

Table III. Message Codes for Products

CODE	NTR	PRODUCT NAME	RESOLUTION	RANGE	DATA LEVEL	MESSAGE FORMAT
16	1	Base Reflectivity	.54 x 1 Nmi x Deg	124	8	Radial Image
17	1	Base Reflectivity	1.1 x 1 Nmi x Deg	248	8	Radial Image
18	1	Base Reflectivity	2.2 x 1 Nmi x Deg	248	8	Radial Image
19	1	Base Reflectivity	.54 x 1 Nmi x Deg	124	16	Radial Image
20	1	Base Reflectivity	1.1 x 1 Nmi x Deg	248	16	Radial Image
21	1	Base Reflectivity	2.2 x 2 Nmi x Deg	248	16	Radial Image
22	2	Base Velocity	.13 x 1 Nmi x Deg	32	8	Radial Image
23	2	Base Velocity	.27 x 1 Nmi x Deg	62	8	Radial Image
24	2	Base Velocity	.54 x 1 Nmi x Deg	124	8	Radial Image
25	2	Base Velocity	.13 x 1 Nmi x Deg	32	16	Radial Image
26	2	Base Velocity	.27 x 1 Nmi x Deg	62	16	Radial Image
27	2	Base Velocity	.54 x 1 Nmi x Deg	124	16	Radial image
28	3	Base Spectrum Width	.13 x 1 Nmi x Deg	32	8	Radial Image
29	3	Base Spectrum Width	.27 x 1 Nmi x Deg	62	8	Radial Image
30	3	Base Spectrum Width	.54 x 1 Nmi x Deg	124	8	Radial Image
31	32	User Selectable Storm Total Precipitation	1.1 x 1 Nmi x Deg	124	16	Radial Image/Geographic Alpha
32	33	Digital Hybrid Scan Reflectivity	.54 x 1 Nmi x Deg	124	256	Radial Image
33	33	Hybrid Scan Reflectivity	.54 x 1 Nmi x Deg	124	16	Radial Image
34	34	Clutter Filter Control	1 x 1.4 Km x Deg (Ver. 0) 1 x 1.0 Km x Deg (Ver. 1)	124	8 (Ver. 0) 4 (Ver. 1)	Radial Image
35	6	Composite Reflectivity	.54 x .54 Nmi x Nmi	124	8	Raster Image/Non-geographic Alpha
36	6	Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	248	8	Raster Image/Non-geographic Alpha
37	6	Composite Reflectivity	.54 x .54 Nmi x Nmi	124	16	Raster Image/Non-geographic Alpha
38	6	Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	248	16	Raster Image/Non-geographic Alpha
39		Spare				
40		Spare				
41	8	Echo Tops	2.2 x 2.2 Nmi x Nmi	124	16	Raster Image
42		Spare				

CODE	NTR	PRODUCT NAME	RESOLUTION	RANGE	DATA LEVEL	MESSAGE FORMAT
43		Spare				
44		Spare				
45		Spare				
46		Spare				
47		Spare				
48	12	VAD Wind Profile	5 Knots	N/A	5	Non-geographic Alphanumeric
49		Spare			16	Raster Image/Non-geographic Alphanumeric
50	14	Cross Section (Reflectivity)	.54 Horizontal x .27 Vert Nmi x Nmi	124	16	Raster Image (Reflectivity)
51	14	Cross Section (Velocity)	.54 Horizontal x .27 Vert Nmi x Nmi	124	16	Raster Image (Velocity)
52		Spare				
53		Spare				
54	-----Reserved-----					
55	16	Storm Relative Mean Radial Velocity	.27 x 1 Nmi x Deg	27	16	Radial Image (Region)
56	16	Storm Relative Mean Radial Velocity	.54 x 1 Nmi x Deg	124	16	Radial Image (Map)
57	17	Vertically Integrated Liquid	2.2 x 2.2 Nmi x Nmi	124	16	Raster Image
58	18	Storm Tracking Information	N/A	248	N/A	Geographic and Non-geographic Alpha
59	19	Hail Index	N/A	124	N/A	Geographic and Non-geographic Alpha
60	20	Mesocyclone	N/A	124	N/A	Geographic and Non-geographic Alpha
61	21	Tornado Vortex Signature	N/A	124	N/A	Geographic and Non-geographic Alphanumeric
62	22	Storm Structure	N/A	248	N/A	Alphanumeric
63	23	Layer Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	124	8 Avg	Raster Image (Layer 1 Average)
64	23	Layer Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	124	8 Avg	Raster Image (Layer 2 Average)
65	23	Layer Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	124	8 Max	Raster Image (Layer 1 Maximum)

CODE	NTR	PRODUCT NAME	RESOLUTION	RANGE	DATA LEVEL	MESSAGE FORMAT
66	23	Layer Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	124	8 Max	Raster Image (Layer 2 Maximum)
67	23	Layer Composite Reflectivity - AP Removed	2.2 x 2.2 Nmi x Nmi	124	8 Max	Raster Image
68		Spare				
69		Spare				
70		Spare				
71		Spare				
72		Spare				
73	25	User Alert Message	N/A	N/A	N/A	Alphanumeric
74	26	Radar Coded Message	1/16 LFM	248	9	Alphanumeric
75	27	Free Text Message	N/A	N/A	N/A	Alphanumeric
76	-----Reserved for internal PUP use -----					
78	28	Surface Rainfall Accum. (1 hr)	1.1 x 1 Nmi x Deg	124	16	Radial Image
79	28	Surface Rainfall Accum. (3 hr)	1.1 x 1 Nmi x Deg	124	16	Radial Image
80	29	Storm Total Rainfall Accumulation	1.1 x 1 Nmi x Deg	124	16	Radial Image
81	30	Hourly Digital Precipitation Array	1/40 LFM	124	256/8	Raster Image / Alphanumeric
82	31	Supplemental Precipitation Data	N/A	N/A	N/A	Alphanumeric
83		Spare			9	
84	12	Velocity Azimuth Display	5 Knots	N/A	8	Non-geographic Alphanumeric
85	14	Cross Section Reflectivity	.54 Horizontal x .27 Vert Nmi x Nmi	124	8	Raster Image (Reflectivity)
86	14	Cross Section Velocity	.54 Horizontal x .27 Vert Nmi x Nmi	124	8	Raster Image (Velocity)
87		Spare				
88		Spare				
89	23	Layer Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	124	8 Avg	raster Image - Layer 3 Average
90	23	Layer Composite Reflectivity	2.2 x 2.2 Nmi x Nmi	124	8 Max	Raster Image - Layer 3 Maximum
91-92		Reserved for internal PUP and RPG Use				

CODE	NTR	PRODUCT NAME	RESOLUTION	RANGE	DATA LEVEL	MESSAGE FORMAT
93	35	ITWS Digital Base Velocity	.54 x 1 Nmi x Deg	Lesser of 62 Nmi or 18Kft AGL	256	Radial Image
94	1	Base Reflectivity Data Array	.54 x 1 Nmi x Deg	248	256	Radial Image
95	6	Composite Reflectivity Edited for AP	.54x.54 Nmi x Nmi	124	8	Raster Image/Non-geographic Alpha
96	6	Composite Reflectivity Edited for AP	2.2 x 2.2 Nmi x Nmi	248	8	Raster Image/Non-geographic alpha
97	6	Composite Reflectivity Edited for AP	.54 x .54 Nmi x Nmi	124	16	Raster Image/Non-geographic Alpha
98	6	Composite Reflectivity Edited for AP	2.2 x 2.2 Nmi x Nmi	248	16	Raster Image/Non-geographic Alpha
99	2	Base Velocity Data Array	.13 x 1 Nmi x Deg	124	256	Radial Image
100		Site Adaptable parameters for VAD Wind Profile (Product 48)				
101		Storm Track Alphanumeric Block				
102		Hail Index Alphanumeric Block				
103		Mesocyclone Alphanumeric Block				
104		TVS Alphanumeric Block				
105		Site Adaptable Parameters for Combined Shear				
106		Spare				
107		Surface Rainfall (1 hr) Alphanumeric Block				
108		Surface Rainfall (3 hr) Alphanumeric Block				

CODE	NTR	PRODUCT NAME	RESOLUTION	RANGE	DATA LEVEL	MESSAGE FORMAT
109		Storm Total Rainfall Accumulation Alphanumeric Block				
110		Clutter Likelihood Reflectivity Alphanumeric Block				
111		Clutter Likelihood Doppler Alphanumeric Block				
112-131		Reserved for Future Products				
132	36	Clutter Likelihood Reflectivity	.54 x 1 Nmi. x Deg	124	11	Radial Image
133	37	Clutter Likelihood Doppler	.54 x 1 Nmi. x Deg	124	12	Radial Image
134	39	High Resolution VIL	.54 x 1 Nmi x Deg	248	256	Radial Image
135	41	Enhanced Echo Tops	.54 x 1 Nmi x Deg	186	199	Radial Image
136	38	SuperOb	Adaptable, default = 5 km x 6 deg	Adaptable , default = 100 km	N/A	Latitude, Longitude (ICD packet code 27)
137	40	User Selectable Layer Composite Reflectivity	0.54 Nmi x1Deg	124 nmi	16	Radial image
138	29	Digital Storm Total Precipitation	1.1Nmi x 1Deg	124	256	Radial Image
139	20	Mesocyclone Rapid Update	N/A	124	N/A	Geographic and Non-geographic Alpha
140	46	Gust Front MIGFA	N/A	38	N/A	Generic Data Format
141	20	Mesocyclone Detection	N/A	124	N/A	Geographic and Non-geographic Alpha

CODE	NTR	PRODUCT NAME	RESOLUTION	RANGE	DATA LEVEL	MESSAGE FORMAT
143	21	Tornado Vortex Signature Rapid Update	N/A	124	N/A	Geographic and Non-geographic Alphanumeric
144	42	One-hour Snow Water Equivalent	0.54 x 1 Nmi x Deg	124	16	Radial Image
145	42	One-hour Snow Depth	0.54 x 1 Nmi x Deg	124	16	Radial Image
146	43	Storm Total Snow Water Equivalent	0.54 x 1 Nmi x Deg	124	16	Radial Image
147	43	Storm Total Snow Depth	0.54 x 1 Nmi x Deg	124	16	Radial Image
149	20	Digital Mesocyclone Detection	N/A	124	N/A	Generic Data Format
150	44	User Selectable Snow Water Equivalent	0.54 x 1 Nmi x Deg	124	16	Radial Image
151	44	User Selectable Snow Depth	0.54 x 1 Nmi x Deg	124	16	Radial Image
152		Archive III Status Product				Generic Data Format
153	1	Super Resolution Reflectivity Data Array	0.13 x 0.5 Nmi x Deg	248	256	Radial Image
154	2	Super Resolution Velocity Data Array	0.13 x 0.5 Nmi x Deg	162	256	Radial Image
155	3	Super Resolution Spectrum Width Data Array	0.13 x 0.5 Nmi x Deg	162	256	Radial Image
156	47	Eddy Dissipation Rate	1.1 x 1 Nmi x Deg	124 nmi	64	Digital Radial Data Array
157	47	Eddy Dissipation Rate Confidence	1.1 x 1 Nmi x Deg	124 nmi	8	Digital Radial Data Array
158	48	Differential Reflectivity	.54 x 1 Nmi x Deg	124	16	Radial Image
159	48	Digital Differential Reflectivity	.13 x 1 Nmi x Deg	162	256	Radial Image
160	49	Correlation Coefficient	.54 x 1 Nmi x Deg	124	16	Radial Image
161	49	Digital Correlation Coefficient	.13 x 1 Nmi x Deg	162	256	Radial Image
162	50	Specific Differential Phase	.54 x 1 Nmi x Deg	124	16	Radial Image

CODE	NTR	PRODUCT NAME	RESOLUTION	RANGE	DATA LEVEL	MESSAGE FORMAT
163	50	Digital Specific Differential Phase	.13 x 1 Nmi x Deg	162	256	Radial Image
164	51	Hydrometeor Classification	.54 x 1 Nmi x Deg	124	16	Radial Image
165	51	Digital Hydrometeor Classification	.13 x 1 Nmi x Deg	162	256	Radial Image
166	52	Melting Layer	.13 x .13 Nmi x Nmi	124	N/A	Linked Contour Vectors/Set Color Level
169	53	One Hour Accumulation	1.1 Nmi X 1 Degree	124	16	Radial Image
170	54	Digital Accumulation Array	0.13 Nmi X 1 Degree	124	256	Radial Image
171	55	Storm Total Accumulation	1.1 Nmi X 1 Degree	124	16	Radial Image
172	56	Digital Storm Total Accumulation	0.13 Nmi X 1 Degree	124	256	Radial Image
173	57	Digital User-Selectable Accumulation	0.13 Nmi X 1 Degree	124	256	Radial Image
174	58	Digital One-Hour Difference Accumulation	0.13 Nmi X 1 Degree	124	256	Radial Image
175	59	Digital Storm Total Difference Accumulation	0.13 Nmi X 1 Degree	124	256	Radial Image
176	60	Digital Instantaneous Precipitation Rate	0.13 Nmi X 1 Degree	124	65536	Generic Radial Product Format
177	51	Hybrid Hydrometeor Classification	250 m (0.13 Nmi) X 1 Degree	124	256	Radial Image
178-193		Reserved for Future Products				
194	1	Base Reflectivity Data Array (DoD Version)	0.54 x 1 Nmi X Deg	124	256	Radial Image
195-198		Reserved for Future Products				
199	2	Base Velocity Data Array (DoD Version)	0.27 x 1 Nmi X Deg	124	256	Radial Image