Updating observing scripts

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(This information is also available on Atlas at /home/hjst/ice_scripts/how-to-update-scripts)

Introduction

The McDonald Observatory observing scripts that are run in ICE and IRAF get modified from time to time. This can be for reasons including:

1) to operate new instrument hardware
2) to add additional software functionality
3) to improve a script's ability to detect and respond to error conditions

When a script is updated and released for use, it is copied into the 'script library' directory on Atlas:

/home/hjst/ice_scripts

An observer can compare the scripts in their account with the scripts in the library to determine if they are running the current version.

Below are some details to help with updating scripts.
Please note well the section on the uparm directory which contains essential steps.

Please feel free to ask Phillip MacQueen to have your account updated.
Text or call (512) 672-9445, or e-mail pjm@astro.as.utexas.edu

Where are your scripts?

When a new account is made for an observer, the account is a copy of an account called 'xproto'. The xproto account is /home/xproto and the copy is modified so that all occurrences of 'xproto' are replaced by the username of the new account.

The xproto account has changed several times since the computer Atlas went into service. For newer accounts, and accounts that have been maintained, your scripts will be in an instrument specific directory that can be reached with commands such as:

cd ~/ice/ts23/scripts
cd ~/ice/ts21/scripts
cd ~/ice/gcms/scripts
cd ~/ice/diafi/scripts

In addition to the ICE scripts, there are IRAF scripts

cd ~/iraf/scripts

Copying a script

Important: <u>before copying a new script, make a copy of the parameters you are using with your current version of the script.</u> For example:

epar ts2foc
Copy-and-paste the parameters into a temporary file.

For example:

cd ~ice/ts23/scripts
cp -p /home/hjst/ice_scripts/ts2foc.cl .

Next, after cleaning up your uparm directory as described in the next section, edit the parameter file of the new script version and restore any values that got reset to default values.

Cleaning up your uparm directories

Scripts typically have input parameters, and a script will come with default values for each parameter. Users modify the parameter values as needed, and the modified parameters are stored in files in a 'uparm' directory (User PARaMeter). Just as there were different script directories for each instrument, there are different uparm directories for each instrument. For example:

cd ~ice/ts23/uparm

IRAF also has its own uparm directory:

cd ~iraf/uparm

<u>Here is an important point:</u> IRAF and ICE have the unfortunate quirk that there can be multiple parameter files, with different names, for a given script (see note 1 at the end). This can cause confusion and errors after a script upgrade, as the wrong parameter file might get used, or the old parameter file might generate errors if there have been parameter changes.
Note: <u>using the IRAF 'unlearn' command won't always prevent problems.</u>

It is best to delete all the parameter files for the updated script. The file names aren't always very obvious, and the file names have two parts. The first part of the name is the IRAF package that was in use when the script was loaded. The second part of the name is a contraction of the script's name. Some examples:

Script: ts2cals
clets2cas.par
icets2cas.par

Script: ts2config
clets2cfg.par
icets2cfg.par

Note 1:
Older accounts used the script 'mytasks' to load the observing scripts. Sometimes mytasks was run before ICE was loaded, leading to the parameter file names that start with 'cle', and sometimes mytasks was run after ICE was loaded leading to the parameter file names that start with 'ice' Accounts made more recently automatically load the scripts before the user loads ICE, and so the parameter file names should only start with 'cle'.

If your account uses mytasks feel free to ask Phillip MacQueen to have your account updated.
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