

GPS DATA PROCESSOR

# QUICK GUIDE



## ABOUT THE SOFTWARE



It is a software used for recording raw data in the field, and downloading data after the field work.

It is also a software used for processing and adjusting raw data recorded in the receiver.

Main features:

- English Windows interface. More language versions will be added.
- Edit function: switch the format of the file data, output the coordinates report, and define the - coordinates system.
- Compatible with AutoCAD, calculation including sides and area.
- Easy-to-use, only requires 3 simple steps: add the data from R70; input the local parameter and known points restriction for post processing; and edit and print the report.
- Output the coordinate file directly.
- You can change the format of coordinate data and import the data into GIS as geographic data.
- Compiled by Visual C++.

## BRIEF STEPS

### NEW JOB

Fill in each item in the dialog box, especially must select the coordinate system and projection zone.

### ADD OBSERVATION DATA

Import the H66 data \*.STH to the software.

### POST DIFFERENTIAL PROCESSING

Input the known coordinates of R70, get the report after real-time processing.

### REPORT OUTPUT

The purpose of this step is to import the report into other software, such as AutoCAD, MAPINFO, etc., in order to proceed more convenient editing and mapping.

## MAIN MENU & FUNCTION

### 1. FUNCTIONS OF THE SOFTWARE

The software using differential GPS collecting data, adopts the pseudo-range differential principle to calculate the position coordinate of the discrete points and close the coverage in order to calculate the area of the coverage.

### 2. MAIN MENU & FUNCTIONS

- a. Post differential processing

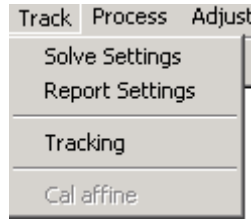


Fig 2.1 Post Differential Menu

- b. Processing Setting: Set the relevant parameter for data processing. Click button **Solve settings**, a dialog box comes up as Fig 2-2.

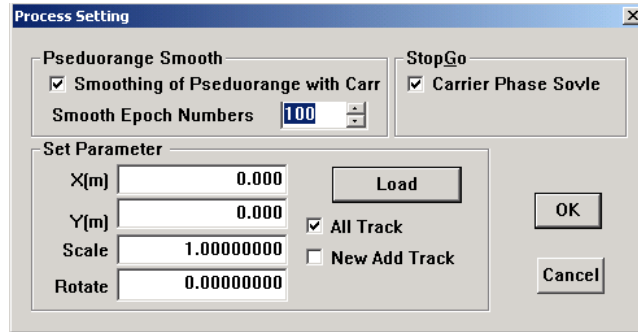


Fig 2-2 Differential Processing Setting

- c. Record: Usually adopts the default settings.
- d. Output setting: Set the display of output figures and files. Click **Report settings** from menu and there is a dialog box coming up.

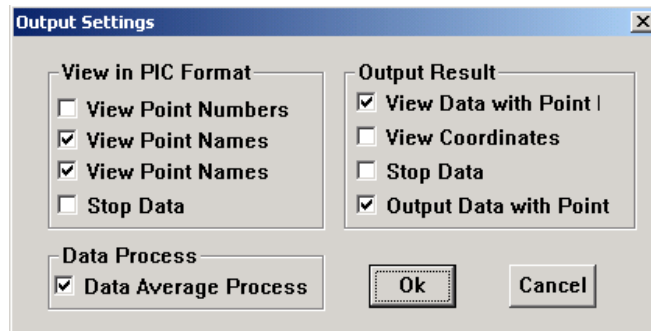


Fig 2-4 Differential Output Setting

- e. Tracking: Process the collected data using differential mode
- f. Calculate the four parameters: calculate the four parameters by two points, then import the parameter setting to use in the processing.

### 3. SOFTWARE USE MODEL

This chapter employs example data to introduce the specific operation.

Before using this software, you need to get a register No. The way of registration is the same as static processing software.

R70 file ABCD0451.STH of field surveying data is demo data. It is important to note is that this file must be the synchronous with observation ones.

#### New Job

Click **New** from **Project**. Fill in the following items.

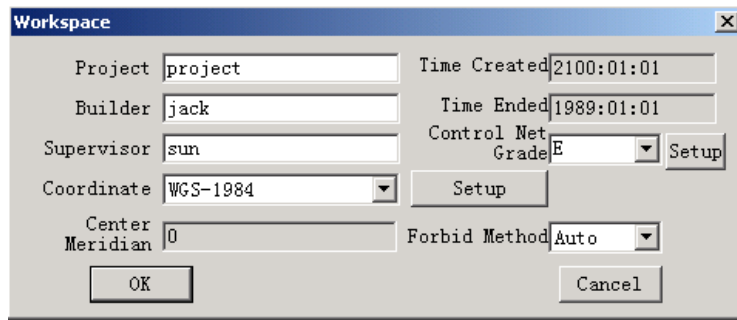


Fig 3-1 New Job

If there is a job file name existed, close this existed file, then create a new job. After filling all the items, click **OK** to enter the program.

### Add Observation Files

The input method of differential data is the same as static. Click **Add GNSS Observation Data** from **Input**, or click the shortcut, and select the observation data from the dialog box. Click **OK**. The demo data of the software defaults the path *C:\Program Files\RUIDE GPS Data Processor\Example\TRACK*. For example, we select the collected file AAAA0451.STH and ABCD0451.STH. Data information is displayed in the form of "Observation Data" when the file is imported.

File Name	Path	date	Start Ti...	End time	Site ID	Ant ...	Mea...	Ant Mode	Ver
ABCD0461.STH	C:\Progra...	2000:02:15	08:31	12:11	ABCD	1.750	1.750	Ant to Bottom	11.00
TTTT0461.STH	C:\Progra...	2000:02:15	10:01	10:54	TTTT	1.000	1.000	Ant to Bottom	15.00

Fig 3-2 Differential data

### Input the Known Coordinate Of R70 Receiver

Click **Station Coordinates** from **Input**.

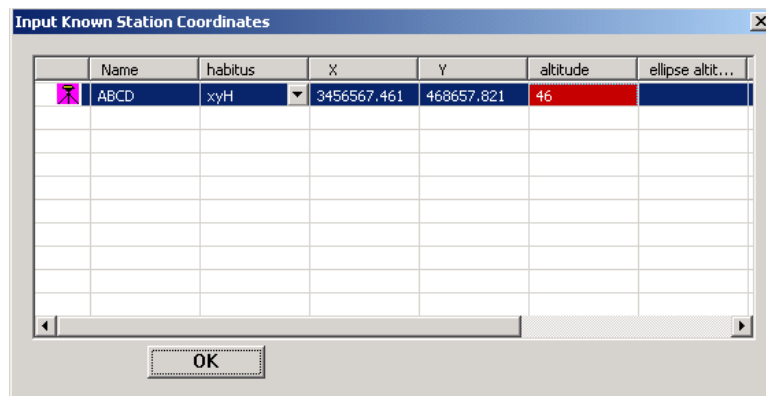


Fig 3-3 Input Known Coordinates

The default coordinate value of the software is the single point geodetic coordinate designated in **Project Setting**, but what we usually need is the right-angle coordinate value. So we need to input the known right-angle coordinate value of R70 receiver in the coming out dialog box.

**Note:** Not only the plane right-angle coordinate is required to input, but also the Height value while setting the R70 coordinates.

### Differential Processing and Output Network Report

Click **Tracking** from **Track**, the software will process the data automatically, showing the report as the following figure:

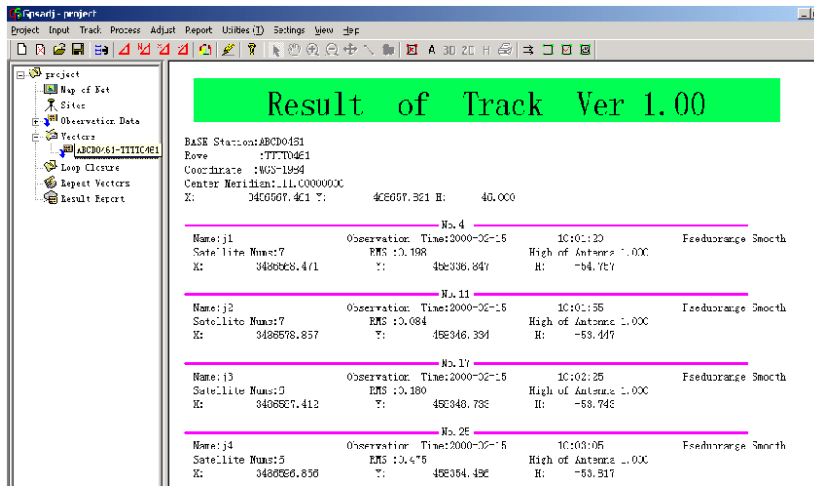
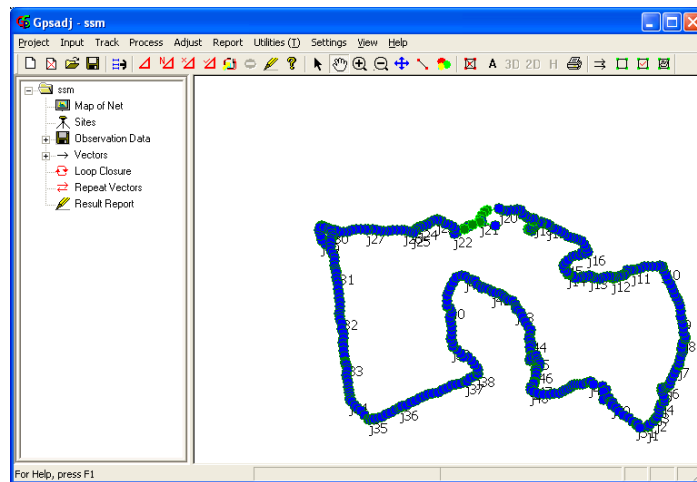


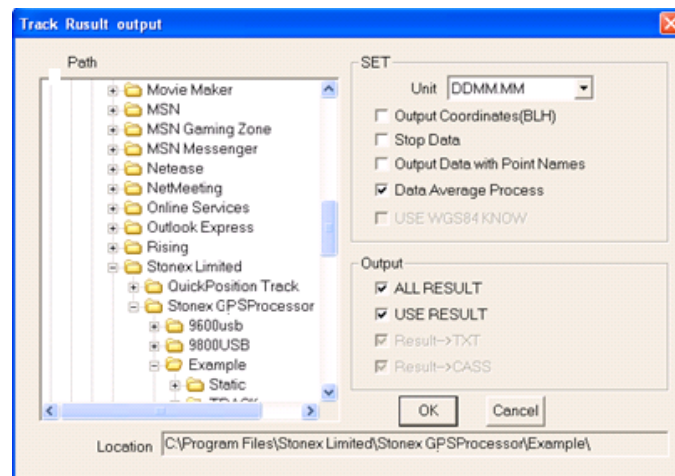
Fig 3-4 Differential Processing Report

View the “Map of Net” on the left bar to show the network as the following figure.



The coordinate value and network graph of the surveying point are displayed here, which can be printed on the current form. If you want to make further use of the report, export the report, in order to import the surveying data into other software.

Select **Track Report** from **Report**.



Select an output path for the report file. You can select different output result from this menu.