

**PARALLEL WORKING GROUP  
MEETING REPORT  
29 FEBRUARY- 1 MARCH 2000**

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**1-Introduction**

Pure parallel observations, in particular with ACS, will present unique capabilities for new scientific programs. While pure parallel opportunities will be open to proposals from the GO community, we wish to define a default, non-proprietary scientific program to be carried out in Cycle 10.

Details of the default pure parallel observing program(s) and the relevant policies will be published in the Cycle 10 Call for Proposals, and the TAC will be tasked with prioritizing among the pure parallel options in order to maximize the scientific return from HST.

To provide us with the necessary scientific guidance we invited a number of experts to a two day meeting on February 29 and March 1 whose objectives were to :

- o define a default parallel program ,for each instruments for Cycle 10.
- o generate descriptive text for a Web page for this program .

o make recommendations regarding policies issues ,with the constraint that scientific recommendations such as priorities among instruments or particular parallel programs, will be made by the TAC to the STScI Director.

**2- Participants and Agenda**

The parallel Working Group ,which included external and internal participants met on 29 Feb and 1 Mar 2000.

Present : R.Fosbury, J.Gardner , R.Griffiths , Lin Yan and R.Windhorst.

Absent : J.Frogel, G.Miley and M.Rieke.

ScI participants : S.Baum, S.Beckwith, J.Biretta, M.Clampin, R.Doxsey, A.Patterson, M.Postman , W.Sparks , D.Soderblom, P.Stanley ,D. van Orsow.

D.Macchetto Chaired the meeting .

The revised agenda is attached below.

**3-Recommendations**

The group made the following recommendations .

A-The parallel program defined in the past has proved to be a very useful research tool .It should continue in Cycle 9 with the changes outlined below.

B-A default parallel program should be defined for Cycle 10 and announced in the Call for Proposals.

We want to encourage :

- GO's to propose archival research programs that use the default parallel program data from past cycles.
- GO's to propose parallel programs different from the default parallel program in Cycle 10.
- GO's to propose to carry out ,for each of the instruments ,either selected pieces or the entire default parallel program for Cycle 10 .

C-The TAC should select the best science and prioritize the parallel programs, including the default programs .This priority will be used by the ScI to set the implementation rules for the different instruments. GOs scientists selected to carry out scientific research on the default parallel program should be asked to participate in a reconstituted Parallel Working Group together with STScI and perhaps a few other outside scientists, which will refine the observing strategy of the default parallel program for each scientific instrument, and will monitor the observations to assure that high quality data are taken. This coordination will be important for the final definition of the program but will not have to be extended to the data analysis phase.

As in previous Cycles all default parallel data will have zero proprietary time associated with it. As for the GOs ,they should recognize that unless they also request zero or short proprietary time for parallel data their proposals might suffer compared to others.

This overall idea is similar to the "treasury" programs recommended by the HST Second Decade Committee ,although limited to the parallel opportunities.

D- The PWG also discussed the overall number of parallel programs that could be supported during Cycle 10 . There was a general agreement that the number of programs should be kept to a few per SI, and their complexity should be no more than the level in the current program. The limitation on the overall number and complexity of the parallel programs should be part of the instructions to the TAC at the time of proposal selection.

**Action :** Macchetto for the Cycle 10 CP text and instructions to the TAC

#### **4-The Cycle 9 program**

The PWG discussed the need for an overall prioritization scheme for adding parallels on to primaries. The group ratified the priority ordering of the STIS and WFPC proposals for Cycle 9 as currently implemented in Cycle 8.

The default Cycle 9 program will be as follows.

STIS -Most of the available opportunities will be assigned to the selected Cycle 9 GO program (Schneider) . However this program will not use the low galactic latitude fields and those fields close to nearby large galaxies. In those instances we will continue with the current default program for low b. To allow the implementation of the default program for nearby galaxies , technically it will be given a higher priority than the GO program. Fosbury concurs with this approach.

**Action :** Gardner /Ferguson to refine the low b and nearby galaxy program

WPC2 -Continue with current program. Discussions over the next few days will result in a recommendation to either keep or drop the U filter from the program in Cycle 9.

**Action:** Windhorst, Griffiths (Consult with Casertano/MacKenty)

#### **5-The Cycle 10 program**

There was discussion of the utilization of the WFPC2 for parallels in Cycle 10. There was a feeling that it should not try to do the same scientific program as ACS ,and therefore there was a preference for the WFPC2 to do U/B imaging .

On a related issue ,the level of overall support for WFPC2 in this era will depend on the GO demand for prime observations. However even if we go into a non-support mode, calibration observations could be taken and reduced by the GOs using the parallel data .

As for the relative prioritization amongst instruments it was agreed that the TAC will be explicitly asked to recommend the priority, but it is widely expected that the ACS parallel program will have higher priority than the WFPC or NICMOS parallel programs ,given the considerably greater potential discovery space for that instrument.

The default program will be as follows.

STIS- Assume that the Cycle 9 GO program will be completed. Return to the GRISM /spectroscopy program ,which has the greatest potential for discovery in the ACS era.

**Action:** Gardner/Ferguson

WFPC2-Two possible programs were discussed .

- a) Continue with current I, V & B band for cosmic shear and strong lensing programs .
- b) Given that ACS will carry out an extensive cosmic shear program, optimize the parallel program to make best use of WFPC2 characteristics and concentrate in imaging in B & U .

**Action:** Windhorst/Griffiths -Consult with Gardner/MacKenty/Casertano

NICMOS-Given the successful parallel program achieved during NICMOS lifetime, continue with a simple program of H and possibly J band observations with NIC3.

**Action:** Yan (Consult with McCarthy, Rieke, Dickinson)

ACS-Carry out the proposed cosmic shear program ,using i,z,r & g filters.

**Action:** Sparks/Postman

NOTE: All actions are due by March 31 .Send inputs to : macchetto@stsci.edu  
Ferguson will set up a web page for parallels and inputs can be placed there .

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PARALLEL WORKING GROUP  
AGENDA

Feb 29 Auditorium

9.00 1-Introduction & purpose of the meeting Macchetto  
9.15 2-Parallel opportunities with ACS Sparks  
9.45 3-Parallel opportunities with NICMOS Dickinson  
10.15 Coffee Break  
10.30 4-Parallel opportunities with STIS Ferguson  
11.00 5-Parallel opportunities with WPC2 Biretta  
11.30 6-Scheduling of parallel observations Stanley  
12.00 7-Challenges for future parallels observations Doxsey  
12.30 LUNCH  
13.30 8-ACS GTO science program Postman  
14.00 9-Past Scientific results External Members  
15.30 Coffee Break  
15.45 10-Policy issues Macchetto  
16.15 11-Process to establish a baseline parallel program All  
16.45 12-Work assignments All  
17.30 Break

March 1 Auditorium

9.00 13-Parallel sessions All  
10.30 Coffee Break All  
10.45 14-Review of parallel sessions All  
11.15 15-Need for future meetings and dates All  
11.30 16-Follow up assessment of scientific effectiveness All  
12.15 17-Break