

MPO Suite

V10.7

Installation Guide (Electronic Download)

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Due to space limitations, some of the files on the original distribution are not included with the MPO version. These include the HTML and PAPERS subdirectories.

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A binary version of the Calsberg Meridian Catalog is included with the two expanded distributions of the MPO software. These are *not* the original files, which are not supported by MPO software.

The CMC-15 is distributed with permission for use with MPO software only. Its use in any publications should be acknowledged as follows: “Based on data from the CMC15 Data Access Service at CAB (INTA-CSIC).”

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A binary version of the AAVSO Photometric All-Sky Survey (APASS) catalog is included in all versions of the MPO software. These are *not* the original files, which are not supported by MPO software. Use of the APASS catalog should give proper acknowledgment: “This research

was made possible through the use of the AAVSO Photometric All-Sky Survey (APASS), funded by the Robert Martin Ayers Sciences Fund.”

License Agreement

The License Agreement is straightforward. Be honest and may your skies be clear. Cheat and may cloudy skies haunt you forever.

You may make a backup set of the DVDs for archive purposes.

If a single license, you may install the programs such that one and only one user can use the software at any given time. Consider the software like a physical book: only one person can read it at a time. For the single license, it is permissible to install the software one more than one machine, providing – again – that one and only one person is using the sum total of copies.

Installation on a network server for access by multiple simultaneous users is not allowed. Installation on a server is allowed only if one and only one user is allowed access to the software at any one time.

If a multiple license (educational), the program can be installed as if you have five (5) DVDs though you use the single DVD for installation. The rules for each installation are the same as for a single license agreement.

If you sell or otherwise dispose of the computer(s) on which the software is installed, you must either remove the software entirely beforehand or transfer complete ownership to the new owner, this includes the original and archive DVDs and any documentation. In the case of a multi-user license, you must decrement the number of allowed installations by the number of computers of which you disposed and carry the MPO software.

System Requirements

Screen and Color Settings

All MPO programs are optimized for screen resolutions of *at least* 800x576 at 256 colors and *using the Small Fonts settings. Higher screen and color resolutions will enhance use of the programs.*

Using Large Fonts at any resolution will make some windows larger than the screen can display and cause other display problems. If at all possible, use at least a 1024x768x64K setting when running the MPO suite of programs.

This allows the best display of 16-bit CCD images. The programs run under Microsoft Windows XP through Windows 10 (64-bit). See the special instructions for use under Windows 7-10. MPO Connections requires that hardware manufacturers have 64-bit drivers available. The MPO installation program runs the Apogee, FLI, and SBIG driver installation programs that support 32 or 64-bit.

Recommended minimum system:

Pentium V or equivalent @ 1.5GHz or higher

Microsoft Windows XP/Win7-10

1024x768x64K or higher screen resolution

DVD (Dual-layer read capability) or software that allows “mounting” a DVD ISO as an available drive on the computer

2GB RAM

Disc Space Requirements

The hard drive space requirements depend on which programs and catalogs you install.

The core programs and supporting files (if all are installed) require approximately 70 MB.

The documentation files, not including help (CHM) files, require approximately 17 MB.

The common data files require approximately 180 MB. These are installed even if only one program is installed.

The MPO Asteroid Viewing Guide has a set of files unique to its operation that are installed only if it is installed. These files require about 200 MB. This is a minimum since the oppositions file included data for only the first 25000 numbered asteroids. The Viewing Guide will add to this file when you generate data for objects not already in the list. If you were to generate data for all the asteroids in the MPCORB file as of 2010 March 28, the total space requirement for the MPO AVG files rises to approximately 1.2GB

The UCAC4 catalog requires approximately 8.1 GB

The MPOSC3 catalog requires approximately 2.5 GB

The APASS catalog requires approximately 1.5 GB

The CMC-15 catalog requires approximately 2.5 GB

The Henden Charts require approximately 17 MB

The example images require approximately 400 MB.

The Photometry Workshop requires approximately 160 MB.

The Henden Charts, Photometry Workshop, MPOSC3, APASS, and CMC-15 files are not embedded within the SETUP.EXE file. Therefore, you can run or copy them directly from the Setup DVD.

Technical Support

Mailing Address Bdw Publishing
446 Sycamore Ave.
Eaton, CO 80615

E-mail brian@bdwpublishing.com

Newsgroup <https://groups.yahoo.com/neo/groups/MPOSoftware>

The Yahoo news group is the preferred method of technical support since this allows you to take advantage of the knowledge and experience of many other users. If you want to keep the discussion private, you can send email to the moderator via the group or using email address above.

About the Manuals

Printed manuals are not provided. Instead, Adobe PDF documents can be found in \MPO\DOCS. However, we know that some people prefer printed documentation and so the manuals are “printer friendly.”

The Users Guide in \MPO\DOCS goes through the basic procedures of measuring an asteroid and then calculating its rotational period. It covers the “how to” of the software while the Reference Guide gives more details. Use them together, giving first preference to the Users Guide. The examples in the Users Guide are fairly straightforward and so are not always typical of “real world” issues. For those, you will need knowledge gleaned from the pages of the manuals. After you have mastered the program basics, take the time to read the manuals.

It is assumed that the user has a basic level of knowledge about the operation of CCD cameras and fundamental image processing functions. If you have questions about obtaining dark fields or flat fields, please refer to the reference materials provided with your CCD Camera.

Multiple Instances and MPO Server Application

MPO programs use a client-server methodology. This means several things:

- A separate “server” application must be run in order to use the MPO programs (clients). To simplify things, the installation program sets up this server application automatically so that it should run when Windows starts. Also, each MPO program checks to see if the server is running before it tries to start its database access. If the server is not running, then the program tries to start it. As for the server application itself, you should never have to change any settings or worry about it.
- You can run multiple instances of Canopus and the Asteroid Viewing Guide, or one of each. Only single instances of Connections or SBScripiter can be run on a given machine. *This is NOT a way around the license agreement, which says that you cannot be running Canopus on more than one machine at a time - unless you have the educational license that allows running on up to five different machines simultaneously.*

If you are installing over version 9.0 or older, you must convert at least some files. See “Converting Data from Previous Versions” before you run the installation program.

Running on Microsoft Windows 7/8/10

The MPO programs have been tested on MS Win7 (32/64-bit), 8/8.1 (64-bit) and Windows 10 (64-bit). There are some requirements that are *not* handled by the installation program for these platforms:

1. For Windows 7-8.1, User Account Control ***must be turned completely off*** before installation and must remain off for the MPO programs to work. If you need to reset UAC to meet this requirement, you must reboot the machine, even if Windows does not tell you to do so.
2. On Windows 10, you can leave UAC on. However, whenever you start one of the MPO programs, UAC will ask if you want to allow the program to run. Answer “Yes” and the program should work as expected.
3. For Windows 10, you ***must*** run the programs as administrator. Use Windows Explorer to navigate to the \MPO\PROGRAMS directory and set the property for every EXE file to “Run as Administrator.” Do ***not*** change the compatibility mode to a previous version of Windows.
 - ↳ This must be done before you try to run any of the MPO programs.

Electronic Download

MPO software is provided as an electronic download only. Backup DVDs can be ordered at an additional cost but this should be necessary only a high speed Internet connection is not available.

Downloading the ISO Images

You will receive a separate email that contains this installation guide (PDF) and links to two DropBox folders with DVD ISO images and the password to access Folder 1.

Folder 1: (Password protected)

MPOSUITE_107_STARTER.ISO (DVD-R, single-layer, 4.5 GB)

and this installation guide.

The STARTER ISO includes all necessary files to get started, including the MPOSC3 and APASS catalogs.

Folder 2: (no password)

MPO_V107_CATS-1.iso (DVD±R, dual-layer, 8.5 GB)

MPO_V107_CATS-2.iso (DVD±R, dual-layer, 8.5 GB)

These DVDs contain the UCAC4, APASS, and CMC-15 catalogs. The APASS catalog is the same one as provided on the STARTER ISO. The UCAC4 catalog is in its native format. The APASS and CMC-15 catalogs are in custom binary formats and will work only with MPO software.

- ↳ You must download *both* catalog DVDs since the UCAC4 catalog is split between the two images. It is not required to download these a

Burn/Mount the ISO Images

The files are ISO images. As such they cannot be used directly. They must be burned to DVD discs before installation can begin.

- ↳ The STARTER ISO is a single-layer DVD-R (4.5 GB) image. The two catalog images are dual-layer DVD±R (8.5 GB) images.

If you do not have a DVD drive, it is still possible to use the ISO images. In Windows 8.1/10, right-click over the ISO file name in Windows Explorer and select the mount option from the popup menu. If nothing else, you can use software that “mounts” an ISO image as a drive on the computer. There are many programs available; one is Daemon Tools Lite (<https://www.daemon-tools.cc/products/dtlite>). The free version includes ads. The ad-free version (\$5.99) allows installation on up to three PCs.

- ↳ Bdw Publishing is not responsible for the installation or use of any mounting software. You download and use it at your own risk.

Installation Overview

It is presumed at this point that you have downloaded the ISO images and have burned them to DVD discs or have mounted them as drives on the computer.

Installation Location

By default, the MPO files are installed into C:\MPO. This can be changed during installation.

Do *not* install software into the “\Program Files” or “\Program Files (x86)” directories (usually on the C:\ drive). This may prevent some critical utility programs from running correctly and complicate issues regarding user privileges.

STARTER ISO

The STARTER ISO includes the core programs and other files necessary to get started with any of the MPO programs. This includes the MPOSC3 and APASS catalogs along with the example images, Henden charts, and the photometry workshop.

The SETUP.EXE program in the root of the STARTER ISO is the installation program. See “To Install MPO Programs” below.

CATALOG ISOS

The installation program does not install the UCAC4 or CMC-15 catalogs. These must be installed manually after you complete the installation of the main programs and other files. See “Manually Installing the Catalogs” below.

- ↳ Because of the way the installation programs work, you should run the core installation first. If installing the additional catalogs, run that installation program with the discs in (or as) the same DVD drive. For example, if the main installation used discs in (or mounted as) drive D:\, then the additional catalogs should be used in (or mounted as) drive D:\

UCAC3 vs. UCAC4 vs. Gaia

The Minor Planet Center prefers that UCAC4 be used for astrometry, although the Gaia catalog will likely replace that at some point. MPO software supports both UCAC3 and UCAC4. You can keep both versions on a hard drive but they must be in different directories. The roots do not have to be off the root of a hard drive. For example, C:\UCAC4 or C:\CATALOGS\UCAC4 are both acceptable.

- ↳ It is *vital* is that the directory structure under the catalog root directory is maintained, i.e., do not move files/or directories to subdirectories that were not part of the original catalog structure defined by the US Naval Observatory releases.

USNO and UCAC2 Support

The MPO software no longer supports the USNO S/A or UCAC2 catalogs.

Location of DLL, INF, and SYS Files

If installing MPO Connections, then depending on selected options, the MPO installation program may invoke the Apogee, FLI, and/or SBIG driver installation programs. These automatically install and register the necessary files.

Previous Versions (General)

By default, the installation program tries to locate a previous installation and, if found, the base directory is set to the same one as the current installation. *This can take a couple of minutes* and so the program may look like it has locked up. Give it ample time to complete the search.

If upgrading, it is recommended that you install over the previous version so that multiple versions are not on your system. *Make a backup of the original installation before installing the new version.*

Converting Data from Previous Versions

Several changes have been made to the data tables since the MPO programs were first written. In order to be able to use files from all versions, you may need to convert some or all of your existing data files.

If you are installing over an older version, please see “Converting Data from Previous Versions” below *before* running the installation program.

Previous Versions (MPO Asteroid Viewing Guide)

If you have the MPO Viewing Guide from a previous year and would like to keep it available (the events calendar is specific to a year), you can do so.

Working with multiple years of the AVG requires careful steps during installation and switching from one year to another.

- ↳ The data tables for the AVG for a given year must be in \MPO\DATA. These files are not given names specific to a year, i.e., they have the same names regardless of the year. The EXE and CHM files must be in \MPO\PROGRAMS.

For example, for the year 2017, MPO2017.EXE and MPO2017.CHM must be in \MPO\PROGRAMS and the data files from 2017 must be in \MPO\DATA.

In the following steps, it’s presumed you have MPO2016 installed, are installing MPO2017, and want to keep the MPO2016 files to check on asteroid-DSO appluses during 2016.

1. Create a directory \MPO\DATA_2016
2. Copy the files from \MPO\DATA to \MPO\DATA_2016. **Do not** delete or move MPO2016.EXE and/or MPO2016.CHM from \MPO\PROGRAMS.

3. Install MPO2017.

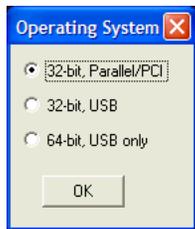
To switch back to MPO2016

1. Create a directory \MPO\DATA_2017
2. Copy the files from \MPO\DATA to \MPO\DATA_2017
3. Copy the files from \MPO\DATA_2016 to \MPO\DATA
4. Run MPO2016.EXE from \MPO\PROGRAMS

↳ *Make backups of the tables in both (all) directories with the year-specific tables.*

Camera Driver Installation (MPO Connections only)

If you are installing MPO Connections, you will see a dialog form



If you will be using a parallel camera (supported under 32-bit systems only), select the first option. If installation on a 64-bit system, be sure to select 64-bit USB only. This choice determines which camera driver installation programs are run.

If you are working with 32-bit parallel cameras and have trouble with installation, contact tech support via the Yahoo group.

Apogee, FLI, and SBIG Driver Installers

If you chose Apogee, FLI, and/or SBIG camera support, the MPO installation program will run the driver installer programs supplied by those manufacturers. Follow the instructions for each installer carefully. Once the programs run, they return to the MPO installation program, which continues from that point.

You must have an active Internet connection to run the SBIG driver installation program since it touches the SBIG servers to download the latest files.

Special Instructions for FLI Installation

The FLI installation program installs a couple of utility programs that will operate the camera and filter wheel. Some required files are installed into the Windows directory tree as required. *However*, the LIBFLI.DLL file required by Connections is not. Instead, it is copied into the same directory where the utility programs are located. The FLI installation program does not update the Windows path to look for the LIBFLI.DLL file.

↳ For Connections to work correctly, you must copy the DLL to the \MPO\PROGRAMS directory.

The location of the FLI utility programs can vary depending on the operating system. Generally, however, the first place to look is in the Program Files directory for the Finger Lakes Instrumentation subfolder. For example, under a 32-bit operating system, the path would be

\Program Files\Finger Lakes Instrumentation

Under a 64-bit operating system, it would be

\Program Files (x86)\Finger Lakes Instrumentation

If all else fails, look for the LIBFLI.DLL using Windows Explorer. If more than one instance of the file is found, be sure to use the one with

the highest version number. This is not necessarily the one with the latest date. However the mouse over the file name in Windows Explorer to display the version number.

To Install MPO Programs:

1. Run
x:\SETUP.EXE
found in the root of the STARTER ISO.
2. Follow the instructions in the installation wizard.

↳ The installation program covers all MPO programs, not just those you purchased. When asked which programs to install, select only those that you purchased (for which you have product release codes).

You must have the release code for each product you purchased. If you have lost the card with the codes, contact Bdw Publishing for a replacement.

Uninstalling Programs (Prior to Win10)

1. Select Start | Settings | Control Panel from the Windows task bar.
2. Select Add/Remove Programs
3. Select the MPO Suite in the list of programs
4. Click the Add/Remove button. Follow the instructions.

Uninstalling Programs (Win10)

1. Select Start | Settings | Apps and Features
2. Click on “Minor Planet Observer” in the list.
3. Click “Uninstall.” Follow the instructions. Usually a reboot is requested by Windows.

This removes all files, including those for Connections and the Asteroid Viewing Guide. ***It also removes user data files, e.g., astrometry and photometry sessions.*** Be sure to make a backup of the data files in case you want to reinstall later and not lose data.

The Uninstall may not completely remove the MPO tree because there may be a few, inconsequential files in some sub-directories. It is perfectly safe to use Explorer to delete the root MPO folder and thus remove the last traces of the programs and associated files.

Manually Installing Star Catalogs

The STARTER ISO installation, if told to do so, will install the MPOSC3 and APASS catalogs during installation. Should you not chose to install the catalogs at that time or want to install the additional catalogs (UCAC4 and CMC-15), you can do so by copying the folder for a given catalog to the hard drive using Windows Explorer, e.g., copy D:\APASS to C:\ or C:\Catalogs, where D:\ is the DVD drive.

↳ The catalogs are from 1.5 to 5.8 GB. Even with a fast system, it’s going to take a few minutes. Windows Explorer will keep you updated.

MPOSC and APASS Catalogs

The MPOSC and APASS catalogs can be directly copied from the STARTER ISO.

↳ The APASS catalog on the STARTER ISO is the same as on the first Catalogs DVD. It is not necessary to install from both DVDs.

The CMC-15 and UCAC4 Catalogs

The CMC-15 catalog is located on the first catalog DVD (MPO_V107_CATS-1).

UCAC4 is split between two DVDs (MPO_V107_CATS-1 and MPO_V107_CATS-2).

Installing MPOSC, APASS, and CMC-15 Manually

The instructions for these catalogs follow the same general steps. The only difference is which catalog folder is selected to be copied to the hard drive.

1. For MPOSC and APASS, insert (or mount) the STARTER DVD. For CMC-15, insert (or mount) the first DVD (MPO_V107_CATS-1)
2. Open Windows Explorer and navigate to the DVD drive.
3. Right click on the folder for the catalog to be copied, i.e., MPOSC, APASS, or CMC-15; do not click on a file within the folder.
4. Select Copy from the popup menu.
5. Navigate to a folder on a hard drive, e.g., C:\ or D:\Catalogs
6. Right-click on the folder on the hard drive.
7. Select Paste from the popup menu. This copies the files to the hard drive.

Installing UCAC4 Manually

The initial steps for installing UCAC4 are similar to those above.

1. Insert (or mount) the first DVD (MPO_V107_CATS-1)
2. Open Windows Explorer and navigate to the DVD drive.
3. Right click on the UCAC4 folder.
4. Select Copy from the popup menu.
5. Navigate to a folder on a hard drive, e.g., C:\ or D:\Catalogs
6. Right-click on the folder on the hard drive.
7. Select Paste from the popup menu
8. The files will be copied to the hard drive.
9. When the files are copied, insert (or mount) the second DVD (MPO_V107_CATS-2).
10. In Windows Explorer, right-click the u4b subdirectory on the second DVD and select all files; **do not** select the u4b folder itself.
 - ↳ This is important! Do not select the folder but the files within the folder.
11. Select **all** the files in the u4b folder.
12. Right click over one of the file names and select “Copy” from the popup menu.
13. In Windows Explorer, navigate to the \UCAC4\u4b directory on the hard drive.
14. Right click over that folder name and select “Paste” from the popup menu.

If you selected the u4b folder and not the files within, most versions of Windows would prompt if you wanted to continue even though there is a u4b folder in the destination. There is no guarantee that the files al-

ready in the destination u4b folder will not be removed. This is why you copy the files and not the folder.

When am I Required to Convert Data Files?

The short answer is “only if you are upgrading from any version prior to v9 or if you have some PhotoRed observations (OBS) and/or Connections script (CSI) files from pre-v9.5.” If none of this applies to you, then you can skip the rest of this section on data conversion.

Prior to V9.0

All MPO database files in versions *before* v9.0 have the extension FFD. These files are incompatible with the v10 MPO Server. When installing v10, core data files (stars, DSOs, etc.) are replaced with the proper version (*.FF2). Critical user files (see discussion below) are NOT replaced and must be converted first to v10 format and then to include additional data fields in some of the tables.

Version 9.5+

V9.5+ files have the FF2 extension but some tables may be missing some data fields. The MPO programs convert these tables automatically as the program starts, so it is **not** required to run the Convert10 program involving FF2 files.

Pre-v9.5 versions of the PhotoRed OBS and MPO Connections CSI (script) files do need converting. If you have such files, then run the Convert10 program and convert *only* those files.

Shirts and Shoes *not* Required

↳ If you have any questions or doubts about data conversion, contact technical support before you convert your data. Since the MPO software converts the most critical files on-the-fly, there is little reason to run Convert10 for those upgrading from v9.5 and who have no legacy files from before then.

If all the legacy files are v9.x, then the only conversions that *might* be required are for PhotoRed observations (OBS) and MPO Connections scripts (CSI) files.

Other than these situations, the only time running Convert10 is *required* is if you are upgrading from v8 or earlier.

↳ It bears repeating: *there is no substitute for having a good backup.* Make backups of your critical files before you run the installation and/or the Convert10 programs.

New Installation

If you've never installed MPO software before, you do not have to convert any data files. However, if you are trying to use Canopus *export sets* (see the Canopus manual) obtained from other users and those files are v8.x or before, then you must convert them before trying to use them.

The “Mighty Five”

This is not the five famous Russian composers (can you name them?) but the five critical *user-maintained* files in the MPO data system.

PHSESS

Canopus photometry sessions

PHOBS

Canopus sessions observations

AAVSO

PhotoRed AAVSO reports

AAVSO2

PhotoRed AAVSO reports, auxiliary data

DOUBLESTARMEASUREMENTS

This table contains double star observations.

Canopus allows you to export data from the PHSESS/PHOBS files for data exchange or archiving. These are called *export sets* that come in pairs, one ending with “_SESS.FF2” and the other with “_OBS.FF2” (without the quotes). These files may also need converting.

✦ It is strongly recommended that you make backups of the “Mighty Five” files (if they exist) and all export sets before running any installation and/or conversion program.

UserStar

Another file that you may want to protect is UserStar. If you are upgrading from v9.x, make copies of the file and restore it after installation but before you open any MPO program. If you are upgrading from before v9, you must use the v10 files and re-enter any data in the file.

Converting on-the-Fly

MPO Canopus converts the Mighty Five as *export sets* as it loads them. Therefore, it is *not required* that you convert these files beforehand. If you have a large number of export sets, then it might be worth running the Convert10 program to get them all done at once. Again, this is not required and if running the Convert10 program seems daunting, then don't use it.

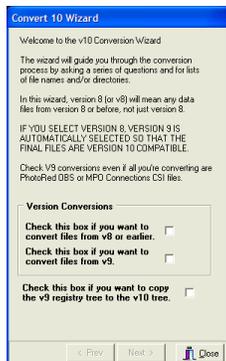
Version 9.5 and V10 Compatibility

You can exchange files with colleagues still using v9.5+. When they send you files, Canopus automatically converts them to v10. If you send them v10 files, they will work in v9.5 *but* new data fields in v10 will be “invisible” to v9.5 users, meaning they will not have access to or be able to update those fields.

The new “CM” (comp star catalog magnitude) fields in v10 *SESS files will be set to 0 if exporting from v9.5 and then importing back into v10. If you are relying on those fields to be catalog values (you are using the “*DerivedMags*” method), then you will have to re-enter the values. See the Users Guide and Reference Manual for more information.

Running the MPO Convert10 Program

The Convert10 program is a “wizard-based” program that collects information along with lists of files to be converted and then runs through the conversions in one step.



Version Conversions

This section asks from which previous versions (9, or 8 and earlier) you want to convert data files. Check the appropriate boxes. You can do both types of conversions in a single pass.

Because the MPO programs convert files on-the-fly, you are not required to run the Convert10 program at all – unless – you are upgrading from v8.x or before, or you have PhotoRed OBS or MPO Connections script files from pre-9.5. If only the latter applies, do not run conversions on any other data files.

You will not harm anything if you convert files that do not need or have already been converted. However, computers being computers, you should always make a backup before running any conversion program.

Copy v9 Registry

Version 10 stores its registry entries in its own “tree”. You can choose to copy the version 9 settings, including profiles, Connections exposure parameters, etc. as part of the conversion. This option can be run independently of any data file conversions, i.e., it is not required to choose either data file conversion option to copy the v9 registry.

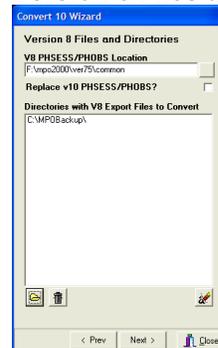
Which pages of the wizard you see depends on which options you select on the first page.

Follow the Wizard

Use the Next and Previous buttons to move through the Wizard. There are groups of pages for V8 and V9 conversion. You will see only those pages that are required to gather information for the options you choose along the way.

Most of the pages are self-explanatory. Some of them are covered in more detail below.

Version 8 Files and Directories



V8 PHSESS/PHOBS Location

Use the speed button to the right of the “Location” field to specify the directory where those two files are found.

Replace V10 PHSESS/PHOBS?

Check this box if you want to have the converted PHSESS/PHOBS files replace the ones installed with version 10.

Directories with V8 Export Files to Convert

Use the open folder button at the bottom to open a select directory dialog and select a location for V8 “export sets” (*_SESS.FFD/*_OBS.FFD). You can enter more than one directory in the list.

If you have subdirectories of files, you must specify each subdirectory separately, i.e., the conversion does not do a recursive search of directories.

The “trash can” button deletes the highlighted directory from the list.

The “eraser” button deletes all entries from the list.

Version 9 Other Conversions

UserStar

This file in v10 also stores SDSS gri magnitudes. This file is automatically converted when you load Canopus or Connections and so it is not mandatory that you convert it here.

AAVSO/AAVSO2

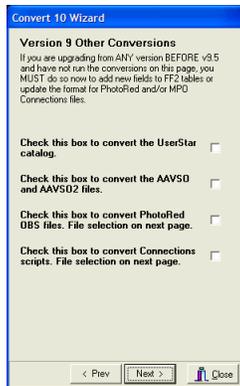
These files (two of the “Mighty Five”) are also converted automatically when you open Canopus. It is not mandatory that you convert them here.

PhotoRed OBS Files

V9.4 changed the format of the PhotoRed observations (OBS) files. It is mandatory that you convert these files otherwise Canopus/PhotoRed may lock up. If you have OBS files and are not certain if you used them in v9.5x, convert them here.

Connections Scripts (CSI)

Several things changed in Connections scripts before v9.5. Here again, if you are using Connections and are upgrading from before 9.5, you should run these conversions on all CSI files.



If you select either OBS or CIS files, you will see this page. In this case, you must select individual files, not just directories.

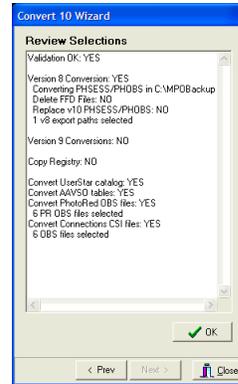


The “open folder” button displays a multi-select file dialog where you can pick one or more files from a given directory.

The “trash can” button deletes the highlighted item from the list immediately above it.

The “eraser” button deletes all items in the list immediately above it.

Review Choices

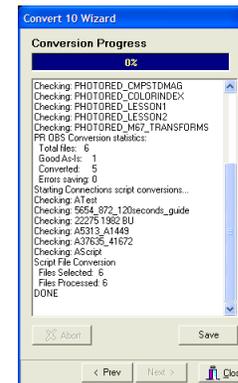


After you have made your selections, the final page before proceeding allows you to review your choices. If the selections are all valid, then “Validation OK: Yes” appears in the top line of the memo field and the OK button is enabled. If there is an error with any of the selections, the OK button is disabled and the memo field will indicate the problem.

Note that the review screen says “Version 9 Conversions: NO”. This refers only to converting the PHSESS/PHOBS files. Other members of “The Mighty Five” that need conversion are treated independently.

Convert the Data

To proceed with the conversions, click the OK button. The wizard will switch to another page where the progress of the conversion is reported, including any errors that may have been encountered.



If you selected to copy the v9 registry to v10 and the v10 tree already exists, a brief message appears. This is **not** an error but simply to inform you that the tree did not need to be copied.

Save

Once the conversion is complete, you should click the Save button and save the contents of the progress memo in case there is a problem and you need to contact tech support.

Close

Click the button to close Convert10.

The Photometry Workshop Files

The Photometry Workshop files consist of a PowerPoint® PPS (presentation only, the file cannot be edited in PowerPoint) and a number of supporting files. The presentation includes slides and audio with the total running time about 56 minutes.

This is an enhanced version of a presentation given at the Society for Astronomical Sciences 2009 Symposium on Telescope Science and covers the essentials behind finding and using extinction and transform values for your system. Applying these terms to your raw data allow you put that data onto a standard magnitude system.

Running the Presentation

In the MPO group folders, there is a link to the presentation. Double-click on it to start the presentation. You can also double-click on the PPS file in Windows Explorer that is found in \MPO\WORKSHOP.

You must have an audio card and speaker/headphones to hear the audio.

You can right-click over a slide at any time to display a menu. This menu allows you skip to the next or previous slide, or to a specific slide in the presentation. A PDF of the entire presentation (with six slides per page and slide numbers at lower right of each slide) can be found in the \MPO\DOCS directory.

EXTINCTIONTRANSFORMS.PDF