# STELLARIUM QUICK CONTROLS     Prof. Patricia Reiff <reiff@rice.edu>

**(download the software and full manual at https://www.stellarium.org/ :**  Mac and PC (and Linux)**)**
Download, install and open the app. On both Windows and Mac you will need to allow security to install.

**SETUP:** Notice the "Gui" popouts at the left and at the bottom (they show up when you move your cursor over them).  The top one on the left sets your location. Many locations can be set by typing in the name of your city in the Question box (to the right of the magnifying glass icon and then selecting on the list). Or put in your lat/long.  Check "use location as default".   When you exit Stellarium, it will write a "config.ini" file with your settings.  Once it has created it for you, you can edit the config with a text editor (or replace with a file given to you).  It's best to have it create one first, so you can find it.  Where is it???
Win10: config.ini is in your username\AppData\Roaming\Stellarium  *(AppData is a hidden folder)*
Mac:  config.ini is in your username\Library\Application Support\Stellarium\
(The program itself is in your "C:Program Files\Stellarium" folder on Windows and "Macintosh HD:Applications\Stellarium" on Mac. You will want to know this if you want color constellations)
Get them at:  http://space.rice.edu/MST/ASTR502/western.zip  and replace the "western" folder in Stellarium\skycultures\ . (rename or move the existing "western" folder if you want to save it)

Roll over left or bottom edge to pop up Gui controls.        CTRL-q = quit
If you want to save settings for next time, go to Configuration (the wrench icon on the left), then in Main select "save view" and "save settings" and it will update your config.ini when you close.

You can zoom in and out by using two fingers on the track pad.  You can slide up, down, left and right by click and drag. Or you can use "page up" to zoom in and "page down" to zoom out.

? *(bottom left popout)* brings up shortcut menu *(below are just some of the ones I use most)*
K: time forward at diurnal rate          A: toggle atmosphere on/off
L: time forward faster (3 taps)          G: toggle ground on/off (invisible Earth)
J: time backwards faster                   8:  return to now
+: (-)  add (subtract) one day           ]: ([)  add (subtract) one week

C: constellation outline          Q: toggle showing Cardinal points (N,E,S,W)
R: toggle const. artwork          rotate sky: left arrow left, right arrow right
D: Star names                          Zoom: two fingers slide trackpad up/down
P: Planets                               Move horizon:  click and drag cursor up and down

Left click: select object          /: Zoom into selected object
Right click: Clear select          \: return to setting (zoom back out))

V: Constellation labels (toggle)          E:  Equatorial Grid
N: Nebulas (toggle)                          Z:  Azimuthal Grid
S: stars on and off
control/alt 1: go to 180° FOV     *(Mac:  Opt/Command 1)*

Want to add a comet?  Go to Configuration>Plugins>Solar system editor;  Be sure "Load at startup" is checked.  Otherwise, check it and restart.  Then hit "configure"; "Solar system"; then at bottom "Import orbital elements in MPC format…"; then "Comets"; then "Download a list" and pull down "Select a source from the list" choose:  "MPC's list of observable comets"  then click "Get orbital elements".  Find the comet you want (e.g. C/2019 Y4 (ATLAS)) and hit "Add objects".  Then use "find" in Stellarium to view.

*As of 28 March 2020*