



SECCHI Status

**STEREO SWG Meeting
April 24, 2008
Meudon, Paris**

R.A. Howard, NRL

Instrument Status

- **Mechanisms**
 - A mech calibration is done every few months to check mech timing in performing standard operations. All mechanisms have nominal timing.
- **CCDs**
 - Calibrations are done periodically (every few months).
 - No deviations from nominal performance
- **SECCHI Electronics Box**
 - Watchdog Resets: “Random” resets of the 750 CPU of unknown origin - no signatures in HK. No apparent association to scheduled activities.
 - SECCHI-A: #5, Oct 23, 2007, #6, Jan 24, 2008
 - SECCHI-B: #5, Jan 14, 2008, #6, Feb 29, 2008
- **Flight SW**
 - Current revision is 5.08.00 on both A and B, loaded 2008-04-09. Corrected 3 bug anomalies/minor improvements
- **EUVI Filters**
 - The number of small pinholes are increasing, but effect is minimized by secondary filter



Commanding Status

12/10/06-4/15/08

	Total CMDs	Total Upload Volume (KB)	# CMDs/Day of CMDing	% of Days CMDing	Median Upload File Size
SECCHI-A	14578	734.2	89.0	32	1547
SECCHI-B	15140	510.0	92.5	32	1536

SECCHI-A Daily Image Telemetry Volume

SECCHI-A Image Volume Downlinked per day thru 21Mar08

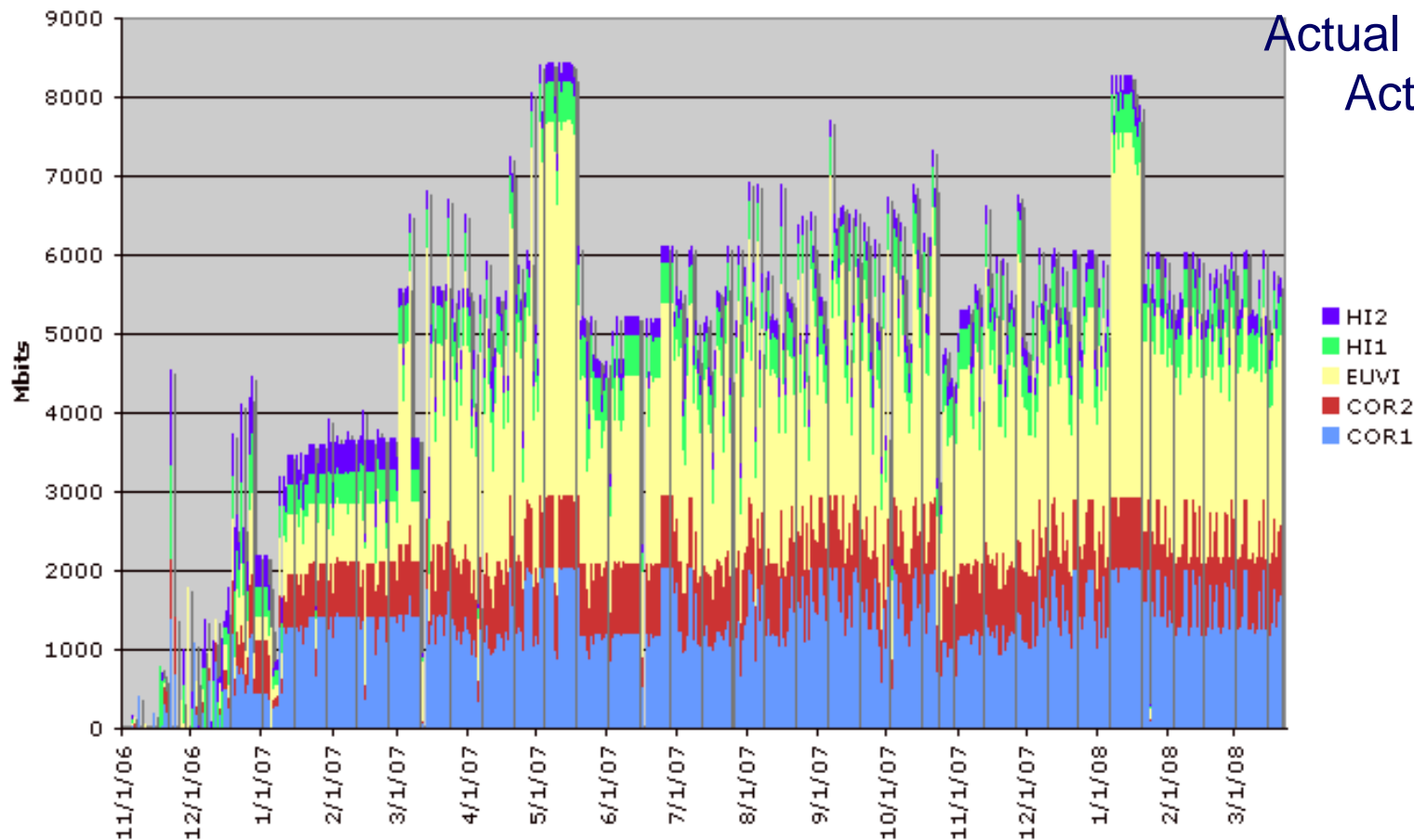
2007/01/22 - 2008/01/21

Nominal: 4611

Actual Median: 5214

Actual Avg: 5270

(HK: ~131)



SECCHI-B Daily Image Telemetry Volume

SECCHI-B Image Volume Downlinked per day thru 21Mar08

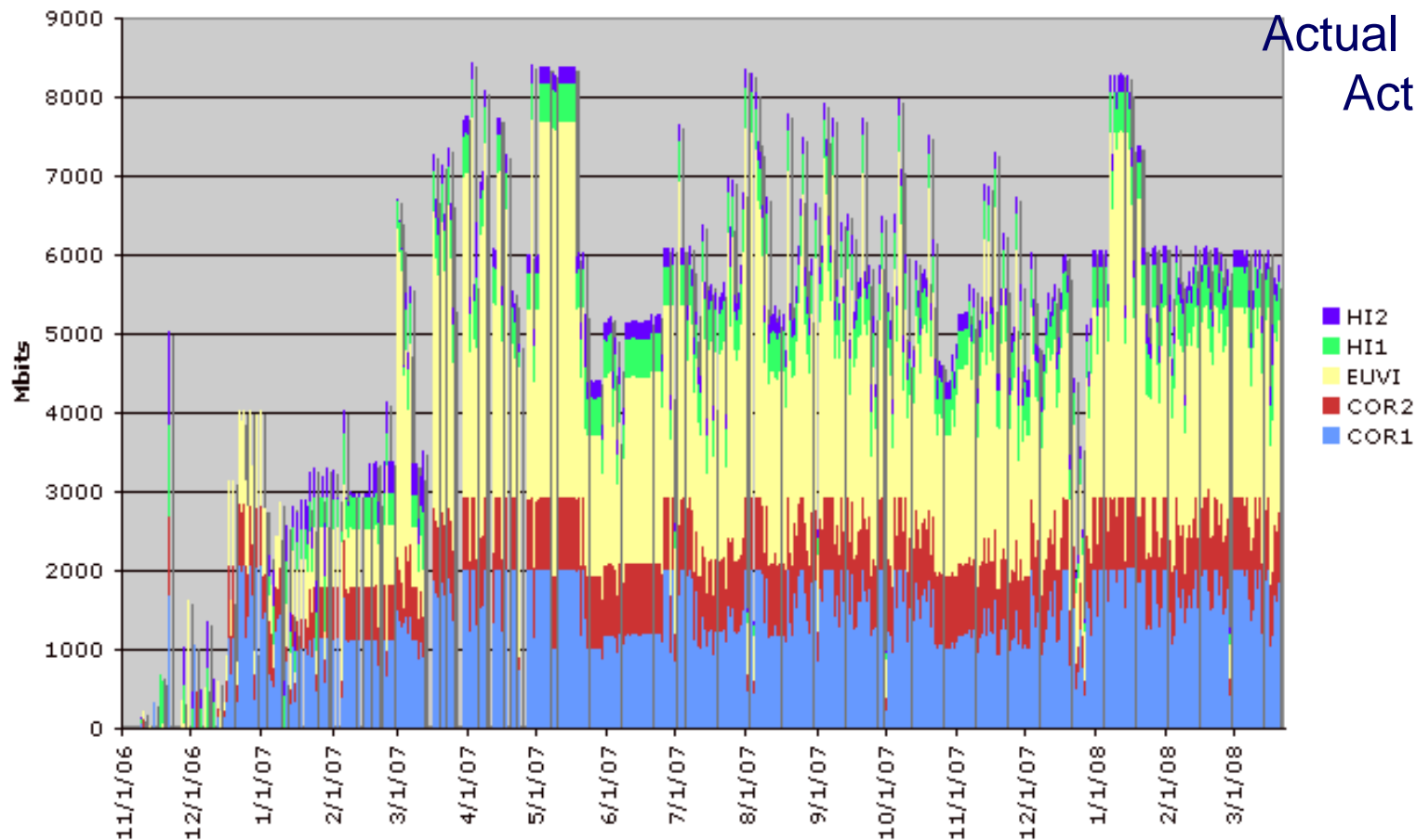
2007/01/22 - 2008/01/21

Nominal: 4611

Actual Median: 5282

Actual Avg: 5072

(HK: ~131)



SECCHI Image Statistics

- As of 22 March 2008 (non-spaceweather)

	COR1A	COR1B	COR2 A	COR2 B	EUVIA	EUVIB	HI1A	HI1B	HI2A	HI2B
N Images	243955	262482	87662	86635	487213	513323	15079	14433	6212	5756
Size (Raw GB)	78	76	47	43	125	125	27	24	15	12
Size (FITS GB)	494	538	758	753	3978	4189	67	64	31	28

Totals

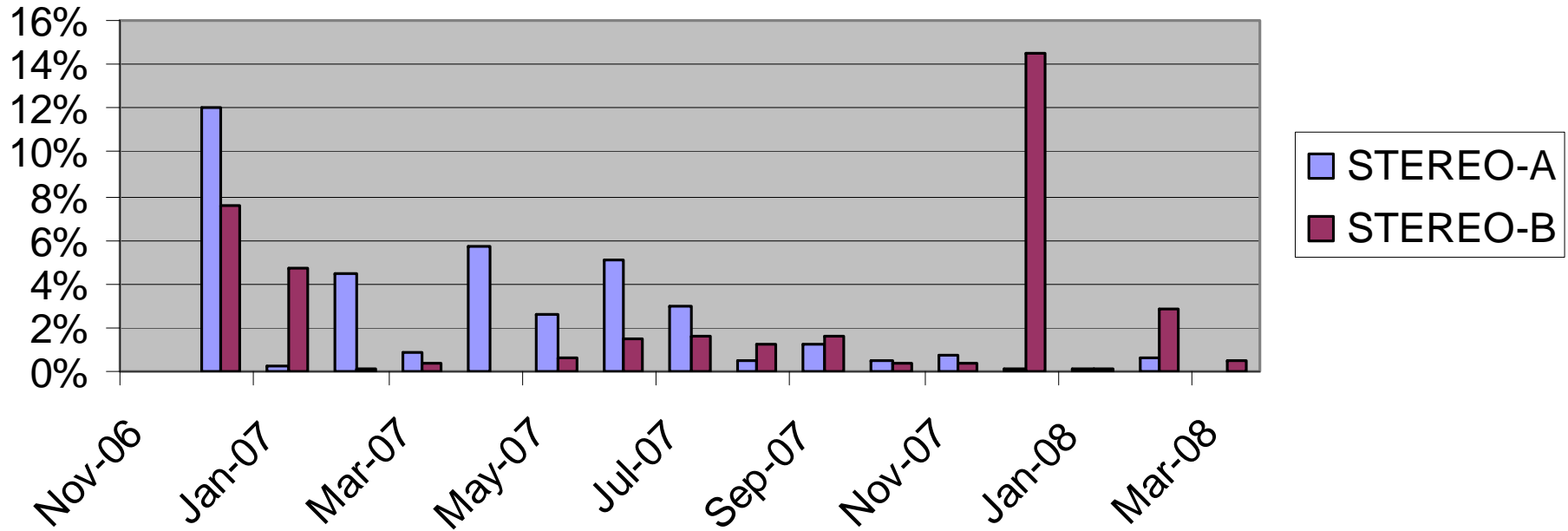
Images: 1,722,750

FITS volume: 10.9 TB

Telemetry volume: 577 GB



Missing Telemetry



- **Average over the whole mission**
 - **A: 1.89%**
 - **B: 2.06%**

ON-GOING SCIENCE TOPICS

- **Imaging and Interpretation of CIRs (Sheeley, Vourlidas, Rouillard, Howard)**
- **STEREO imaging of CMEs (Thernisien, Antunes, Bothmer, Forsythe, Webb, Chen, ..)**
- **STEREO Imaging of EUV structures (Aschwandan, Patsourakis, Stenborg)**
- **Comet McNaught tail analysis (Jones)**
- **Comet Encke tail disruption MHD interpretation (Manchester et al)**
- **MHD interpretation of CME (Lugaz, ...)**
- **Initiation of CMEs (Vourlidas, ...)**
- **F-corona (Colaninno, Howard, Stenborg)**
- **Binary Star Photometry (Brewsher)**
- **Relation of White Light to Radio (Pick)**
- **CME lists (C1, RAL, Robbrecht, Zhang)**
- **Calibrations (All groups)**
- **More papers are in press**
- **More ??**

Calibration Status

SECCHI Telescope Calibration Status and Source (2008-03-25)

Calibration	EUVI	COR1	COR2	HI1	HI2
Shutterless readout correction	NA	NA	NA	hi_desmear .pro, v1.6, 2007/06/13	hi_desmear .pro, v1.6, 2007/06/13
Photometric calibration	get_calfac .pro, v1.1 2006/10/03	get_calfac .pro, v1.8 2008/02/13	get_calfac .pro, v1.1 2006/10/03	planned 2008	planned 2008
Geometric distortion	NA	NA	Cor2_distortion.pro, v1.1 2008/03/27	get_hi_params.pro, v1.2 2007/11/29	get_hi_params .pro, v1.2 2007/11/29
Flat field + vignetting via get_calimg.pro	20060823_wav	20071003_flatfd	20060929_vignet	20061129_flatfld	20061129_flatfld
Sun center	euvi_point .pro, v1.5 2007/05/08	cor1_point .pro, v1.9 2008/01/17	Cor2_point.pro, v1.1 2008/03/27	get_hi_params .pro, v1.2 2007/11/29	get_hi_params .pro, v1.2 2007/11/29