# Installing IDL with SSW on a Mac with OS X Lion

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1. Install IDL version 8.2 or later for the Mac.
2. Download SSW using the form at
<http://www.lmsal.com/solarsoft/ssw_install.html>. For RHESSI data analysis, include the hessi, spex, and xray analysis packages. Perl is already installed in OS X at /usr/bin/perl. The form will generate a script that can be found in the Downloads directory. Click on this script to run it. If all goes well, you should have a new folder in your home directory labeled ssw containing at least the folders gen, hessi, packages, and site.
3. Change your default Unix shell to tcsh (the default is bash). To do this, click on the Apple menu (Apple symbol in upper left of screen) and select System Preferences… Under System, select Users and Groups. Right click on your user name and click the Advanced Options… tag that appears. (This will only work if the lock icon in the lower left of the Users & Groups box is unlocked.) In the Login shell box, select or type /bin/tcsh. Click OK in the bottom right of the Advanced Options box. To prevent further changes, click the open lock in the Users & Groups box.
4. In Launchpad open the Utilities folder and click on the Terminal program. It should open in your home directory.
5. Create a file named .login to edit by typing nano .login. Add the following lines (replace path\_to\_ssw\_top with the path to your top SSW directory):

setenv SSW path\_to\_ssw\_top

setenv SSW\_INSTR 'hessi spex xray'

source $SSW/gen/setup/setup.ssw

setenv OS Darwin
setenv IDL\_STARTUP ~/.idl\_startup

Other SSW packages can be included between the quotes in the second line above if you installed them and want to include them in your IDL path. The three listed packages are needed to analyze RHESSI data. Include the last line if you create an idl startup file as described in Step 6. Close nano by typing <Control>-X. Type Y to save your changes.

1. Create a personal IDL startup file if desired by typing (still in Terminal) nano .idl\_startup. Add lines like the following:

device, decomposed=0, retain=2
loadct, 5
search\_network, /enable

 The first line causes color values to be interpreted as indices into a color

table and forces IDL to perform backing store ; the second line sets an initial color table; and the third line is used in the RHESSI software to automatically download files. These are just examples. As before, close nano by typing <Control>-X. Type Y to save your changes.

1. In Terminal type ls –a. You should see a list of files and folders in your home directory, including .login and .idl\_startup.
2. Fully close Terminal (on the task bar at the top of the screen) and then restart it. You should now see the lines:

SSW setup will include: <gen hessi spex xray>

Type <sswidl> to start SSW IDL

 Type sswidl to start IDL with SSW. Type sswidlde to start
 the IDL GUI with SSW.

1. The SSW directories can be updated from within IDL by typing
ssw\_upgrade, /loud, /passive, /spawn
at the IDL command line.