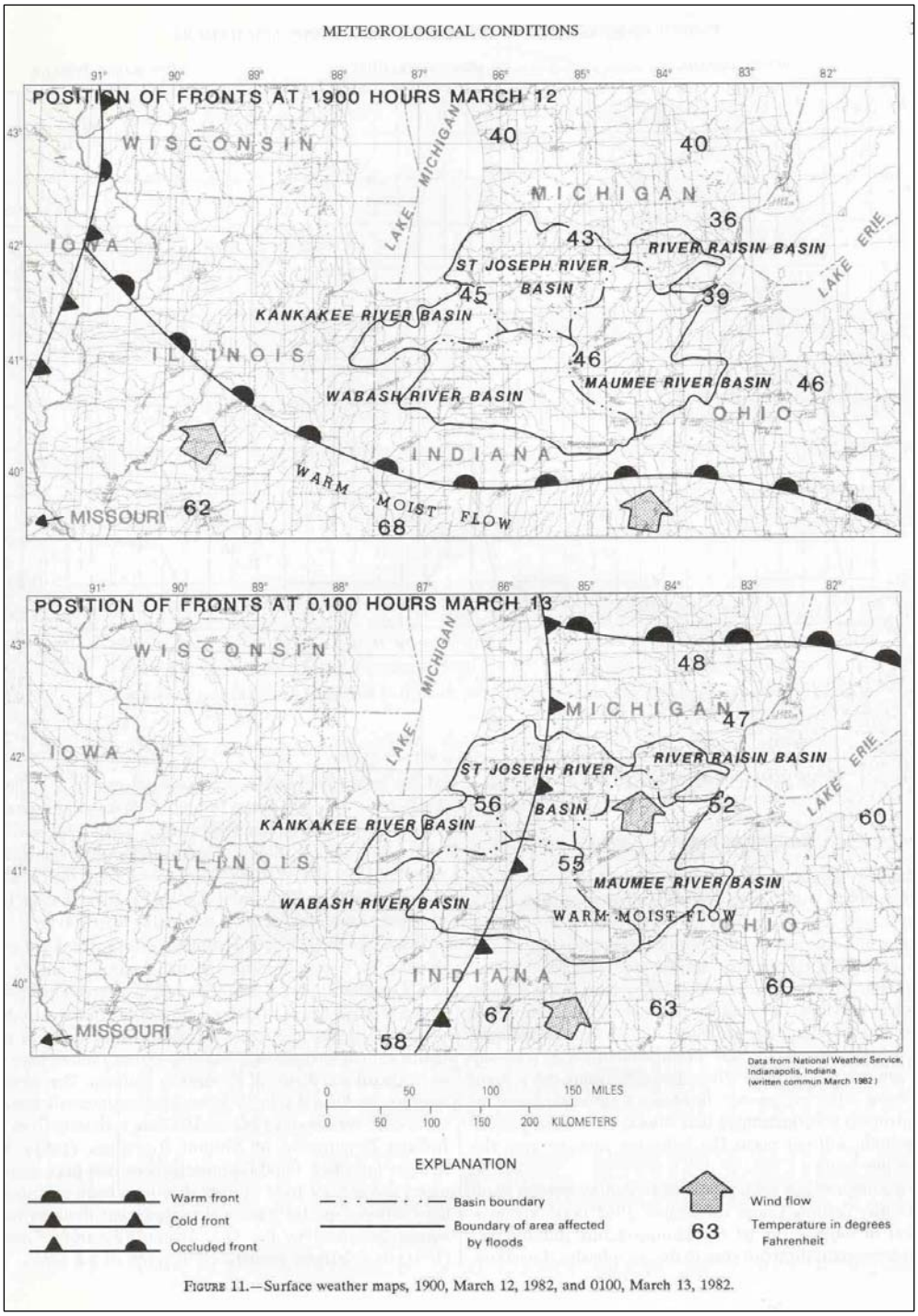

FIGURE 11.—Surface weather maps, 1900, March 12, 1982, and 0100, March 13, 1982.

Much of the snow in the Wabash, Kankakee and Maumee River Basins had melted by March 13th. Several inches of snow remained at that time in the St. Joseph Michigan River and River Raisin Basins although snow depth in these basins had been considerably been reduced. At Fort Wayne, on March 9 the snow depth was 7 inches with a water equivalent of 2.4 inches. By March 13th, this snow cover had completely melted.

By March 16th an upper air disturbance over Iowa and Missouri. At the surface, southerly flow predominated from the lower Mississippi Valley northward, bringing warm moist maritime air into the region. Moderate rain fell and temperatures increase. On March 16 at Fort Wayne, the high temperature reached 69 ^{o}F. Rainfall totaled 0.63 inches.

The warming trend ended by the morning of March 17th as cold air re-entered the region. Temperatures reached normal by March 20.