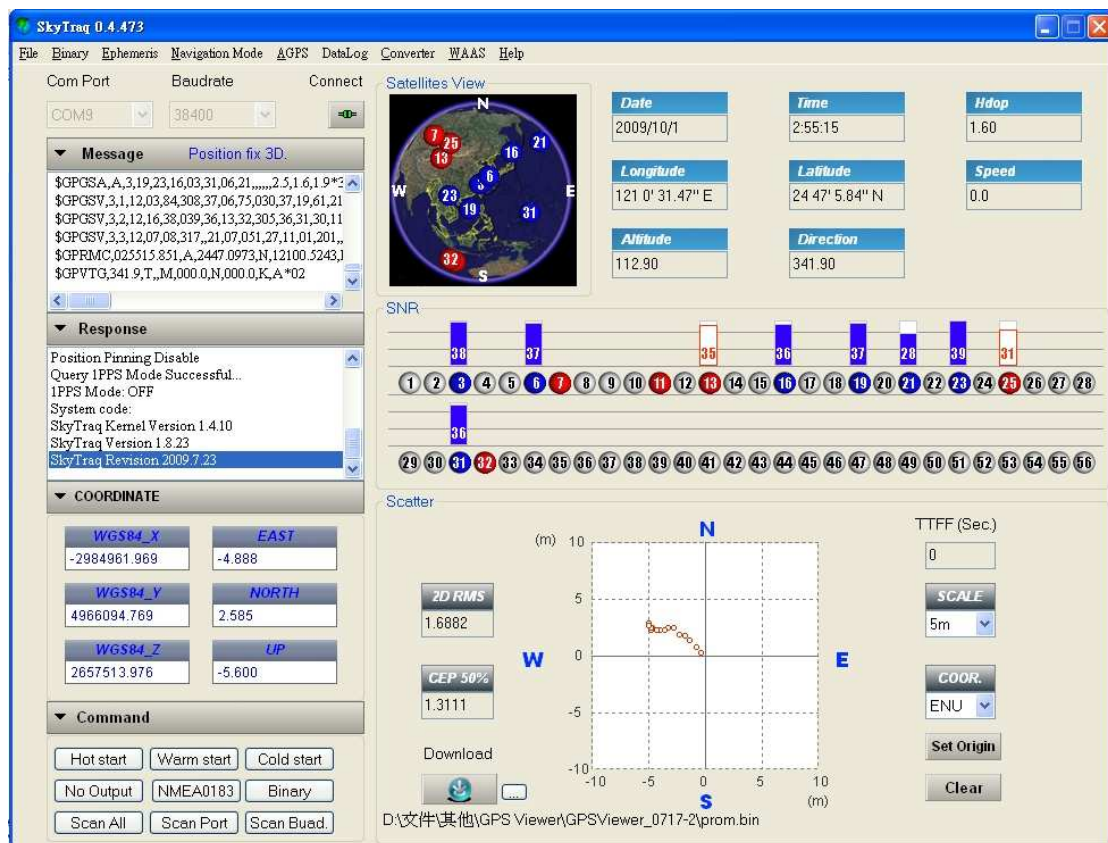


# SkyTraq™

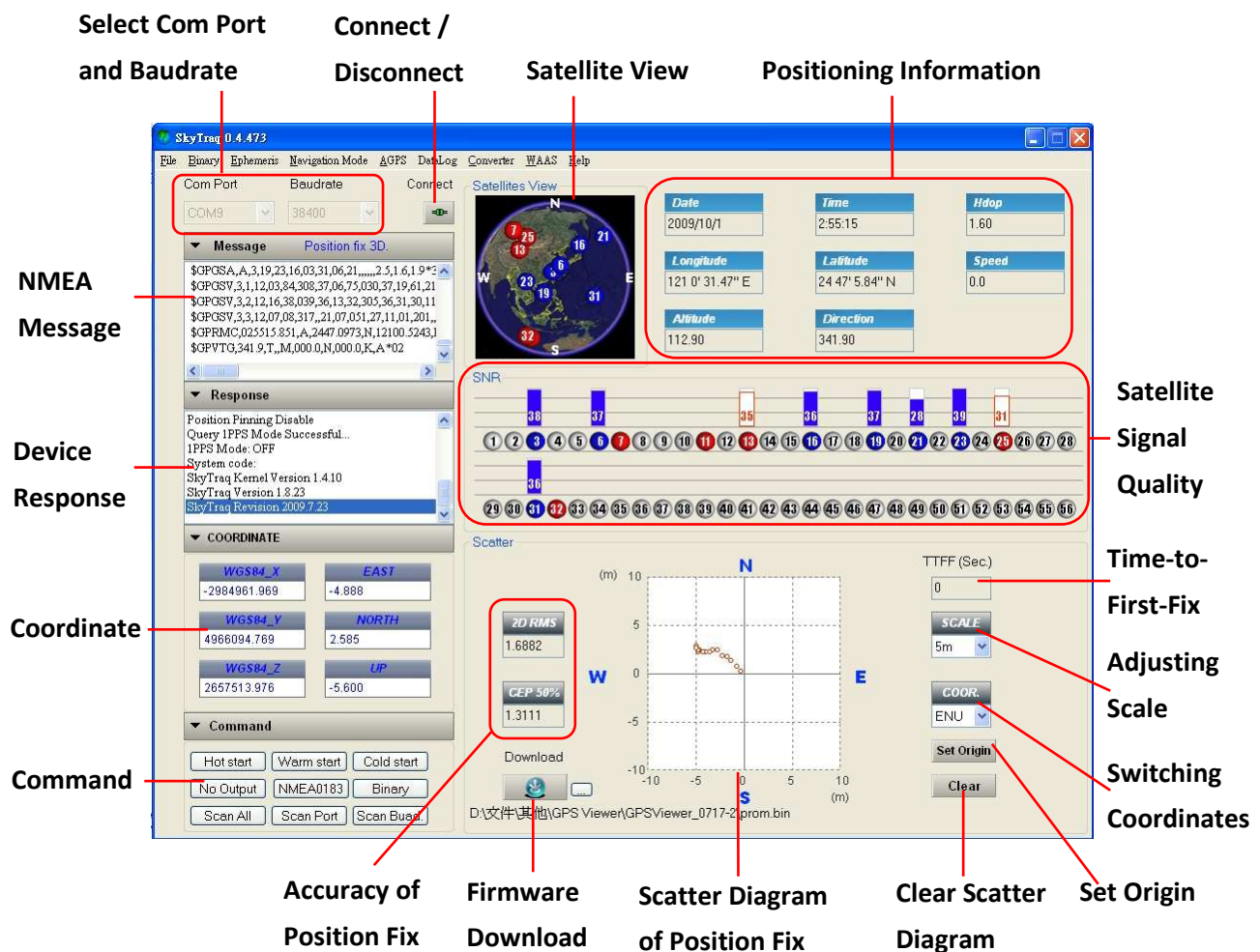
## GPS Viewer Software

### User's Guide



The SkyTraq GPS Viewer is easy to use and its clear interface of real-time monitoring can help you efficiently complete testing of GPS device. You can start the GPS Viewer without installation first. Just few clicking help you to save all positioning data for further analysis from your GPS device.

## DISPLAY & FUNCTION

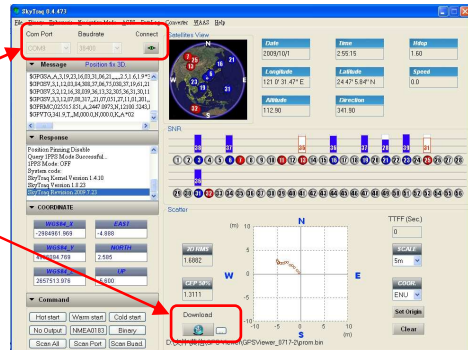


Satellite Color	Meaning
<span style="color: blue;">●</span> <b>Blue</b>	Satellite used in navigation
<span style="color: green;">●</span> <b>Green</b>	Satellite used in navigation, but SNR<20
<span style="color: red;">●</span> <b>Red</b>	Satellite signal not enough

# QUICK GUIDE

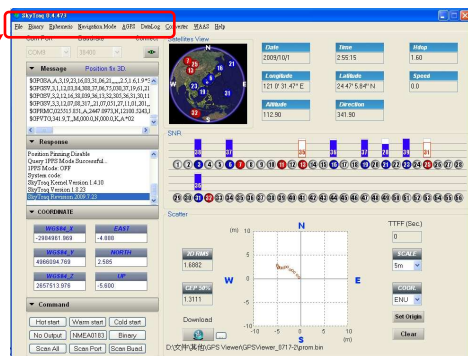
## Get Ready for Use

1. [Connect your GPS device to PC.](#)
2. [Select Correct Com Port and Baudrate to Operate.](#)
3. [Download appropriate Firmware to your GPS device.](#)



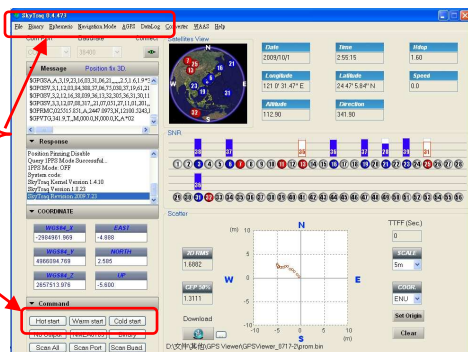
## Save Positioning Data

1. [Save NMEA to your PC.](#)
2. [Save Ephemeris to your PC.](#)
3. [Save DataLog to your PC.](#)



## Helpful Function

1. [Change Navigation Mode between Car and Pedestrian.](#)
2. [Download AGPS data to your GPS device.](#)
3. [Converter DataLog to Kml.](#)
4. [Test TTFF of Hot / Warm / Cold Start of your GPS device.](#)



## BEFORE USE

### Connect GPS device to PC

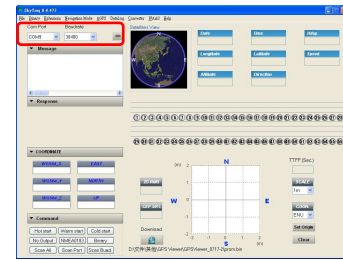
1. Turn on your GPS device (Switch to PC connecting mode, if it has the mode).
2. Make sure your GPS device has a clear view of the sky.
3. Connect your GPS device to PC by USB cable or other connecting means.
4. Install the driver of your GPS device on your PC.
5. Now, your GPS device is ready for working with the SkyTraq GPS Viewer.

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## USING GPS Viewer


## Select Com Port and Baudrate to Operate

- 



- 
- The screenshot shows the "COM Port" configuration window. The "Com Port" dropdown is set to "COM9". The "Baudrate" dropdown menu is open, displaying a list of options: 4800, 9600, 19200, 38400 (highlighted), 57600, 115200, and 230400. A red arrow points to the "Baudrate" label, and another red arrow points to the "38400" option in the list.

- 
- ▼ **Command**
- |           |            |            |
|-----------|------------|------------|
| Hot start | Warm start | Cold start |
| No Output | NMEA0183   | Binary     |
| Scan All  | Scan Port  | Scan Baud. |

- 

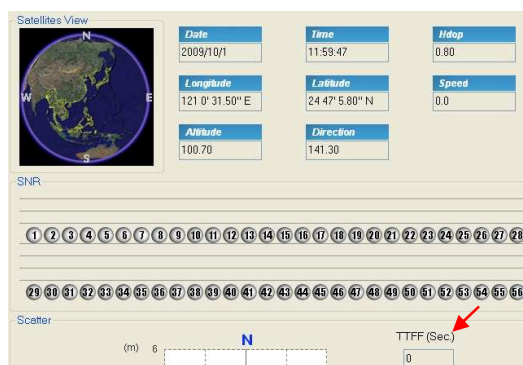
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## Hot / Warm / Cold Start and TTFF

1. To test Time-to-First-Fix (TTFF) of your GPS device, simply click on *Hot / Warm / Cold Start* button.



2. If you click on *Cold Start*, you'll see all satellites disappear in *Satellite View* and *SNR*, and *TTFF* start to count from zero.



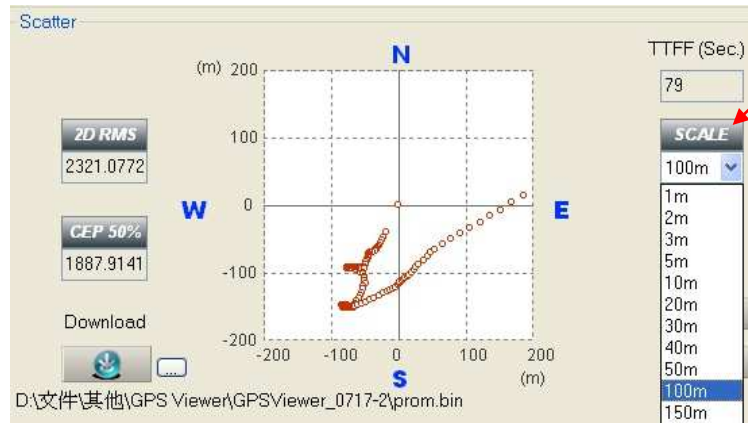
3. If you click on *Hot or Warm Start*, you'll see all satellites turn red in *Satellite View* and *SNR*, and *TTFF* start to count from zero.



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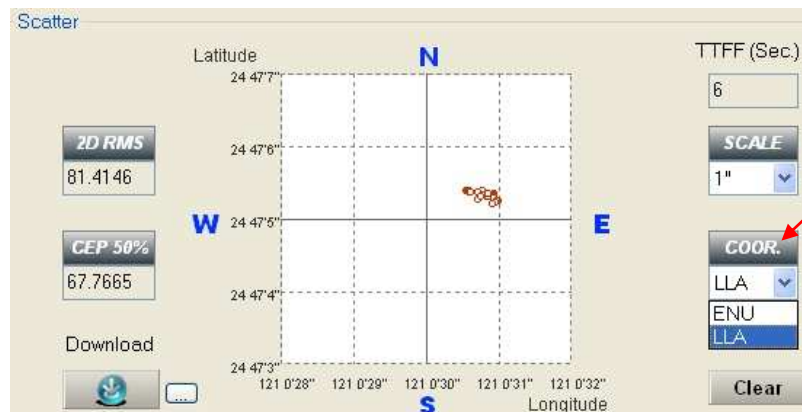
## Adjusting Scale

You can adjust the unit of the scatter diagram by clicking the pull-down menu. If you select larger unit, you can see more widely.



## Switching Coordinates

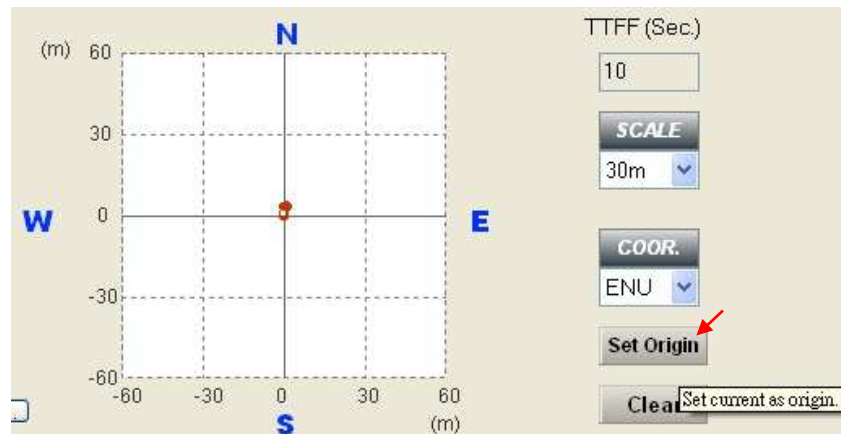
You can switch coordinates between ENU (Local east, north, up coordinates) and LLA (longitude, latitude, altitude) by clicking the pull-down menu.





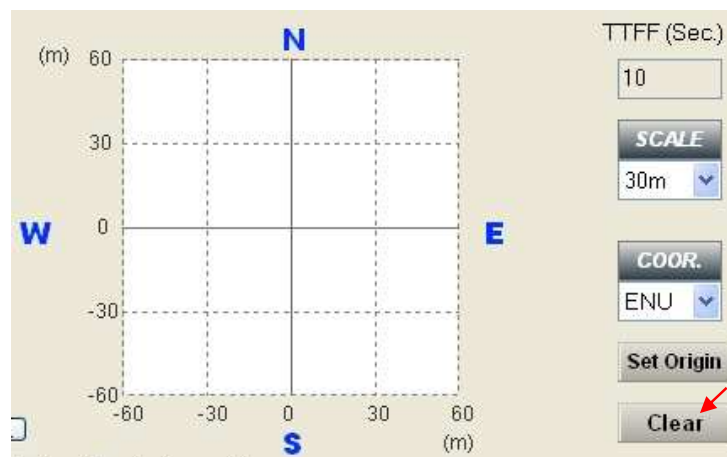
## Set Origin

You can set the latest position fix as the origin point by clicking on *Set Origin* button.



## Clear Scatter Diagram

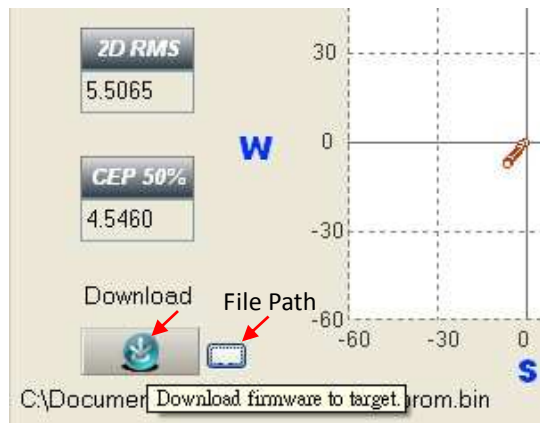
You can clear *Scatter Diagram* by clicking on *Clear* button.





## Download firmware

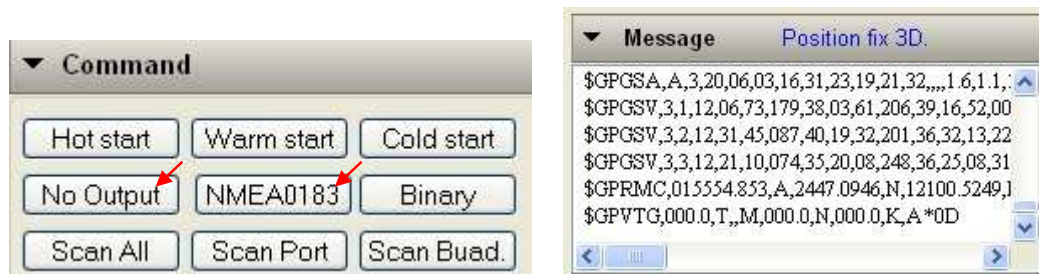
1. You can select a firmware for download by clicking on *File Path* button.
2. You can download the selected firmware to your GPS device by clicking on *Download* button.



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## NMEA 0183

1. You can stop displaying new NMEA in *Message* window by clicking on *No Output* button.
2. You can start to display new NMEA in *Message* window by clicking on *NMEA 0183* button.

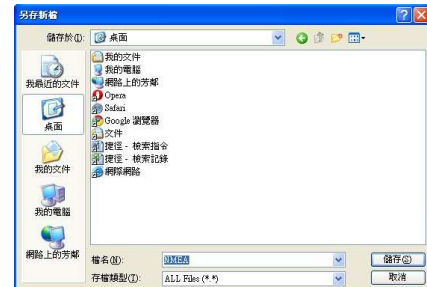


## File – Save NMEA

1. You can save NMEA to a file by clicking on *Save NMEA* button.



2. Select a folder for your NMEA file.
3. You can see the Size of the file is increasing continuously.
4. When you want to stop saving NMEA to the file, you can click on *Stop* button.



## File – Clean NMEA

1. You can clean NMEA records by clicking on *Clean NMEA* button.
2. You can see *Message* window is clean.
3. *Clean NMEA* button can help you eliminate old NMEA records.



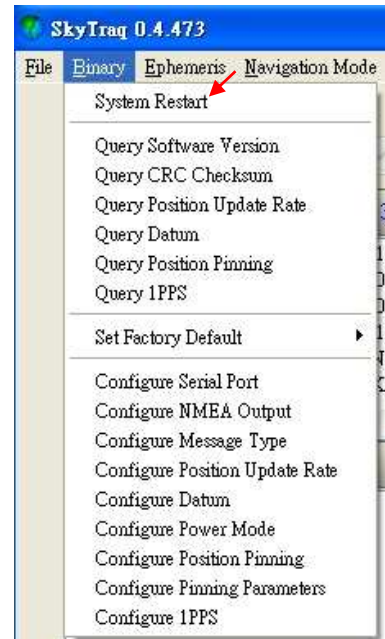
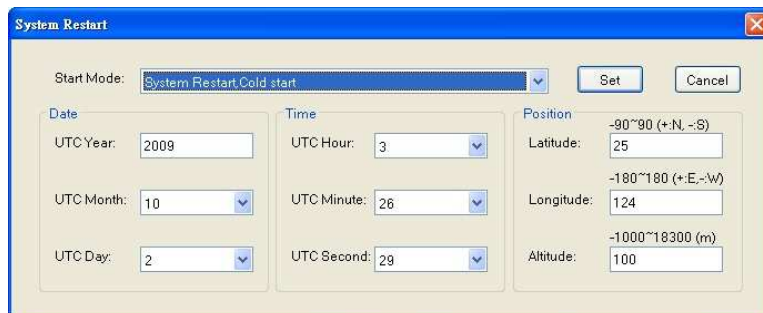
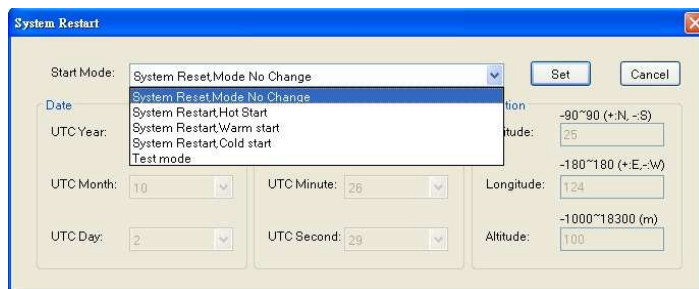
## File – Exit

1. You can close GPS Viewer program by clicking on *Exit* button.

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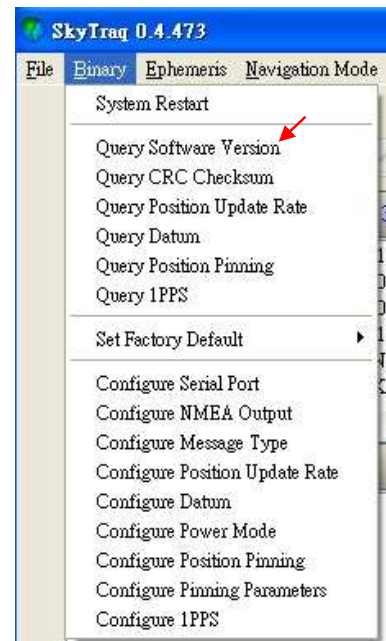
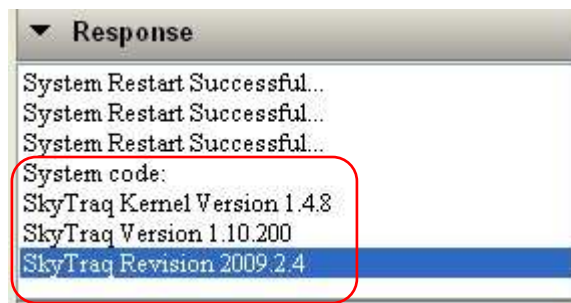
## Binary – System Restart

1. You can have an advanced system restart by clicking on *System Restart* button.
2. You can set different date, time, or position to test TTFF of your GPS device.



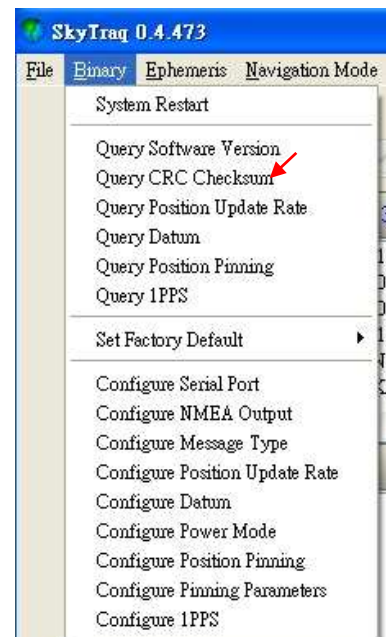
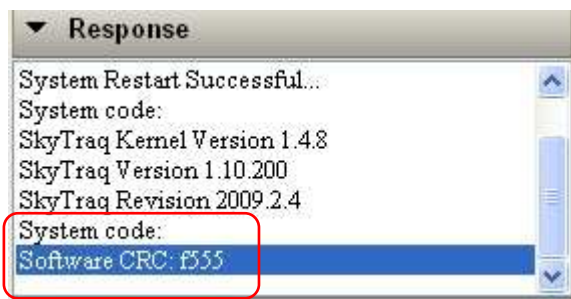
## Binary – Query Software Version

1. You can query current software version by clicking on *Query software version* button.
2. You will see Kernel Version, Version, and Revision date of the current software version.



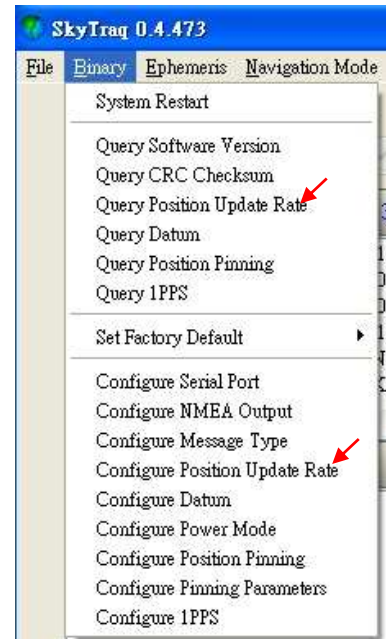
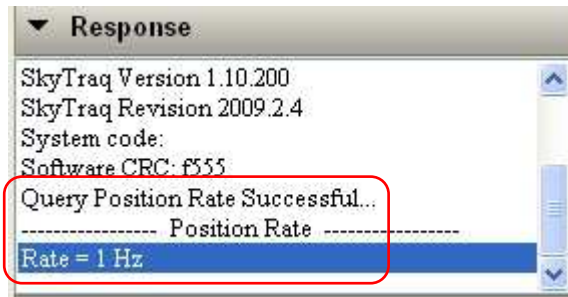
## Binary – Query CRC Checksum

1. You can query CRC Checksum by clicking on *Query CRC Checksum* button.
2. You will see Software CRC checksum.

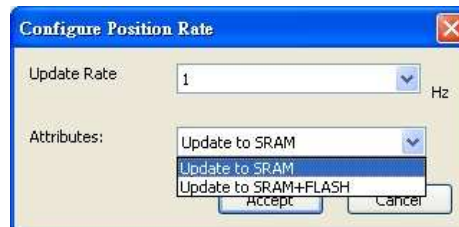
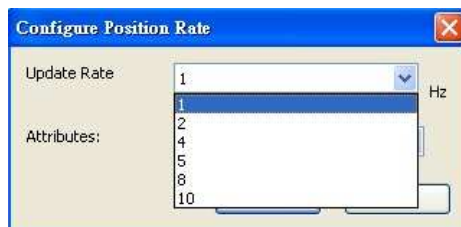


## Binary – Query and Configure Position Update Rate

1. You can query Position Update Rate by clicking on *Query Position Update Rate* button.
2. You will see Position Update Rate.

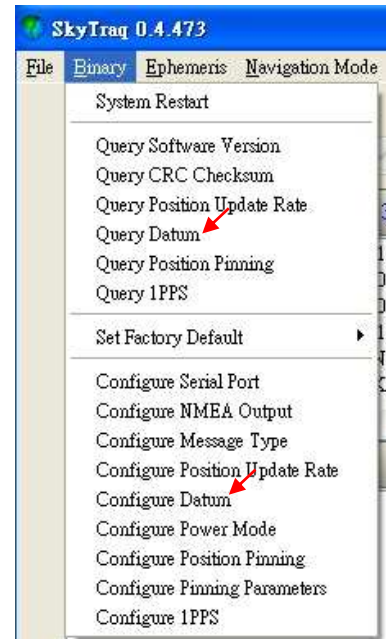
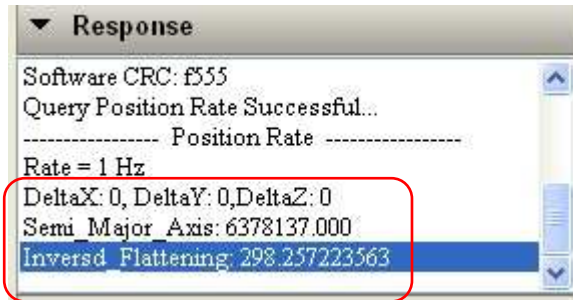


3. You can configure Position Update Rate by clicking on *Configure Position Update Rate* button.
4. You can adjust Update Rate and Attributes.

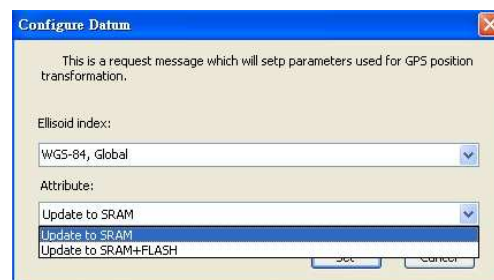
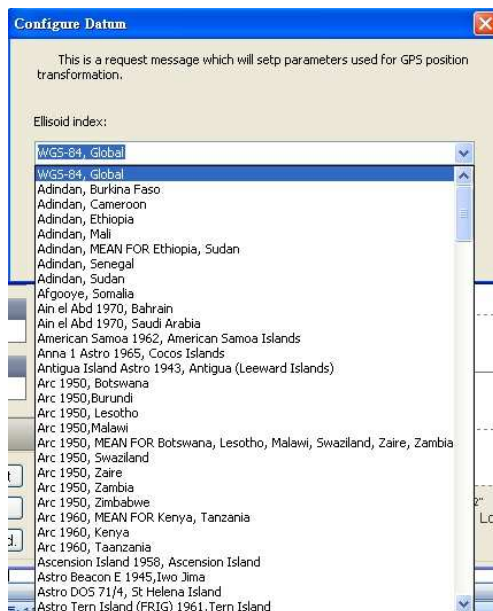


## Binary – Query and Configure Datum

1. You can query Datum by clicking on *Query Datum* button.
2. You will see DeltaX, DeltaY, DeltaZ, Semi\_Major\_Axis, and Inversed\_Flattening.



3. You can configure Datum by clicking on *Configure Datum* button.
4. You can adjust Ellipsoid Index and Attributes.



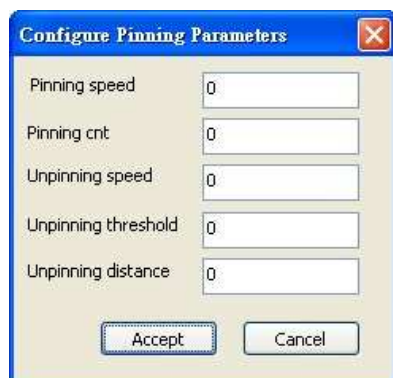
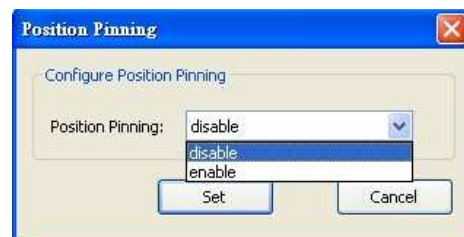
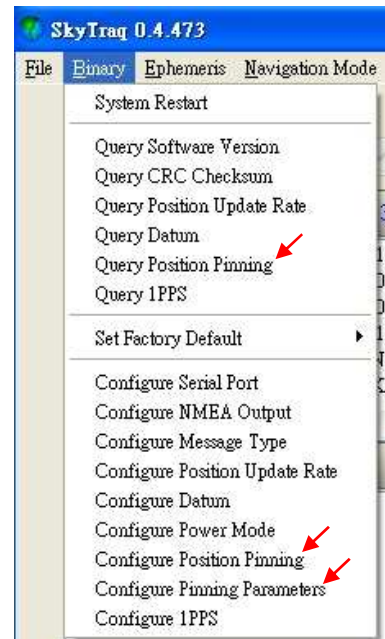


## Binary – Query and configure Position Pinning

1. You can query Position Pinning by clicking on *Query Position Pinning* button.
2. You will see Position Pinning Disable or Enable.

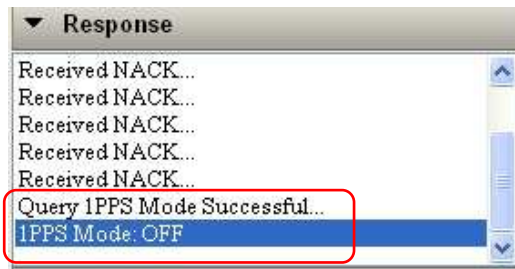


3. You can configure Position Pinning by clicking on *Configure Position Pinning* button.
4. You can enable or disable Position Pinning.
5. You can configure Pinning Parameters by clicking on *Configure Pinning Parameters* button.
6. You can adjust Pinning speed, Pinning cnt, Unpinning speed, Unpinning threshold, and Unpinning distance.

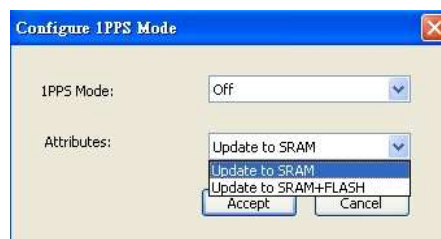
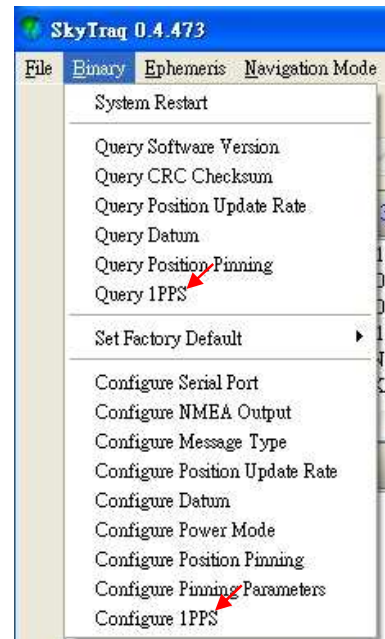


## Binary – Query 1PPS

1. You can query 1PPS by clicking on *Query 1PPS* button.
2. You will see whether 1PPS Mode is on or off.

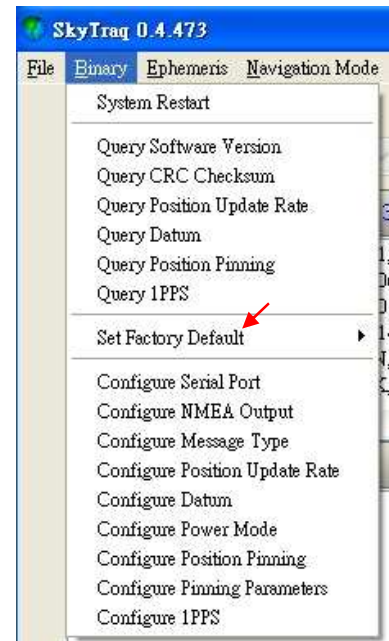
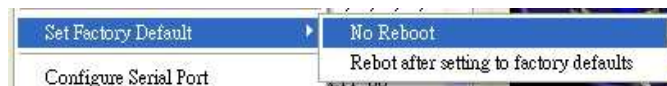


3. You can configure Datum by clicking on *Configure Datum* button.
4. You can adjust 1PPS Mode and Attributes.



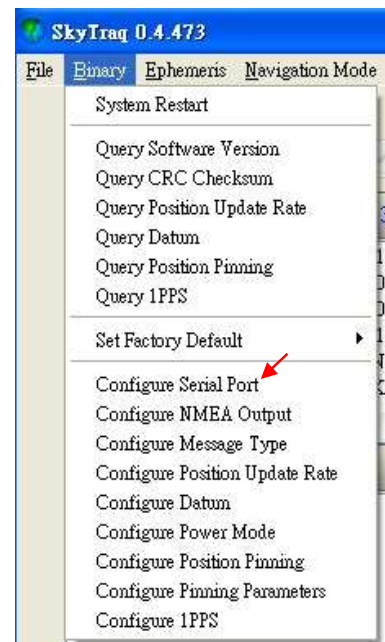
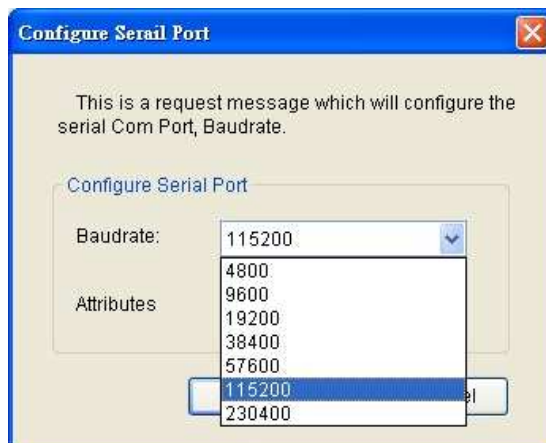
## Binary – Set Factory Default

1. You can restore your GPS device to original setting by clicking on *Set Factory Default* button.
2. You will see *No Reboot* and *Reboot after setting to factory defaults*, however, *Reboot after setting to factory defaults* is recommended.



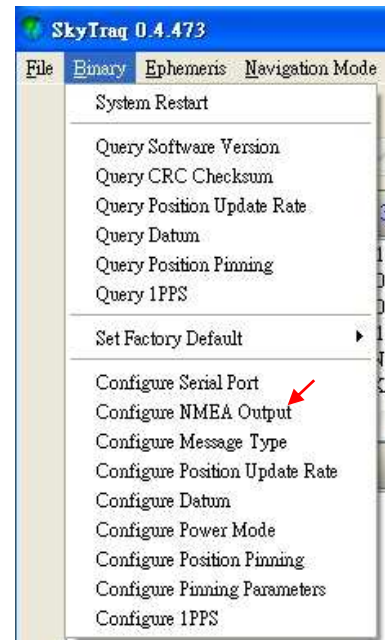
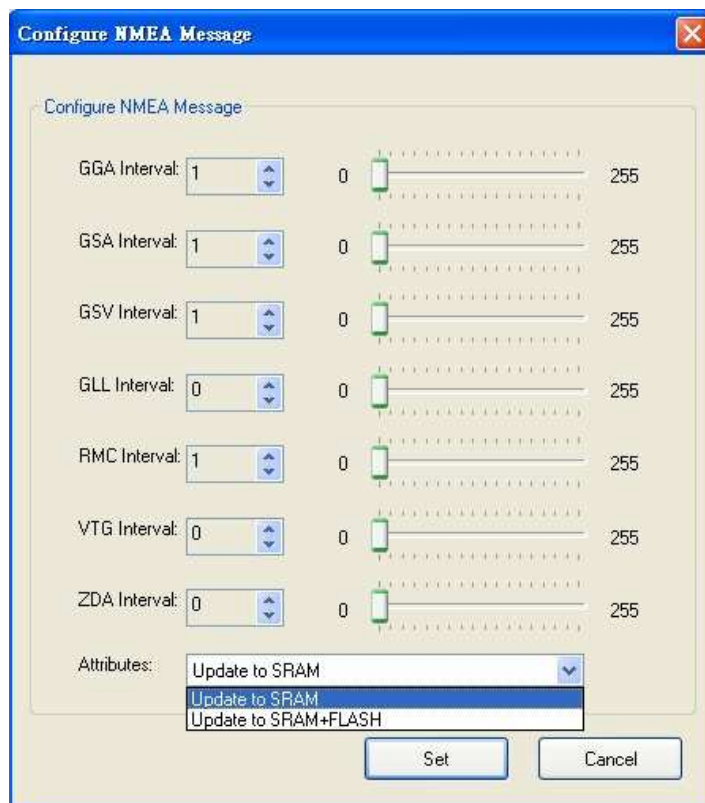
## Binary – Configure Serial Port

1. You can configure Serial Port by clicking on *Configure Serial Port* button.
2. You can adjust Baudrate and Attributes.



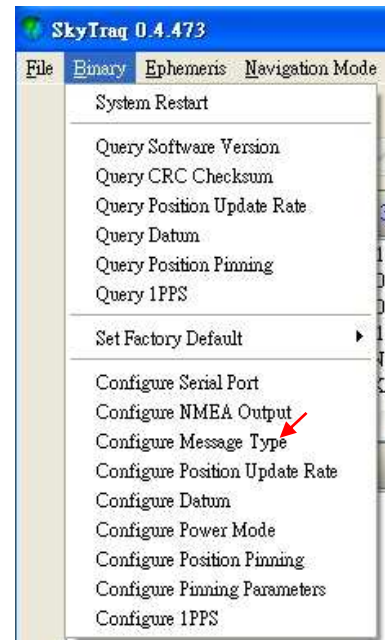
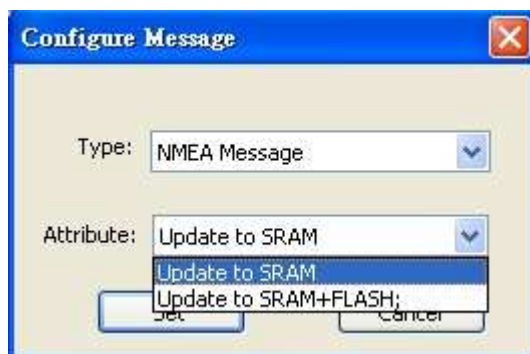
## Binary – Configure NMEA Output

1. You can configure NMEA output by clicking on *Configure NMEA Output* button.
2. You can adjust GGA Interval, GSA Interval, GSV Interval, GLL Interval, RMC Interval, VTG Interval, ZDA Interval, and Attributes.



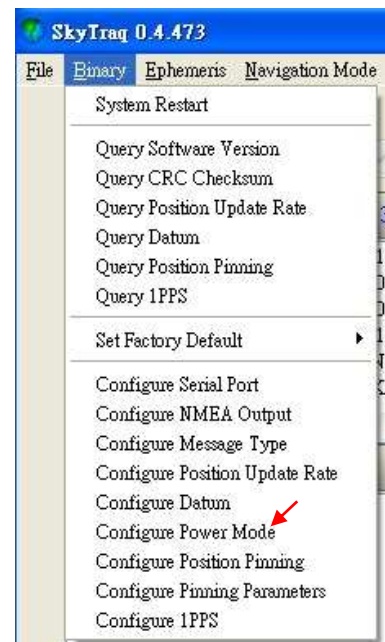
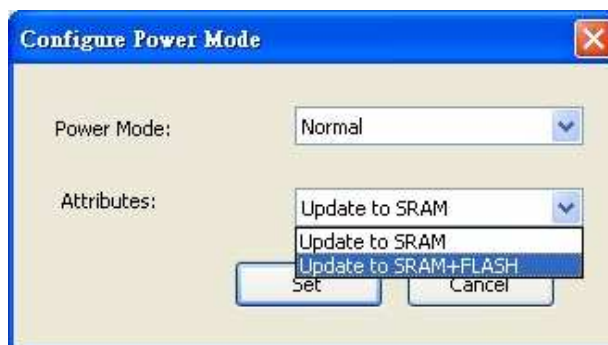
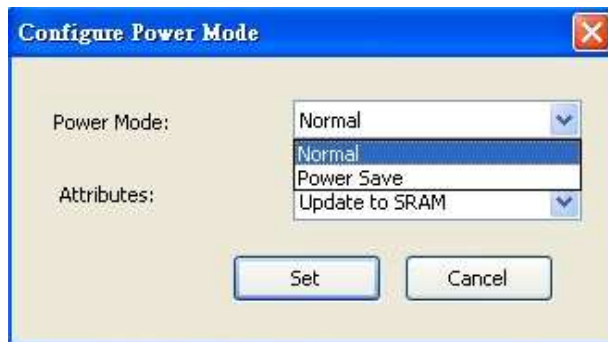
## Binary – Configure Message Type

1. You can configure message type by clicking on *Configure Message Type* button.
2. You can adjust Type and Attributes.



## Binary – Configure Power Mode

1. You can configure power mode by clicking on *Configure Power Mode* button.
2. You can adjust Power Mode and Attributes.



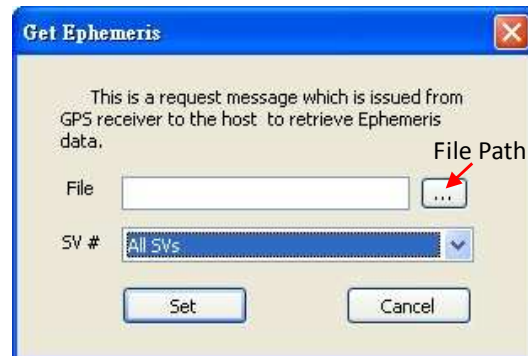


## Ephemeris – Get and Set Ephemeris

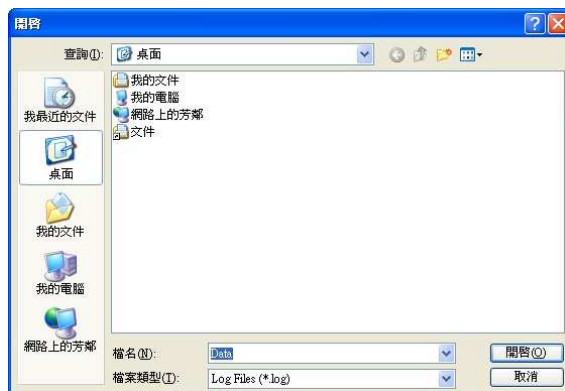
1. You can get Ephemeris by clicking on *Get Ephemeris* button.



2. You can save Ephemeris of all satellites or a specific satellite.
3. You can select a folder to save the Ephemeris file by clicking on File Path button.



4. You can set Ephemeris by clicking on *Set Ephemeris* button.
5. You can select an Ephemeris file to send to your GPS device.

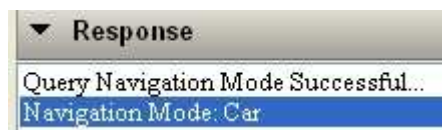


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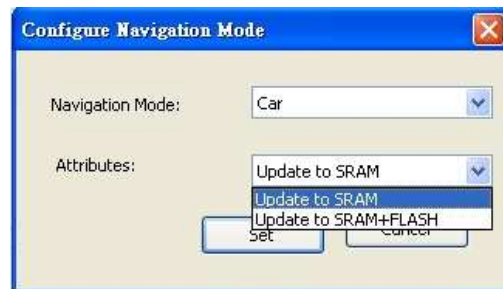
## Navigation Mode – Query and Configure Navigation Mode



1. You can query navigation mode by clicking on *Query Navigation Mode* button.



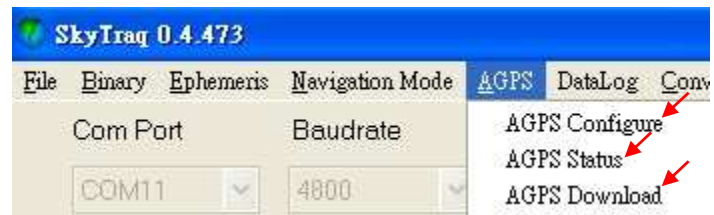
2. You can configure navigation mode by clicking on *Configure Navigation Mode* button.
3. You can adjust Navigation Mode and Attributes.



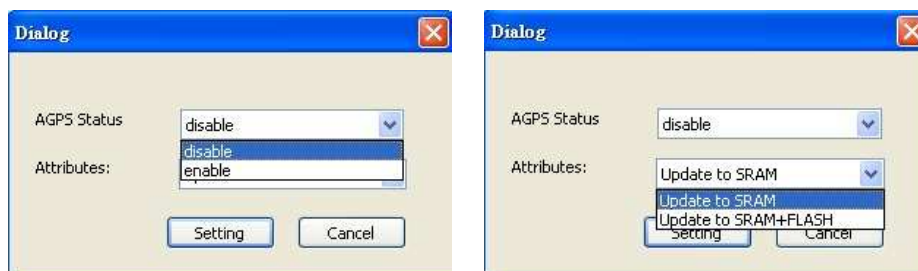
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## AGPS Configure / Status / Download

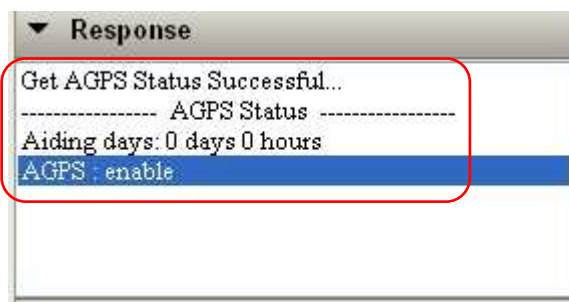
1. You can configure AGPS by clicking on *AGPS Configure* button.



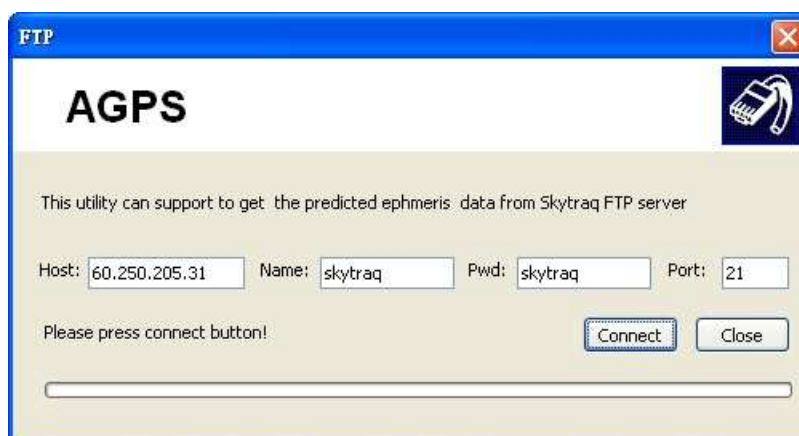
2. You can adjust AGPS Status and Attributes.



3. You can see AGPS status by clicking on *AGPS Status* button.



4. You can download predicted ephemeris by clicking on *AGPS Download* button.

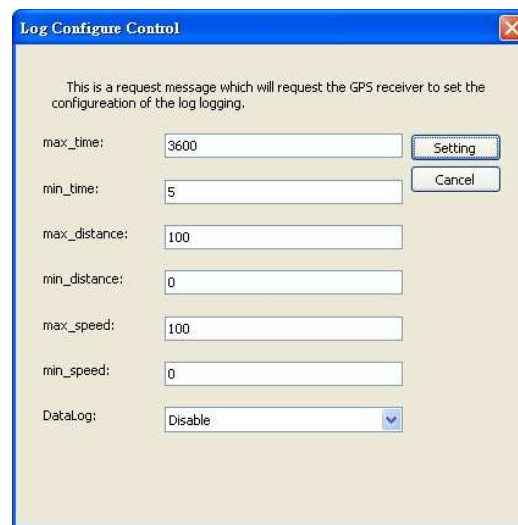


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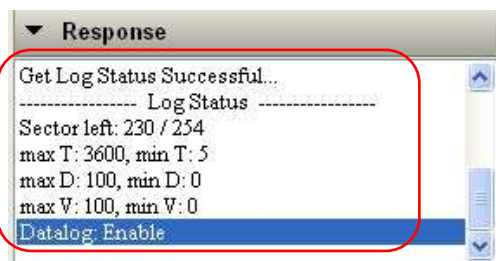
## DataLog Configure / Clear / Status



1. You can adjust log configure by clicking on *Log Configure* button.
2. You can adjust max\_time, min\_time, max\_distance, min\_distance, max\_speed, and min\_speed. You can enable or disable *DataLog* function.
3. You can clear log by clicking on *Log Clear* button.



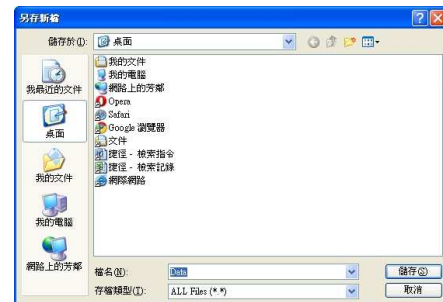
4. You can get log status by clicking on *Log Status* button.



## DataLog – Log Decompress / Read Batch

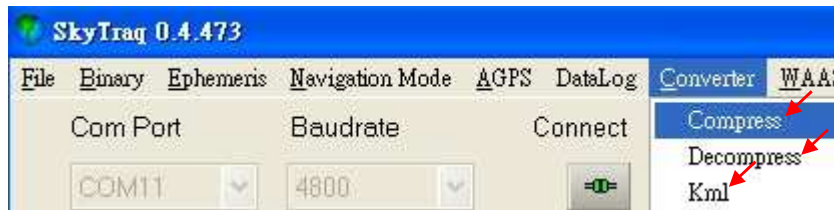


1. You can decompress log by clicking on *Log Decompress* button.
2. You can select a folder and a filename to save the file of decompressed log.
3. You can save log by clicking on *Log Read Batch* button.
4. You can select a folder and a filename to save the file of *Log Read Batch*.

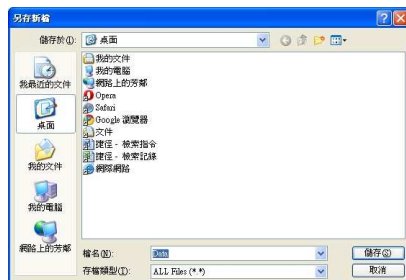
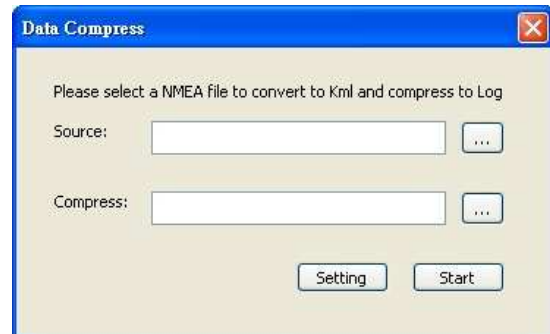


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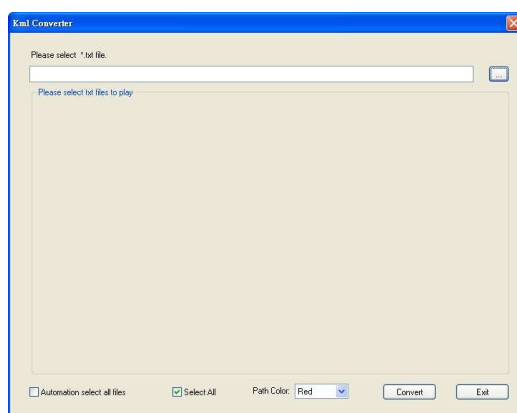
## Converter - Compress / Decompress / Kml



1. You can select a NMEA file to convert to Kml and compress to Log by clicking on *Compress* button.
2. You can select a file to decompress by clicking on *Decompress* button.
3. You can select a folder and a filename to save the file of decompressed log.

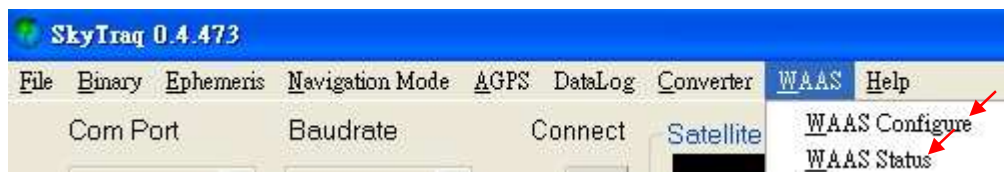


4. You can select a file to convert to Kml by clicking on *Kml* button.

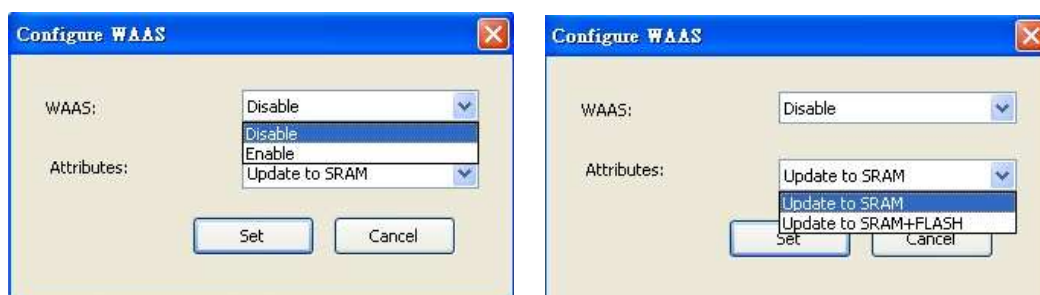


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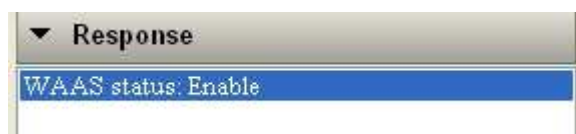
## WAAS Configure / Status



1. You can configure WAAS by clicking on *WAAS Configure* button.
2. You can adjust WAAS and Attributes.



3. You can see WAAS status by clicking on WAAS Status button.





## Help



1. You can get information of the version of SkyTraq GPS Viewer and Copyright by clicking on *Help* button.

