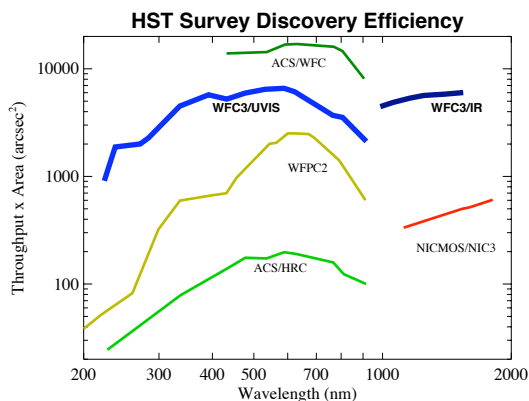


The HST focal plane, showing the instrument complement after Servicing Mission 4. The WFC3 UVIS and IR channels view the same patch of sky, but not simultaneously. All instrument apertures are shown to scale, except for COS, which has been enlarged by a factor of five for clarity.



The discovery efficiency of the HST cameras. Here, the discovery efficiency is proportional to the total system throughput at the pivot wavelength of the broadband filters and proportional to the field of view.

IR Channel Filters

Name	Description	Wavelength (nm)	
		pivot	width
F105W	Wide Y	1058	292
F110W	Wide YJ	1159	503
F125W	Wide J	1249	302
F140W	JH gap	1396	399
F160W	Blue-shifted H & red grism ref.	1544	288
G102	Blue grism high resolution	1025	250
G141	Red grism low resolution	1410	600
F098M	Blue grism reference	988	169
F127M	H ₂ O/CH ₄ continuum	1274	69
F139M	H ₂ O/CH ₄ line	1384	65
F153M	H ₂ O & NH ₃	1532	69
F126N	[FeII]	1259	11
F128N	Paschen β	1283	14
F130N	Paschen β continuum	1300	13
F132N	Paschen β redshifted	1319	13
F164N	[FeII]	1641	17
F167N	[FeII] continuum	1665	17

Science Oversight Committee

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WFC3

WIDE FIELD CAMERA 3

Ultraviolet-Visible (UVIS) Channel

- Two 2k x 4k CCDs
- 160 arcsec x 160 arcsec field of view
- 62 filters, 1 grism
- 200 - 1000 nm spectral coverage
- 0.039 arcsec pixels

Infrared (IR) Channel

- 1k x 1k HgCdTe array with 1.7 μm cutoff
- 123 arcsec x 136 arcsec field of view
- 15 filters, 2 grisms
- 800 - 1700 nm spectral coverage
- 0.13 arcsec pixels

NASA's new Wide Field Camera 3 has been built for installation during HST Servicing Mission 4. Equipped with state-of-the-art detectors and optics, WFC3 will provide wide-field imaging with continuous spectral coverage from the ultraviolet into the infrared, dramatically increasing both the survey power and the panchromatic science capabilities of HST.

For further information, visit:
<http://www.stsci.edu/hst/wfc3>



November 29, 2006

UVIS Channel Filters - Broad

Name	Description	Wavelength (nm)	
		pivot	width
F200LP	Clear	516	800
F218W	ISM feature	224	35
F225W	UV Wide	238	55
F275W	UV Wide	272	48
G280	Grism	278	185
F300X	Extremely wide UV	285	75
F336W	<i>U</i> , Stromgren <i>u</i>	336	55
F350LP	Long Pass	592	450
F390W	Washington <i>C</i>	393	95
F438W	WFPC2 <i>B</i>	432	68
F475W	SDSS <i>g'</i>	478	149
F475X	Extremely wide blue	496	220
F555W	WFPC2 <i>V</i>	532	160
F600LP	Long Pass	751	400
F606W	WFPC2 Wide <i>V</i>	588	230
F625W	SDSS <i>r'</i>	622	158
F775W	SDSS <i>i'</i>	766	149
F814W	WFPC2 Wide <i>I</i>	807	254
F850LP	SDSS <i>z'</i>	916	150

UVIS Channel Filters - Medium

Name	Description	Wavelength (nm)	
		pivot	width
F390M	Call continuum	390	21
F410M	Stromgren <i>v</i>	411	18
F467M	Stromgren <i>b</i>	468	22
F547M	Stromgren <i>y</i>	545	71
F621M	11% passband	621	63
F689M	11% passband	688	71
F763M	11% passband	761	80
F845M	11% passband	844	89

UVIS Channel Filters - Narrow

Name	Description	Wavelength (nm)	
		pivot	width
F280N	MgII 2795,2802	284	3
F343N	[NeV] 3426	344	14
F373N	[OII] 3726/3729	373	4
F395N	Call H&K	395	7
F469N	HeII 4686	469	4
F487N	H β 4861	487	5
F502N	[OIII] 5007	501	6
F631N	[OI] 6300	630	4
F645N	Continuum	645	9
F656N	Ha 6563	656	1
F657N	Wide Ha+[NII]	656	10
F658N	[NII] 6583	658	2
F665N	<i>z</i> (Ha+[NII])	665	11
F673N	[SII] 6717,6731	676	10
F680N	<i>z</i> (Ha+[NII])	688	32
F953N	[SIII] 9532	953	8

UVIS Channel Filters - Quad

Name	Description	Wavelength (nm)	
		pivot	width
FQ232N	CII] 2326	246*	3
FQ243N	[NeIV] 2425	250*	3
FQ378N	<i>z</i> ([OII] 3727)	379	9
FQ387N	[NeIII] 3869	387	2
FQ422M	Continuum	422	11
FQ436N	H γ + [OIII] 4363	437	4
FQ437N	[OIII] 4363	437	2
FQ492N	<i>z</i> (H β)	493	10
FQ508N	<i>z</i> ([OIII] 5007)	509	12
FQ575N	[NII] 5755	576	1
FQ619N	CH ₄ 6194	620	6
FQ634N	6194 continuum	635	7
FQ672N	[SII] 6717	672	1
FQ674N	[SII] 6731	673	1
FQ727N	CH ₄ 7270	727	6
FQ750N	7270 continuum	750	7
FQ889N	CH ₄ 25/km-agt	889	9
FQ906N	CH ₄ 2.5/km-agt	906	9
FQ924N	CH ₄ 0.25/km-agt	925	9
FQ937N	CH ₄ 0.025/km-agt	937	9

*Pivot wavelength falls outside of bandpass due to red leak.