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GETTING IDL AND SOLARSOFT TO WORK ON YOUR APPLE MAC

Version 0.9, 10 Aug 2006:
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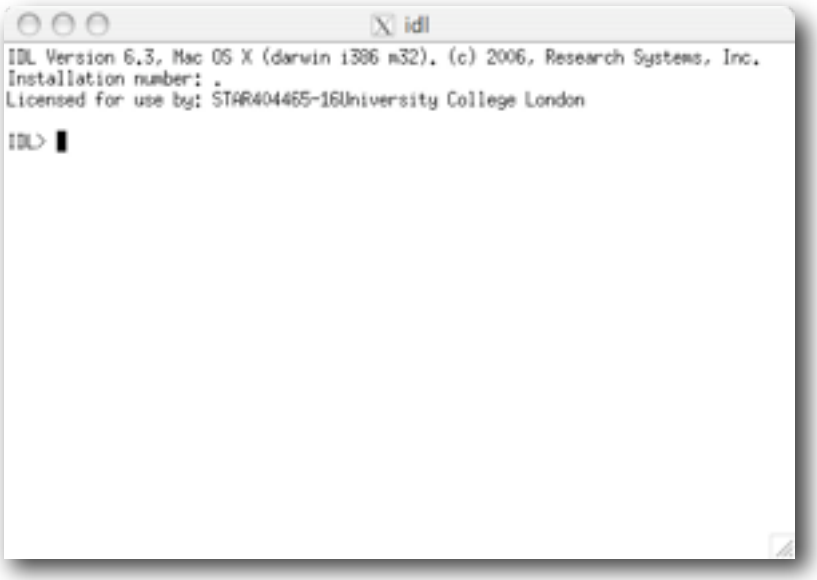
Why?

This short guide is about how to set up *SolarSoft*[1] *IDL*[2] on your Mac. Because this was a relatively new experience for most of us at MSSL, I thought it'd be useful to put all the lessons learnt into one document so that people don't end up re-inventing the wheel when it comes to trying to configure *SolarSoft* for their beloved Macintosh.



For the most part, it's not that complicated. But there are a few points which you mightn't be aware of when you first set out to install it that could make all the difference between a successful installation on the one hand, and wailing and gnashing of teeth on the other.

It's assumed that you're setting up *IDL* and *SolarSoft* for the first time on your machine, and that you have a permanent *IDL* licence file. The experience of setting this up was with *IDL* 6.3. To install this, you'll need either an *IDL* installation CD/DVD or a downloaded installation package from ITT's website. It's also assumed that you've installed *Mac OS X*'s X11 application, as this is needed to run *IDL* on the command line.

Credit where credit's due...

A large vote of thanks goes to the people whose advice I have stolen to write this, namely Louise Harra and Sarah Matthews, who suffered long absences of communication between their licence manager and *IDL* installations, Mark Blackman whose advice helped crack the problem, and Jian Sun (孙坚), who very patiently guided me through the *SolarSoft* installation process.

First, get a licence

Within Mullard Space Science Laboratory, you'll need to contact Paul Lamb to get a licence for your machine. You'll need the following information:

1. Machine type (make, model): e.g. Apple MacBook Pro 17"
2. Machine serial number: to find this, choose *Apple Menu -> About this Mac -> More Info...* and highlight *Hardware* at the top-left. The serial number is shown in the panel on the right.

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[1] *SolarSoft*, a.k.a. *SSW*, is the standard set of libraries for *IDL* used by solar physicists in analysing data. The package can be downloaded via http://www.lmsal.com/solarsoft/ .

[2] *IDL*, the *Interactive Data Language*, is a licensed software package from ITT VIS (formerly RSI).

3. Hostname: this is your machine's name. Within MSSL, this will be something of the form `msslxx` and is probably printed on a sticker on your machine somewhere.
4. Built-in Ethernet MAC address: **be really careful with this one**. Several people have fallen foul of the Ethernet MAC address displayed in the Airport wireless information. To find your **wired** MAC address, follow the same steps as above for finding your machine's serial number, but on the left panel choose *Network* (rather than *Hardware*) and then, on the upper-right pane, choose *Built-in Etheernet*. Scroll down in the lower-right pane to the very bottom, where you'll see *Ethernet:* and below it, *MAC Address*. **This** is the number that you need, as *IDL*'s licence is tied to your built-in Ethernet MAC address, not the Airport wireless one.
5. The operating system and version (almost certainly OS X, unless this document is now really old!)
6. Your MSSL username: e.g. DRW
7. The licence type: probably "*fixed*" (other options are *single*, *n (multiple users)*, and *floating*, but it's unlikely to be any of these).

With this information, Paul can apply for you licence through the Starlink arrangement, via the nominated contact at UCL.

You'll hopefully receive an e-mail within anything up to two weeks with the licence file as part of the body of the e-mail. **It's very important that you keep this e-mail**, or that you save the body as a text file to be used in the installation process. The key lines are those that fall between (and including) the lines

```
############ license file comments, do not delete ###############
```

and

```
###################### end of license file ########################
```

Installing IDL

The first step in getting *IDL* installed. If it's a DVD/CD, then click on the Install application. If not, then unpack the installer using *Stuffit Expander* or another archiver package, and then click on Install in IDL6xmac Folder that it extracts, where 6x is the version (e.g. 63 for *IDL* 6.3).

Follow all the steps to installing *IDL* that the installer prompts you to do, including the installation of your licence. At this point, copy and paste in the licence file described above. The type of licence you have is almost certainly *Permanent*, and for the second option, choose *License (sic.)*.

The first kludge is the deepest...

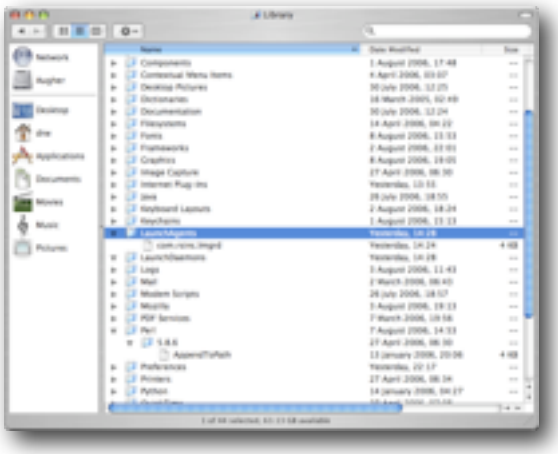
The next part is the most obscure. But it appears to be necessary to get the licence manager to talk to *IDL* properly.

First of all, you'll need to download

http://www.mssl.ucl.ac.uk/www_solar/idl/com.rsinc.lmgrd.plist,

which is just a file, so choose to save it to your hard disk or desktop. Note that, because the file is an XML file, some browsers will choose to save it as a text file and append `.txt` to the filename. It's important that you remove this `.txt` extension in the filename by renaming it, if necessary

Once you have this file, open Finder and go to your Macintosh Hard Drive directory, then Library, then LaunchAgents. Drag the file com.rsinc.lmgrd.plist from wherever it was you saved it to the LaunchAgents directory. Depending on what account you install this under, you may be prompted for an Administrator password, as this is a system directory. It may be that the file appears now as com.rsinc.lmgrd (without the .plist extension), but this is probably because the file's extension is hidden. If you're uncertain, highlight the file and choose ⌘-I to show the file's info; you should see that the *Hide extension* box is ticked (or "checked").



Three steps to averting an identity crisis

Setting the machine's name the easy way

First, we need to ensure that your Mac's name is consistent internally and on your network. In the menu at the top of your screen, choose *System Preferences -> Sharing*. Ensure that your *Computer Name* field is `mssllxx`, rather than `Bob Steve's computer` or anything else.

Setting the machine's name the *less* easy way

The second step is to add or edit a line in /etc/hostconfig so that your Mac knows who it is for the purposes of running *IDL*. In a terminal[3], type the following:

```
sudo pico /etc/hostconfig
```

then look for a line beginning with the word `HOSTNAME`. If such a line doesn't exist, add the following line:

```
HOSTNAME=mssllxx
```

where `mssllxx` is your machine's hostname on the MSSL network. If the line existed anyway, change its value in exactly the same way. To exit pico and save the changes, type CTRL-X and then Y to accept.

Setting the machine's name the *really obscure* way

The third and final identity management step requires you to open the NetInfo Manager utility[4].

Highlight Machines, then localhost. Choose the *Click the lock to make changes* option at the bottom of the window and enter your Administrator password if you need to. With localhost still selected in the upper pane, click on the *Duplicate* button and confirm that you want to duplicate when asked.

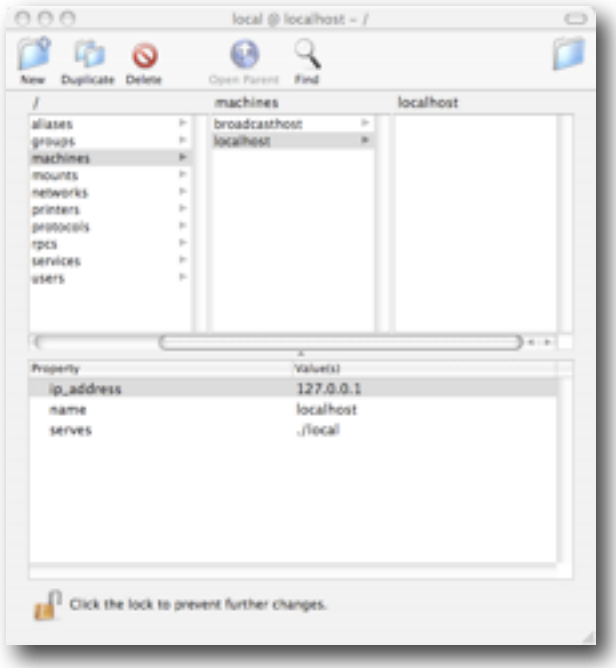
---

[3] To run a terminal in OS X 10.4, go to Macintosh Hard Drive -> Applications -> Utilities -> Terminal

[4] in the same Utilities folder as Terminal

This will generate an entry below `localhost` called `localhost copy`. In the bottom panel, double-click the value of *Name* and change it from `localhost copy` to `mssl`**xx**, again where this is your machine's hostname on the network. Don't change the IP address, as there should be no need: in TCP/IP, 127.0.0.1 is an alias for `localhost`, which means that *IDL*'s licence manager will know that `mssl`**xx** is really the same machine as the one it's running on.

Lastly for this part, click on the lock again and confirm that you want to keep the changes.



Checking that IDL is licensed

You should now be able to run *IDL* either in the *IDLDE* environment by choosing Applications -> rsi -> idl -> idlde, or in a terminal by running Applications -> rsi -> idl -> idl. If the licence is active, you should see *IDL* start with a message something like this:

```
IDL Version 6.3, Mac OS X (darwin i386 m32). (c) 2006, Research Systems, Inc.
Installation number: .
Licensed for use by: STAR404465-16University College London
```

Installing SolarSoft

The place to start with this is at http://www.lmsal.com/solarsoft/ssw_install.html. Here you are presented with a form, asking you what your requirements are for your intended *SolarSoft* installation.

The first part asks where you want to install *SolarSoft* **from**, and where you want to install it **to** on your Mac. Within MSSL, the fastest source from which to install is `mssly5.mssl.ucl.ac.uk`; if you're outside the UK, there's a good chance that `sohoftp.nascom.nasa.gov` may be the faster server[5].

Next, because we're assuming a fresh installation here, choose *New Installation* as the installation type. The installation source is *Internet*, and — this appears to be important — the firewall constraints should be set to *None*.

Where you want to install *SolarSoft* on you Mac is up to you. Although *IDL* is installed in the system-wide folder /Applications/rsi/idl/, I

[5] Note that the third download server option, which is just an IP address, is simply the IP address of the server `sohoftp`.

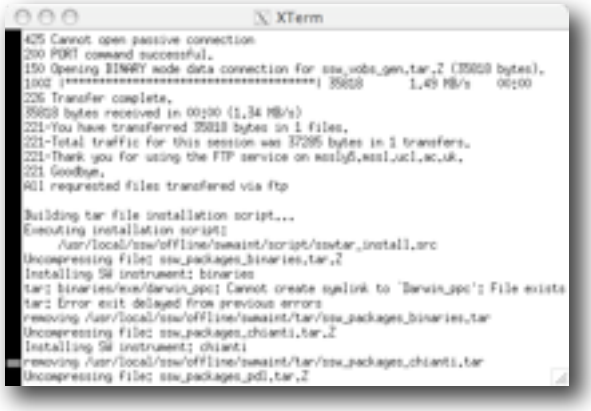
chose the first default option, /usr/local/ssw because that's where I'm used to it being on my Linux desktop, but it ought not to matter. You can also set it to any folder you want using the *Explicit Path* option; later we'll point the system to the right location so that it can find *SolarSoft*.

The next important step here is to choose the branches of the *SolarSoft* tree which you want to use. It's **strongly** advised that you don't uncheck any already-checked entries (an example is the *Binaries* package), as these are normally required for *SolarSoft* to work.

Lastly, once you're happy that you have chosen all the branches you want, hit the *Generate installation script* button. This will then present you with a page that summarises the size and name of each package you've requested. If these are correct, click on the link below marked *Your UNIX installation script*. This will then either return a text file to your browser window, or ask you to save a text file with a .csh extension, called something like ssw_install060810_021711.csh This is a C-shell script, which you'll need to run in a terminal. If you're **not** prompted to save it, choose *File -> Save as...* in your browser, and save it somewhere obvious.

Next, open a terminal (described above). Type `tcsh` to start the (T)C-shell (although running `csh` is also fine). Go to the directory where you saved the script (if you saved it to your Desktop, for example, type

```
cd ~/Desktop
```



You'll probably have to make the .csh file executable to run it, so type

```
chmod +x ssw_install060810_021711.csh
```

replacing the filename with whatever your script is called. Lastly, to install *SolarSoft*, type

```
sudo ./ssw_install060810_021711.csh
```

and you should hopefully see it start to download several .tar.Z files, then unpack them. For reference, the log of a sample installation is included in the Appendix. If all goes well, you should see a message saying `installation complete`. Good luck! For more information, see Sam Freeland's page on using this script to install *SolarSoft* at

http://www.lmsal.com/solarsoft/ssw_install_howto.html

Editing your CSH or TCSH settings

The final necessary step in configuring your system is to set various environment variables so that *IDL* and *SolarSoft* know where each other are. In this section, it is assumed that you are using `tcsh` or `csh` as your default shell in a terminal. `bash` devotees who have a successful *SolarSoft* installation running might want to contribute their settings so that I can To do this, run `tcsh` (or `csh`) in a terminal window, as described above.

If you don't have a file in your home directory called .tcshrc (or .cshrc), then create one. If/once you do, then edit it to include the following lines:

```
##############################################################
# FOR MAC OS X 10.4 and SolarSoft
#
```

```
# Change the following line according to your
# solarsoft installation directory:
setenv SSW /usr/local/ssw
# This command sets up all the paths for solarsoft:
source $SSW/gen/setup/setup.ssw
# Tell solarsoft where IDL is normally found:
alias idl /Applications/rsi/idl_6.3/bin/idl
# Explicitly set the name of your operating system (Darwin is the
# Mac's UNIX-style environment):
setenv OS Darwin
# Point the system to your personal IDL startup file preferences:
setenv IDL_STARTUP $HOME/idl/my_startup.pro
##############################################################
```

The last line above refers to the file where you can customise your *IDL* session. If you do not have one, then ignore this line, but you may want to invest in one as it allows default settings to be run each time you begin *IDL*. This is discussed in the next section.

Customising your IDL startup preferences

If you don't have a personal *IDL* startup file, it may be the answer to one or two problems, and can certainly be of use in managing software from particular instruments. One problem you may run into is the classic *IDL* colours problem, namely that colour tables either don't load correctly or don't load at all. In this case, add a line to your `$IDL_STARTUP` file (*e.g.* $HOME/idl_mystartup.pro) as follows:

```
device, decomposed=0
```

This ought to take care of the problem (although I make no promises).

Running SolarSoft IDL

If everything's gone according to plan, you should now be able to run *SolarSoft*. The best way to do this from the command line is to run X11. This is done by going to Macintosh Hard Drive -> Applications -> Utilities -> X11 and clicking on this application. Next, go to *Applications -> Terminal* in the menu bar, and type tcsh in the terminal window that pops up. If everything is correctly configured, you should see it print the following lines to the terminal above your prompt:

```
SSW  setup will include: <gen>

Type <sswidl> to start SSW IDL
```

You should then be able to set the instrument packages you want to run by typing something like

```
setssw eis chianti trace
```

which will hopefully cause the following lines to be printed to the terminal:

```
Executing: $SSW/site/setup/setup.ssw_paths
Executing: $SSW/gen/setup/setup.soho_env
```

```
Executing: $SSW/gen/setup/setup.yohkoh_env
Executing: $SSW/gen/setup/setup.stereo_env
SSW  setup will include: <gen eis chianti trace>
Executing: $SSW/solarb/eis/setup/setup.eis_env
Executing: $SSW/site/setup/setup.trace_paths
Executing: $SSW/trace/setup/setup.trace_env
Executing: $SSW/gen/setup/setup.ssw_alias

Type <sswidl> to start SSW IDL
```

Lastly, type **`sswidl`** to start *SolarSoft*, and you should be home and dry!

Appendix: sample SolarSoft installation log

```
[Thu 10 Aug 11:19] ~/Desktop
[drw@msslni] > sudo ./ssw_install060809_070952.csh
===== passive=0 ============
Generating ftp transfer script
Starting ftp transfer of installation package: ssw_install.tar.Z
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_install.tar.Z remote: ssw_install.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_install.tar.Z (11403 bytes).
100% |***********************************| 11403       1.39 MB/s    00:00
226 Transfer complete.
11403 bytes received in 00:00 (1.22 MB/s)
221-You have transferred 11403 bytes in 1 files.
221-Total traffic for this session was 12866 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Transferring control to: /usr/local/ssw/offline/swmaint/script/ssw_install.control
Starting transfer of file: ls.current
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ls.current remote: ls.current
500 'EPSV': command not understood.
425 Cannot open passive connection
```

```
200 PORT command successful.
150 Opening BINARY mode data connection for ls.current (2931 bytes).
100% |***********************************|  2931      591.01 KB/s    00:00
226 Transfer complete.
2931 bytes received in 00:00 (419.38 KB/s)
221-You have transferred 2931 bytes in 1 files.
221-Total traffic for this session was 4363 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Requested software sets: ssw_ssw_site ssw_packages_ztools ssw_packages_pdl ssw_pack-
ages_xray ssw_packages_chianti ssw_packages_binaries ssw_ssw_gen ssw_solarb_gen
ssw_stereo_secchi ssw_ssw_trace ssw_stereo_gen ssw_soho_mdi ssw_soho_eit ssw_soho_cds
ssw_soho_gen ssw_solarb_eis ssw_vobs_vso ssw_vobs_gen
Requested database sets:
using default diskfree call...
------------------------------------------------------------
Available disk space under SSW (1024 byte blocks): 67180116
Total size of requested compressed tar files:     572256
Total size required by installation (w/buffer):   1201737
------------------------------------------------------------
Sufficient disk space exists, continuing with ftp transfer...
Starting transfer of file: ssw_ssw_site.tar.Z Size: 6815 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                            FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_ssw_site.tar.Z remote: ssw_ssw_site.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_ssw_site.tar.Z (6815 bytes).
100% |***********************************|  6815       1.16 MB/s    00:00
226 Transfer complete.
6815 bytes received in 00:00 (1.00 MB/s)
221-You have transferred 6815 bytes in 1 files.
221-Total traffic for this session was 8279 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_packages_ztools.tar.Z Size: 234577 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                            FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_packages_ztools.tar.Z remote: ssw_packages_ztools.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_packages_ztools.tar.Z (234577 bytes).
100% |***********************************|   229 KB    3.30 MB/s    00:00
226 Transfer complete.
234577 bytes received in 00:00 (3.23 MB/s)
221-You have transferred 234577 bytes in 1 files.
221-Total traffic for this session was 236075 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_packages_pdl.tar.Z Size: 39639283 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_packages_pdl.tar.Z remote: ssw_packages_pdl.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_packages_pdl.tar.Z (39639283 bytes).
100% |***********************************| 38710 KB    5.71 MB/s    00:06
226 Transfer complete.
39639283 bytes received in 00:06 (5.71 MB/s)
221-You have transferred 39639283 bytes in 1 files.
221-Total traffic for this session was 39640775 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_packages_xray.tar.Z Size: 59445791 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_packages_xray.tar.Z remote: ssw_packages_xray.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_packages_xray.tar.Z (59445791 bytes).
100% |***********************************| 58052 KB    5.30 MB/s    00:10
226 Transfer complete.
59445791 bytes received in 00:10 (5.30 MB/s)
221-You have transferred 59445791 bytes in 1 files.
221-Total traffic for this session was 59447287 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_packages_chianti.tar.Z Size: 13976473 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_packages_chianti.tar.Z remote: ssw_packages_chianti.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_packages_chianti.tar.Z (13976473 bytes).
100% |***********************************| 13648 KB    5.09 MB/s    00:02
226 Transfer complete.
13976473 bytes received in 00:02 (5.09 MB/s)
221-You have transferred 13976473 bytes in 1 files.
221-Total traffic for this session was 13977981 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_packages_binaries.tar.Z Size: 7101281 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_packages_binaries.tar.Z remote: ssw_packages_binaries.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_packages_binaries.tar.Z (7101281 bytes).
100% |***********************************|  6934 KB    3.76 MB/s    00:01
226 Transfer complete.
7101281 bytes received in 00:01 (3.75 MB/s)
221-You have transferred 7101281 bytes in 1 files.
221-Total traffic for this session was 7102790 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_ssw_gen.tar.Z Size: 11653205 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_ssw_gen.tar.Z remote: ssw_ssw_gen.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_ssw_gen.tar.Z (11653205 bytes).
100% |***********************************| 11380 KB    3.33 MB/s    00:03
226 Transfer complete.
11653205 bytes received in 00:03 (3.33 MB/s)
221-You have transferred 11653205 bytes in 1 files.
221-Total traffic for this session was 11654677 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_solarb_gen.tar.Z Size: 5925 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_solarb_gen.tar.Z remote: ssw_solarb_gen.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_solarb_gen.tar.Z (5925 bytes).
100% |***********************************|  5925     576.42 KB/s    00:00
226 Transfer complete.
5925 bytes received in 00:00 (460.42 KB/s)
221-You have transferred 5925 bytes in 1 files.
221-Total traffic for this session was 7397 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_stereo_secchi.tar.Z Size: 5294973 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_stereo_secchi.tar.Z remote: ssw_stereo_secchi.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_stereo_secchi.tar.Z (5294973 bytes).
100% |***********************************|  5170 KB    3.26 MB/s    00:01
226 Transfer complete.
5294973 bytes received in 00:01 (3.26 MB/s)
221-You have transferred 5294973 bytes in 1 files.
221-Total traffic for this session was 5296466 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_ssw_trace.tar.Z Size: 7529215 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_ssw_trace.tar.Z remote: ssw_ssw_trace.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_ssw_trace.tar.Z (7529215 bytes).
100% |***********************************|  7352 KB    3.86 MB/s    00:01
226 Transfer complete.
7529215 bytes received in 00:01 (3.85 MB/s)
221-You have transferred 7529215 bytes in 1 files.
221-Total traffic for this session was 7530692 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_stereo_gen.tar.Z Size: 109072823 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_stereo_gen.tar.Z remote: ssw_stereo_gen.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_stereo_gen.tar.Z (109072823 bytes).
100% |***********************************|   104 MB    5.23 MB/s    00:19
226 Transfer complete.
109072823 bytes received in 00:19 (5.23 MB/s)
221-You have transferred 109072823 bytes in 1 files.
221-Total traffic for this session was 109074310 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_soho_mdi.tar.Z Size: 1831114 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@mssln' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_soho_mdi.tar.Z remote: ssw_soho_mdi.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_soho_mdi.tar.Z (1831114 bytes).
100% |***********************************|  1788 KB    1.55 MB/s    00:01
226 Transfer complete.
1831114 bytes received in 00:01 (1.55 MB/s)
221-You have transferred 1831114 bytes in 1 files.
221-Total traffic for this session was 1832587 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_soho_eit.tar.Z Size: 32322866 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@mssln' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_soho_eit.tar.Z remote: ssw_soho_eit.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_soho_eit.tar.Z (32322866 bytes).
100% |***********************************| 31565 KB    3.25 MB/s    00:09
226 Transfer complete.
32322866 bytes received in 00:09 (3.25 MB/s)
221-You have transferred 32322866 bytes in 1 files.
221-Total traffic for this session was 32324342 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_soho_cds.tar.Z Size: 172059423 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

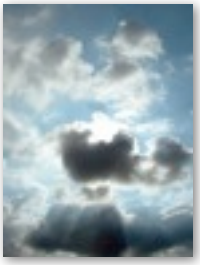
```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_soho_cds.tar.Z remote: ssw_soho_cds.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_soho_cds.tar.Z (172059423 bytes).
100% |***********************************|   164 MB    5.55 MB/s    00:29
226 Transfer complete.
172059423 bytes received in 00:29 (5.55 MB/s)
221-You have transferred 172059423 bytes in 1 files.
221-Total traffic for this session was 172060902 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_soho_gen.tar.Z Size: 11389929 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_soho_gen.tar.Z remote: ssw_soho_gen.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_soho_gen.tar.Z (11389929 bytes).
100% |***********************************| 11122 KB    6.71 MB/s    00:01
226 Transfer complete.
11389929 bytes received in 00:01 (6.71 MB/s)
221-You have transferred 11389929 bytes in 1 files.
221-Total traffic for this session was 11391405 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_solarb_eis.tar.Z Size: 114390875 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                             FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_solarb_eis.tar.Z remote: ssw_solarb_eis.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_solarb_eis.tar.Z (114390875 bytes).
100% |***********************************|   109 MB    4.91 MB/s    00:22
226 Transfer complete.
114390875 bytes received in 00:22 (4.91 MB/s)
221-You have transferred 114390875 bytes in 1 files.
221-Total traffic for this session was 114392362 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_vobs_vso.tar.Z Size: 293 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                            FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_vobs_vso.tar.Z remote: ssw_vobs_vso.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_vobs_vso.tar.Z (293 bytes).
100% |***********************************|   293      76.93 KB/s    00:00
226 Transfer complete.
293 bytes received in 00:00 (52.22 KB/s)
221-You have transferred 293 bytes in 1 files.
221-Total traffic for this session was 1754 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
Starting transfer of file: ssw_vobs_gen.tar.Z Size: 35818 bytes
Connected to mssly5.mssl.ucl.ac.uk.
220-                    Solar UK Research Facility (SURF)
220-  Mullard Space Science Laboratory. Dept. of Space and Climate Physics, UCL.
220-                            FTP server.
220-
220-  In case of problems contact problems@mssl.ucl.ac.uk
220-
220-  All transfers are logged. On the fly compressed tar files are supported.
220-
220-  Communications on or through University College London's computer systems
220-  may be monitored or recorded to secure effective system operation and for
220-  other lawful purposes.
220-
220-
220 mssly5.mssl.ucl.ac.uk FTP server ready.
```

```
331 Guest login ok, send your complete e-mail address as password.
230-The response 'root@msslni' is not valid
230-Next time please use your e-mail address as your password
230-        for example: joe@msslni.mssl.ucl.ac.uk
230 Guest login ok, access restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
200 Type set to I.
250 CWD command successful.
local: ssw_vobs_gen.tar.Z remote: ssw_vobs_gen.tar.Z
500 'EPSV': command not understood.
425 Cannot open passive connection
200 PORT command successful.
150 Opening BINARY mode data connection for ssw_vobs_gen.tar.Z (35818 bytes).
100% |***********************************| 35818       1.49 MB/s    00:00
226 Transfer complete.
35818 bytes received in 00:00 (1.34 MB/s)
221-You have transferred 35818 bytes in 1 files.
221-Total traffic for this session was 37285 bytes in 1 transfers.
221-Thank you for using the FTP service on mssly5.mssl.ucl.ac.uk.
221 Goodbye.
All requrested files transfered via ftp

Building tar file installation script...
Executing installation script:
     /usr/local/ssw/offline/swmaint/script/sswtar_install.src
Uncompressing file: ssw_packages_binaries.tar.Z
Installing SW instrument: binaries
tar: binaries/exe/darwin_ppc: Cannot create symlink to `Darwin_ppc': File exists
tar: Error exit delayed from previous errors
removing /usr/local/ssw/offline/swmaint/tar/ssw_packages_binaries.tar
Uncompressing file: ssw_packages_chianti.tar.Z
Installing SW instrument: chianti
removing /usr/local/ssw/offline/swmaint/tar/ssw_packages_chianti.tar
Uncompressing file: ssw_packages_pdl.tar.Z
Installing SW instrument: pdl
removing /usr/local/ssw/offline/swmaint/tar/ssw_packages_pdl.tar
Uncompressing file: ssw_packages_xray.tar.Z
Installing SW instrument: xray
removing /usr/local/ssw/offline/swmaint/tar/ssw_packages_xray.tar
Uncompressing file: ssw_packages_ztools.tar.Z
Installing SW instrument: ztools
removing /usr/local/ssw/offline/swmaint/tar/ssw_packages_ztools.tar
Uncompressing file: ssw_soho_cds.tar.Z
Installing SW instrument: cds
removing /usr/local/ssw/offline/swmaint/tar/ssw_soho_cds.tar
Uncompressing file: ssw_soho_eit.tar.Z
Installing SW instrument: eit
removing /usr/local/ssw/offline/swmaint/tar/ssw_soho_eit.tar
Uncompressing file: ssw_soho_gen.tar.Z
Installing SW instrument: gen
removing /usr/local/ssw/offline/swmaint/tar/ssw_soho_gen.tar
Uncompressing file: ssw_soho_mdi.tar.Z
Installing SW instrument: mdi
removing /usr/local/ssw/offline/swmaint/tar/ssw_soho_mdi.tar
Uncompressing file: ssw_solarb_eis.tar.Z
Installing SW instrument: eis
removing /usr/local/ssw/offline/swmaint/tar/ssw_solarb_eis.tar
Uncompressing file: ssw_solarb_gen.tar.Z
Installing SW instrument: gen
removing /usr/local/ssw/offline/swmaint/tar/ssw_solarb_gen.tar
Uncompressing file: ssw_ssw_gen.tar.Z
Installing SW instrument: gen
removing /usr/local/ssw/offline/swmaint/tar/ssw_ssw_gen.tar
Uncompressing file: ssw_ssw_site.tar.Z
Installing SW instrument: site
removing /usr/local/ssw/offline/swmaint/tar/ssw_ssw_site.tar
Uncompressing file: ssw_ssw_trace.tar.Z
Installing SW instrument: trace
removing /usr/local/ssw/offline/swmaint/tar/ssw_ssw_trace.tar
Uncompressing file: ssw_stereo_gen.tar.Z
Installing SW instrument: gen
removing /usr/local/ssw/offline/swmaint/tar/ssw_stereo_gen.tar
Uncompressing file: ssw_stereo_secchi.tar.Z
```

```
Installing SW instrument: secchi
removing /usr/local/ssw/offline/swmaint/tar/ssw_stereo_secchi.tar
Uncompressing file: ssw_vobs_gen.tar.Z
Installing SW instrument: gen
removing /usr/local/ssw/offline/swmaint/tar/ssw_vobs_gen.tar
Uncompressing file: ssw_vobs_vso.tar.Z
Installing SW instrument: vso
removing /usr/local/ssw/offline/swmaint/tar/ssw_vobs_vso.tar
Installation complete
```



David Williams, UCL, 10 Aug 2006