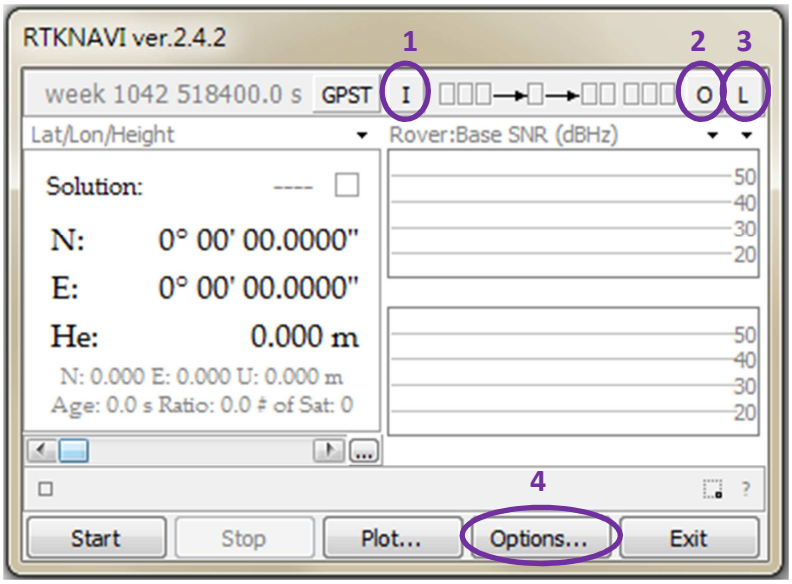
RTKLIB: http://www.rtklib.com/

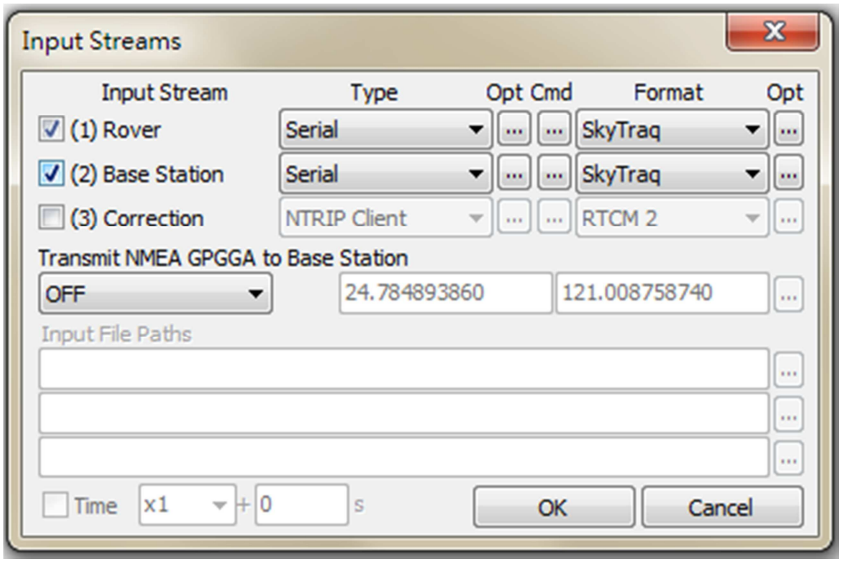
rtknavi.exe

Can receive raw measurement data and perform position fix in real time, or record raw measurement data for later post processing by rtkpost.exe



1. Input Streams

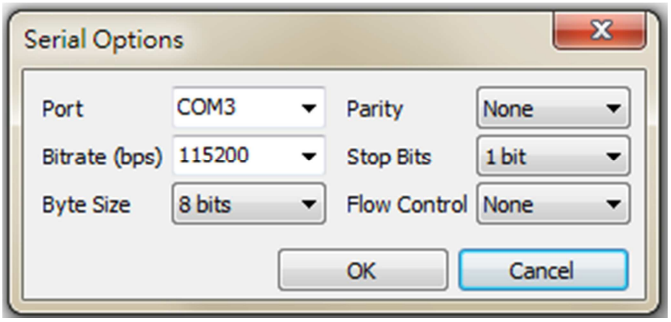
Select data source



(a) For stand-alone positioning, select Rover.

For RTK or DGPS positioning, also select Base Station.

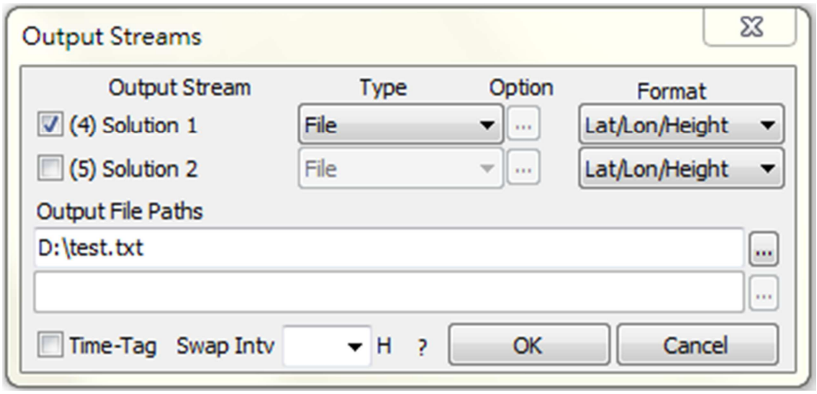
(b) Opt: Select suitable Port and Bitrate (baud rate).



(c) Format pull-down menu select SkyTraq

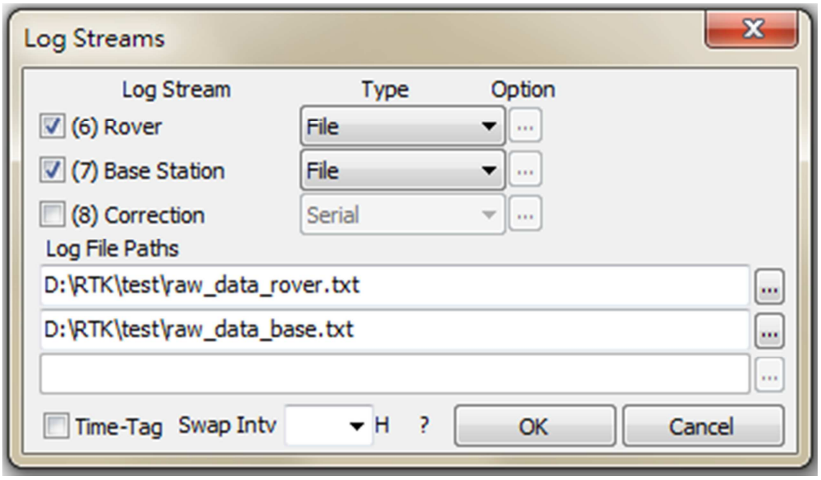
2. Output Streams

For recording result of real-time position fix



3. Log Streams

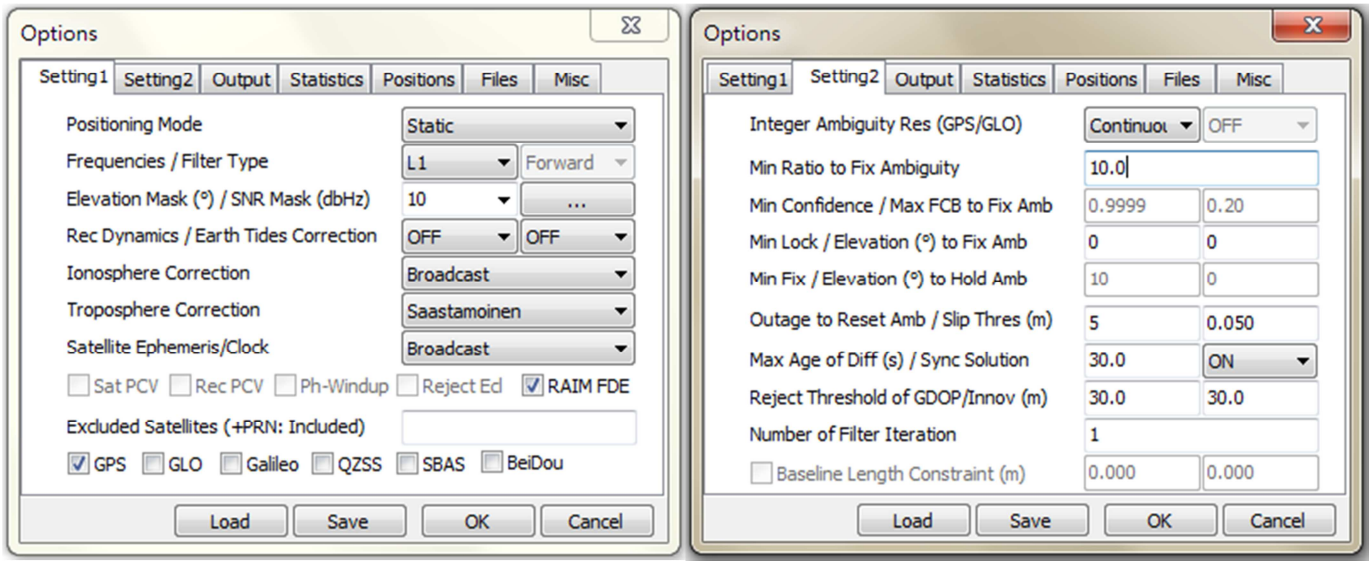
For recording raw measurement data for later post-processing by rtkpost.exe



4. Options

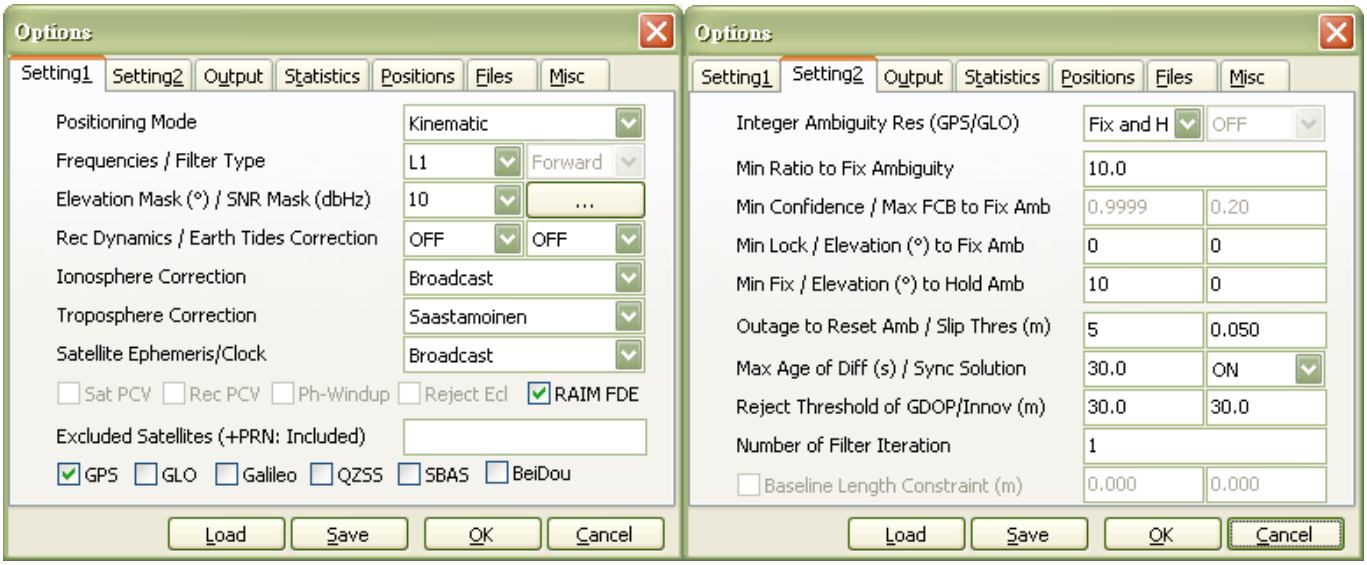
For setting up related parameters.

(a) Static positioning example:

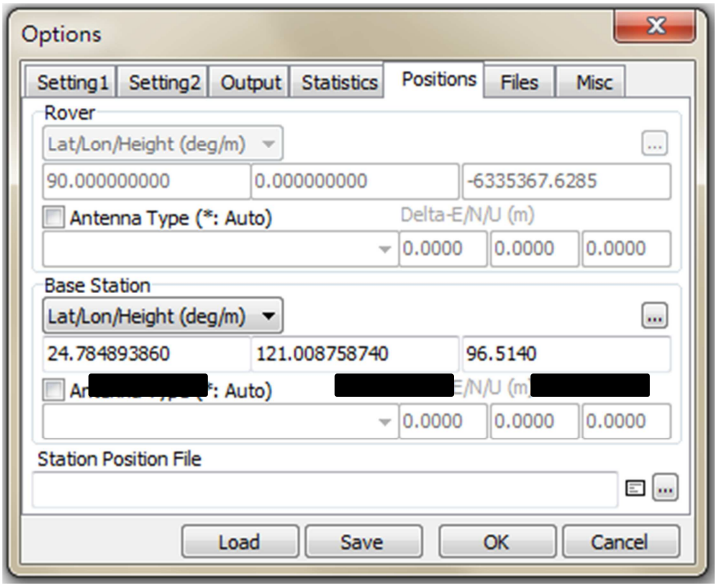


(b) non-stationary positioning example:

Change Positioning Mode to Kinematic. Good to consider setting Integer Ambiguity Res (GPS/GLO) to Fix and Hold in order to have higher availability for fixed solution when in motion.

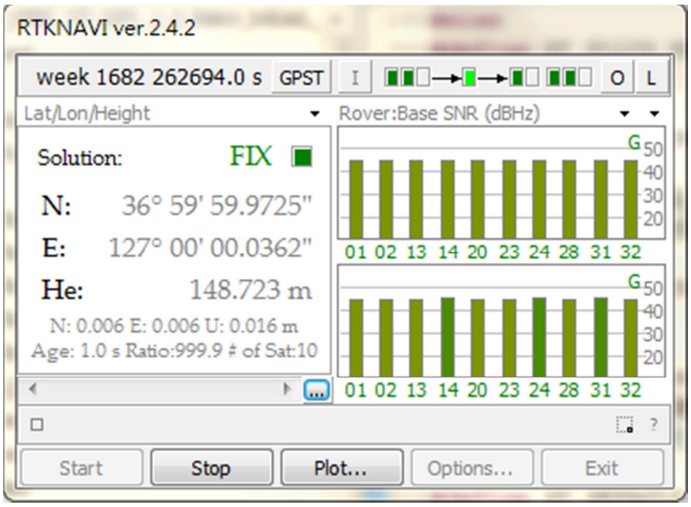


If doing RTK positioning, need to enter base station coordinate, more accurate the better.



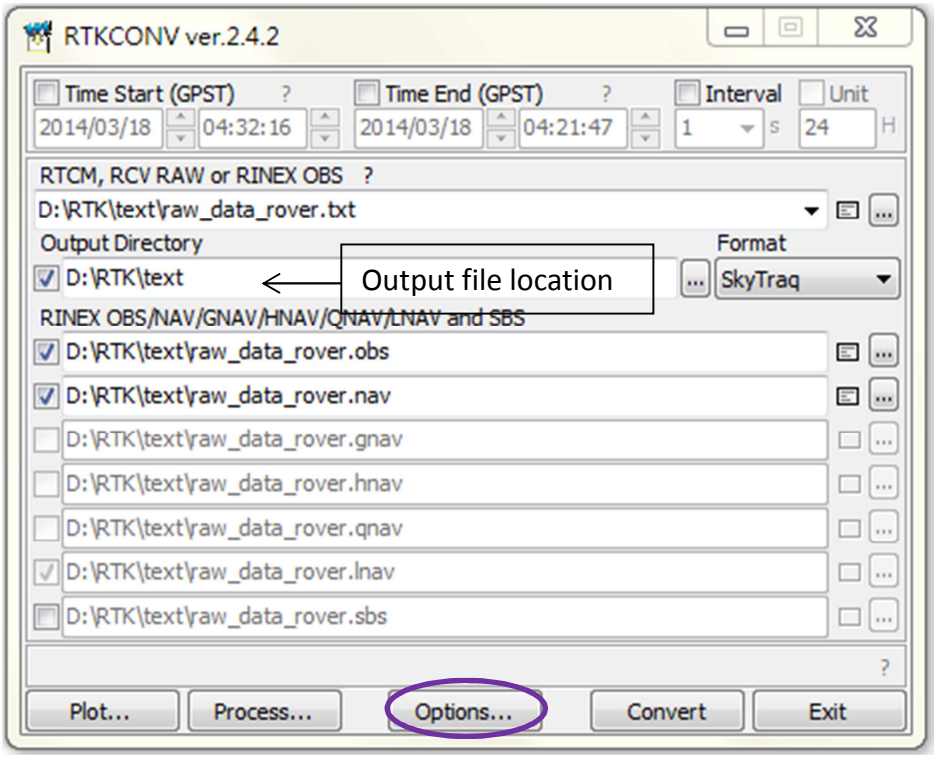
Other parameters use default values.

After setting up parameters, click start to begin navigation or record data。



rtkconv.exe

Covert pre-recorded raw measurement data into RINEX format.



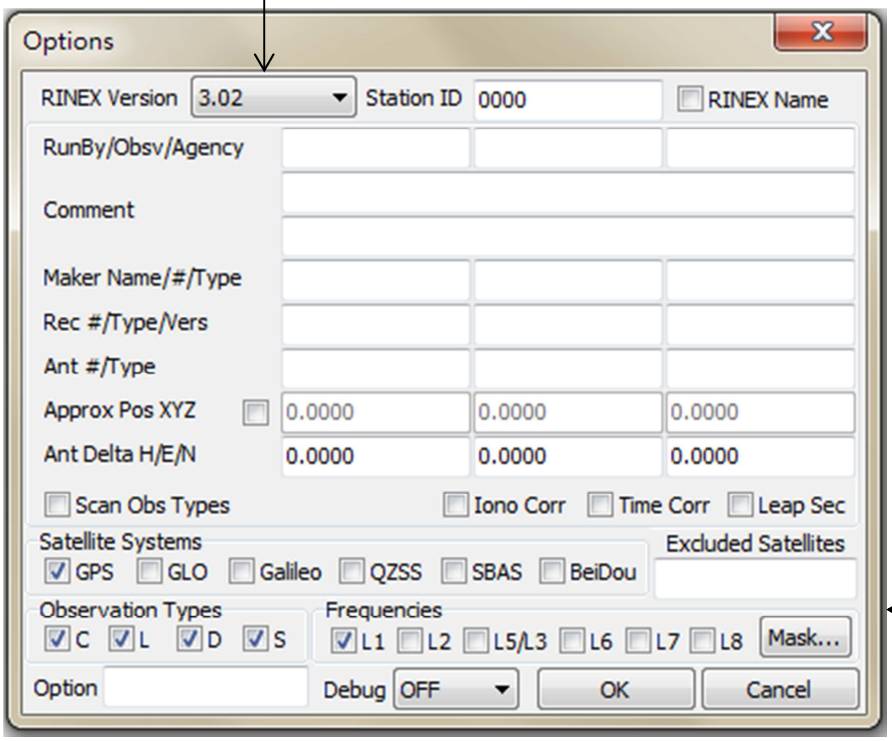
Output file location

Source file location

Select SkyTraq format

Output file format, usually just need .obs & .nav files

Version of RINEX to convert

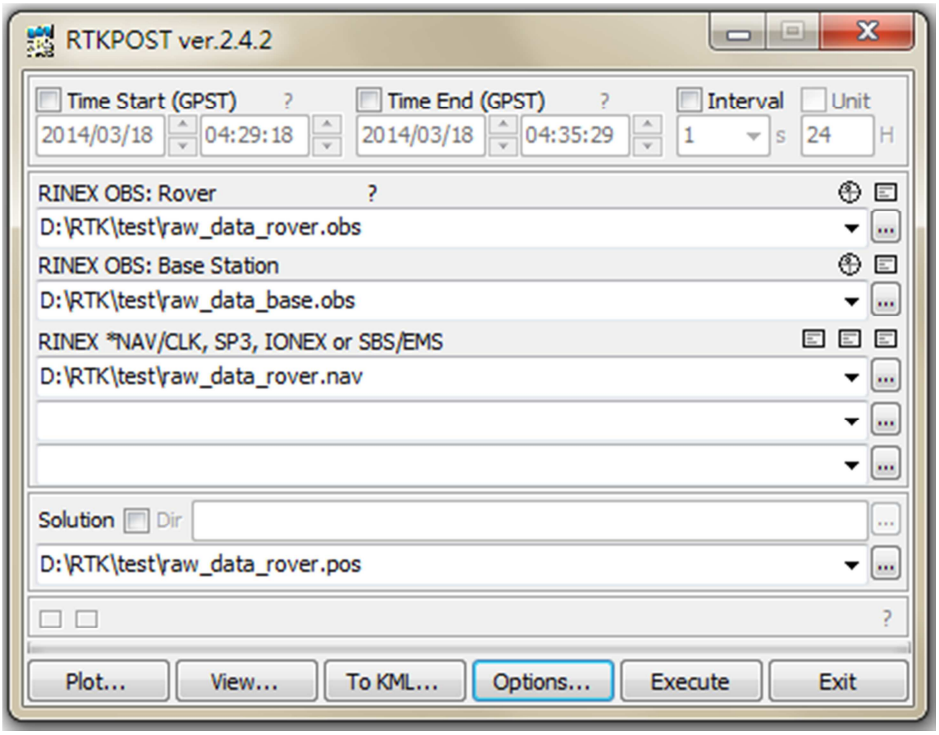


Select GPS satellite system for conversion, observables (C for pseudo-range, L for carrier phase, D for Doppler, S for signal strength), L1 band

After setting up, click “Convert” to convert raw measurement data to RINEX format. When done, can click “Process” button to go to rtkpost.exe for follow up processing。

rtkpost.exe

For post-processing the RINEX data



Select matching .obs & .nav files.

Set the Options setting similar to what's done for rtknavi.exe，when done click "Execute" to generate .pos output，which is navigation result。 Afterwards can click "Plot" to run rtkplot.exe to draw the result。

rtkplot.exe

For plotting navigation result

File->open solution 1，select output recorded by rtknavi.exe, or .pos output generated by rtkpost.exe to plot。