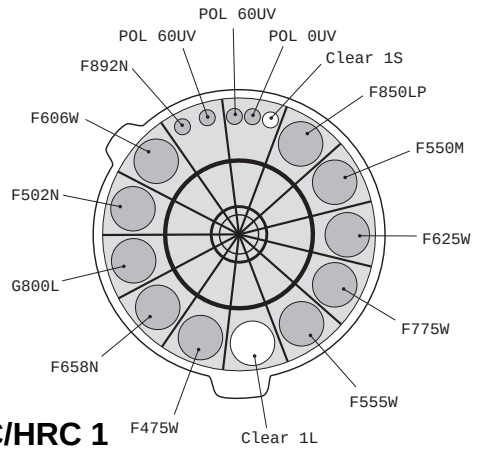
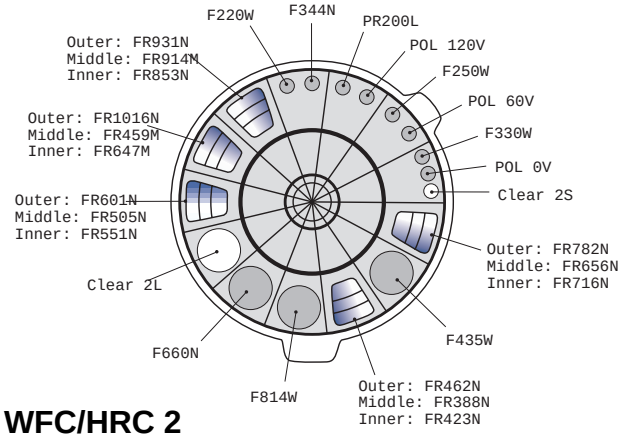
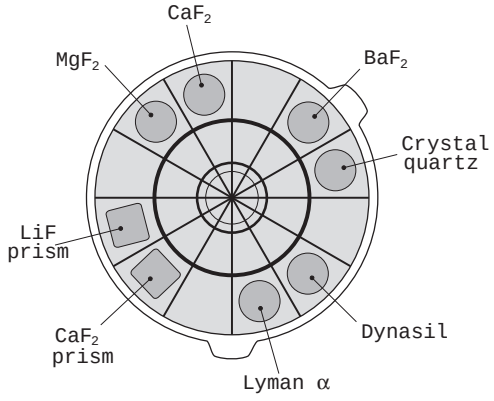


WFC/HRC 1



WFC/HRC 2



SBC

ACS WFC/HRC Filter Wheel 1

Filter Name	Filter Description	Wavelength(Å) λ_c	Wavelength(Å) $\Delta\lambda$	Camera
F555W	Johnson V	5346	5346	WFC/HRC
F775W	SDSS[1] i	7764	1528	WFC/HRC
F625W	SDSS[1] r	6318	1442	WFC/HRC
F658N	Hα	6584	1%	WFC/HRC
F850LP	SDSS[1] z	9445	1229	WFC/HRC
POL0UV	UV polarizer 0^0	—		WFC/HRC
POL60UV	UV polarizer 60^0	—		WFC/HRC
POL120UV	UV polarizer 120^0	—		WFC/HRC
F892N	Methane	8917	2%	WFC/HRC
F606W	Broad V	5907	2342	WFC/HRC
F502N	OIII	5022	1%	WFC/HRC
G800L	GRISM	—	—	WFC/HRC
F550M	Narrow V	5580	547	WFC/HRC
F475W	SDSS[1] g	4760	1458	WFC/HRC

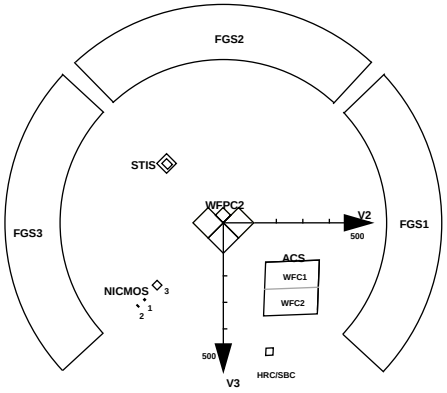
[1]Sloan Digital Sky Survey

ACS SBC Filter Wheel

Filter Name	Filter Description	Filter Specifications
F165LP	Dynasil	λ_C=1200 Å, $\Delta\lambda$=60 Å
F150LP	Crystal Quartz	1150 Å longpass
F140LP	BaF_2	1250 Å longpass
F125LP	CaF_2	1400 Å longpass
F122M	Lyman α	1500 Å longpass
F115LP	MgF_2	1650 Å longpass
PR130L	CaF_2 Prism	R~100
PR110L	LiF_2 Prism	R~100

ACS WFC/HRC Filter Wheel 2

Filter Name	Filter Description	Wavelength (Å) λ_c	Wavelength (Å) $\Delta\lambda$	Camera
F660N	NII	6602	1%	WFC/HRC
F814W	Broad I	8333	2511	WFC/HRC
FR388N	OII Ramp(m)	3710-4050	2%	WFC/HRC
FR423N	OII Ramp(i)	4050-4420	2%	WFC
FR462N	OII Ramp(o)	4420-4820	2%	WFC
F435W	Johnson B	4297	1038	WFC/HRC
FR656N	Hα Ramp(m)	6270-6850	2%	WFC/HRC
FR716N	Hα Ramp(i)	6850-7470	2%	WFC
FR782N	Hα Ramp(o)	7470-8160	2%	WFC
POL0V	Visible Polarizer 0^0	—	—	WFC/HRC
F330W	HRC u	3354	588	HRC
POL60V	Visible Polarizer 60^0	—	—	WFC/HRC
F250W	Near-UV filter	2696	549	HRC
POL120V	Visible Polarizer 120^0	—	—	WFC/HRC
PR200L	HRC Prism	—	—	HRC
F344N	NeV	3434	2%	HRC
F220W	Near-UV filter	2228	485	HRC
FR853N	IR Ramp(i)	8160-8910	2%	WFC
FR931N	IR Ramp(o)	8910-9720	2%	WFC
FR1016N	IR Ramp(o)	9720-10610	2%	WFC
FR459M	Broad Ramp(m)	3810-5370	9%	WFC/HRC
FR647M	Broad Ramp(i)	5370-7570	9%	WFC
FR914M	Broad Ramp(m)	7570-10710	9%	WFC/HRC
FR505N	OIII Ramp(m)	4820-5270	2%	WFC/HRC
FR551N	OIII Ramp(i)	5270-5750	2%	WFC
FR601N	OIII Ramp(o)	5750-6270	2%	WFC

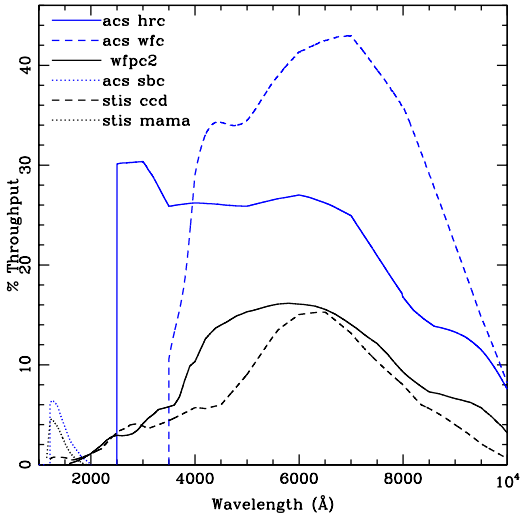


HST Field of View

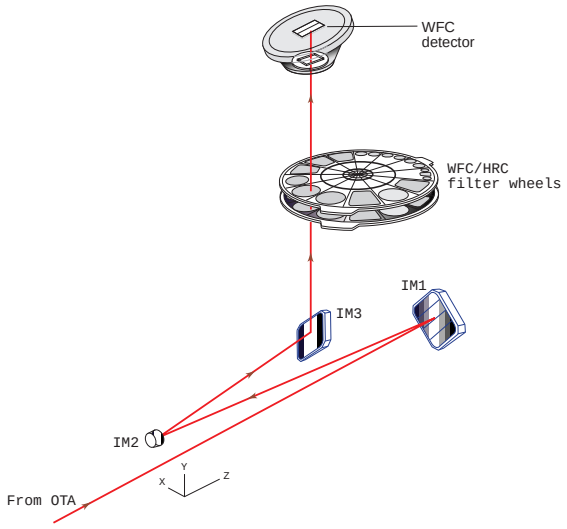
ACS Limiting Magnitudes

Camera	Filter	Magnitude[1]
HRC	F250W	24.5
HRC	F606W	26.9
HRC	F814W	25.7
WFC	F606W	27.3
WFC	F814W	26.5
SBC	F125LP	14.4

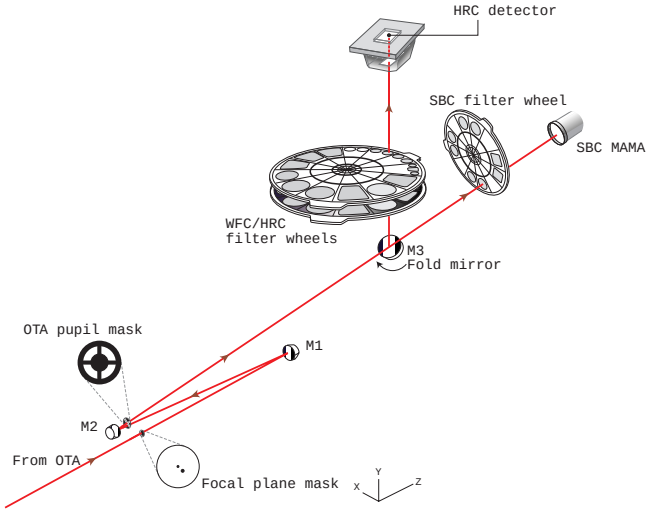
[1]Anticipated A1 star limiting V magnitudes to achieve S/N=10 with1 hour exposure for an avg sky brightness and a ~0.″25x0.″25 aperture



HST Throughput Comparison



ACS WFC Optical Path



ACS HRC/SBC Optical Path w/ Optional Coronographic Mode

ACS

Advanced Camera for Surveys

Wide Field Channel (WFC)

- 3 mirror design, overcoated silver on mirrors
- 2–2048x4096 15 µm/pixel CCDs optimized for I-band
- 202″x202″ field of view
- 0.05″ pixels, critically sampled at 8000 Å

High Resolution Channel (HRC)

- 3 mirror design, MgF_2 on Al
- 1–1024X1024 21 µm/pixel near UV-enhanced CCD
- 29″x26″ field of view
- 0.025″ pixels, critically sampled at 5000 Å

Solar Blind Channel (SBC)

- 2 mirror design, MgF_2 on Al
- 1–1024X1024 CsI 25 µm/pixel MAMA
- 35″x31″ field of view
- 0.031″ pixels

Coronograph

- aberrated beam coronography with the HRC from 2000 to 11000 Å
- 1.8 and 3.0 arcsec diameter occulting spots

The Advanced Camera for Surveys is being built through a collaborative effort between Johns Hopkins University, Ball Aerospace, & Goddard Space Flight Center. ACS will be installed on the Hubble Space Telescope (HST) during servicing mission SM3(B). The ACS principal investigator is Holland Ford (JHU).

`http://adcam.pha.jhu.edu`

For further HST information visit:
`http://www.stsci.edu/instruments/acs`
or send email to: `help@stsci.edu`

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