AIMIDB – Additional Image ID Support Data Extension

The format and description for the user- defined fields of the AIMIDB extension are detailed in Table 1.

Note that the fields from ACQUISITION_DATE through END_TILE_ROW, inclusive, constitute the ST_ID field in the STREOB extension of a stereo mate image, and portions of these fields shall constitute the first forty characters of the Image Subheader ITITLE field. Table 2 illustrates the mapping between ITITLE and these fields.

TABLE 1   AIMIDB – ADDITIONAL IMAGE ID EXTENSION FORMAT

R = REQUIRED , C = CONDITIONAL , <> = BCS SPACES ALLOWED FOR ENTIRE FIELD

Field	Name	Size	Value Range	Units	Type
CETAG	Unique Extension Identifier.	6	AIMIDB	N/A	R
CEL	Length of Entire Tagged Record.	5	00089	bytes	R
The following fields define AIMIDB					
ACQUISITION_DATE	Acquisition Date and Time. This field shall contain the date and time, referenced to UTC, of the collection in the format CCYYMMDDhhmmss, in which CCYY is the year, MM is the month (01–12), DD is the day of the month (01 to 31), hh is the hour (00 to 23), mm is the minute (00 to 59), and ss is the second (00 to 59). This field is equivalent to the IDATIM field in the image subheader.	14	CCYYMMDDhhmmss		R
MISSION_NO	Mission Number. Four character descriptor of the mission, which has the form PPNN, where PP is the DIA Project Code (range is AA to ZZ) or U0 if the Project Code is unknown, and "NN" is an assigned two-digit identifier, for example, the last digits of FLIGHT_NO. "UNKN" (without quotes) shall be used if no specific descriptor is known.	4	PPNN U0NN UNKN		R
MISSION_ IDENTIFICATION	Name of the Mission. The Air Tasking Order Mission Number should be used, if available, followed by spaces. "NOT AVAIL." (two words separated by a single space and a trailing period, but without quotes) shall be used if the Mission name is unavailable.	10	Alphanumeric		R
FLIGHT_NO	Flight Number. Each flight shall be identified by a flight number in the range 01 to 09. Flight 01 shall be the first flight of the day, flight 02 the second, etc. In order to ensure uniqueness in the image id, if the aircraft mission extends across midnight UTC, the flight number shall be	2	00 01 to 09 A1 to A9 B1 to B9 … Z1 to Z9		R

Field	Name	Size	Value Range	Units	Type
	0x (where x is in the range 0 to 9) on images acquired before midnight UTC and Ax on images acquired after midnight UTC; for extended missions Bx, … Zx shall designate images acquired on subsequent days. The value 00 indicates the flight number is unavailable.				
OP_NUM	Image Operation Number. Reset to 001 at the start of each flight and incremented by 1 for each distinct imaging operation. Reset to 001 for the imaging operation following 999. A value of 000 indicates the airborne system does not number imaging operations. For imagery derived from video systems this field contains the frame number within the ACQUISITION_DATE time.	3	000 to 999		R
CURRENT_SEGMENT	Current Segment ID. Identifies which segment (piece) of an imaging operation contains this image. AA is the first segment; AB is the second segment, etc. This field shall contain AA if the image is not segmented (i.e., consists of a single segment).	2	AA to ZZ		R
REPRO_NUM	Reprocess Number. For SAR imagery this field indicates whether the data was reprocessed to overcome initial processing failures, or has been enhanced. A 00 in this field indicates that the data is an originally processed image, a 01 indicates the first reprocess/enhancement, etc. For visible and infrared imagery this field shall contain 00 to indicate no reprocessing or enhancement.	2	00 to 99		R
REPLAY	Replay. Indicates whether the data was reprocessed to overcome initial processing failures, or retransmitted to overcome transmission errors. A 000 in this field indicates that the data is an originally processed and transmitted image, a value in the ranges of G01 to G99 or P01 to P99 indicates the data is reprocessed, and a value in the range of T01 to T99 indicates it was retransmitted.	3	000, G01 to G99, P01 to P99, T01 to T99		<R>
(reserved-001)		1	1 space		R

Field	Name	Size	Value Range	Units	Type
START_TILE_COLUMN	Starting Tile Column Number. For tiled (blocked) sub-images, the number of the first tile within the CURRENT_SEGMENT relative to tiling at the start of the imaging operation. Tiles are rectangular arrays of pixels (dimensionally defined by the NITF image subheader NPPBH and NPPBV fields) that subdivide an image. For untiled (single block) images this field shall contain 001.	3	001 to 099		R
START_TILE_ROW	Starting Tile Row Number. For tiled (blocked) sub-images, the number of the first tile within the CURRENT_SEGMENT, relative to tiling at the start of the imaging operation. For untiled (single block) images this field shall contain 00001.	5	00001 to 99999		R
END_SEGMENT	Ending Segment. Ending segment ID of the imaging operation. This field shall contain AA if the image is not segmented (i.e., consists of a single segment). During an extended imaging operation the end segment may not be known or predictable before it is collected; the value 00 (numeric zeros) shall indicate that the ending segment of the operation is unknown.	2	00, AA to ZZ		R
END_TILE_COLUMN	Ending Tile Column Number. For tiled (blocked) sub-images, the number of the last tile within the END_SEGMENT, relative to tiling at the start of the imaging. operation For untiled (single block) images this field shall contain 001.	3	001 to 099		R
END_TILE_ROW	Ending Tile Row Number. For tiled (blocked) sub-images, the number of the last tile within the END _SEGMENT, relative to tiling at the start of the imaging operation. For untiled (single block) images this field shall contain 00001.	5	00001 to 99999		R
COUNTRY	Country Code. Two letter code defining the country for the reference point of the image. Standard codes may be found in FIPS PUB 10-4.	2	AA to ZZ		<R>
(reserved-002)		4	4 spaces		R

Field	Name	Size	Value Range	Units	Type
LOCATION	<u>Location</u> of the natural reference point of the sensor provides a rough indication of geographic coverage. The format ddmmX represents degrees (00 to 89) and minutes (00 to 59) of latitude, with X = N or S for north or south, and dddmmY represents degrees (000 to 179) and minutes (00 to 59) of longitude, with Y = E or W for east or west, respectively. For SAR imagery the reference point is normally the center of the first image block. For EO-IR imagery the reference point for framing sensors is the center of the frame; for continuous sensors, it is the center of the first row of the image. Note: because the location is only reported to one arc-minute, it may be more than ½ mile in error, and not actually represent any point within the boundary of the image. Spaces indicate the location is unavailable.	11	DdmmXdddmmY, spaces		<R>
(reserved-003)		13	13 spaces		R

TABLE 2 MAPPING BETWEEN AIMIDB AND ITITLE/IID2

ITITLE/IID2 Location (Bytes)	AIMIDB Field
1 - 7	ACQUISITION_DATE (formatted as DDMMMYY, where: DD is the day of the month, MMM is a three letter abbreviation of the month, JAN, FEB, … DEC, YY is the least significant 2 digits of the year).
8 – 11	MISSION_NO
12 – 13	FLIGHT_NO
14 – 16	OP_NUM
17 – 18	CURRENT_SEGMENT
19 – 20	REPRO_NUM
21 – 23	REPLAY
24	Space
25 – 26	START _TILE_COLUMN (least significant 2 bytes)
27 – 31	START _TILE_ROW
32 – 33	END_SEGMENT
34 – 35	END_TILE_COLUMN (least significant 2 bytes)
36 - 40	END_TILE_ROW