

Instrument Usage Statistics

November 6, 2003

Instrument usage statistics

- Developed from Phase II submissions, as of mid-June
- Does not include DDs, changes to proposals
 - ◆ Overall statistics should still be valid, bulk of program was in place at time the queries were run
 - ◆ Tried to STUC address requests, much more data is available

ACS utilization for Cycle 12 - SBC

- All Prime + Coordinated Parallel ACS utilization
 - ◆ #lines = #exposure logsheet lines
 - ◆ #exps = # of individual exposures
 - ◆ Exp_Time = total exposure time in seconds
 - ◆ %_Exps = % of all ACS exposures
 - ◆ %_Time = % of all ACS exposure time

Config	#Lines	#Exps	Exp_Time	%_Exps	%_Time
ACS/HRC	1348	2592	600829.9	28.644	10.281
ACS/SBC	43	139	65760	1.536	1.125
ACS/WFC	3129	6318	5177640	69.82	88.594

ACS Utilization for Cycle 12 -Coronagraph

■ Coronagraphic usage

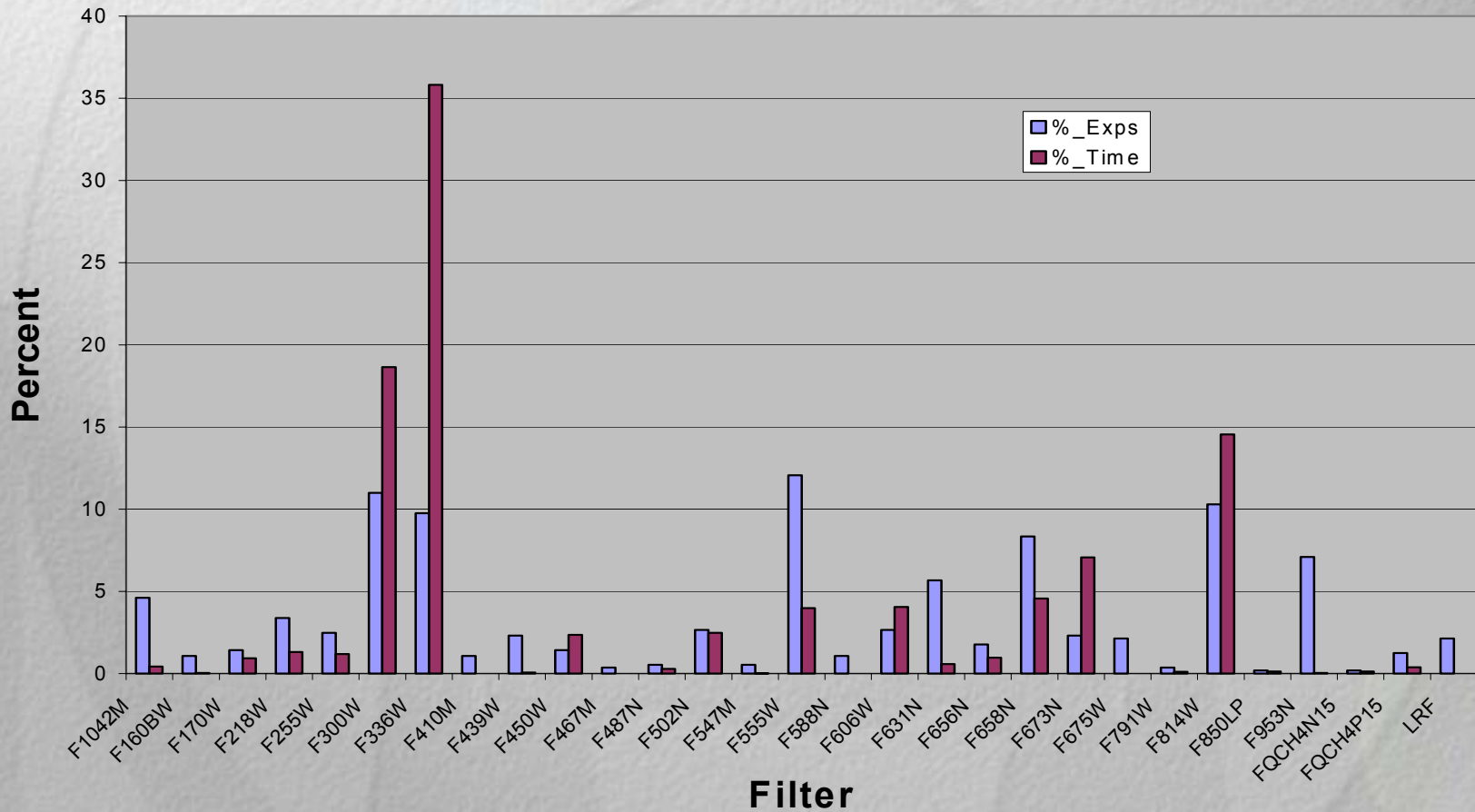
- ◆ 2 GO + 2 GTO programs
- ◆ 61 orbits total in those programs

Distribution_of_HRC/ACCUM_Aperture_Usage:

HRC/ACCUM_Ap	#Lines	#Exps	Exp_Time	%_HRC_Exps	%_HRC_Time	%_ACS Exps	%_ACS_Time
HRC	723	1568	450563.2	61.39	75.02	17.33	7.71
HRC-512	48	192	9632	7.52	1.60	2.12	0.16
HRC-CORON1.8	365	442	95321	17.31	15.87	4.88	1.63
HRC-FIX	174	352	45049.6	13.78	7.50	3.89	0.77

WFPC2 Utilization

#Lines	#Exps	Exp_Time	Time/Exp
346	564	128782.2	228.3



NICMOS Utilization

NICMOS Filter	Replaced by WFC3 filter	% Exposures	Note
F110M	F105W (50% wider and bluer)	2-3	
F110W	F110W (15% narrower and redder)	10	&
F160W	F160W (short H)	19	
F164N/F166N	F126N/F164N/F167N	2	#
F187N/F190N	F128N/F130N/F132N	6	@
G096	G102 (higher res. and redder)		
G141	G141	27	*

Notes:

& There is a 'real' J-band filter in WFC3, F125W.

[FeII] line and its continuum; the ratio between the [FeII] lines at 1.26 and 1.64 micron can be used as sort of reddening indicator.

@ The Paschen-alpha filters in NICMOS can in principle be replaced with the Paschen-beta in WFC3, modulo the higher dust extinction hit, plus [FeII] and HeII contamination considerations for the Pa-beta.

* The large grism usage comes from a single huge pure parallel program in Cycle 12.

In WFC3 there are an additional 5 filters (4 of them medium-band ones) with no obvious NICMOS counterpart.

In NICMOS there are 6 narrow/medium band filters below 1.7 microns with no WFC3 counterpart. Their combined exposure fraction is ~18-20%. Most of them are NIC1 (highest resolution camera) filters. Beyond 1.7 micron there are an additional 12 broad/medium/narrow (excluding Pa-alpha) filters, with a combined exposure fraction of ~15-17%. In addition, NICMOS has polarizers, for an additional 1% usage level.