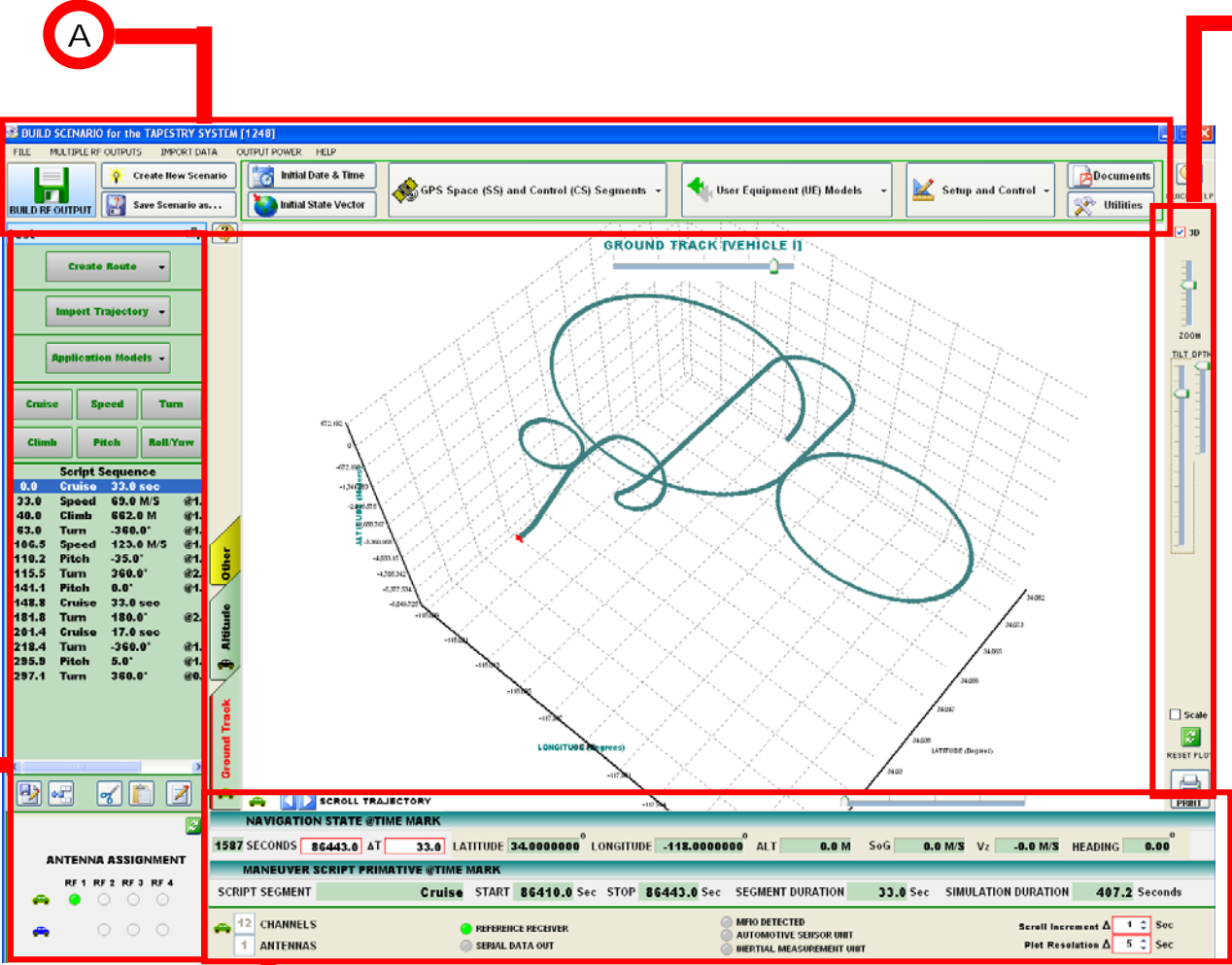


< CLICK >  to follow LINK



SETTING UP HARDWARE



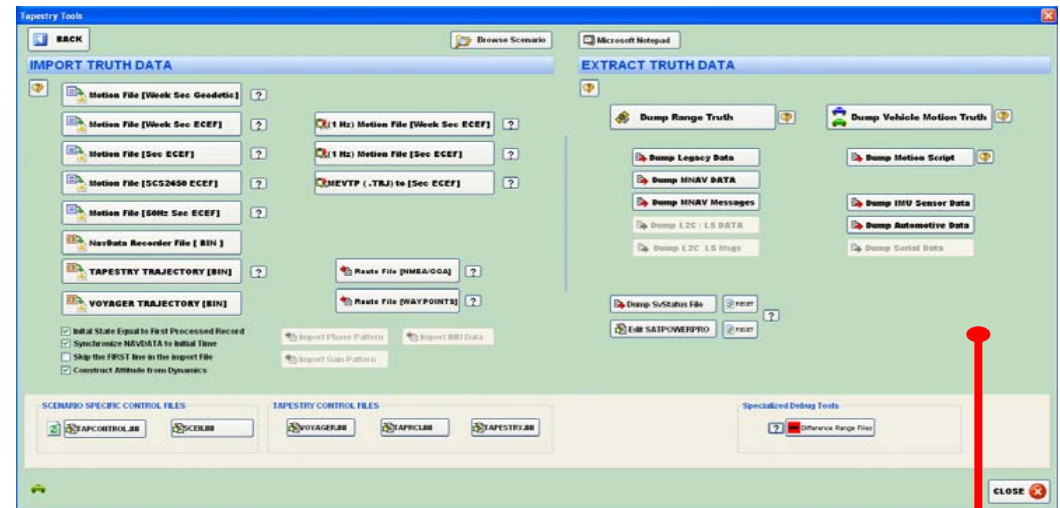
USERS GUIDE



GETTING STARTED

A

MENU BAR & PULLDOWNS



Build Scenario for RF Output

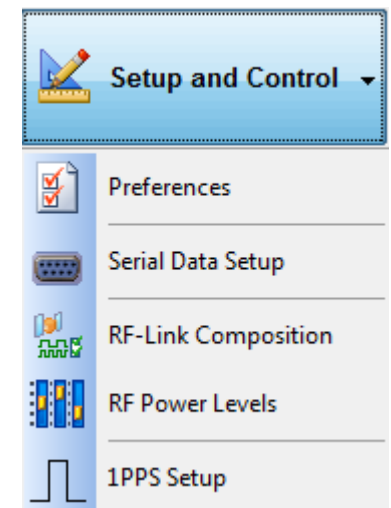
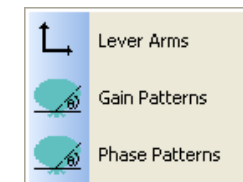
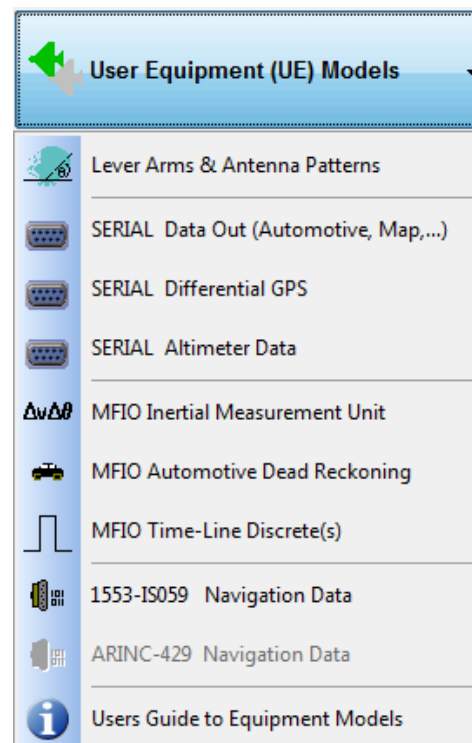
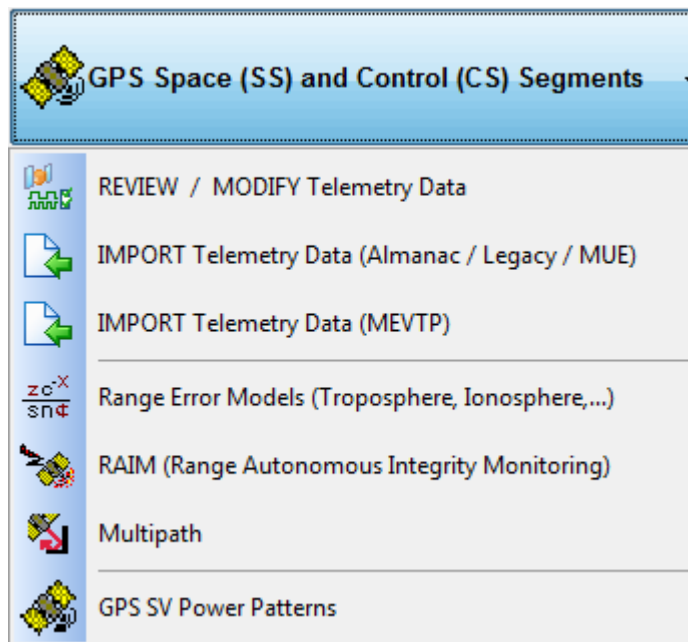
Create New Scenario Wizard

Initial Date and Time

Initial Location, Velocity, and Attitude



Save Scenario in a different Folder



B (SCRIPTED) VEHICLE MOTION GENERATOR

Select desired maneuver primitive

0.0	Cruise	33.0 sec
33.0	Speed	69.0 M/S @1.1
40.0	Climb	662.0 M @1.1
63.0	Turn	-360.0° @1.1
106.5	Speed	123.0 M/S @1.1
116.2	Pitch	-27.0° @1.1
116.2	Turn	>360.0° @1.1

RF 1	RF 2	RF 3	RF 4
		<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Use the Preferences button to specify the maximum acceleration, jerk, and dynamic conditions associated with your simulated vehicle.

Setup and Control

- Preferences
- Serial Data Setup
- RF-Link Composition
- RF Power Levels
- 1PPS Setup

1-PPS

☐ GPIO/MFIO

☐ Channel Calibration

<SHIFT> click to select a range of Maneuvers

0.0	Cruise	33.0 sec
33.0	Speed	69.0 M/S @1.1
40.0	Climb	662.0 M @1.1
63.0	Turn	-360.0° @1.1
106.5	Speed	123.0 M/S @1.1
116.2	Pitch	-27.0° @1.1
116.2	Turn	>360.0° @1.1

Export to save the list in the Scenario Folder with the name: **CutManeuverList.txt**. Rename and move this file to save it. We've created a folder c:\tapestry\maneuvers for this purpose.

To insert a Script in the format of CutManeuverList.txt after highlighted Maneuver.

MODIFY THE SELECTED SCRIPT PRIMITIVE

SELECTED MANEUVER SEGMENT: **SPEED**

START TIME: 87489.9 Seconds into Week 999.9 Seconds into Simulation

STOP TIME: 87489.8 Seconds into Week 1079.8 Seconds into Simulation

DURATION: 79.9 Seconds

INITIAL SPEED: 2.0 M/S

INITIAL ALTITUDE: 0.00 Meters

FINAL SPEED: 888.888 M/S

LINEAR ACCELERATION: 10.000 M/S²

LINEAR JERK: 100.000 M/S³

Buttons: Delete Selected, Delete Trailing, Delete All, CANCEL, APPLY

<DbI Click> or use Button to Edit the selected Maneuver or perform global operations.

Delete Selected

Delete Trailing

Delete All

When deleting a Maneuver(s), Tapestry will re-propagate all trailing maneuvers automatically. To modify a Maneuver edit the appropriate control and press **NEXT**

TIME FORMAT

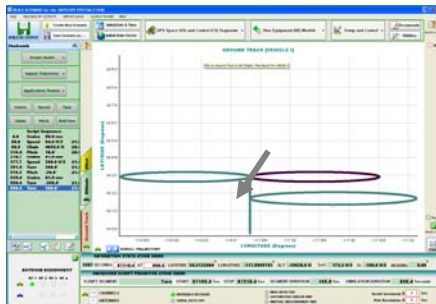
☒ Absolute ☐ Relative

SHOW MANEUVER

☐ Start Time ☒ Stop Time

Display time in Seconds-into-Simulation or Absolute Time.

This controls the Maneuver-Script-Summary Display:
START displays the Initial conditions of the maneuver
STOP displays the Terminal conditions of the maneuver



FEATURES

- Click on the maneuvers in the script and the entire Main Form will synchronize depending upon the SHOW MANEUVER settings.
- If a Vehicle Trajectory is imported, the Maneuver Script Summary bar will be replaced by the Imported Trajectory Summary Bar.
- You can BROWSE through the maneuver one-step-at-a-time using the SCROLL control. The selected point on the GROUND TRACK DISPLAY will be marked with a RED CROSS:

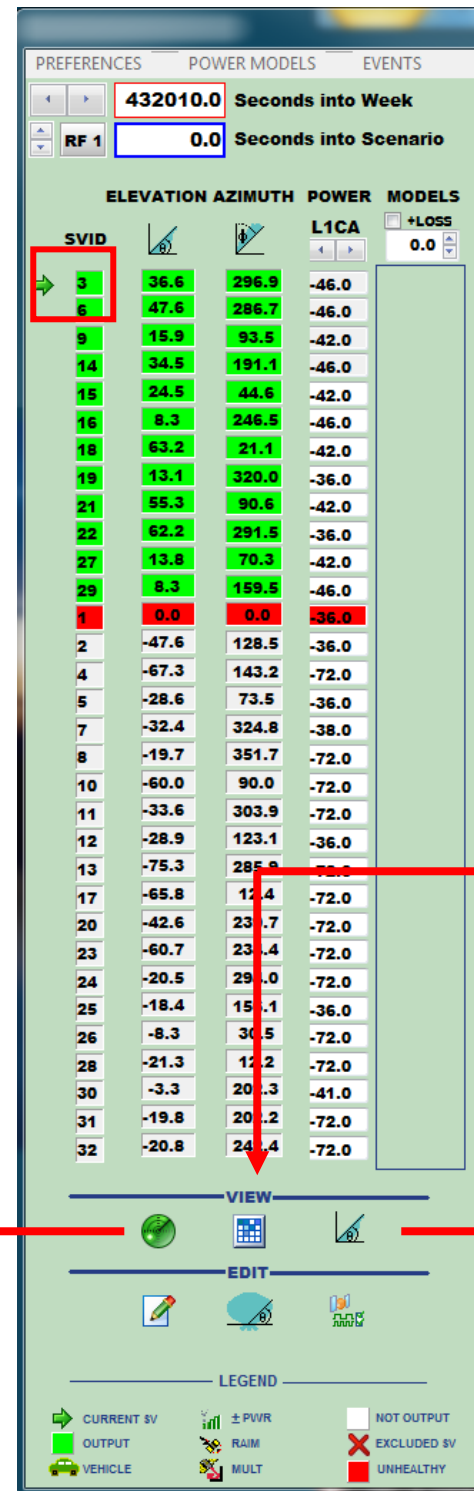
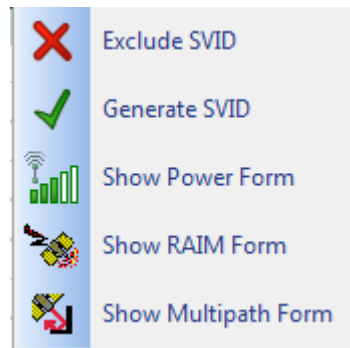


SATELLITE VIEW DISPLAY

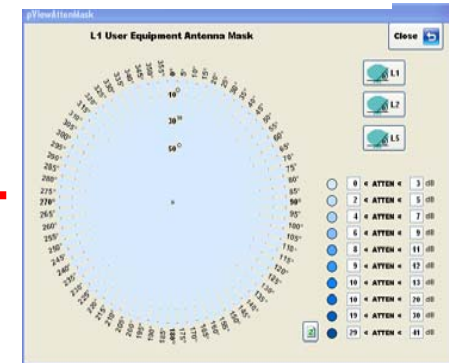
Show NEXT Satellite Visibility Epoch

Click to SET SVID and display quick edit popup

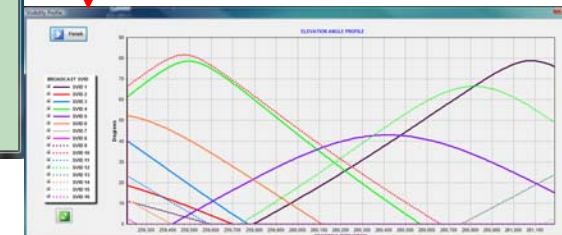
Control UE Antenna Pattern, GPS SV Antenna Pattern, and Slant Range Power Effects



Display a polar plot of the Antenna Pattern



Elevation Angle Profile





NAVIGATION STATE SUMMARY

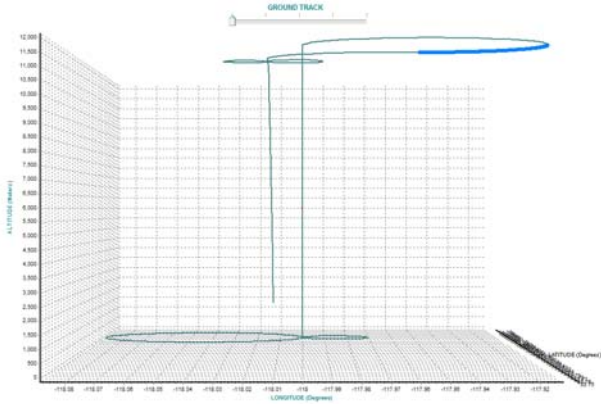
Enter the time 33 into this (or any of the Time Controls) and the GUI Form synchronizes along with all popup data forms and controls.

Set summary to Maneuver START or STOP time

NAVIGATION STATE @TIME MARK ☐ START ☒ STOP

1613 SECONDS 432043.0 ΔT 33.0 LATITUDE 34.0136650 LONGITUDE -117.9847260 ALT 0.0 M SoG 100.0 M/S Vz -0.0 M/S HDG/YAW 90.0 90.0

Maneuver Sequence		
432001.0	Cruise1.0 sec	
432002.0	Speed 200.0 M/S	@10.0 M/S
432022.1	Turn 360.0 °	@10.0 M/S
432147.9	Turn -360.0 °	@29.9 M/S
432190.2	Climb 12000.0 M	@14.7 M/S
432317.4	Turn -180.0 °	@10.0 M/S
432380.4	Turn -90.0 °	@9.9 M/S
432412.1	Cruise6.0 sec	
432418.1	Turn 90.0 °	@9.9 M/S
432449.8	Cruise8.0 sec	
432457.8	Turn 360.0 °	@39.8 M/S
432489.8	Turn -360.0 °	@49.9 M/S
432515.6	Cruise8.0 sec	
432523.6	Climb 1232.0 M	@9.9 M/S



Scroll Increment Δ 1 Sec

Plot Resolution Δ 5 Sec

Scroll ± through the Trajectory Data by the specified scroll amount [The Display resets to the scroll Epoch]

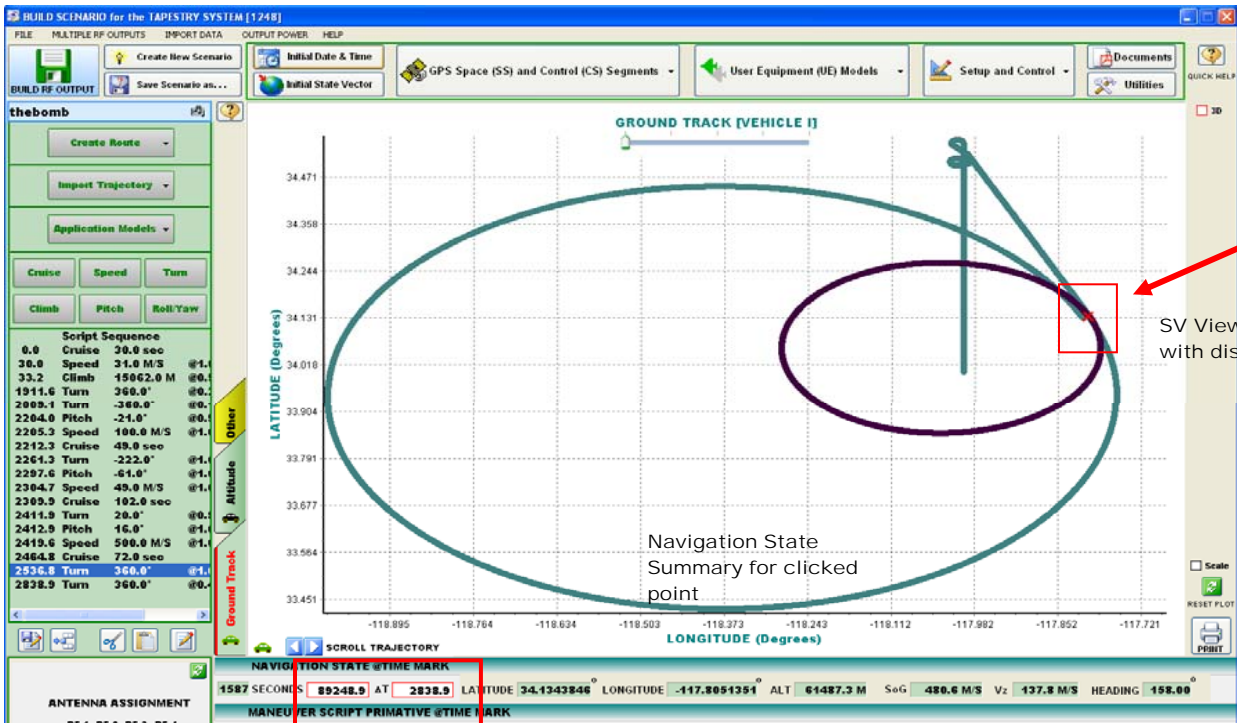
MANEUVER SCRIPT PRIMITIVE @TIME MARK

SCRIPT SEGMENT Script Sequence START 86410.0 Sec STOP 86410.0 Sec SEGMENT DURATION 0.0 Sec SIMULATION DURATION 0.0 Seconds



GROUND TRACK DISPLAY

Click on Ground Track to set the Graphical Display to the time associated with the LLA



PREFERENCES POWER MODELS EVENTS

432010.0 Seconds into Week

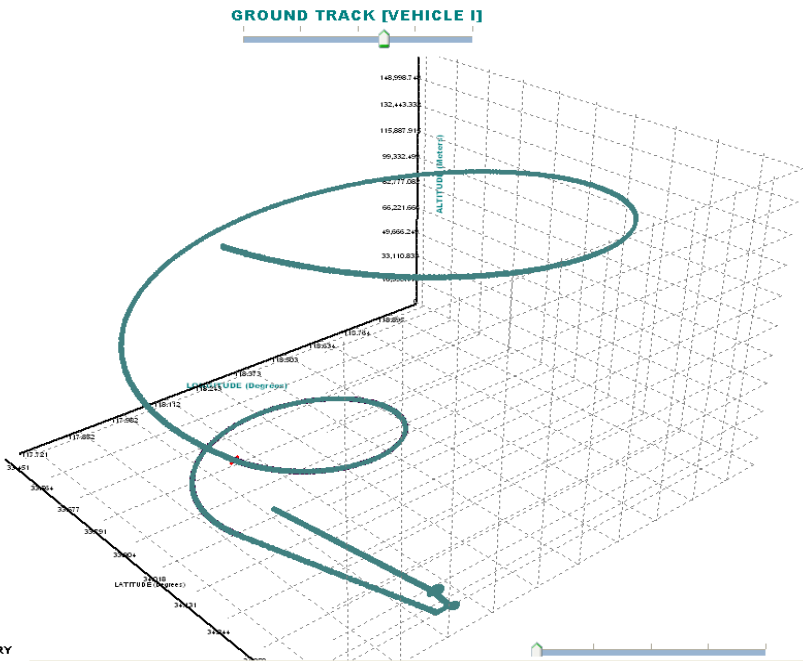
RF 1 0.0 Seconds into Scenario

SVID	ELEVATION	AZIMUTH	POWER	MODELS
1	36.8	198.9	-46.0	
2	47.4	128.5	-46.0	
3	19.0	153.1	-42.0	
4	34.4	191.1	-46.0	
5	34.8	144.4	-42.0	
6	36.8	198.9	-46.0	
7	32.4	124.8	-38.0	
8	19.7	151.7	-72.0	
9	40.0	90.0	-72.0	
10	33.6	303.9	-72.0	
11	28.9	123.1	-38.0	
12	75.3	285.9	-72.0	
13	65.8	12.4	-72.0	
14	42.6	229.7	-72.0	
15	60.7	224.4	-72.0	
16	25.5	254.0	-72.0	
17	18.4	194.1	-38.0	
18	8.3	10.5	-72.0	
19	21.3	12.3	-72.0	
20	3.3	202.3	-41.0	
21	19.8	202.3	-72.0	
22	20.8	242.4	-72.0	

SV View Form synchronized with display epoch

Enter the time into any RED highlight box. The GUI will synchronize

3D Version of the same plot and selected epoch point



Click for 3D