An Historical Look Back at the beginnings of Satellite Cloud Winds

by Dennis Dismachek

"National Environmental Satellite ServiceCatalog of Products, Third Edition", NOAA. Technical Memorandum NESS 109, April 1980, Suitland, Maryland

"National Environmental Satellite Service Catalog of Products", NOAA Technical Memorandum, NESS 88, June 1977, Suitland, Maryland

MMIPS (Man Machine Interactive Processing System) Console

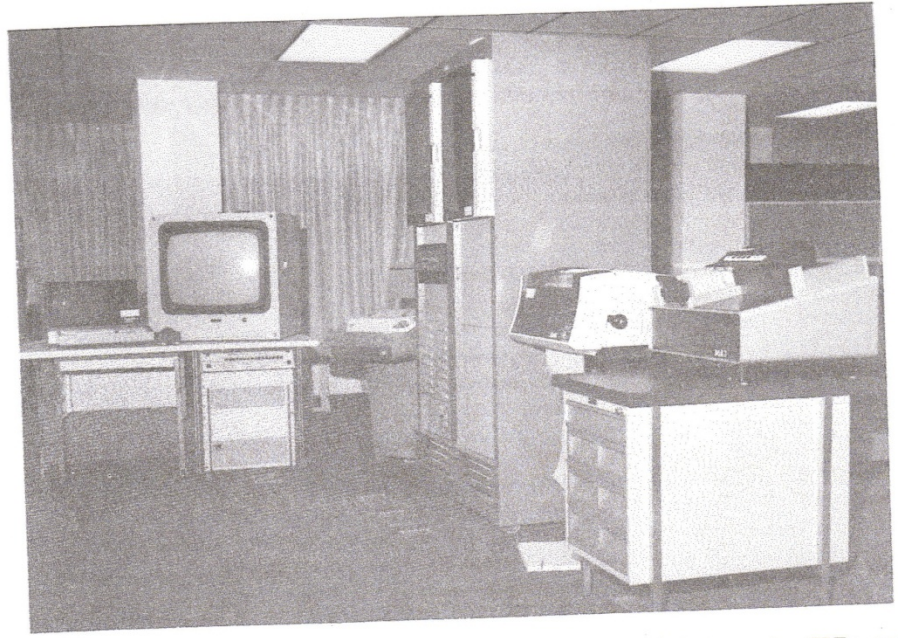

Figure 11-3.--MMIPS configuration (1 to r): Keyboard/alphameric CRT; color imager CRT; teletypewriter; GTE minicomputer, tape units, line printer, and card reader. Not shown--two 22-M byte Ampex disk units.

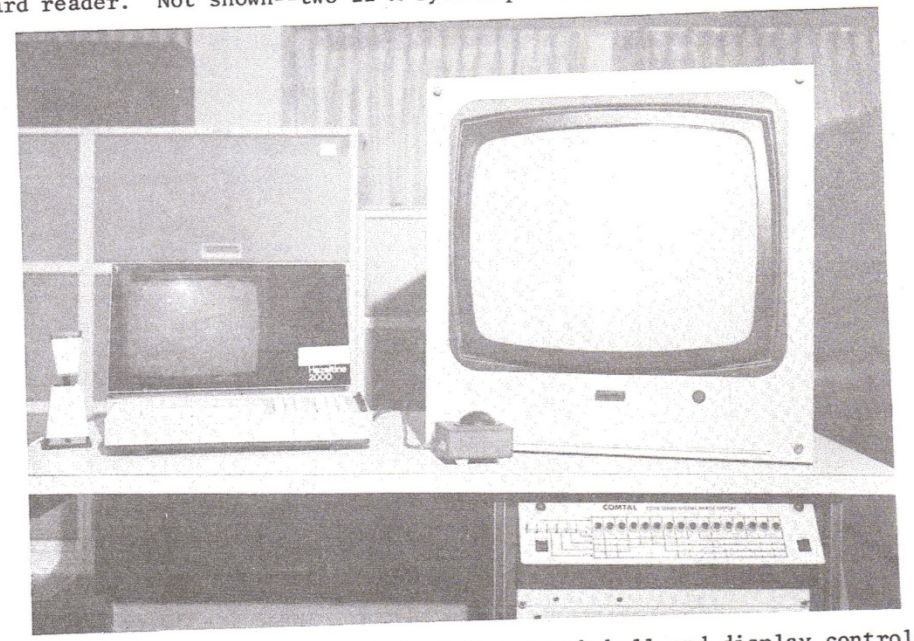

Figure 11-4.--MMIPS CRT units including track ball and display controls

Picture Pair Digitizer

291	289	283	277	283	290	292	293	293	293	293	293	293	293	293	293	293
290	283	270	274	288	292	292	293	293	293	293	292	293	293	293	293	293
282	281	280	287	291	292	292	291	290	291	292	292	293	293	292	293	293
279	288	291	291	292	289	283	283	284	284	286	291	292	292	293	292	293
274	287	292	292	289	278	266	262	270	275	276	280	285	289	292	293	293
274	283	288	287	279	265	261	253	249	249	249	257	270	282	288	290	291
289	287	284	277	269	259	252	247	245	245	244	242	253	270	281	287	291
293	289	286	280	270	263	256	249	246	245	244	243	249	261	274	284	288
289	285	279	274	266	261	255	249	244	239	243	246	255	266	278	282	285
285	284	281	271	262	254	249	246	241	236	242	246	254	269	284	287	287
274	280	287	285	277	261	251	245	240	235	243	247	255	268	279	285	288
265	282	288	287	278	264	255	250	248	244	242	244	253	268	278	288	292
271	285	288	285	278	274	271	259	250	245	244	249	262	271	280	288	291
279	285	284	282	276	278	271	257	251	253	254	262	269	265	270	283	289
275	282	285	284	283	279	268	258	261	270	275	279	276	265	260	271	286
267	281	289	290	291	287	279	274	280	282	279	280	279	266	256	266	283
274	284	289	291	292	292	287	282	285	285	276	275	278	264	254	265	282

Figure 13-1.--Sample 17 x 17 temperature array in degrees kelvin. (Contours are added every 10°K.) A single cirrus cloud tracer overlying the sea surface is depicted. Temperature values of 244 for cloud top and 292 for sea surface are chosen as input parameters to tracer temperature algorithm.

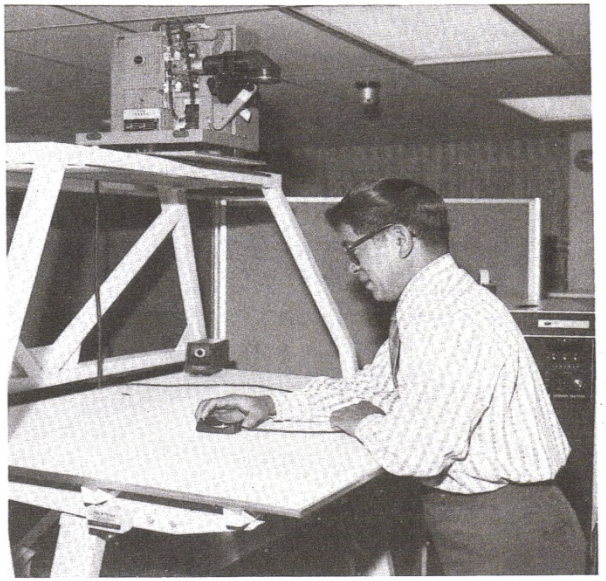

Figure 13-2.--The vector end point extraction station consists of the loop movie projector and the Bendix "Datagrid" Digitizer. Not shown is the attached IBM 029 card punch which provides output.

Wind Vector Digitizer

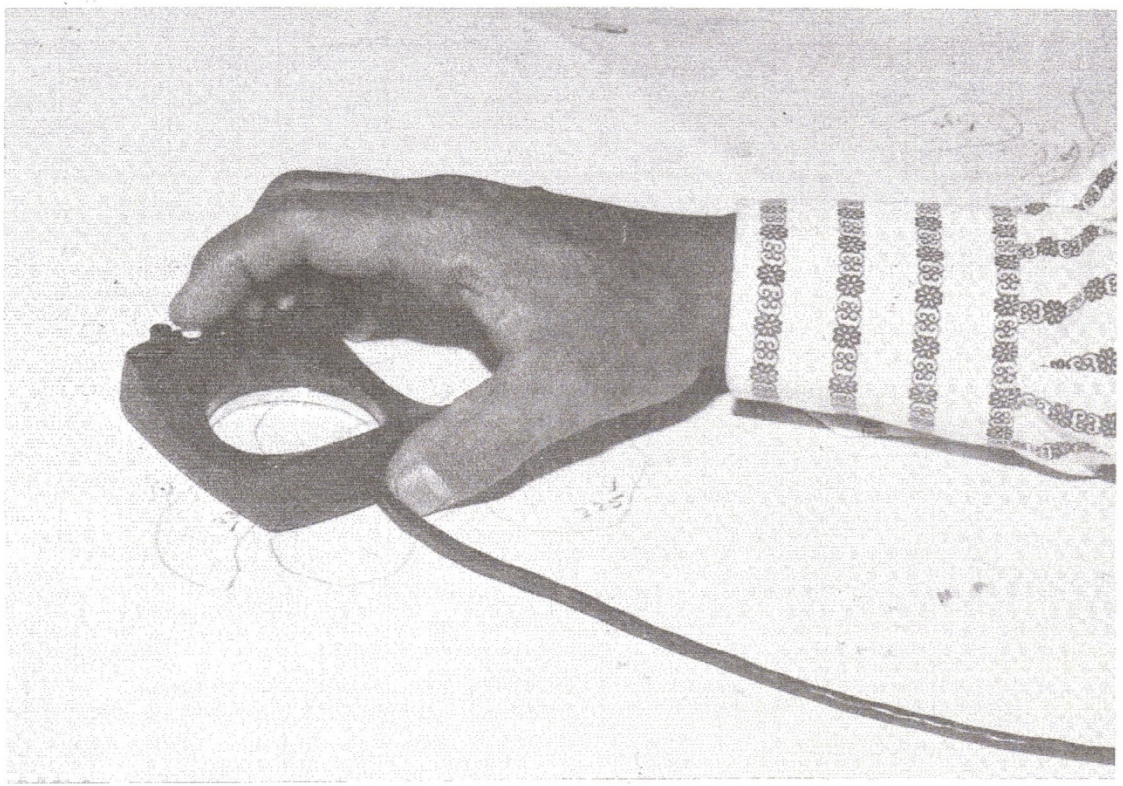

Figure 13-3.--Control buttons on the "Datagrid" cursor provide for activation of the card punch.

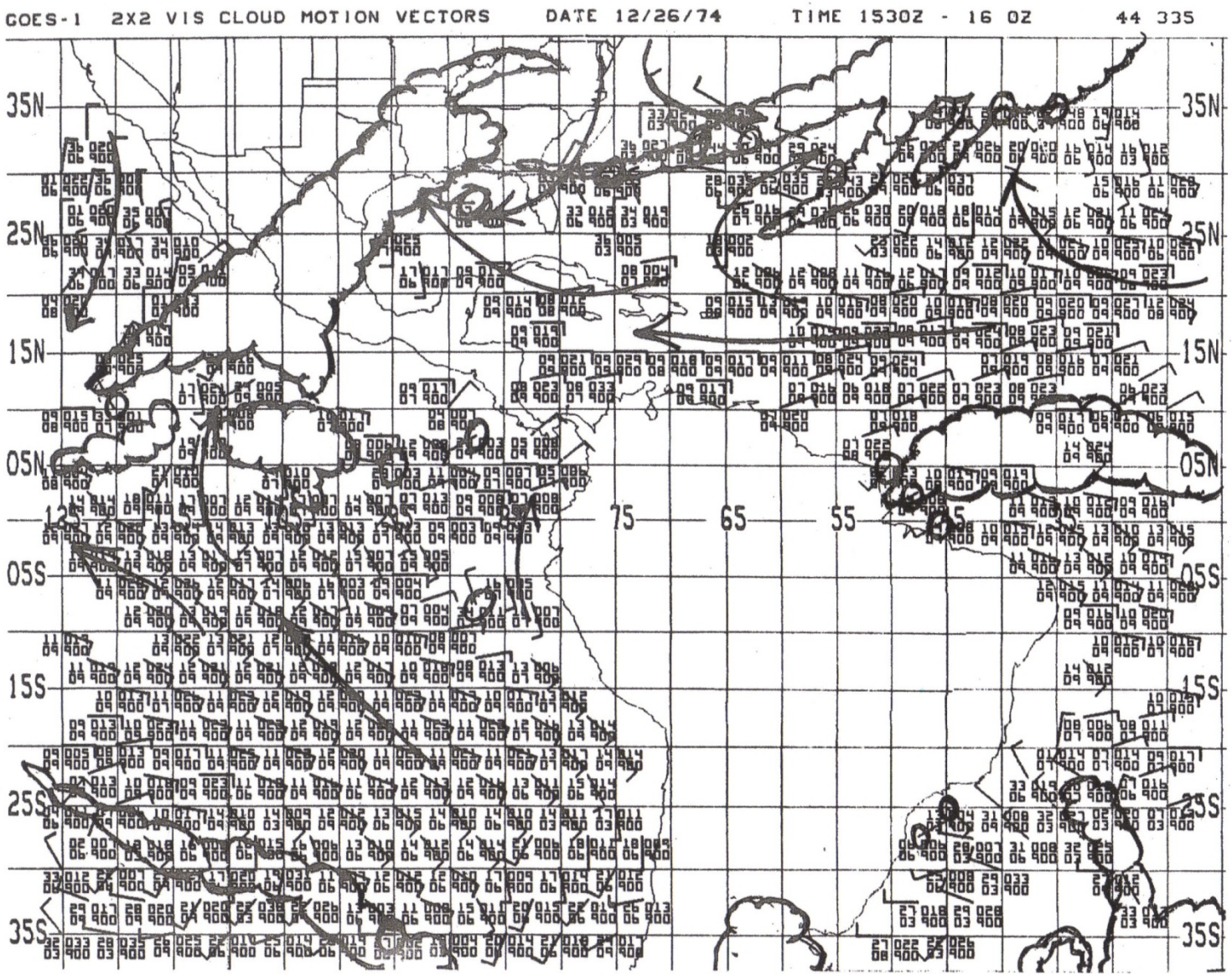

Figure 13-4.--Edit plot showing picture pair vectors and transcribed cloud patterns and synoptic flow indicators.

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CLOUD HEIGHT AND CHANGE ANALYSIS FROM DIGITAL SMS/GOES SATELLITE DATA

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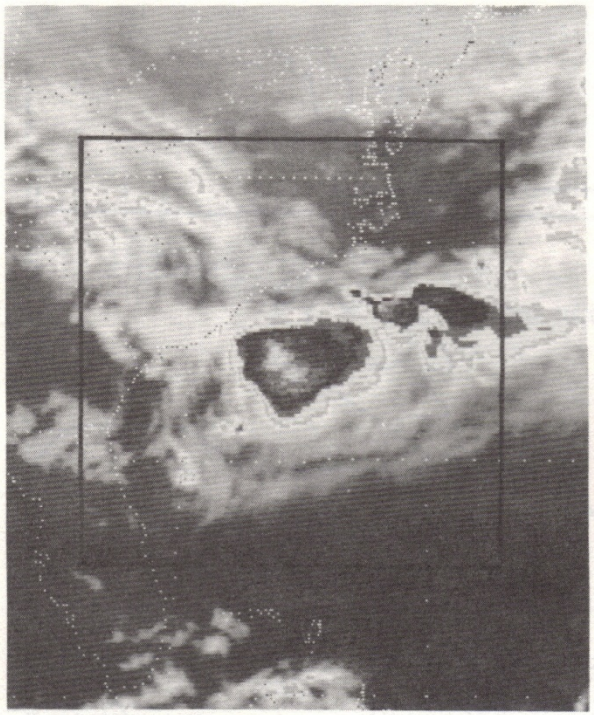

Figure 3. Enhanced thermal IR picture for 0900Z of 13 June 1977.

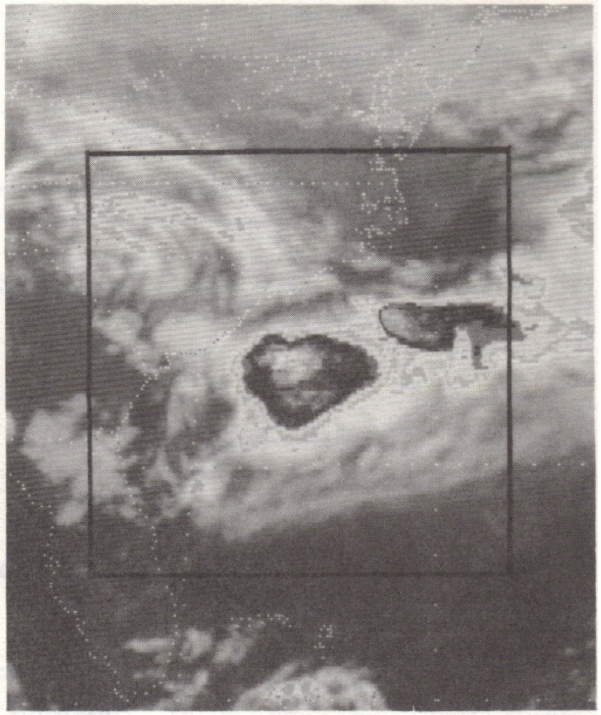

Figure 4. Enhanced thermal IR picture for 1000Z of 13 June 1977.

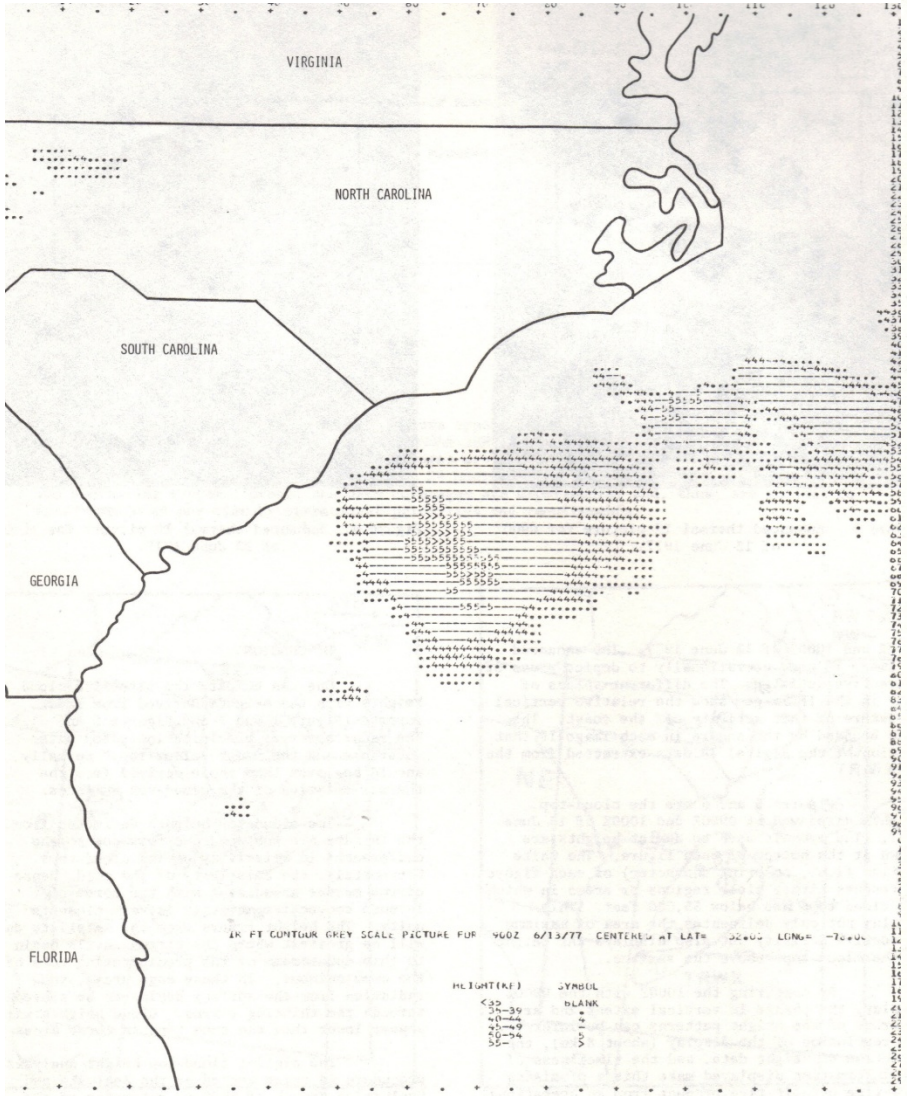

Figure 5. Cloud-top height display from digital IR for 0900Z of 13 June 1977.

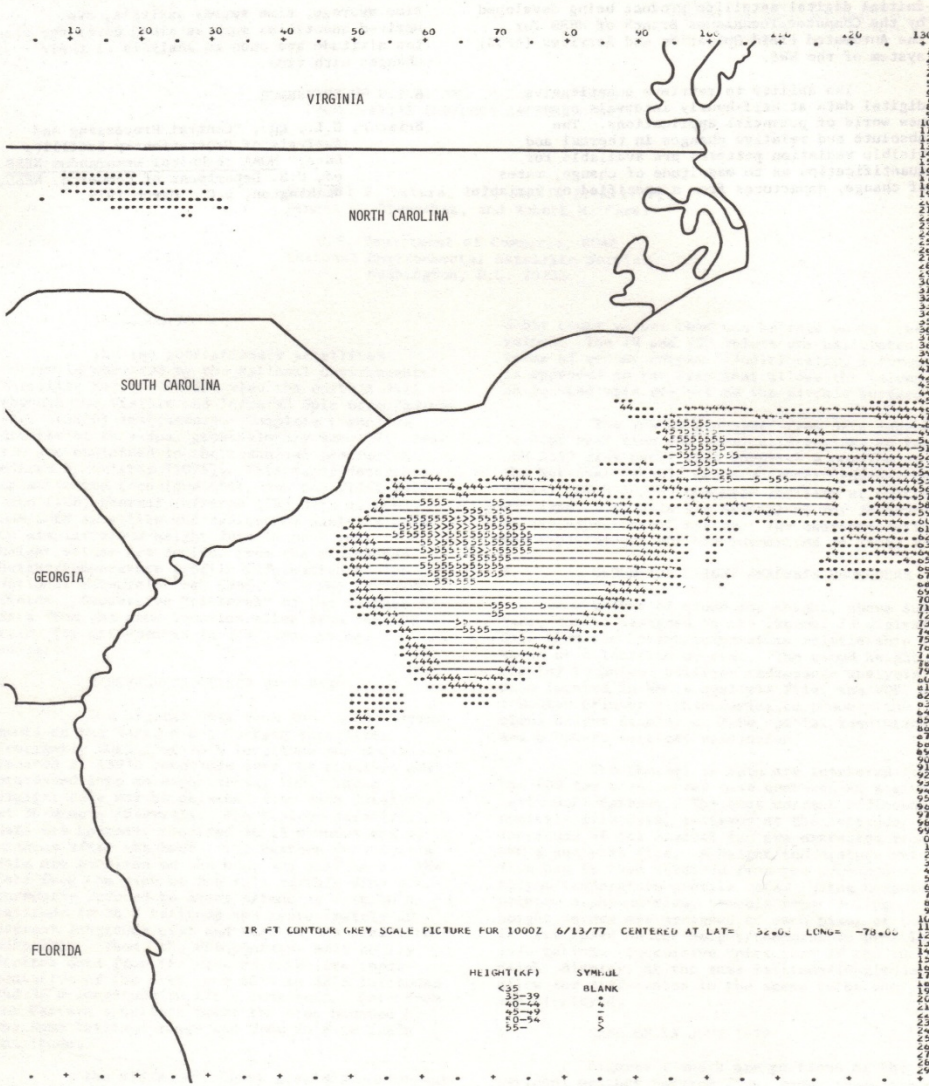

Figure 6. Cloud-top height display from digital IR for 1000Z of 13 June 1977.

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