16 STORM RELATIVE MEAN RADIAL VELOCITY (SRM, SRR)

16.1 SS Product Description

"This product shall provide mean radial velocity for: (a) a small geographic area centered upon or near an identified storm of interest with the storm motion removed, or (b) the entire area of radar coverage (to 230 km) with the average storm motion removed. This product shall be produced upon request for any azimuth scan at any elevation angle. The product shall be generated as a displayable image by removing the radial (velocity component away from the radar antenna) component of storm motion from the mean radial velocity values.

The radial component of storm motion shall be computed using the storm motion value computed for the identified storm by the Storm Cell Tracking Algorithm, the vector average of all currently identified storms or a value input by the user. The value of storm motion used to adjust the mean radial velocity values shall be user selectable at the time of product request, or default to the vector average of all currently identified storms if not selected. Each product shall contain 16 data levels for storm-adjusted mean radial velocity. Each product shall include annotations for the product name, radar ID, time and date of scan, elevation angle, storm motion, coordinates of product center, radar position, radar elevation above MSL, and radar operational mode."

16.2 Display Format

Each product version is displayable in full- or quarter-screen format (see Appendix B).

16.2.1 Data Levels

Both product versions use 16 data levels. The data level code may vary with operational mode and with NEXRAD (or agency) system adaptation data. One currently identified velocity table is shown.

16.2.2 Color Level Code Tables

			Color Levels	
16-Level Code	Display knots	Range knots	Code	Color
0	ND	SNR<TH	(00 00 00)	black
1	-50	-50≥knots	(00 E0 FF)	light blue
2	-40	-40≥knots>-50	(00 80 FF)	medium blue
3	-30	-30≥knots>-40	(32 00 96)	dark blue
4	-22	-22≥knots>-30	(00 FB 90)	light green
5	-10	-10≥knots>-22	(00 BB 00)	medium green
6	-5	-5≥knots>-10	(00 8F 00)	dark green
7	-1	0>knots>-5	(CD C0 9F)	light gray
8	0	0≤knots<+5	(76 76 76)	dark gray
9	+5	+5≤knots<+10	(F8 87 00)	medium orange
A	+10	+10≤knots<+22	(FF CF 00)	medium yellow
B	+22	+22≤knots<+30	(FF FF 00)	yellow
C	+30	+30≤knots<+40	(AE 00 00)	dark red
D	+40	+40≤knots<+50	(D0 70 00)	medium brown
E	+50	+50≤knots	(FF 00 00)	bright red
F	RF	RF	(77 00 7D)	dark purple