

SINMAP for ArcGIS 10

David Tarboton, July 4, 2014

SINMAP 2.0 was developed for ArcGIS 9.x. It is programmed using visual basic 6, a technology that has been deprecated and is no longer supported in ArcGIS 10. ESRI has provided the capability to register Legacy components with ArcGIS 10 through their ESRIRegAsm program. The following knowledge base article gives information on this:

<http://support.esri.com/fr/knowledgebase/techarticles/detail/37639>

In this article ESRI cautions against this approach, recommending that it is better to recompile and redeploy ArcGIS customizations for each release. We have to date not had the resources to rebuild SINMAP for ArcGIS 10. Nevertheless, we evaluated this approach and were able to execute the basic SINMAP functionality. Some of the capability for automatically setting color schemes and visualization of results is lost. You can work around this by adjusting the symbology of these layers manually.

The file si10patch.bat has been developed to configure SINMAP for ArcGIS 10.

Steps in using SINMAP with ArcGIS 10 are.

1. Download SINMAP 2.0 setup.exe from <http://hydrology.uwrl.usu.edu/sinmap2/>
2. Install "SINMAP 2.0 setup.exe" Click through the install sequence
3. Download Si10patch.bat

You may need to say yes to security warnings because .bat is an executable file. Following is the content of Si10patch.bat. This registers the agSinMap.dll and proEssentials controls that SINMAP uses for plotting. This may be examined (and changed) in a text editor if necessary.

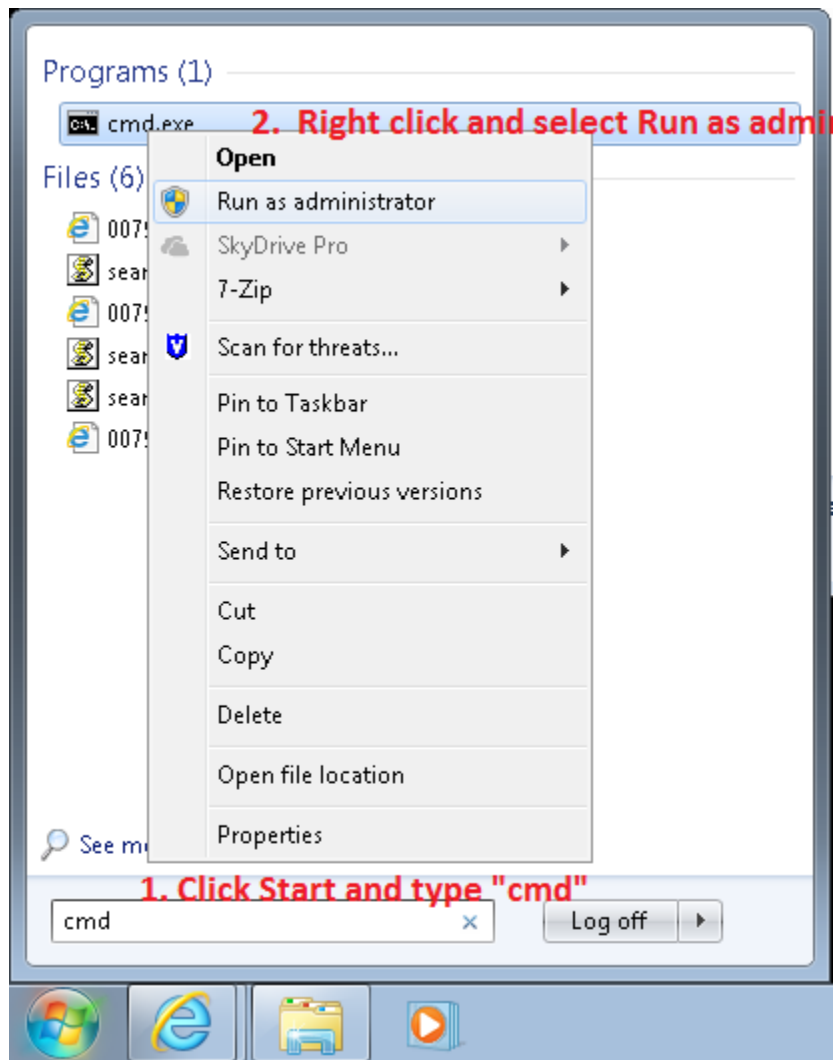
Si10patch.bat

```
Rem The next two lines register the sinmap dll for ArcMap. May
need to change folder location depending on your system
cd c:\program files\sinmap
"C:\Program Files\Common Files\ArcGIS\bin\ESRIRegAsm.exe" /p:Desktop
agSinMap.dll
```

```
Rem The next three lines register controls SINMAP uses that are
part of pro-essentials used for plotting and installed with SINMAP
Rem You may need to change the folder location depending on your
system
cd c:\windows\system32
regsvr32 pe3do32c.ocx
regsvr32 pego32c.ocx
regsvr32 pepco32c.ocx
regsvr32 pepso32c.ocx
```

regsvr32 pesgo32c.ocx

4. Open a command prompt as Administrator. This can be done following the sequence in the image below.



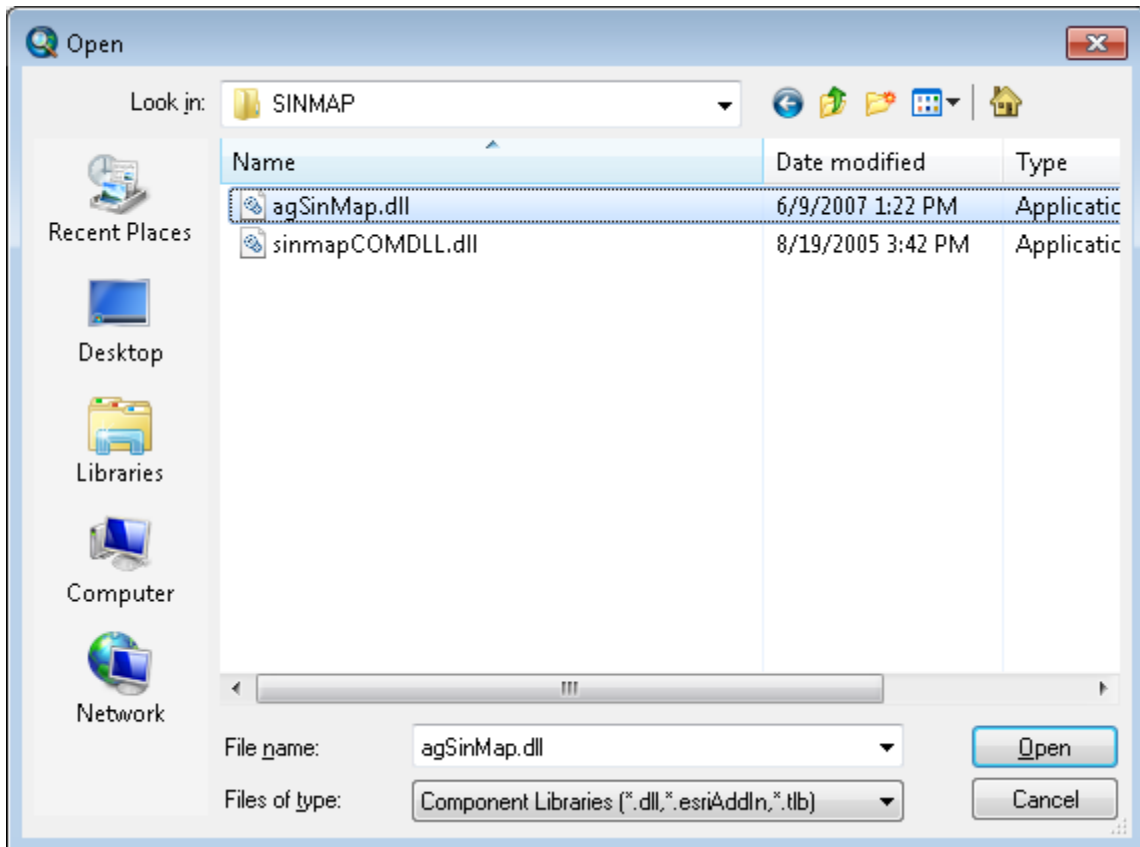
5. In the command prompt navigate to the location of the downloaded si10patch.bat file (e.g. type cd C:\Users\dtarb\Downloads)

```
ca. Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Windows\system32>cd C:\Users\dtarb\Downloads_
```

6. In the command prompt type "si10patch"

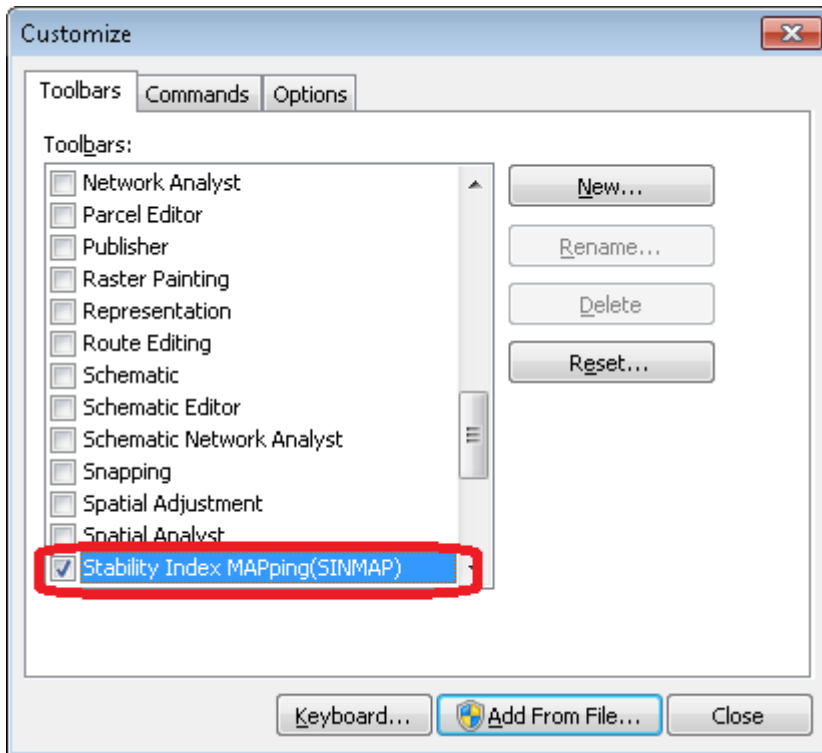
```
ca. Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Windows\system32>cd C:\Users\dtarb\Downloads
C:\Users\dtarb\Downloads>si10patch_
```

7. Click OK multiple times to acknowledge the registration succeeded.
8. Open ArcMap
9. In ArcMap click Customize > Toolbars > Customize > Add from file
10. Select agSinMap.dll in c:\program files\SINMAP



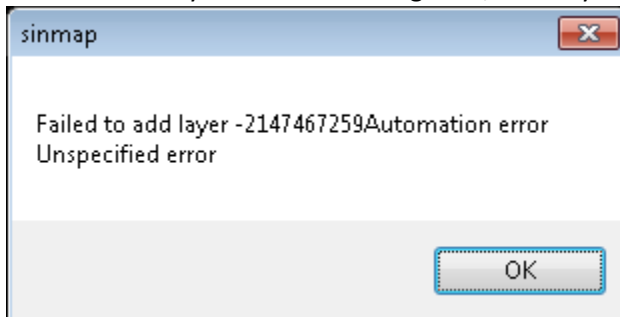
Click Open and Yes repeatedly to User Account Control (You need to be an administrator to do this), then finally OK.

11. Check the stability index mapping extension



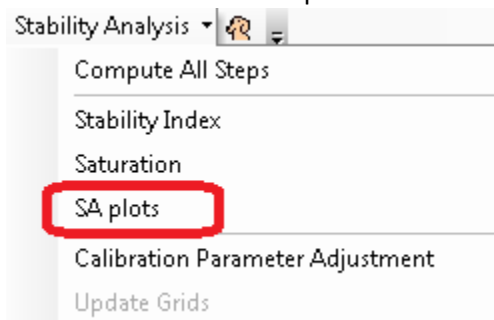
SINMAP should now be partially operational. Running it I obtained the following errors

1. Failed to add layer for Contributing area, Stability Index, and Saturation



These appear to be due to differences in the way ArcGIS 10 handles the customization of colors, and are cosmetic. The grids are evaluated correctly, they just do not have the SINMAP color scheme. Symbology can be used to adjust this.

2. The SINMAP function SA plots does not work.



I do not know the reason for this, but suspicion centers on proper registration of the ProEssentials tools used for plotting.

3. The SINMAP Calibration Parameter Adjustment tool also does not open, likely for a similar reason.