Starry Night Information Sheet

Starry Night is a sky simulation program that we shall often use in the indoor labs. Our version is Starry Night Pro. 6.0. It has lots of features that are fairly intuitive to use once you get the ideas behind it. This sheet provides a brief introduction and some simple commands to start you off. Try them out.

1. Overview of operation

When you enter SN you see a view of the sky as seen from a given location, in a given direction, with a given field of view, at a given time and date. The view may be from NY, or some other place on Earth, or from another planet, or somewhere out in space.

The most important information about the setup is shown in the display windows along the top: date and time, rate of time flow, your location (e.g. New York), direction of view (called Gaze), and field of view (called Zoom). There are several ways to change things:

Pull Down Menus: Along the top; note options are found under both "View" and "Options."

Tool bar: Along top, from left:

- *mouse control*: controls what the mouse does (drag, ruler, etc)
- *time and date*: set time and date to show (and whether standard or daylight savings time)
- *time flow rate*: to speed up the flow of time in the display
- *viewing location*: controls where the observer is located
- *viewing direction*: direction of observation (most useful are NSEW buttons below)
- *zoom*: angular field-of-view of window

Tabs: Along the left margin (most useful are "Find" and "Options").

When you first enter the program, it is helpful to check that the location is New York and that the time is now. If not, use the pull down menu in the Viewing Location display to change, and click the Now button.

2. Basic Operations and How to change things

- **Move around the sky:** Hold down the left mouse button and drag the hand cursor.
- **Look at the horizon N, S, E, W, or at the zenith:** Click the N, S, E, W, or Z buttons under the Gaze display.
- **Change field of view (zoom):** Use + − buttons below Zoom display, or the pull down menu in the display.
- **Change viewing location:** Pull down menu in display window. Can be specified by place name, or by latitude and longitude.
- **Change time/date:** Click in display window and type-over, or use keyboard arrows.
- **Start/stop time:** Use CD like buttons below Time Flow display.
- **Change rate of time flow:** Click in Time Flow display and type-over or use keyboard arrows, or use drop down menu in display. 1 × means as the sky moves in real time, which is quite slow.
- **Turn on/off horizon:** Pull down View menu, click Hide Horizon.
- **Turn on/off daylight:** Pull down View menu, click Hide Daylight.
- **Identify a star:** Point to it with the mouse cursor.
- **Display Alt/Az grid lines:** Pull down View menu, click Alt/Az Guides, then grid.
- **Display RA grid lines:** Pull down View menu, click Celestial Guides, then grid.
- **Display constellation boundaries, labels, illustrations:** Pull down View menu, click constellations, then boundaries, labels, illustrations.
- **Measure an angle on the sky:** Point to first star, and drag with left mouse button to the second star or position.
- **Find an object:** Click Find tab at left and select object.

3. Emergency! Lost in space or time?

Stop time flow on CD controls. Press Home button under Viewing Location and check this is set for NY. Click S button under Gaze window to look south.