

PLEASE READ BEFORE INSTALLING THE MAGMA CHAMBER SIMULATOR

If you are a first-time user of the Magma Chamber Simulator (MCS), or if you are installing the MCS on a Macintosh that has never had MCS opened on it before, you may encounter Excel and/or operating system issues. Please read the below requirements and instructions to ensure a smooth installation on your machine.

MCS will only operate using a Mac OS, and can run in either Excel 2016 or Excel 2019. All MCS workbooks will be rejected from opening or operating on a Windows OS computer.

Before installation, ensure that your version of Excel (either Excel 2016 or Excel 2019) has been previously installed and fully updated.

You can ensure that Excel has been fully updated by taking the following steps:

- Open Excel
- Go to Help, then select “Check for Updates”
- Repeat this step until you are certain that there are no updates remaining.

It is **vital** that your version of Excel is fully updated. This is because there are known issues with early versions of Excel 2016 that will cause the MCS to not operate properly. The MCS support team cannot address questions about MCS usage from users with Excel versions that are not fully up-to-date.

Tips for MCS First-Time Installation:

1. Always start the first time install procedure by accessing the following file from the finder window:

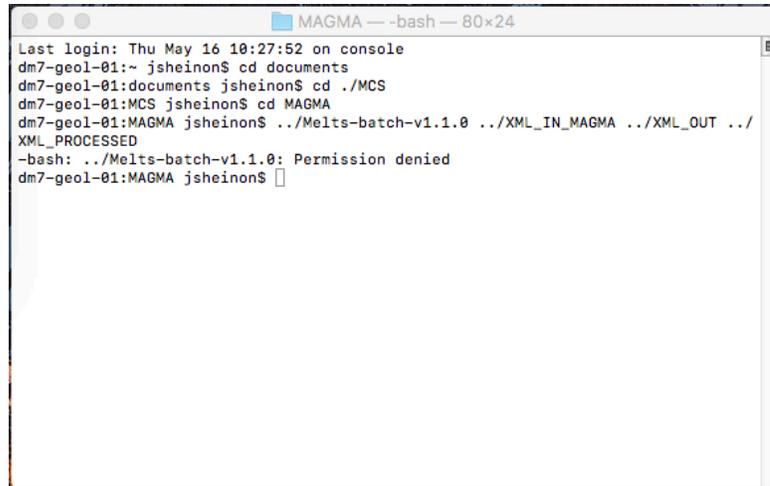
\Documents\MCS\MCS VBL CODE\MCS_PhaseEQ_2019{ver}.xlsm

For the first time install, **DO NOT** attempt the alternative:

Start Excel and then File > Open > MCS_PhaseEQ_2019{ver}.xlsm

After the installation, Excel > File > Open dialogs will work as expected.

2. Do not attempt to launch MCS_TraceElement_Isotopes_2019{ver}.xlsm until MCS_PhaseEQ_2019{ver}.xlsm has been successfully installed.
3. If you receive a ‘Permissions Denied’ Error (screenshot below) when attempting to run MCS for the first time, you may need to manually give your Mac permission to run the different MELTS batch executable files.

A terminal window titled "MAGMA -- bash -- 80x24" showing a sequence of commands and their outputs. The user navigates through directories and runs a script, which results in a "Permission denied" error.

```
Last login: Thu May 16 10:27:52 on console
dm7-geol-01:~ jsheinson$ cd documents
dm7-geol-01:documents jsheinson$ cd ./MCS
dm7-geol-01:MCS jsheinson$ cd MAGMA
dm7-geol-01:MAGMA jsheinson$ ../Melts-batch-v1.1.0 ../XML_IN_MAGMA ../XML_OUT ../
XML_PROCESSED
-bash: ../Melts-batch-v1.1.0: Permission denied
dm7-geol-01:MAGMA jsheinson$
```

Should this occur, you will need to open a terminal window, type in the following lines of code, and then press enter:

```
chmod 755 documents/mcs/meltsinput.xsd
chmod 755 documents/mcs/meltsoutput.xsd
chmod 755 documents/mcs/melts-batch-pmelts-v5.6.1
chmod 755 documents/mcs/melts-batch-v1.0.2
chmod 755 documents/mcs/ melts-batch-v1.1.0
chmod 755 documents/mcs/ melts-batch-v1.2.0
chmod 755 documents/mcs/magma/meltsinput.xsd
chmod 755 documents/mcs/recharge/meltsinput.xsd
chmod 755 documents/mcs/wallrock/meltsinput.xsd
chmod 755 documents/mcs/xml_in_magma/meltsinput.xsd
chmod 755 documents/mcs/xml_in_recharge/meltsinput.xsd
chmod 755 documents/mcs/xml_in_wallrock/meltsinput.xsd
(then press enter)
```

Permissions should now be enabled for MCS on your Mac.

In case of intractable issues during install or at any time during subsequent MCS operation:

Close all instances of Excel via Excel > Quit Excel, or via {Apple} > Force Quit, if necessary, and restart Excel. Do not save your file.