MPDSR - Mensuration Data

MPDSR provides additional information required by most advanced image mensuration programs, such as RULER. It is optional, but is required for accurate mensuration. This extension is designed to be used with the information contained in a companion BLOCK extension (identified by BLK_NUM) supporting the same image block. The format and descriptions for the user-defined fields of the MPDSRA extension are detailed in Table 1.

TABLE 1 MPDSRA – MENSURATION DATA EXTENSION FORMAT
R = REQUIRED, C = CONDITIONAL , <> = BCS SPACES ALLOWED FOR ENTIRE FIELD

Field	Name	Size	Value Range	Units	Type
CETAG	Unique Extension Identifier	6	MPDSRA	N/A	R
CEL	Length of Entire Tagged Record	5	00188	bytes	R
The following fields define MPDSRA					
BLK_NUM	BLOCK_INSTANCE (see BLOCK) to which this mensuration data applies.	2	01 to 99		R
IPR	Commanded impulse response.	2	01 to 99	feet	R
NBLKS_IN_WDG	Total number of image blocks in this imaging operation segment.	2	01 to 99		R
ROWS_IN_BLK	Number of Rows in each Image Block	5	00001 to 99999		R
COLS_IN_BLK	Number of Columns in each Image Block	5	00001 to 99999		R
ORP_X	X, Y, and Z components of the Output Reference Point (ORP) position vector in the Earth Centered Fixed (ECF) coordinate system.	9	±99999999	feet	<R>
ORP_Y		9	±99999999	feet	<R>
ORP_Z		9	±99999999	feet	<R>
ORP_ROW	Row Containing ORP	5	00001 to 19999		<R>
ORP_COLUMN	Column Containing ORP	5	00001 to 19999		<R>
FOC_X	X, Y, and Z components of Focus Plane Normal (FPN) Vector in Earth Centered Fixed (ECF) coordinate system.	7	±1.0000		<R>
FOC_Y		7	±1.0000		<R>
FOC_Z		7	±1.0000		<R>
ARP_TIME	Collection Start Time in seconds past midnight UTC	9	00000.000 to 86399.999	seconds	R
(reserved-001)		14	spaces		R
The Antenna Reference Point (ARP) position, velocity, and acceleration at ARP_TIME is given in a North, East, Down, earth fixed coordinate system with the origin at the scene entry point for the Search mode and at the RP for the SPOT modes.					
ARP_POS_N	Antenna Reference Point Position at ARP_TIME.	9	±99999999	feet	R
ARP_POS_E		9	±99999999	feet	R
ARP_POS_D		9	±99999999	feet	R
ARP_VEL_N	Antenna Reference Point Velocity at ARP_TIME.	9	±99999.99	feet/sec	R
ARP_VEL_E		9	±99999.99	feet/sec	R
ARP_VEL_D		9	±99999.99	feet/sec	R
ARP_ACC_N	Antenna Reference Point Acceleration at ARP_TIME.	8	±100.000	feet/sec^2	R

ARP_ACC_E		8	±100.000	feet/sec^2	R
ARP_ACC_D		8	±100.000	feet/sec^2	R
(reserved-002)		13	000.0000001.0		R