Satellite

GEORGIA GUST FRONT

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This sequence of five visible satellite images shows the development and evolution of a gust front produced by a thunderstorm over southern Georgia. Between 1531Z and 1731Z, the primary thunderstorm complex moves northward and weakens as a gust front forms to the east and translates toward the coast. In its wake a clear area develops and enlarges due to subsidence.

By 2131Z, another interesting effect occurs. As the gust front moves further eastward toward the coast it encounters the afternoon sea-breeze front causing a secondary development of convection. As this new convection develops it begins to drift toward the west probably indicating that the sea-breeze front was the stronger of the two mesofronts at the time of merger.

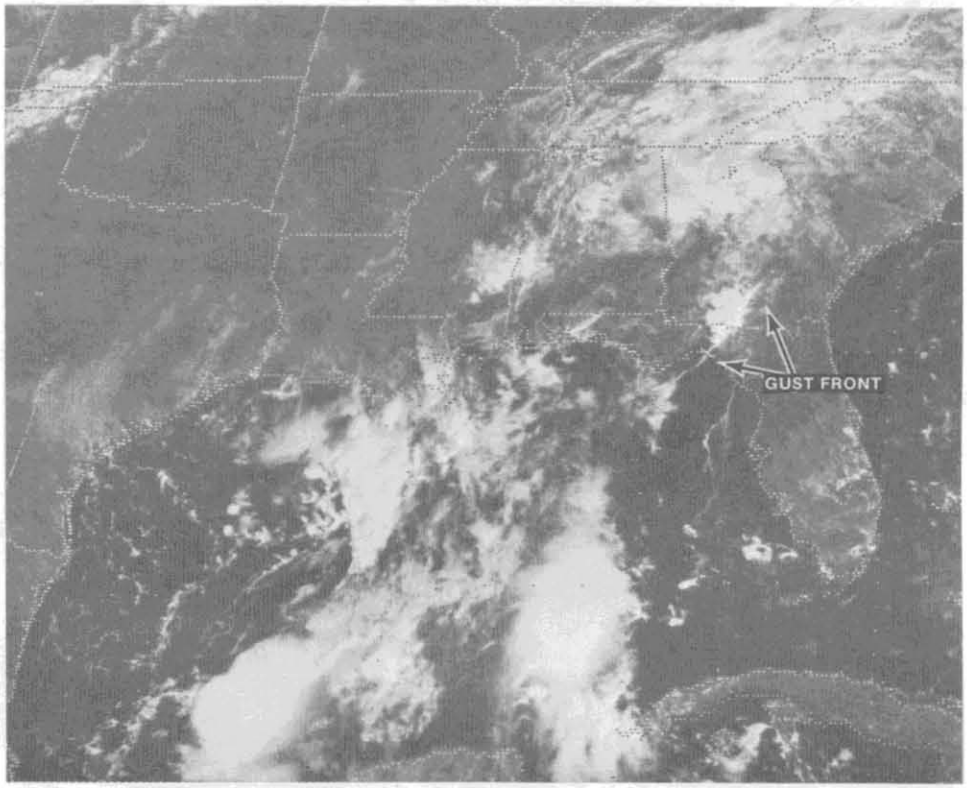

Figure 1. 1531Z 4 September 1983

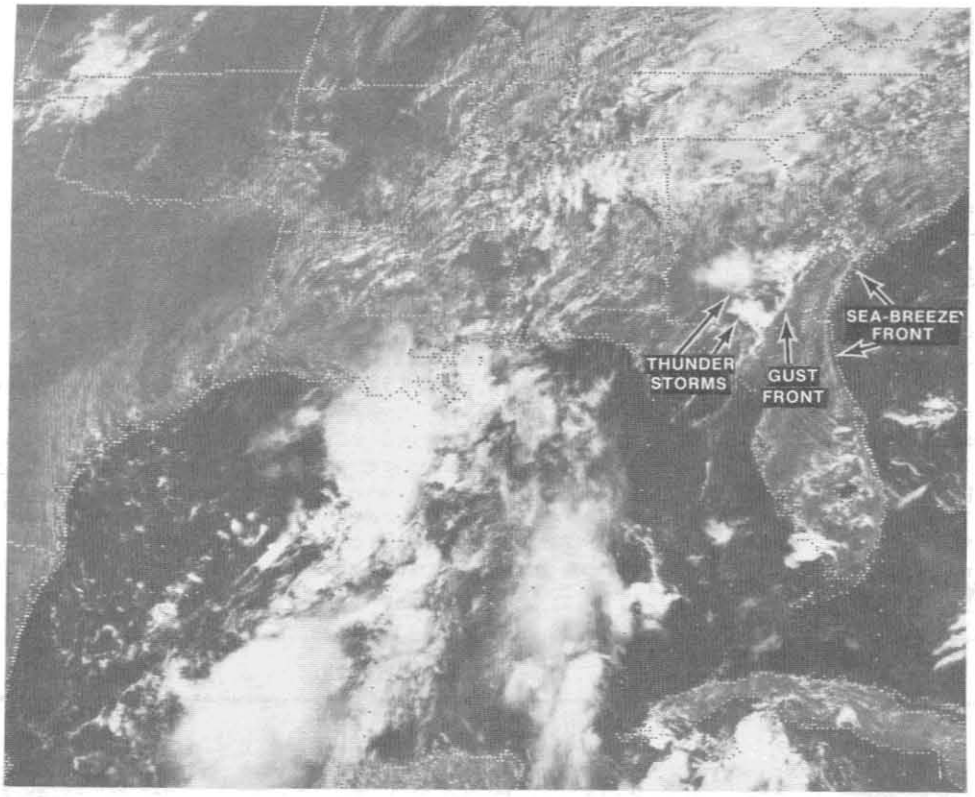

Figure 2. 1731Z 4 September 1983

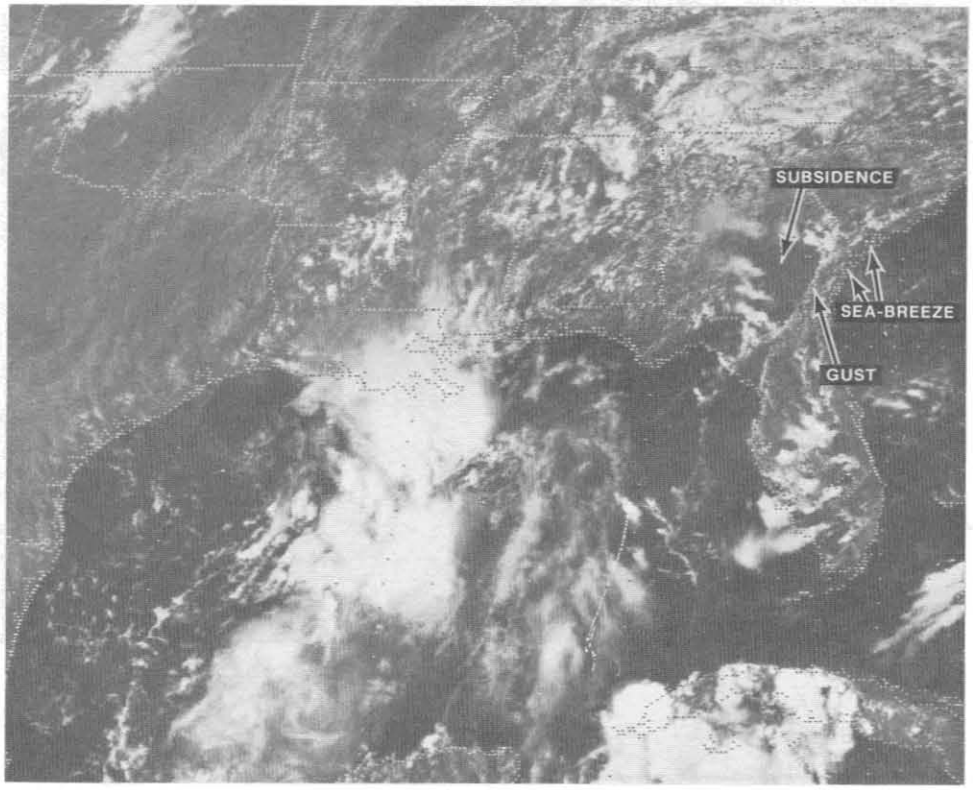

Figure 3. 1931Z 4 September 1983

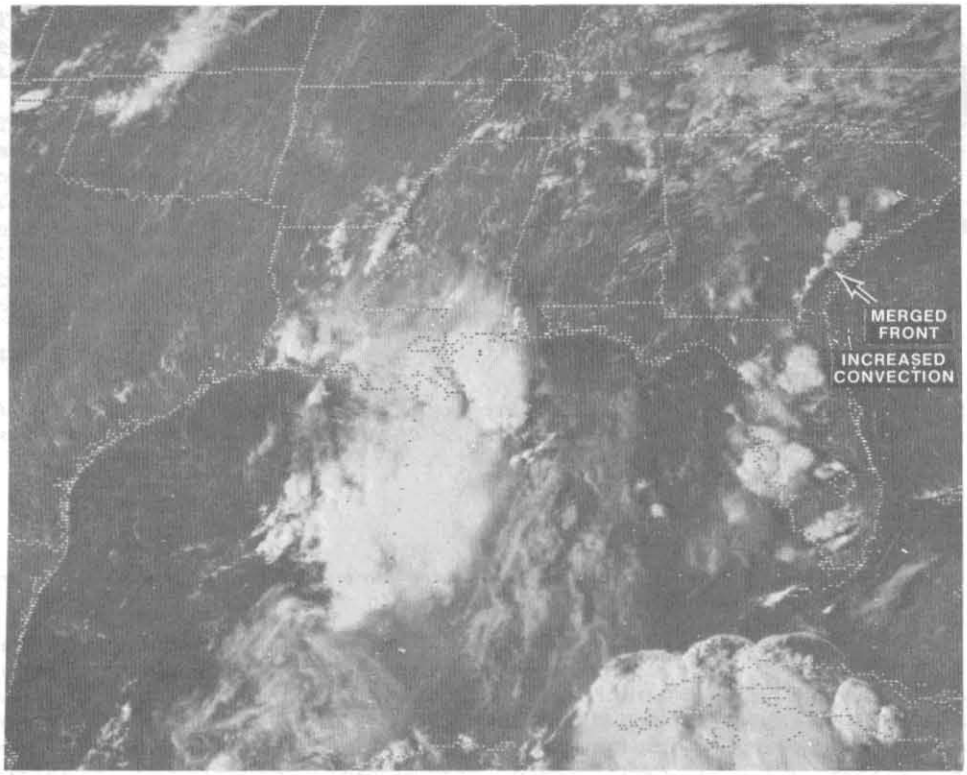

Figure 4.

2131Z 4 September 1983

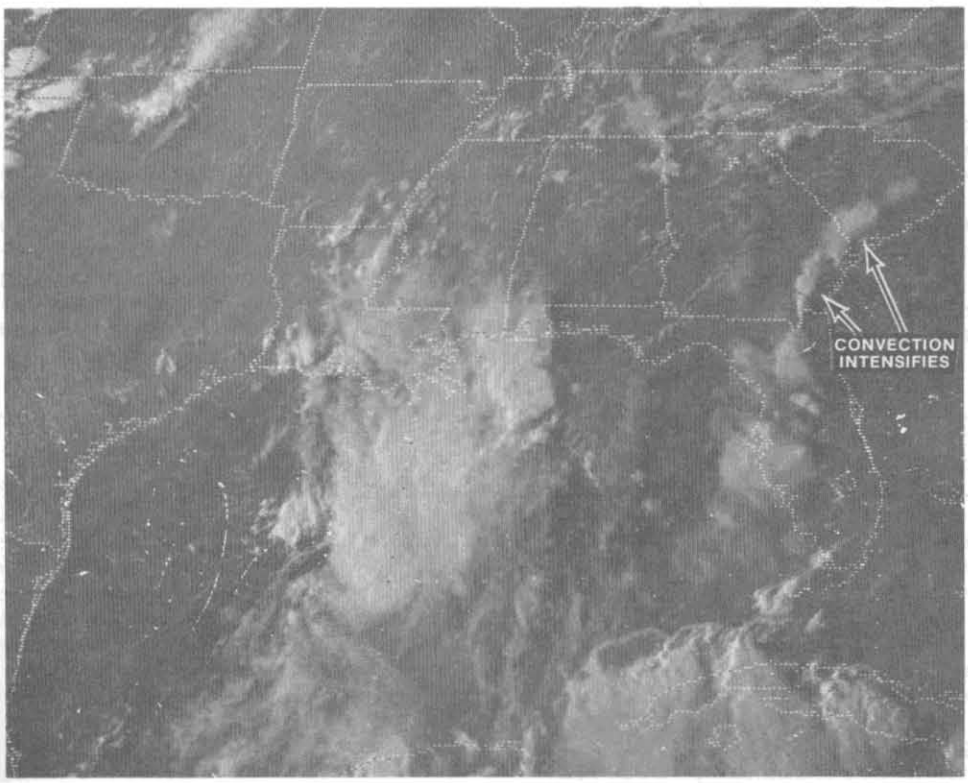

Figure 5.

2231Z 4 September 1983

FOOTNOTES

1. Charles Kadin received a B.S. degree in meteorology from the City College of New York in 1976, and a M.S. degree in Meteorology from the Pennsylvania State University in 1978, where he also taught undergraduate laboratory courses. After spending some time as a forecaster in the private sector, he joined the staff at the Synoptic Analysis Branch of NESS in January of 1980.