Appendix K: <u>Original Level 1b Formats Valid to Sept. 8, 1992</u>

The original formats of the Level 1b data before any enhancements were implemented are contained in this appendix. These formats are valid for Level 1b data collected after the launch of TIROS-N and before Sept. 8, 1992. Tables K-1 and K-2 contain the format of the GAC and LAC/HRPT data records before September 8, 1992, respectively. Table K-3 contains the format of the quality indicators before September 8, 1994, while Table K-4 contains the dataset header format before September 8, 1992. A detailed explanation of the contents of the data records is contained in Sections 3.1 and 3.2.

Table K-1. Format of GAC Data Record before September 8, 1992.		
Byte #	**# of Bytes**	**Contents**
1-2	2	Scan line number from 1 to n
3-8	6	Time code (year, day, hour, minute, second)
9-12	4	Quality indicators
13-52	40	Calibration coefficients
53	1	Number of meaningful Solar Zenith angles and Earth location points appended to scan (n)
54-104	51	Solar Zenith angles
105-308	204	Earth location
309-448	140	Telemetry (HRPT minor frame format)
449-3176	2728	GAC video data
3177-3220	44	Spare

Table K-2. Format of LAC/HRPT Data Record before September 8, 1992.			
Record #	**Byte #**	**# of Bytes**	**Contents**
1	1-2	2	Scan line number
	3-8	6	Time code
	9-12	4	Quality indicators
	13-52	40	Calibration coefficients
	53	1	Number of meaningful Solar Zenith angles and Earth location points appended to scan
	54-104	51	Solar Zenith angles
	105-308	204	Earth location
	309-448	140	Telemetry (header)
	449-7400	6952	LAC/HRPT video data
2	1-6704	6704	LAC/HRPT video data
	6705-7400	696	Spare

Table K-3. Format of Quality Indicators before September 8, 1994.		
Byte #	**Bit #**	**Contents**
9	1	FATAL FLAG - Data should not be used for product generation.
	2	TIME ERROR - A time sequence error was detected while processing this frame.

	3	DATA GAP - A gap precedes this frame.
	4	DATA JITTER - Resync occurred on this frame.
	5	CALIBRATION - Insufficient data for calibration.
	6	NO EARTH LOCATION - Earth location data not available.
	7	ASCEND/DESCEND - AVHRR Earth location indication of ascending (=0) or descending (=1) data.
	8	P/N STATUS - Pseudo Noise (P/N) occurred (=1) on the frame, data not used for calibration computations.
10	1	BIT SYNC STATUS - Drop lock during frame.
	2	SYNC ERROR - Frame Sync word error greater than zero.
	3	FRAME SYNC LOCK - Frame Sync previously dropped lock.
	4	FLYWHEELING - Flywheeling detected during this frame.
	5	BIT SLIPPAGE - Bit slippage detected during this frame.
	6-8	SPARE
11	1	TIP PARITY - In first minor frame.
	2	TIP PARITY - In second minor frame.
	3	TIP PARITY - In third minor frame.
	4	TIP PARITY - In fourth minor frame.
	5	TIP PARITY - In fifth minor frame.
	6-8	SPARE
12	1-6	SYNC ERRORS - Number of bit errors in frame sync.
	7-8	SPARE

Table K-4. Format of Dataset Header Record before September 8, 1992.		
Byte #	**# of Bytes**	**Contents**
1	1	Spacecraft ID
2	1	Data type
3-8	6	Start time - time code from first frame of data
9-10	2	Number of scans
11-16	6	End time - time code from last frame of data
17-23	7	Processing Block ID (ASCII)
24	1	Ramp/Auto Calibration
25-26	2	Number of data gaps
27-32	6	DACS Quality
33-34	2	Calibration Parameter ID
35	1	DACS Status
36-40	5	Spares, zero-filled
41-84	44	44 character data set name (EBCDIC)
85-end	variable	Spares, zero-filled to size of data record