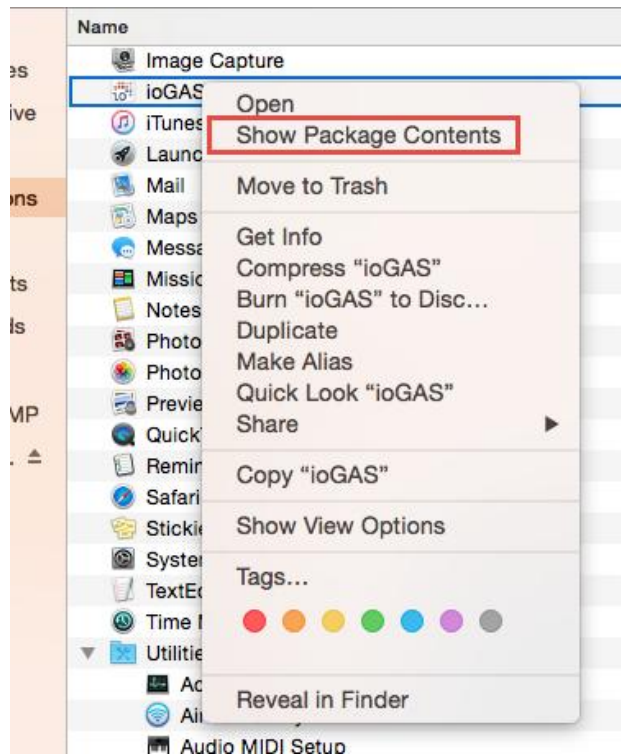
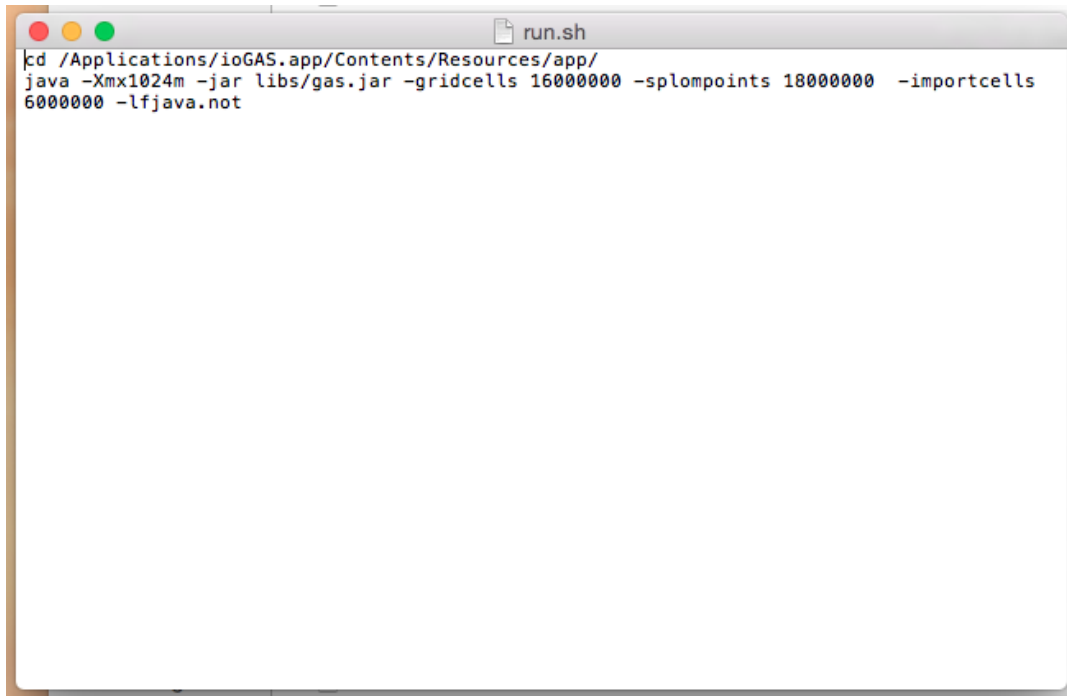


## Increase memory utilised by ioGAS on a Mac:

In the ioGAS Mac installation there is a script file (which you can edit as a text file), that can be executed to run ioGAS with higher memory limits. This file is called run.sh and is located in the ioGAS directory (See Finder: Applications/ioGAS.app/Contents/Resources/app/ ). To open these folders select “Show Package Contents”:



Double-click on the run.sh file to open it.



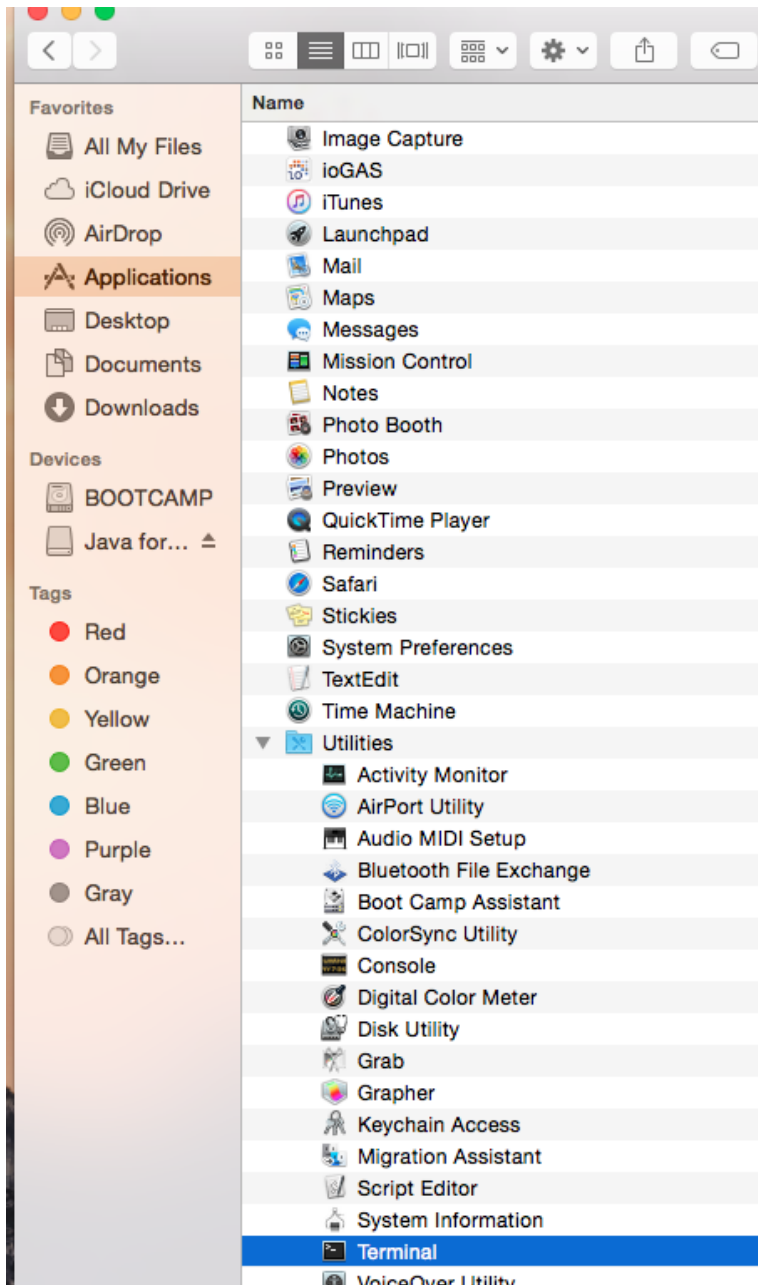
```
run.sh
cd /Applications/ioGAS.app/Contents/Resources/app/
java -Xmx1024m -jar libs/gas.jar -gridcells 16000000 -splompnts 18000000 -importcells
6000000 -lfjava.not
```

The new memory limits can be entered directly into the run.sh file by editing the numbers after – gridcells, -splompnts and –importcells. Depending on your computer memory we recommend the following Data Limits:

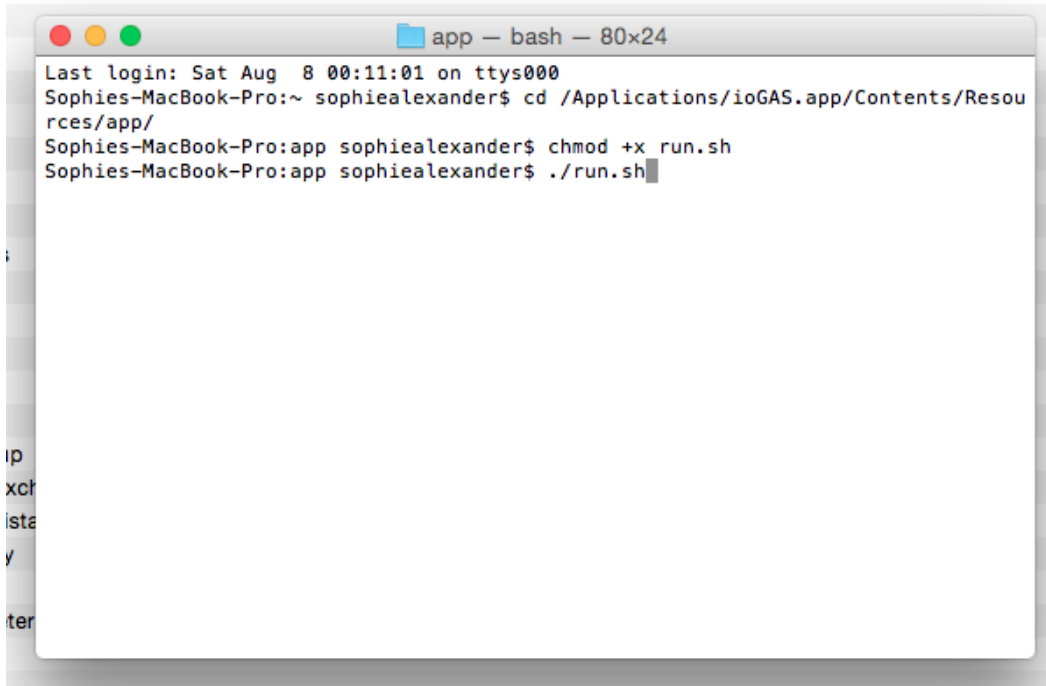
Memory	Data Cell Import Limit	Gridding Cell Limit	SPLOM Point Limit
512 MB	2 million	5 million	7 million
1 GB	4 million	9 million	11 million
2 GB	6 million	16 million	18 million
2 GB	8 million	16 million	18 million
4 GB	16 million	32 million	30 million
8 GB	32 million	64 million	60 million

The run.sh file should be automatically saved when the window is closed.

The run.sh file then needs to be executed from the **Terminal** window, which can be accessed under the Applications\Utilities menu.



Alternatively, go to Finder and search for Terminal.

A screenshot of a macOS Terminal window titled "app — bash — 80x24". The window shows the following text: "Last login: Sat Aug 8 00:11:01 on ttys000", "Sophies-MacBook-Pro:~ sophiealexander\$ cd /Applications/ioGAS.app/Contents/Resources/app/", "Sophies-MacBook-Pro:app sophiealexander\$ chmod +x run.sh", and "Sophies-MacBook-Pro:app sophiealexander\$ ./run.sh". The cursor is at the end of the last line.

```
app — bash — 80x24
Last login: Sat Aug 8 00:11:01 on ttys000
Sophies-MacBook-Pro:~ sophiealexander$ cd /Applications/ioGAS.app/Contents/Resources/app/
Sophies-MacBook-Pro:app sophiealexander$ chmod +x run.sh
Sophies-MacBook-Pro:app sophiealexander$ ./run.sh
```

In Terminal, type in the following line:

```
cd /Applications/ioGAS.app/Contents/Resources/app/
```

This will take you to the directory where the run.sh file is located. Type the following command to change permission to the run.sh file.

```
chmod +x run.sh
```

Then type the following command to run the file.

```
./run.sh
```

The new memory limits should now be used by ioGAS. As a check see the Help>About menu option:

