

## Precipitation Processing System (PPS) Product Format Description

### **Storm Total Rainfall Accumulation (STP)**

Change History Log		
Author	Date	Build
Kelley Miles	3/8/2005	8
Jihong Liu	3/17/2005	correction

<b>Setting</b>	<b>Value</b>	<b>Comment</b>
Product type	16-level	
Time generated	Once every volume scan	
Product size	N/A	
Compression	None	
Resolution	1.1-Nmi x 1-deg	
Range	124	
AWIPS ID	WSRSTP <sub>xxx</sub>	xxx is site ID for originating WFO
Description/Purpose: STP is formatted as a radial image.		

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

Highlighted areas in the description below indicate changes since the previous Build

[Note: a Halfword is 16 bits]

#### **MESSAGE HEADER**

#### References

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

<b>HALF WORD</b>	<b>FIELDNAME</b>	<b>TYPE</b>	<b>UNITS</b>	<b>VALUE</b>	<b>PRECISION/ ACCURACY</b>	<b>NOTES</b>
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01	Message Code	INT*2	N/A	80	N/A	
02	Date of Message	INT*2	Julian Date	1 to 32,767	1	
03-04	Time of Message	INT*4	Seconds	0 to 86,399	1	
05-06	Length of Message	INT*4	N/A	18 to 409856	1	
07	Source ID	INT*2	N/A	0 to 999	1	
08	Destination ID	INT*2	N/A	0 to 999	1	
09	Number of Blocks	INT*2	N/A	4	1	

## 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 29.2.2 “Color Level Code Table”

<b>HALF WORD</b>	<b>FIELDNAME</b>	<b>TYPE</b>	<b>UNITS</b>	<b>VALUE</b>	<b>PRECISION/ ACCURACY</b>	<b>NOTES</b>
10	Block Divider	INT*2	NA	-1	N/A	
11-12	Latitude of Radar	INT*4	Degrees	-90 to +90	0.001	
13-14	Longitude of Radar	INT*4	Degrees	-180 to +180	0.001	
15	Height of Radar	INT*2	Feet	-100 to +11000	1	
16	Product Code	INT*2	N/A	80	N/A	
17	Operational Mode	INT*2	N/A	0 to 2	N/A	
18	Volume Coverage Pattern	INT*2	N/A	1 to 767	N/A	
19	Sequence Number	INT*2	N/A	-13, 0 to 32767	1	
20	Volume Scan Number	INT*2	N/A	1 to 80	1	
21	Volume Scan Date	INT*2	Julian Date	1 to 32767	1	
22-23	Volume Scan Start Time	INT*4	Seconds GMT	0 to 86399	1	
24	Product Generation Date	INT*2	Julian Date	1 to 32767	1	
25-26	Product Generation Time	INT*4	Seconds	0 to 86399	1	
27	Not Used	INT*2	N/A	0.	N/A	

<b>HALF WORD</b>	<b>FIELDNAME</b>	<b>TYPE</b>	<b>UNITS</b>	<b>VALUE</b>	<b>PRECISION/ ACCURACY</b>	<b>NOTES</b>
28	Not Used	INT*2	N/A	0	N/A	
29	Elevation Number	INT*2	N/A	0 to 20	1	
30	Not Used	INT*2	N/A	0	N/A	
31	Data Level 1 Threshold	INT*2	Inches	Code for ND (i.e. 0)	1	
32	Data Level 2 Threshold	INT*2	Inches	Code for >0.0	1	
33	Data Level 3 Threshold	INT*2	Inches	Code for >0.3	1	
34	Data Level 4 Threshold	INT*2	Inches	Code for >0.6	1	
35	Data Level 5 Threshold	INT*2	Inches	Code for >1.0	1	
36	Data Level 6 Threshold	INT*2	Inches	Code for >1.5	1	
37	Data Level 7 Threshold	INT*2	Inches	Code for >2.0	1	
38	Data Level 8 Threshold	INT*2	Inches	Code for >2.5	1	
39	Data Level 9 Threshold	INT*2	Inches	Code for >3.0	1	
40	Data Level 10 Threshold	INT*2	Inches	Code for >4.0	1	
41	Data Level 11 Threshold	INT*2	Inches	Code for >5.0	1	
42	Data Level 12 Threshold	INT*2	Inches	Code for >6.0	1	
43	Data Level 13 Threshold	INT*2	Inches	Code for >8.0	1	
44	Data Level 14 Threshold	INT*2	Inches	Code for > 10.0	1	
45	Data Level 15 Threshold	INT*2	Inches	Code for >12.0	1	
46	Data Level 16 Threshold	INT*2	Inches	Code for >15.0	1	
47	Max rainfall	INT*2	Inches	0.0 to 327.6	0.1	
48	Begin Date Rainfall	INT*2	Julian Date	1 to 32767	1	
49	Begin Time Rainfall	INT*2	Minutes	1 to 1439	1	
50	End Date Rainfall	INT*2	Julian Date	1 to 32767	1	
51	End Time Rainfall	INT*2	Minutes	0 to 1439	1	

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION/ ACCURACY	NOTES
52	Mean-field Bias	INT*2	N/A	0.01 to 99.99	0.01	
53	Effective No. G-R Pairs (Sample Size)	INT*2	N/A	0.00 to 9999.99	0.01	
54	Version	INT*1	N/A	1 to 2	1	
54	Spot Blank	INT*1	N/A	0 to 1	1	
55-56	Offset to Symbology	INT*4	Halfwords	60	1	
57-58	Offset to Graphic	INT*4	Halfwords	0	1	
59-60	Offset to Tabular	INT*4	Halfwords	0 to 400000	1	Varies, depending on size of Symbology Block

**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	
62	Block ID	INT*2	N/A	1	N/A	
63-64	Length of Block	INT*4	Bytes	1 to 400000	1	
65	Number of Layers	INT*2	N/A	1	1	
66	Layer Divider	INT*2	N/A	-1	N/A	
67-68	Length of Data Layer	INT*4	N/A	1 to 400000	1	
69	Packet Code	INT*2	N/A	AF1F (Hex)	N/A	
70	Index of First Range Bin	INT*2	N/A	0	1	
71	Number of Range Bins	INT*2	N/A	115	1	
72	I Center of Sweep	INT*2	Km/4	256	1	
73	J Center of Sweep	INT*2	Km/4	280	1	
74	Scale Factor	Scaled Integer	Pixels	2.0	0.001	
75	Number of Radials	INT*2	N/A	360	1	

<b>HALF WORD</b>	<b>FIELDNAME</b>	<b>TYPE</b>	<b>UNITS</b>	<b>VALUE</b>	<b>PRECISION/ ACCURACY</b>	<b>NOTES</b>
76	Number of RLE Halfwords in Radial	INT*2	Halfword	1 to 116	1	}Repeat
77	Radial Start Angle	Scaled Integer	Degrees	0.0 to 359.0	0.1	} Each } of }
78	Radial Angle Delta	Scaled Integer	Degrees	1.0 to 2.0	0.1	} Radial } }
79	Run (0)	4 Bit INT	N/A	0 to 15	1	} }
79	Color Code (0)	4 Bit INT	N/A	0 to 15	1	} }
79	Run (1)	4 Bit INT	N/A	0 to 15	1	} }
79	Color Code (1)	4 Bit INT	N/A	0 to 15	1	} }
...	...	...	...	...	...	}
...	...	...	...	...	...	}
...	...	...	...	...	...	}
	Run (N)	4 Bit INT	N/A	0 to 15	1	} }
	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 STP]

**TABULAR ALPHANUMERIC BLOCK – CONTAINS STP PAIRED ALPHANUMERIC PRODUCT**

References

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

<b>HALF WORD</b>	<b>FIELDNAME</b>	<b>TYPE</b>	<b>UNITS</b>	<b>VALUE</b>	<b>PRECISION / ACCURACY</b>	<b>NOTES</b>
1	Block Divider	INT*2	N/A	-1	N/A	
2	Block ID	INT*2	N/A	3	N/A	
3-4	Length of Block	INT*4	Bytes	1 to 65535	1	
5	Message Code	INT*2	N/A	109	N/A	
6	Date of Message	INT*2	Julian Date	1 to 32,767	1	
7-8	Time of Message	INT*4	Seconds	0 to 86,399	1	
9-10	Length of Message	INT*4	N/A	18 to 409856	1	
11	Source ID	INT*2	N/A	0 to 999	1	
12	Destination ID	INT*2	N/A	0 to 999	1	
13	Number of Blocks	INT*2	N/A	4	1	
14	Block Divider	INT*2	N/A	-1	N/A	
15-16	Latitude of Radar	INT*4	Degrees	-90 to +90	0.001	
17-18	Longitude of Radar	INT*4	Degrees	-180 to +180	0.001	
19	Height of Radar	INT*2	Feet	-100 to +11000	1	
20	Product Code	INT*2	N/A	80	N/A	
21	Operational Mode	INT*2	N/A	0 to 2	N/A	
22	Volume Coverage Pattern	INT*2	N/A	1 to 767	N/A	
23	Sequence Number	INT*2	N/A	-13, 0 to 32767	1	
24	Volume Scan Number	INT*2	N/A	1 to 80	1	
25	Volume Scan Date	INT*2	Julian Date	1 to 32767	1	
26-27	Volume Scan Start Time	INT*4	Seconds GMT	0 to 86399	1	
28	Product Generation Date	INT*2	Julian Date	1 to 32767	1	
29-30	Product Generation Time	INT*4	Seconds	0 to 86399	1	
31	Not Used	INT*2		0	N/A	
32	Not Used	INT*2		0	N/A	

<b>HALF WORD</b>	<b>FIELDNAME</b>	<b>TYPE</b>	<b>UNITS</b>	<b>VALUE</b>	<b>PRECISION / ACCURAC Y</b>	<b>NOTES</b>
33	Elevation Number	INT*2	N/A	0 to 20	1	
34	Not Used	INT*2		0	N/A	
35	Data Level 1 Threshold	INT*2	Inches	Code for ND (i.e. 0)	1	
36	Data Level 2 Threshold	INT*2	Inches	Code for >0.0	1	
37	Data Level 3 Threshold	INT*2	Inches	Code for >0.3	1	
38	Data Level 4 Threshold	INT*2	Inches	Code for >0.6	1	
39	Data Level 5 Threshold	INT*2	Inches	Code for >1.0	1	
40	Data Level 6 Threshold	INT*2	Inches	Code for >1.5	1	
41	Data Level 7 Threshold	INT*2	Inches	Code for >2.0	1	
42	Data Level 8 Threshold	INT*2	Inches	Code for >2.5	1	
43	Data Level 9 Threshold	INT*2	Inches	Code for >3.0	1	
44	Data Level 10 Threshold	INT*2	Inches	Code for >4.0	1	
45	Data Level 11 Threshold	INT*2	Inches	Code for >5.0	1	
46	Data Level 12 Threshold	INT*2	Inches	Code for >6.0	1	
47	Data Level 13 Threshold	INT*2	Inches	Code for >8.0	1	
48	Data Level 14 Threshold	INT*2	Inches	Code for > 10.0	1	
49	Data Level 15 Threshold	INT*2	Inches	Code for >12.0	1	
50	Data Level 16 Threshold	INT*2	Inches	Code for >15.0	1	
51	Max rainfall	INT*2	Inches	0.0 to 189.0	0.1	
52	Mean-field Bias	INT*2	N/A	0.01 to 99.99	0.01	
53	Effective No. G-R Pairs (Sample Size)	INT*2	N/A	0.00 to 9999.99	0.01	
54	Rainfall End Date	INT*2	Julian Date	1 to 32767	1	
55	Rainfall End Time	INT*2	Minutes	0 to 1439	1	
56	Not Used	INT*2		0	N/A	

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
57	Not Used	INT*2		0	N/A	
58	Version	INT*1	N/A	1 to 2	1	
58	Spot Blank	INT*1	N/A	0 to 1	1	
59-60	Offset to Symbology	INT*4	Halfwords	60	1	
61-62	Offset to Graphic	INT*4	Halfwords	0	1	
63-64	Offset to Tabular	INT*4	Halfwords	0 to 400000	1	
65	Block Divider	INT*2	N/A	-1	N/A	
66	Number of Pages	INT*2	N/A	5	1	
67	Number of Characters	INT*2	N/A	80	1	
68-107	Title	CHAR*80	8 Bit ASCII	STORM TOTAL PRECIPITATION ACCUMULATION MM/DD/YY HH:MM	N/A	Corrections to original description (no format change)
108	Number of Characters	INT*2	N/A	80	1	
109-148	Blank Line	CHAR*80	8 Bit ASCII	' '	N/A	Correction to original description (no format change)
149	Number of Characters	INT*2	N/A	80	1	
150-189	Blank Line	CHAR*80	8 Bit ASCII	' '	N/A	Correction to original description (no format change)
190	Number of Characters	INT*2	N/A	80	1	
191-230	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	GAGE/RADAR BIAS ESTIMATE. ..... ..... "XXXX.XX X"	0.001	Correction to original description (no format change)



HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				(space padded) Range:0.001 to 100.000 Default:1.255		
231	Number of Characters	INT*2	N/A	80	1	
232-271	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	SAMPLE SIZE (EFFECTIVE NO. GAGE/RADAR PAIRS)..... "XXXX.XX X" (space padded) Range:0.000 to 9999.999 Default:13.494	0.001	Correction to original description (no format change)
272	Number of Characters	INT*2	N/A	80	1	
273-312	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MEMORY SPAN (HOURS) OVER WHICH BIAS DETERMINED ... "XXXX.XX X" (space padded) Range:0.001 to 10.**3 Default:168.006	0.001	Corrections to original description (no format change)
313	Number of Characters	INT*2	N/A	80	1	

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
314-353	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	PRODUCT ADJUSTED BY BIAS ESTIMATE? ..... ... "XXX" (space padded) Range:Yes to No Default:No	N/A	
354	End of Page Flag	INT*2	N/A	-1	N/A	
355	Number of Characters	INT*2	N/A	80	1	
356-395	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	RADAR HALF POWER BEAM WIDTH. .... ..... ..... "XXXXX.XX" DEG" (space padded) Range: 0.80 to 1.00 Default:0.90	0.10	Correction to original description (no format change)
396	Number of Characters	INT*2	N/A	80	1	
397-436	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MAXIMUM ALLOWABLE PERCENT OF BEAM BLOCKAGE ..... .. :"XXXXX.XX" (space padded) Range: 0.00	0.10	Correction to original description (no format change)

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				to 100.00 Default: 50.00		
437	Number of Characters	INT*2	N/A	80	1	
438-477	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MAXIMUM ALLOWABLE PERCENT LIKELIHOOD OF CLUTTER . ..... ..”XXXXX.X X” (space padded) Range: 0.00 to 100.00 Default: 50.00	0.10	Correction to original description (no format change)
478	Number of Characters	INT*2	N/A	80	1	
479-518	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	PERCENT OF BEAM REQUIRED TO COMPUTE AVERAGE POWER..... ”XXXXX.X X” (space padded) Range: 0.00 to 100.00 Default: 50.00	0.10	Correction to original description (no format change)
519	Number of Characters	INT*2	N/A	80	1	
520-559	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	PERCENT OF HYBRID	0.10	Correction to original

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				SCAN NEEDED TO BE CONSIDERED FULL....."X XXXX.XX" (space padded) Range: 90.00 to 100.00 Default: 99.70		description (no format change)
560	Number of Characters	INT*2	N/A	80	1	
561-600	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	LOW REFLECTIVITY THRESHOLD (dBZ) FOR BASE DATA. .... ..... ..... :"XXXXX.XX DBZ" (space padded) Range: -40.00 to -20.00 Default: -32.00	0.10	Correction to original description (no format change)
601	Number of Characters	INT*2	N/A	80	1	
602-641	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	REFLECTIVITY (dBZ) REPRESENTING SIGNIFICANT RAIN. .... ..... "XXXXX.X	0.10	Correction to original description (no format change)

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				X" (space padded) Range: 10.00 to 30.00 Default: 20.00		
642	Number of Characters	INT*2	N/A	80	1	
643-682	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	AREA WITH REFLECTIVITY EXCEEDING SIGNIFICANT RAIN THRESHOLD..... ."XXXXX.XX" X" KM**2" (space padded) Range: 0.00 to 82800.00 Default:80.00	1.00	Corrections to original description (no format change)
683	Number of Characters	INT*2	N/A	80	1	
684-723	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	THRESHOLD TIME WITHOUT RAIN FOR RESETTNG STP..... ..... ."XXXXX.XX" X" MINUTES" (space padded) Range:0.00 to 1440.00 Defaults:	1.00	Correction to original description (no format change)

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				60.00		
724	Number of Characters	INT*2	N/A	80	1	
725-764	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	REFLECT-TO-PRECIP RATE CONVERSION MULTIPLICATIVE COEFFICIENT. ...."XXXXX.XX" DBZ" (space padded) Range: 30.00 to 3000.00 Defaults: 300.00	0.10	Correction to original description (no format change)
765	Number of Characters	INT*2	N/A	80	1	
766-805	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	REFLECT-TO-PRECIP RATE CONVERSION POWER COEFFICIENT ..."XXXXX.XX" DBZ" (space padded) Range: 1.00 to 2.50 Default: 1.40	0.10	Correction to original description (no format change)
806	Number of Characters	INT*2	N/A	80	1	
807-846	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MIN DBZ FOR CONVERTING TO	0.10	Correction to original description (no format

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				PRECIP RATE (VIA TABLE LOOKUP)... "XXXXX.XX" (space padded) Range: -32.00 to 20.00 Default: 0.00		change)
847	Number of Characters	INT*2	N/A	80	1	
848-887	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MAX DBZ FOR CONVERTING TO PRECIP RATE (VIA TABLE LOOKUP)... "XXXXX.XX" (space padded) Range: 50.00 to 90.00 Default: 70.00	0.10	Correction to original description (no format change)
888	Number of Characters	INT*2	N/A	80	1	
889-928	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	NUMBER OF EXCLUSION ZONE..."XXX.XX" Range: 0.00 to 20.00 (space padded) Default: 3.00	1.00	Correction to original description (no format change)
929	End of Page Flag	INT*2	N/A	-1	N/A	

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
930	Number of Characters	INT*2	N/A	80	±	CCR NA04-32201
931-970	Site Adaptable Parameters	CHAR	8-Bit ASCII	MAX STORM SPEED (m/sec)...”XXXX M/Sec” Range: 10.00 to 40.00 Default: 25.00	N/A	CCR NA04-32201
971	Number of Characters	INT*2	N/A	80	±	CCR NA04-32201
972-1011	Site Adaptable Parameters	CHAR	8-Bit ASCII	MAX SCAN-TO-SCAN TIME DIFFERENCE FOR TIME CONTINUITY TESTS...”XXXX MINUTES” Range: 10.00 to 30.00 Default: 15.00	N/A	CCR NA04-32201
1012	Number of Characters	INT*2	N/A	80	±	CCR NA04-32201
1013-1052	Site Adaptable Parameters	CHAR	8-Bit ASCII	MIN PRECIP-AREA FOR PERFORMING TIME CONTINUITY TESTS...”XXXX KM**2” Range: 50 to 1000 Default: 200.00	N/A	CCR NA04-32201



HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
1053	Number of Characters	INT*2	N/A	80	1	CCR NA04-32201
1054-1093	Site Adaptable Parameters	CHAR	8-Bit ASCII	RATE OF CHANGE: VOLUMETRIC PRECIP RATE, MIN ECHO AREA..... ..... :"XXXXX 1/Hr" Range:0.1 to 99.9 Default:24.00	N/A	CCR NA04-32201
1094	Number of Characters	INT*2	N/A	80	1	CCR NA04-32201
1095-1134	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	CCR NA04-32201
1135	Number of Characters	INT*2	N/A	80	1	CCR NA04-32201
1136-1175	Site Adaptable Parameters	CHAR	8-Bit ASCII	MAX ECHO AREA RATE OF CHANGE..." XXXXX KM**2/Hr" Range:20.00	N/A	CCR NA04-32201

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				to -700.00 Default:200.00		
930	Number of Characters	INT*2	N/A	80	1	
931-970	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	RANGE BEYOND WHICH TO APPLY RANGE-EFFECT FUNCTION ...”XXXXX.XX” KM (space padded) Range:0.00 to 230.00 Default:230.00	1.00	Correction to original description (no format change)
971	Number of Characters	INT*2	N/A	80	1	
972-1011	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	1ST COEFFICIENT OF RANGE-EFFECT FUNCTION ...”XXXXX.XX DBR” (space padded) Range:0.00 to 3.00 Default:0.00	0.10	Correction to original description (no format change)
1012	Number of Characters	INT*2	N/A	80	1	
1013-1052	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	2ND COEFFICIENT OF	0.10	Correction to original description

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				RANGE-EFFECT FUNCTION ..."XXXXX.XX DBR" (space padded) Range:1.00 to 10.00 Default:1.00		(no format change)
1053	Number of Characters	INT*2	N/A	80	1	
1054-1093	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	3RD COEFFICIENT OF RANGE-EFFECT FUNCTION ..."XXXXX.XX DBR" (space padded) Range:0.00 to 1.00 Default:0.00	0.10	Correction to original description (no format change)
1094	Number of Characters	INT*2	N/A	80	1	
1095-1134	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MIN RATE SIGNIFYING PRECIPITATION..."XXX XX.XX MM/Hr" (space padded) Range:0.00 to 10.00 Default:0.00	0.10	Correction to original description (no format change)
1135	Number of Characters	INT*2	N/A	80	1	
1136-	Site Adaptable	CHAR*	8 Bit	MAX	0.10	Correction to

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
1175	Parameters	80	ASCII	PRECIPITATION RATE..."XX XXX.XX MM/Hr" (space padded) Range:50.00 to 1600.00 Default:103.80		original description (no format change)
1176	End of Page Flag	INT*2	N/A	-1	N/A	
1177	Number of Characters	INT*2	N/A	80	1	
1178-1217	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	REINITIALIZATION TIME LAPSE THRESHOLD (FOR ACCUM PROCESS)... "XXXXX.XX MINUTES" (space padded) Range:45.00 to 60.00 Default:60.00	1.00	Correction to original description (no format change)
1218	Number of Characters	INT*2	N/A	80	1	
1219-1258	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MAX TIME DIFFERENCE BETWEEN SCANS FOR INTERPOLATION..."XX XXX.XX MINUTES" (space padded)	1.00	Correction to original description (no format change)

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				Range:15.00 to 60.00 Default:30.00		
1259	Number of Characters	INT*2	N/A	80	1	
1260-1299	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MIN TIME NEEDED TO ACCUMULATE HOURLY TOTALS...” XXXXX.XX MINUTES” (space padded) Range:0.00 to 60.00 Defaults:54.00	1.00	Correction to original description (no format change)
1300	Number of Characters	INT*2	N/A	80	1	
1301-1340	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	THRESHOLD FOR HOURLY OUTLIER ACCUMULATION...”X XXXX.XX MM” (space padded) Range:50.00 to 800.00 Default:400.00	1.00	Correction to original description (no format change)
1341	Number of Characters	INT*2	N/A	80	1	
1342-1381	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	HOURLY GAGE ACCUMULATION SCAN	1.00	Correction to original description (no format change)

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				ENDING TIME..."XX XXX.XX MINUTES" (space padded) Range:0.00 to 59.00 Default:0.00		
1382	Number of Characters	INT*2	N/A	80	1	
1383-1422	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MAX ACCUMULATION PER SCAN-TO-SCAN PERIOD..."XXXXX.XX MM" (space padded) Range:50.00 to 400.00 Default:400.00	1.00	Correction to original description (no format change)
1423	Number of Characters	INT*2	N/A	80	1	
1424-1463	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MAX ACCUMULATION PER HOURLY PERIOD..."XXXXX.XX MM" (space padded) Range:50.00 to 1600.00 Default:800.00	1.00	Correction to original description (no format change)
1464	End of Page Flag	INT*2	N/A	-1	N/A	
1465	Number of	INT*2	N/A	80	1	

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
	Characters					
1466-1505	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	MINUTES AFTER CLOCK HOUR WHEN BIAS IS UPDATED... "XXXXX.XX MM" (space padded) Range:50.00 to 59.00 Default:50.00	1.00	Correction to original description (no format change)
1506	Number of Characters	INT*2	N/A	80	1	
1507-1546	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	THRESHOLD # OF GAGE/RADAR PAIRS NEEDED TO SELECT BIAS... "XXX.XX" (space padded) Range:6.00 to 30.00 Default:10.00	1.00	Correction to original description (no format change)
1547	Number of Characters	INT*2	N/A	80	1	
1548-1587	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	RESET VALUE OF GAGE/RADAR BIAS ESTIMATE ... "XXXXX.XX" (space padded)	0.10	Correction to original description (no format change)

HALF WORD	FIELDNAME	TYPE	UNITS	VALUE	PRECISION / ACCURACY	NOTES
				Range:0.5 to 2.0 Default:1.0		
1588	Number of Characters	INT*2	N/A	80	1	
1589-1628	Site Adaptable Parameters	CHAR*80	8 Bit ASCII	LONGEST ALLOWABLE LAG FOR USE OF BIAS FROM BIAS TABLE..."XXXX.XX HOURS" (space padded) Range:100.00 to 1000.00 Default:168.00	1.00	Correction to original description (no format change)
1629	End of Page Flag	INT*2	N/A	-1	N/A	

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

CVT using variable CV\_ORPG\_BUILD to set ORPG Build to 6

```
*** ORPG DATABASE PRODUCT LOAD UTILITY ***
-> Number of Products Available=5417
-> Message ID=5399
-> Product Info: LBuffer# 107 MSGLEN 014738 VOLNUM 158 ELEV 07
```

```
Tabular Alphanumeric Block
Block Divider = -1
Block ID = 3
Length of Block = 3258 bytes
Block Divider = -1
Number of Pages: 5
```

```
Tabular Alphanumeric Block - Page: 1
STORM TOTAL PRECIPITATION ACCUMULATION 10/09/03 13:25
```

```
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? ..... YES

Tabular Alphanumeric Block - Page: 2

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.....	3.00	

Tabular Alphanumeric Block - Page: 3

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

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

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

TAB Message Complete  
program complete