

The WFPC2 Clearinghouse

Michael S. Wiggs, Brad Whitmore, and Inge Heyer

Space Telescope Science Institute

Abstract. We discuss the development and use of the WFPC2 Clearinghouse, a Web-based search tool designed to provide WFPC2 users with a listing of astronomical publications which report results based on the use of WFPC2 data. The database can be searched on a variety of WFPC2 calibration related topics, ranging from astrometry to UV throughput.

1. Introduction

The WFPC2 Clearinghouse was designed to provide users of the Wide Field and Planetary Camera 2 with a searchable listing of all known journal articles, STScI documentation and reports, as well as user submitted documents on all aspects of the performance, calibration, and scientific use of WFPC2.

Table 1. WFPC2 Clearinghouse Topics.

Aperture Corrections	Object Identification
Aperture Photometry	Observation Planning
Astrometry	Photometric Transformations
Bias Frames	Photometric Zeropoint
Bias Jumps	Pipeline Calibration
Calibration Observations	Polarization
CCD Characteristics	PSF Characterization
Charge Transfer Traps	PSF Fitting Photometry
Chip-to-Chip Normalization	PSF Subtraction
Completeness Corrections	Quad Filters
Cosmic Rays	Recalibration
CTE Losses	Red Leaks
Darks	Residual Images
Data Quality	Saturated Data
Deconvolution	Scattered Light
Dithering	Serial Clocks
Drizzle	Size Measurements
Field Distortion	Software
Flats	Surface Photometry
Focus	SYNPHOT
Hot Pixels	T=77 Observations
Image Anomalies	UV Throughput
Linear Ramp Filters	Vignetting
Long vs. Short Exposures	Woods Filters
Narrow Band Photometry	1997 Servicing Mission

The Clearinghouse has two basic goals:

1. To make it easier for WFPC2 users to take advantage of the fact that there are hundreds of astronomers reducing and analyzing WFPC2 data, and learning much that may be of interest to other users.
2. To keep the WFPC2 Group at STScI aware of how people use WFPC2, and what they consider to be the main concerns regarding the instrument.

**SPACE
TELESCOPE
SCIENCE
INSTITUTE**

THE WFPC2 CLEARINGHOUSE:

The WFPC2 Clearinghouse is designed to provide easy reference to a wide variety of WFPC2 related information. It includes references to:

- STScI documentation.
- Publications from the astronomical literature.
- User submitted documentation.

Please note that inclusion in the WFPC2 Clearinghouse does not necessarily mean that the WFPC2 Instrument Scientists at STScI endorse the results of a given reference, due to the fact that there are simply too many items for detailed review.

To search for articles pertaining to a specific topic, select a keyword from the menu below, and then hit the search button to generate a list of relevant documents.

SYNPHOT

An alphabetized listing of all references contained in the Clearinghouse database is also available.

STScI's WFPC2 Reference Library:

[WFPC2 Homepage](#) [WFPC2 Instrument Handbook](#) [WFPC2 IR's](#) [HST Data Handbook](#)

Related Search Engines:

[STScI Homepage](#) [HST Papers \(STScI\)](#) [HST Papers \(ST-ECF\)](#) [Journals](#) [ADS](#)

Figure 1. The WFPC2 Clearinghouse Web Page. In this example a user has selected to search for all articles which contain references to SYNPHOT

2. Description

Once a suitable article has been identified, it is added to our database, which is accessible through the WFPC2 Clearinghouse Web-page. Each article is entered into the database with its specific WFPC2 calibration related topics and an attempt is made to estimate how important the information on that topic may be to general users of WFPC2.

Please note that inclusion in the WFPC2 Clearinghouse does not necessarily mean that the WFPC2 Instrument Scientists at STScI endorse the results of a given reference, due to the fact that there are simply too many items for detailed review.

WFPC2 CLEARINGHOUSE SEARCH RESULTS:

The results of this search are given in the following sample format:

Author: Holtzman, Mould, Gallagher, et al.
 Title: *Stellar Populations in the Large Magellanic Cloud: Evidence for a...*
 Year: 1997
 Reference: AJ 113, 656
 Science Keyword: IMF, LMC
 Calibration Keyword(3): **psf_fitting_photometry(3)**
 Calibration Keyword(2): **bias(2)**
 Calibration Keyword(1): **photometric_zero_point(1)**
 Comment: Comparison of aperture and PSF fitting photometry.

Where the category number following each keyword stands for the following:

(3) = One of the fundamental references on this topic.
 (2) = Some new information on this topic.
 (1) = General information on the subject.

STScI Documents on synphot:

References in Category #3:

Bushouse
SYNPHOT Users Guide
 1995
ra.stsci.edu/documents/SyG/SG_1.html
 None
synphot(3)
observation_planning(2)
 None
 None

Baggett, Wiggs
Index of SYNPHOT Tables
 1997
www.stsci.edu/ftp/cdbs/cdbs6/synphot_tables/
 None
synphot(3)
 None
 None
 None

Figure 2. A small portion of the Clearinghouse Search Results Page, showing 2 important references regarding SYNPHOT.

3. An Example

Figure 1 shows a portion of the WFPC2 Clearinghouse Search Tool available through the World Wide Web. The user can select from a large list of WFPC2 calibration related topics (see Table 1). In this example a user has decided to search for all articles on SYNPHOT. Figure 2 shows the results of the search. At the top is a descriptive example of each database entry. Below that is the beginning of the listing, which starts with STScI Documentation on the subject, then on to references in the astronomical literature. Note that each reference line is linked to the appropriate STScI document. For journal articles, the reference is linked to its entry in the ADS Abstract Database, so that users can quickly determine if that particular article is relevant to his/her needs. The entire database listing is also

downloadable. A handy section providing links to other useful astronomical search engines is also included.

The Clearinghouse can be found at the following URL:

http://www.stsci.edu/ftp/instrument_news/WFPC2/Wfpc2_clear/wfpc2_clrhs.html

