

In this section we will review the installation of HYSPLIT on a Mac computer. HYSPLIT is a series of programs that can be used to compute trajectories or pollutant dispersion patterns. These programs can be run individually through the command-line or you can use a graphical user interface that is supplied as part of the HYSPLIT package. However, the use of the graphical user interface requires some additional software to be installed. Now it may be easier for you to understand the Mac installation if you just listen to the Windows installation, so that you can contrast the differences between the Mac and Windows versions.

So let's go to the Mac page and the installation is very similar to the Windows installation. The HYSPLIT system, the post processing programs will output graphical files in Postscript format. Now, unlike Windows, this is native to the Mac, and therefore there are things available, programs available within the Mac OS, like the preview program that will display these PostScript files, automatically convert them to PDF. So, therefore, many of the programs that come with, or are required for windows are not needed in the Mac, so it is a much simpler installation.

However if you do not want to run HYSPLIT from the command line you should download the interpreter for the TCL commands that make up the graphical user interface portion of the HYSPLIT package. Now the ..., I should mention that the, each of the sections, the tutorial sections will, or most of them will have a link to a script or a

Windows batch file. The LINUX script can be run in, under the Mac OS. So that from the command line you can run this script to generate the same products for any should be sections. But the point I want to make is that the script is really a line-by-line example of the commands that you would need to enter from the command line to run HYSPLIT to get the products that are shown in that tutorial section. However the tutorial itself will focus on using the graphical user interface, and the graphical user interface really just generates the input files for HYSPLIT and calls the appropriate post-processing programs to manipulate the output.

So to open up, to get the software needed to run the graphical user interface, we would take you to the TCL/TK homepage and you would install something like this Mac package installer for version 8.6.7. And once that's installed then you can open the graphical user interface for HYSPLIT. Optionally, you can also install ImageMagick. This is a program that is used to convert output formats to other formats, graphical formats to other formats. If you do install ImageMagick, to read the files, the Postscript files, you would probably also need Ghostscript. But normally you can just use the Preview function in the place of ImageMagick because it also supports conversion to, a limited number of other graphical formats. And as I mentioned the Postscript viewer is not required because Preview will read those files. There is one issue with Preview in that if there are too many frames in a file, and it is possible with HYSPLIT that you can generate many output frames, there is a command available within the

HYSPLIT executable directory, that you can use to clean up the Postscript file so that it can be displayed by Preview.

In any event, once you've done this, decided upon the approach, you can go ahead and download the Mac OS X HYSPLIT installation. And there will be, once you've downloaded this, I have it here on the desktop, the registered version, you might have a slightly different filename. Once you do that you'll see it has the HYSPLIT install app. Now really all this HYSPLIT install app does is copy the HYSPLIT4 directory and its contents into your home drive. So for instance if I were to run this installer what it did, we will just close for a moment, is it put an app or an icon on my desktop, and created, or it copied from the DMG file, copied the HYSPLIT4 directory and its contents into my Home directory. And this is where the entire HYSPLIT package is contained. And the link itself will open up the graphical user interface, which I said is really optional thing, but it is used in the tutorial.

There're other options that you might want, for instance Google Earth for the Mac, because we can convert some of the HYSPLIT output to be compatible with the display in Google Earth as well as perhaps some of the GIS programs.

And the last point that I would like to make is that if you do want to run HYSPLIT from the command line, that would be from the working directory, what you need to do is to ensure that you have a link to open it. And for instance, if

I were to open up the command prompt, you need to go to the HYSPLIT4 directory, working, and you would need to type in this link so that you can run the graphical user interface also from the command line if you like, which is in the graphic user interface code directory, it's called hysplit4.tcl. By creating this link you can just open up the graphical user interface from the window, it went off to the side here. And of course you can always run the model from here, from this directory. But we will look going to that in more detail in some of the individual sections later on.

So this concludes the installation on a Mac.