Precipitation Processing System (PPS) Product Format Description

One Hour Surface Rainfall Accumulation (OHP)

OHP shall provide 1-hour rainfall accumulation maps displayed as an image. The 1-hour map shall be updated every volume scan time. OHP is a 16 data level product, formatted as a radial image, with 1.1 Nmi x 1 Degree resolution and a range of 124. The product is not compressed.

The following table provides a detailed specification of the OHP product.

Highlighted areas indicate fields which are specific to this product (or might be)

[Note: a Halfword is 16 bits]

MESSAGE HEADER

References

2620001F (Class I User ICD):
Fig 3-3 "Message Header"

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
01	Message Code	INT*2	N/A	78	N/A	From Fig 3-3
02	Date of Message	INT*2	Julian Date	1 to 32,767	1	From Fig 3-3
03-04	Time of Message	INT*4	Seconds	0 to 86,399	1	From Fig 3-3
05-06	Length of Message	INT*4	N/A	18 to 409856	1	From Fig 3-3
07	Source ID	INT*2	N/A	0 to 999	1	From Fig 3-3
08	Destination ID	INT*2	N/A	0 to 999	1	From Fig 3-3
09	Number of Blocks	INT*2	N/A	4	1	From Fig 3-3

PRODUCT DESCRIPTION BLOCK

References

2620001F (Class I Users ICD):
Fig 3-6 "Graphic Product Message" Sheet 2, Sheet 6, Sheet 7
Table III "Message Codes for Products"
Table V "Product Dependent Halfword Definition for Product Description Block"

2620003F (Product Spec ICD):
Section 28.2.2 “Color Level Code Table”

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
10	Block Divider	INT*2	NA	-1	N/A	From Fig 3-6 Sheet 6
11-12	Latitude of Radar	INT*4	Degrees	-90 to +90	0.001	From Fig 3-6 Sheet 6
13-14	Longitude of Radar	INT*4	Degrees	-180 to +180	0.001	From Fig 3-6 Sheet 6
15	Height of Radar	INT*2	Feet	-100 to +11000	1	From Fig 3-6 Sheet 6
16	Product Code	INT*2	N/A	78		From Table III
17	Operational Mode	INT*2	N/A	0 to 2	N/A	From Fig 3-6 Sheet 6
18	Volume Coverage Pattern	INT*2	N/A	1 to 767	N/A	From Fig 3-6 Sheet 6
19	Sequence Number	INT*2	N/A	-13, 0 to 32767	1	From Fig 3-6 Sheet 6
20	Volume Scan Number	INT*2	N/A	1 to 80	1	From Fig 3-6 Sheet 6
21	Volume Scan Date	INT*2	Julian Date	1 to 32767	1	From Fig 3-6 Sheet 6
22-23	Volume Scan Start Time	INT*4	Seconds GMT	0 to 86399	1	From Fig 3-6 Sheet 6
24	Product Generation Date	INT*2	Julian Date	1 to 32767	1	From Fig 3-6 Sheet 6
25-26	Product Generation Time	INT*4	Seconds	0 to 86399	1	From Fig 3-6 Sheet 6
27	Not used	INT*2		0		From cvt view
28	Not used	INT*2		0		From cvt view
29	Elevation Number	INT*2	N/A	0 to 20	1	From Fig 3-6 Sheet 6
30	Not used			0		From cvt view
31	Data Level 1 Threshold	INT*2	Inches	Code for ND (i.e. 0)	1	From 28.2.2
32	Data Level 2 Threshold	INT*2	Inches	Code for > 0.00	1	From 28.2.2
33	Data Level 3 Threshold	INT*2	Inches	Code for > 0.10	1	From 28.2.2
34	Data Level 4 Threshold	INT*2	Inches	Code for > 0.25	1	From 28.2.2
35	Data Level 5 Threshold	INT*2	Inches	Code for > 0.50	1	From 28.2.2

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
36	Data Level 6 Threshold	INT*2	Inches	Code for > 0.75	1	From 28.2.2
37	Data Level 7 Threshold	INT*2	Inches	Code for > 1.00	1	From 28.2.2
38	Data Level 8 Threshold	INT*2	Inches	Code for > 1.25	1	From 28.2.2
39	Data Level 9 Threshold	INT*2	Inches	Code for > 1.50	1	From 28.2.2
40	Data Level 10 Threshold	INT*2	Inches	Code for > 1.75	1	From 28.2.2
41	Data Level 11 Threshold	INT*2	Inches	Code for > 2.00	1	From 28.2.2
42	Data Level 12 Threshold	INT*2	Inches	Code for > 2.50	1	From 28.2.2
43	Data Level 13 Threshold	INT*2	Inches	Code for > 3.00	1	From 28.2.2
44	Data Level 14 Threshold	INT*2	Inches	Code for > 4.00	1	From 28.2.2
45	Data Level 15 Threshold	INT*2	Inches	Code for > 6.00	1	From 28.2.2
46	Data Level 16 Threshold	INT*2	Inches	Code for > 8.00	1	From 28.2.2
47	Max rainfall	INT*2	Inches	0.0 to 189.0	0.1	From Table V
48	Mean-field Bias	INT*2	N/A	0.01 to 99.99	0.01	From Table V
49	Effective No. G-R Pairs (Sample Size)	INT*2	N/A	0.00 to 9999.99	0.01	From Table V
50	Rainfall End Date	INT*2	Julian Date	1 to 32767	1	From Table V
51	Rainfall End Time	INT*2	Minutes	0 to 1439	1	From Table V. NOTE: Fig 3-6 Sheet 7 Note 3 says this field should be compression method
52	Not used	INT*2		0		From cvt view
53	Not used	INT*2		0		From cvt view
54	Version	INT*1	N/A	1 to 2	1	From Sheet 7, Note 2
54	Spot Blank	INT*1	N/A	0 to 1	1	From Fig 3-6 Sheet 6
55-56	Offset to Symbology	INT*4	Halfwords	60	1	From Fig 3-6 Sheet 6.

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
57-58	Offset to Graphic	INT*4	Halfwords	0	1	From Sheet 6
59-60	Offset to Tabular	INT*4	Halfwords	0 to 400000	1	From Fig 3-6 Sheet 6. Varies, depending on size of Symbology

PRODUCT SYMBOLOGY BLOCK

References

2620001F (Class I User ICD):

Section 3.2.1.2 “Product Symbology Block”
Fig 3-6 “Graphic Product Message” Sheet 3 and Sheet 8
Fig 3-10 “Radial Data Packet”

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
61	Block Divider	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 8
62	Block ID	INT*2	N/A	1	N/A	From Fig 3-6 Sheet 8
63-64	Length of Block	INT*4	Bytes	1 to 400000	1	From Fig 3-6 Sheet 8
65	Number of Layers	INT*2	N/A	1	1	From 3.2.1.2
66	Layer Divider	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 8
67-68	Length of Data Layer	INT*4	N/A	1 to 400000	1	From Fig 3-6 Sheet 8
69	Packet Code	INT*2	N/A	AF1F (Hex)	N/A	From Figure 3-10
70	Index of First Range Bin	INT*2	N/A	0	1	From Figure 3-10
71	Number of Range Bins	INT*2	N/A	115	1	From Figure 3-10
72	I Center of Sweep	INT*2	Km/4	256	1	From Figure 3-10
73	J Center of Sweep	INT*2	Km/4	280	1	From Figure 3-10
74	Scale Factor	Scaled	Pixels	2.0	0.001	From Figure

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
		Integer				3-10
75	Number of Radials	INT*2	N/A	360	1	From Dennis's notes
76	Number of RLE Halfwords in Radial	INT*2	Halfword	1 to 116	1	} }
77	Radial Start Angle	Scaled Integer (INT*2)	Degrees	0.0 to 359.0	0.1	} for } }
78	Radial Angle Delta	Scaled Integer (INT*2)	Degrees	1.0 to 2.0	0.1	} each } }
79	Run (0)	4 Bit INT	N/A	0 to 15	1	} } of
79	Color Code (0)	4 Bit INT	N/A	0 to 15	1	} for each } 360
79	Run (1)	4 Bit INT	N/A	0 to 15	1	} "run" } radials
79	Color Code (1)	4 Bit INT	N/A	0 to 15	1	} }
…	…	…	…	…	…	}
…	…	…	…	…	…	}
…	…	…	…	…	…	}
	Run (N)	4 Bit INT	N/A	0 to 15	1	[N is even] }
	Color Code (N)	4 Bit INT	N/A	0 to 15	1	}
	End of Block	4 Bit INT	N/A	0000	N/A	End of } block } marker }
	End of Block	4 Bit INT	N/A	0000	N/A	End of } block } marker }

[GRAPHIC ALPHANUMERIC BLOCK IS NOT APPLICABLE FOR OHP]

TABULAR ALPHANUMERIC BLOCK – CONTAINS OHP PAIRED ALPHANUMERIC PRODUCT

<u>References</u>

2620001F:

Section 3.2.1.4 "Tabular Alphanumeric Block"
Fig 3-3 "Message Header"

Fig 3-6 “Graphic Product Message” Sheet 7 and Sheet 10
Fig 3-10 “Radial Data Packet”
From Table V “Product Dependent Halfword Definition for Product Description Block”
26200003F:
Appendix C, Format IX “Precipitation Adaptation Data”, Sheets 1-4

ICD for the RPG to Class I User:
3-28 (Sheet 7)

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
	Block Divider	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 10
	Block ID	INT*2	N/A	3	N/A	From Fig 3-6 Sheet 10
	Length of Block	INT*4	Bytes	1 to 65535	1	From Fig 3-6 Sheet 10
	Message Code	INT*2	N/A	107	N/A	From Section 3.2.1.4
	Date of Message	INT*2	Julian Date	1 to 32,767	1	From Fig 3-3
	Time of Message	INT*4	Seconds	0 to 86,399	1	From Fig 3-3
	Length of Message	INT*4	N/A	18 to 409856	1	From Fig 3-3
	Source ID	INT*2	N/A	0 to 999	1	From Fig 3-3
	Destination ID	INT*2	N/A	0 to 999	1	From Fig 3-3
	Number of Blocks	INT*2	N/A	4	1	From Dennis
	Block Divider	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 6
	Latitude of Radar	INT*4	Degrees	-90 to +90	0.001	From Fig 3-6 Sheet 6
	Longitude of Radar	INT*4	Degrees	-180 to +180	0.001	From Fig 3-6 Sheet 6
	Height of Radar	INT*2	Feet	-100 to +11000	1	From Fig 3-6 Sheet 6
	Product Code	INT*2	N/A	78		From 3-28(sheet 7)
	Operational Mode	INT*2	N/A	0 to 2	N/A	From Fig 3-6 Sheet 6
	Volume Coverage Pattern	INT*2	N/A	1 to 767	N/A	From Fig 3-6 Sheet 6
	Sequence Number	INT*2	N/A	-13, 0 to 32767	1	From Fig 3-6 Sheet 6
	Volume Scan Number	INT*2	N/A	1 to 80	1	From Fig 3-6 Sheet 6
	Volume Scan Date	INT*2	Julian	1 to 32767	1	From Fig 3-6

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
			Date			Sheet 6
	Volume Scan Start Time	INT*4	Seconds GMT	0 to 86399	1	From Fig 3-6 Sheet 6
	Product Generation Date	INT*2	Julian Date	1 to 32767	1	From Fig 3-6 Sheet 6
	Product Generation Time	INT*4	Seconds	0 to 86399	1	From Fig 3-6 Sheet 6
	Not Used	INT*2		0		From cvt view
	Not Used	INT*2		0		From cvt view
	Elevation Number	INT*2	N/A	0 to 20	1	From Fig 3-6 Sheet 6
	Not Used	INT*2		0		From cvt view
	Data Level 1 Threshold	INT*2	Inches	Code for ND (i.e. 0)	1	From 28.2.2
	Data Level 2 Threshold	INT*2	Inches	Code for >0.00	1	From 28.2.2
	Data Level 3 Threshold	INT*2	Inches	Code for >0.10	1	From 28.2.2
	Data Level 4 Threshold	INT*2	Inches	Code for >0.25	1	From 28.2.2
	Data Level 5 Threshold	INT*2	Inches	Code for >0.50	1	From 28.2.2
	Data Level 6 Threshold	INT*2	Inches	Code for >0.75	1	From 28.2.2
	Data Level 7 Threshold	INT*2	Inches	Code for >1.00	1	From 28.2.2
	Data Level 8 Threshold	INT*2	Inches	Code for >1.25	1	From 28.2.2
	Data Level 9 Threshold	INT*2	Inches	Code for >1.50	1	From 28.2.2
	Data Level 10 Threshold	INT*2	Inches	Code for >1.75	1	From 28.2.2
	Data Level 11 Threshold	INT*2	Inches	Code for >2.00	1	From 28.2.2
	Data Level 12 Threshold	INT*2	Inches	Code for >2.50	1	From 28.2.2
	Data Level 13 Threshold	INT*2	Inches	Code for >3.00	1	From 28.2.2
	Data Level 14 Threshold	INT*2	Inches	Code for > 4.00	1	From 28.2.2
	Data Level 15 Threshold	INT*2	Inches	Code for >6.00	1	From 28.2.2
	Data Level 16	INT*2	Inches	Code for		From 28.2.2

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
	Threshold			>8.00		
	Max rainfall	INT*2	Inches	0.0 to 189.0	0.1	From Table V
	Mean-field Bias	INT*2	N/A	0.01 to 99.99	0.01	From Table V
	Effective No. G-R Pairs (Sample Size)	INT*2	N/A	0.00 to 9999.99	0.01	From Table V
	Rainfall End Date	INT*2	Julian Date	1 to 32767	1	From Table V
	Rainfall End Time	INT*2	Minutes	0 to 1439	1	From Table V. NOTE: Fig 3-6 Sheet 7 Note 3 says this field should be compression method
	Not Used	INT*2		0		From cvt view
	Not Used	INT*2		0		From cvt view
	Version	INT*1	N/A	1 to 2	1	From Sheet 7, Note 2
	Spot Blank	INT*1	N/A	0 to 1	1	From Fig 3-6 Sheet 6
	Offset to Symbology	INT*4	Halfwords	60	1	From Fig 3-6 Sheet 6
	Offset to Graphic	INT*4	Halfwords	0	1	From Fig 3-6 Sheet 6
	Offset to Tabular	INT*4	Halfwords	0 to 400000	1	From Fig 3-6 Sheet 6
	Block Divider	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 7
	Number of Pages	INT*2	N/A	5	1	From Fig 3-6 Sheet 7
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Title			1-HOUR PRECIPITATION ACCUMULATION DATE TIME		From CVG
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Blank Line	INT*2		‘ ‘	N/A	From the source code
	Number of	INT*2	N/A	80	1	From Fig 3-6

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
	Characters					Sheet 7
	Blank Line	INT*2		‘ ‘	N/A	From the source code
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	GAGE/RADAR BIAS ESTIMATE …”XXXXX” Range:0.01 to 100.00 Default:1.255	N/A	
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	SAMPLE SIZE (EFFECTIVE NO. GAGE/RADAR PAIRS)…”XXXXX” Range:0.00 to 9999.99 Default:13.494	N/A	
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MEMORY SPAN (HOURS) OVER WHICH BIAS DETERMINED…”XXXXX” Range:0.001 to 10**7 Default:0.001	N/A	
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable	CHAR	8 Bit	PRODUCT	N/A	

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
	Parameters		ASCII	ADJUSTED BY BIAS ESTIMATE... ”XXX” Range:Yes to No Default:No		
	End of Page Flag	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 7
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	RADAR HALF POWER BEAM WIDTH. . . . . “XXXX” DEG” Range: 0.80 to 1.00 Default:0.90	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAXIMUM ALLOWABLE PERCENT OF BEAM BLOCKAGE . . . . . ”XXXXX” Range: 0.00 to 100.00 Default: 50.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAXIMUM ALLOWABLE PERCENT LIKELIHOOD OF CLUTTER . .	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				.. . .”XXXXX” Range: 0.00 to 100.00 Default: 50.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	PERCENT OF BEAM REQUIRED TO COMPUTE AVERAGE POWER…… ”XXXXX” Range: 0.00 to 100.00 Default: 50.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	PERCENT OF HYBRID SCAN NEEDED TO BE CONSIDERED FULL…..”XXXXX” Range: 90.00 to 100.00 Default: 99.70	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	LOW REFLECTIVITY THRESHOLD (dBZ) FOR BASE DATA.	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				.”XXXXX DBZ” Range: -40.00 to -20.00 Default: -32.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	REFLECTIVITY (dBZ) REPRESENTING SIGNIFICANT RAIN. . . . . “XXXXX” Range: 10.00 to 30.00 Default: 20.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	AREA WITH REFLECTIVITY EXCEEDING SIGNIFICANT RAIN THRESHOLD. . . . . .”XXXXX”KM**2” Range: 0.00 to 82800.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	THRESHOLD TIME WITHOUT RAIN FOR RESETTING STP . . . . . .”XXXXX”	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				MINUTES" Range:0.00 to 1440.00 Defaults: 60.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	REFLECT-TO-PRECIP RATE CONVERSIO N MULTIPLIC ATIVE COEFFICIEN T. …."XXXXX" DBZ" Range: 30.00 to 3000.00 Defaults: 300.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	REFLECT-TO-PRECIP RATE CONVERSIO N POWER COEFFICIEN T …"XXXXX" DBZ" Range: 1.00 to 2.50 Default: 1.40	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MIN DBZ FOR CONVERTIN G TO PRECIP	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				RATE (VIA TABLE LOOKUP)…" XXXXX" Range: -32.00 to 20.00 Default: 0.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX DBZ FOR CONVERTING TO PRECIP RATE (VIA TABLE LOOKUP)…" XXXXX" Range: 50.00 to 90.00 Default: 70.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	NUMBER OF EXCLUSION ZONE…"XXXX" Range: 0.00 to 20.00 Default: 0.00	N/A	From Format IX Sheets 1-4
	End of Page Flag	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 7
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX STORM SPEED (m/sec)…"XXXXX M/Sec" Range: 10.00 to 40.00 Default: 25.00	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX SCAN-TO-SCAN TIME DIFFERENCE FOR TIME CONTINUITY TESTS…"XXXXX MINUTES" Range: 10.00 to 30.00 Default:15.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MIN PRECIP-AREA FOR PERFORMING TIME CONTINUITY TESTS…"XXXXX KM**2" Range:50 to 1000 Default: 200.00	N/A	From Format IX Sheets 1-4
	End of Page Flag	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 7
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	RATE OF CHANGE: VOLUMETRIC PRECIP RATE, MIN ECHO AREA . . . . . ."XXXXX	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				1/Hr" Range:0.1 to 99.9 Default:24.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	RATE OF CHANGE: VOLUMETRIC PRECIP RATE, Full ECHO UMBRELLA . . . . . ."XXXXX 1/Hr" Range:0.1 to 99.9 Default:13.20	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX ECHO-AREA RATE OF CHANGE…" XXXXX KM**2/Hr" Range:20.00 to 700.00 Default:200.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	RANGE BEYOND WHICH TO APPLY RANGE-EFFECT FUNCTION …"XXXXX KM"	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				Range:0.00 to 230.00 Default:230.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	1ST COEFFICIENT OF RANGE-EFFECT FUNCTION …"XXXXX DBR" Range:0.00 to 3.00 Default:0.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	2ND COEFFICIENT OF RANGE-EFFECT FUNCTION …"XXXXX DBR" Range:1.00 to 10.00 Default:1.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	3RD COEFFICIENT OF RANGE-EFFECT FUNCTION …"XXXXX DBR" Range:0.00 to 1.00 Default:0.00	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MIN RATE SIGNIFYING PRECIPITATION…"XXXXX MM/Hr" Range:0.00 to 10.00 Default:0.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX PRECIPITATION RATE…"XXXXX MM/Hr" Range:50.00 to 1600.00 Default:103.80	N/A	From Format IX Sheets 1-4
	End of Page Flag	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 7
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	REINITIALIZATION TIME LAPSE THRESHOLD (FOR ACCUM PROCESS)…"XXXXX MINUTES" Range:45.00 to 60.00 Default:60.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX TIME DIFFERENCE BETWEEN	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				SCANS FOR INTERPOLATION…"XX XXX MINUTES" Range:15.00 to 60.00 Default:30.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MIN TIME NEEDED TO ACCUMULATE HOURLY TOTALS…" XXXXX MINUTES" Range:0.00 to 60.00 Defaults:54.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	THRESHOLD FOR HOURLY OUTLIER ACCUMULATION…"XX XXX MM" Range:50.00 to 800.00 Default:400.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	HOURLY GAGE ACCUMULATION SCAN ENDING TIME…"XX XXX	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				MINUTES" Range:0.00 to 59.00 Default:0.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX ACCUMULATION PER SCAN-TO-SCAN PERIOD…"XXXXX MM" Range:50.00 to 400.00 Default:400.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MAX ACCUMULATION PER HOURLY PERIOD…"XXXXX MM" Range:50.00 to 1600.00 Default:800.00	N/A	From Format IX Sheets 1-4
	End of Page Flag	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 7
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	MINUTES AFTER CLOCK HOUR WHEN BIAS IS UPDATED…"XXXXX MM" Range:50.00	N/A	From Format IX Sheets 1-4

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
				to 59.00 Default:50.00		
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	THRESHOLD # OF GAGE/RADAR PAIRS NEEDED TO SELECT BIAS…"XXXXX" Range:6.00 to 30.00 Default:10.00	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	RESET VALUE OF GAGE/RADAR BIAS ESTIMATE …"XXXXX" Range:0.5 to 2.0 Default:1.0	N/A	From Format IX Sheets 1-4
	Number of Characters	INT*2	N/A	80	1	From Fig 3-6 Sheet 7
	Site Adaptable Parameters	CHAR	8 Bit ASCII	LONGEST ALLOWABLE LAG FOR USE OF BIAS FROM BIAS TABLE…"XXXXX HOURS" Range:100.00 to 1000.00 Default:168.00	N/A	From Format IX Sheets 1-4
	End of Page Flag	INT*2	N/A	-1	N/A	From Fig 3-6 Sheet 7

The following is the tabular alphanumeric block coming from one of the products by the use of the CVG

Tabular Alphanumeric Block
Block Divider = -1
Block ID = 3
Length of Block = 3750 bytes
new offset = 7284
Block Divider = -1
Number of Pages: 5 Current Page: 1

Tabular Alphanumeric Block - Page: 1
buf len=568, buf =
1-HOUR PRECIPITATION ACCUMULATION 05/11/04 07:59

GAGE/RADAR BIAS ESTIMATE 1.255
SAMPLE SIZE (EFFECTIVE NO. GAGE/RADAR PAIRS) 13.494
MEMORY SPAN (HOURS) OVER WHICH BIAS DETERMINED ... 168.006
PRODUCT ADJUSTED BY BIAS ESTIMATE? ..... NO

Tabular Alphanumeric Block - Page: 2
buf len=1135, buf =
RADAR HALF POWER BEAM WIDTH..... 0.90 DEG
MAXIMUM ALLOWABLE PERCENT OF BEAM BLOCKAGE..... 50.00 %
MAXIMUM ALLOWABLE PERCENT LIKELIHOOD OF CLUTTER..... 50.00
PERCENT OF BEAM REQUIRED TO COMPUTE AVERAGE POWER..... 50.00
PERCENT OF HYBRID SCAN NEEDED TO BE CONSIDERED FULL..... 99.70
LOW REFLECTIVITY THRESHOLD (dBZ) FOR BASE DATA..... -32.00 DBZ
REFLECTIVITY (dBZ) REPRESENTING SIGNIFICANT RAIN..... 20.00
AREA WITH REFLECTIVITY EXCEEDING SIGNIFICANT RAIN THRESHOLD. 80.00 KM**2
THRESHOLD TIME WITHOUT RAIN FOR RESETTING STP ..... 60.00 MINUTES
REFLECT-TO-PRECIP RATE CONVERSION MULTIPLICATIVE COEFFICIENT 300.00 DBZ
REFLECT-TO-PRECIP RATE CONVERSION POWER COEFFICIENT..... 1.40 DBZ
MIN DBZ FOR CONVERTING TO PRECIP RATE (VIA TABLE LOOKUP).... 0.00
MAX DBZ FOR CONVERTING TO PRECIP RATE (VIA TABLE LOOKUP).... 70.00
NUMBER OF EXCLUSION ZONES..... 0.00

Tabular Alphanumeric Block - Page: 3
buf len=973, buf =
MAX STORM SPEED (M/SEC)..... 25.00 M/Sec

MAX SCAN-TO-SCAN TIME DIFFERENCE FOR TIME CONTINUITY TESTS.. 15.00 MINUTES
MIN PRECIP-AREA FOR PERFORMING TIME CONTINUITY TESTS..... 200.00 KM**2
RATE OF CHANGE: VOLUMETRIC PRECIP RATE, MIN ECHO AREA..... 24.00 1/Hr
RATE OF CHANGE: VOLUMETRIC PRECIP RATE, FULL ECHO UMBRELLA.. 13.20 1/Hr
MAX ECHO-AREA RATE OF CHANGE 200.00 KM**2/Hr
RANGE BEYOND WHICH TO APPLY RANGE-EFFECT CORRECTION..... 230.00 KM
1ST COEFFICIENT OF RANGE-EFFECT FUNCTION..... 0.00 DBR
2ND COEFFICIENT OF RANGE-EFFECT FUNCTION..... 1.00
3RD COEFFICIENT OF RANGE-EFFECT FUNCTION..... 0.00
MIN RATE SIGNIFYING PRECIPITATION..... 0.00 MM/Hr
MAX PRECIPITATION RATE..... 103.80 MM/Hr

Tabular Alphanumeric Block - Page: 4
buf len=568, buf =
REINITIALIZATION TIME LAPSE THRESHOLD (FOR ACCUM PROCESS)... 60.00 MINUTES
MAX TIME DIFFERENCE BETWEEN SCANS FOR INTERPOLATION..... 30.00 MINUTES
MIN TIME NEEDED TO ACCUMULATE HOURLY TOTALS..... 54.00 MINUTES
THRESHOLD FOR HOURLY OUTLIER ACCUMULATION..... 400.00 MM
HOURLY GAGE ACCUMULATION SCAN ENDING TIME..... 0.00 MINUTES
MAX ACCUMULATION PER SCAN-TO-SCAN PERIOD..... 400.00 MM
MAX ACCUMULATION PER HOURLY PERIOD..... 800.00 MM

Tabular Alphanumeric Block - Page: 5
buf len=325, buf =
MINUTES AFTER CLOCK HOUR WHEN BIAS IS UPDATED..... 50.00 MINUTES
THRESHOLD # OF GAGE/RADAR PAIRS NEEDED TO SELECT BIAS..... 10.00
RESET VALUE OF GAGE/RADAR BIAS ESTIMATE..... 1.00
LONGEST ALLOWABLE LAG FOR USE OF BIAS FROM BIAS TABLE..... 168.00 HOURS