



WFC3 Science Status Summary



<u>Parameter</u>	<u>UVIS Channel</u>	<u>IR Channel</u>
Read Noise	3.1 – 3.2 e-	Up-the-ramp: 12.5 e- (16 samples) CDS = 22-23 e-
Dark Current	1.5 e-/pix/hour (0.3 expected)	0.05 e-/pix/second
Gain	1.6 - 1.63 e-/DN	2.3-2.45 e-/DN
Throughput	5 to 20% above ground tests	~10-15% above ground tests
Photometric Stability	<1%	<1% (wide and medium), 1-2% (narrow)
Image Quality	nominal	nominal
Background	TBD	between 100% - 140% above expectations
LOS stability over 2 orbits (milliarcseconds)	max excursion = 14 Specification = 10	max excursion = 25 Specification = 20
Pointing	Nominal (SIAF Update installed on Day 215)	
Geometric Distortion Accuracy	0.08 pix (3 milliarcseconds RMS)	0.08 pix (10 milliarcseconds RMS)
Current Flat Field Correction Accuracy	1-3% depending on filter	3%
Grisms	To be calibrated in Cycle 17	Throughput 10% above expectations Dispersion nominal



WFC3 Engineering Status Summary



<u>Parameter</u>	<u>UVIS Channel</u>	<u>IR Channel</u>
Lamps	Tungsten and D2 verified (slightly brighter than ground test)	Tungsten verified (slightly brighter than ground test)
QEH	Bowtie mitigation works to ~0.5%	< 1%
Thermal	Good margin on UVIS @ -83C	Expect to maintain IR @-128C for Cycle 17
Anneal	Done 3x under SMS control; Hot pixel removal >70%	N/A
SAA Passage	Contours nominal	Contours nominal 12% pixels hit per minute in SAA core.