

# HGO

**GPS DATA PROCESSING SOFTWARE**

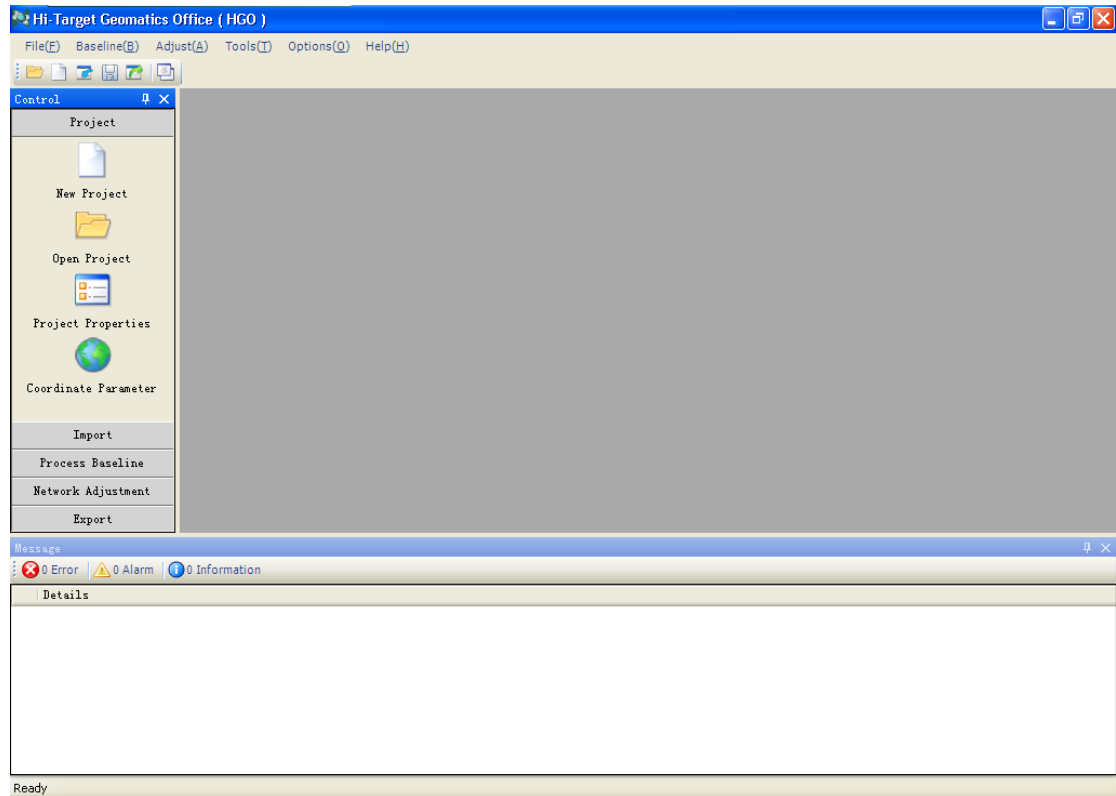
**BRIEF OPERATION INSTRUCTION**

HI-TARGET SURVEYING INSTRUMENT CO., LTD.

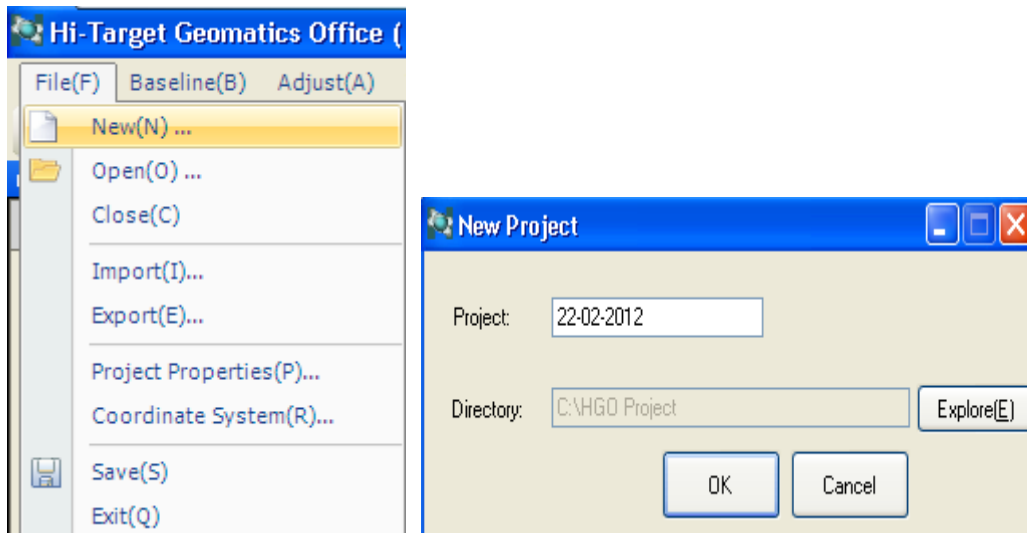
# GPS static data processing

## 1 Establish a new project

Run the main program, start the software:



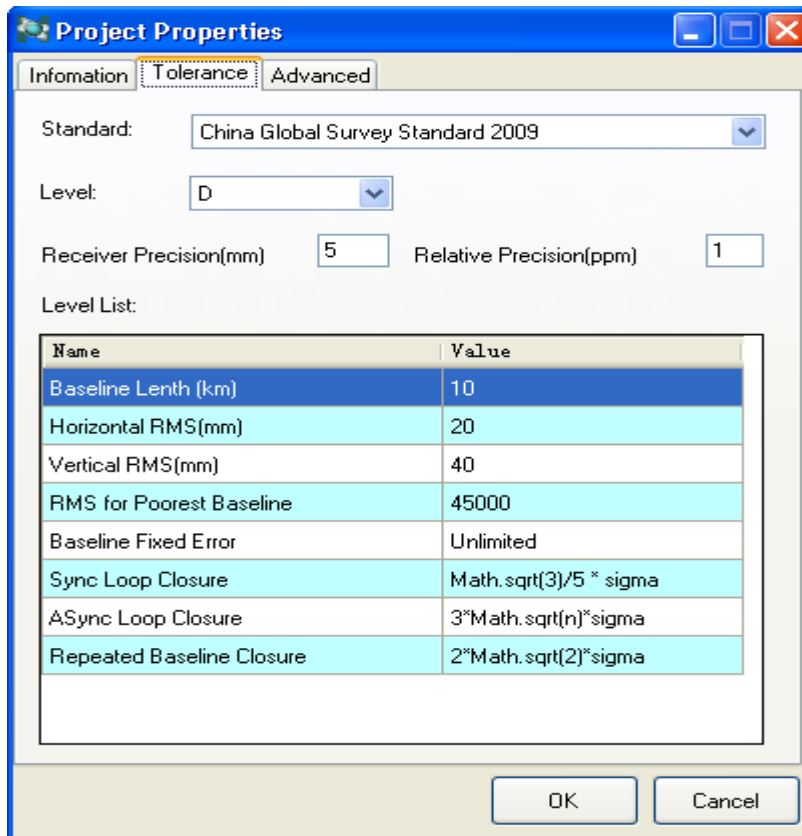
Establish a new project: “File”—“New”.



You can name the project by yourself or use the default one which named according to the date.

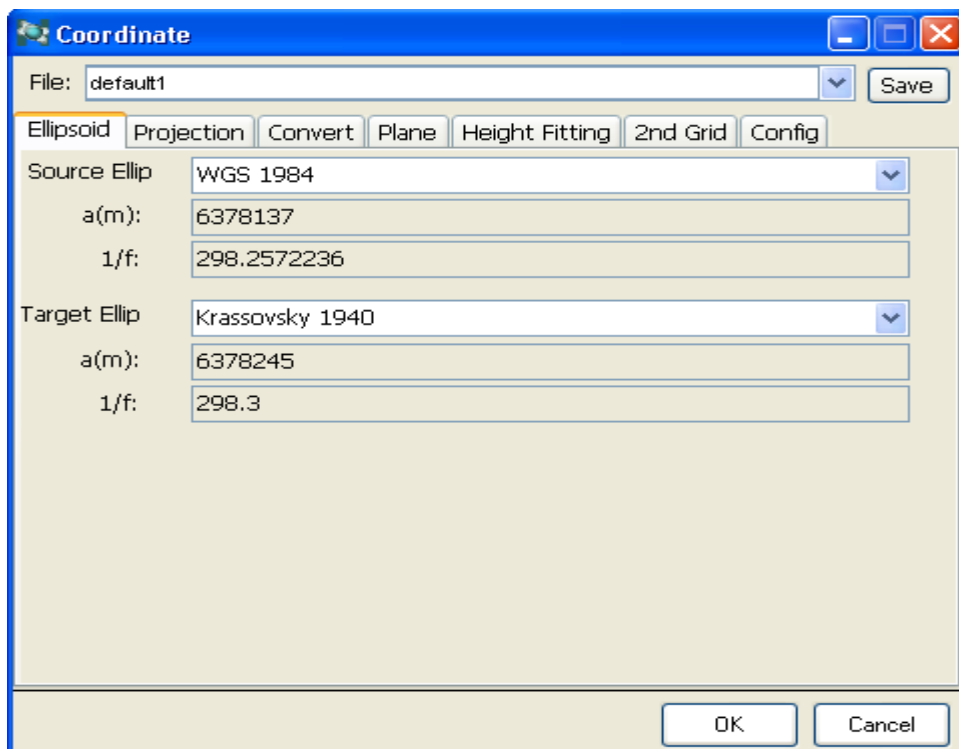
## 2 The modification of projection properties

Set the project properties in the interface below: (“File”—“Project Properties”)



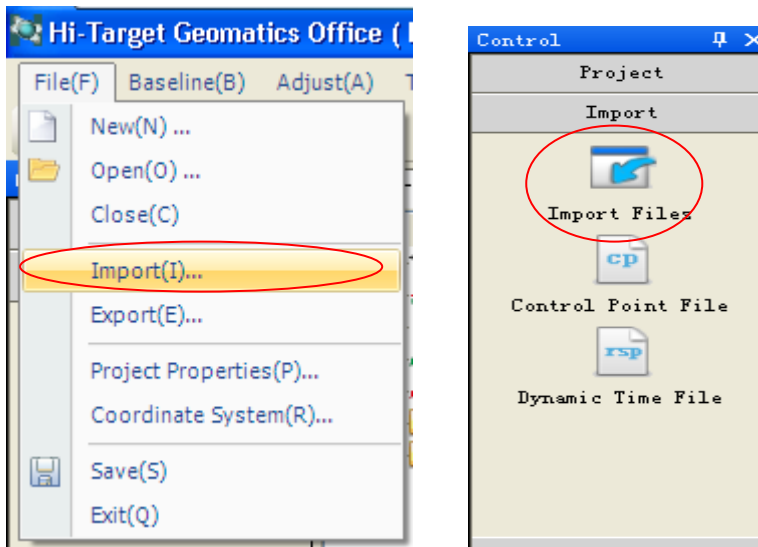
### 3 The settings of coordinate system

Enter into the coordinate system setting interface (“File”—“Coordinate System”) to set the ellipsoid, projection and the parameters.

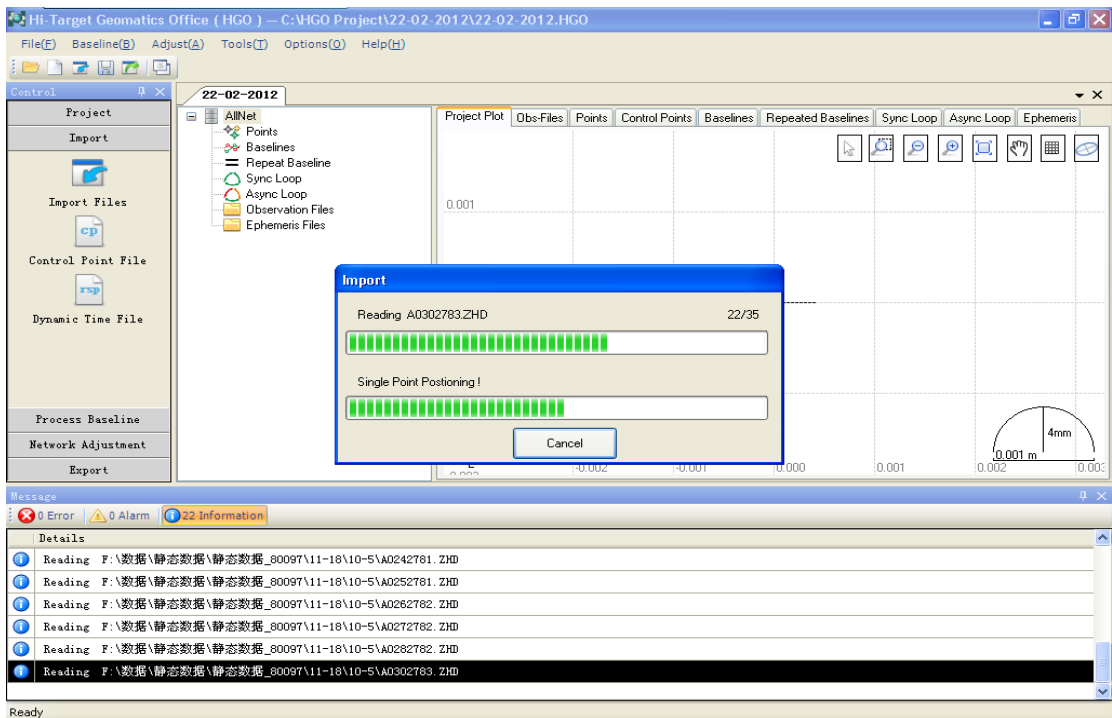
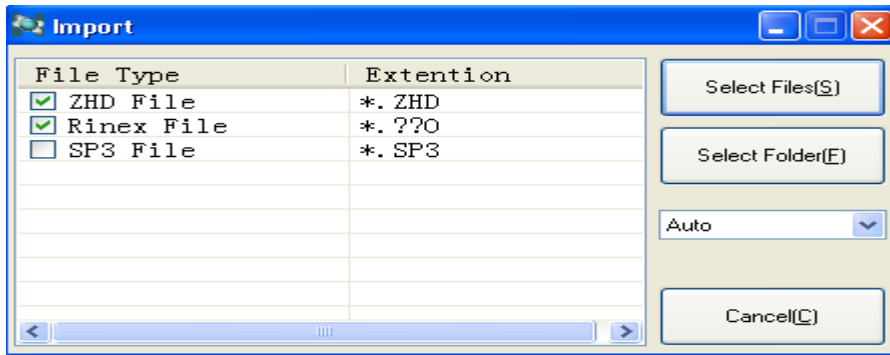


## 4 Import the data

After accomplishing the operation above, then import the data to the software.

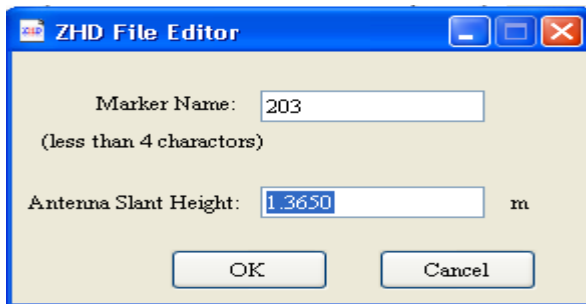


Choose the data type in the interface below:

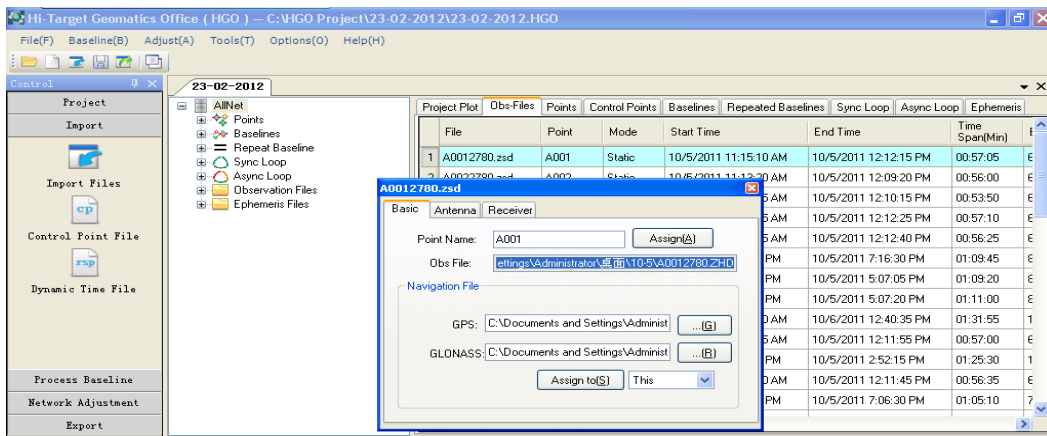


## 5 File information edit

Before importing the data, you need to enter the points name and the antenna type by double click the raw data:

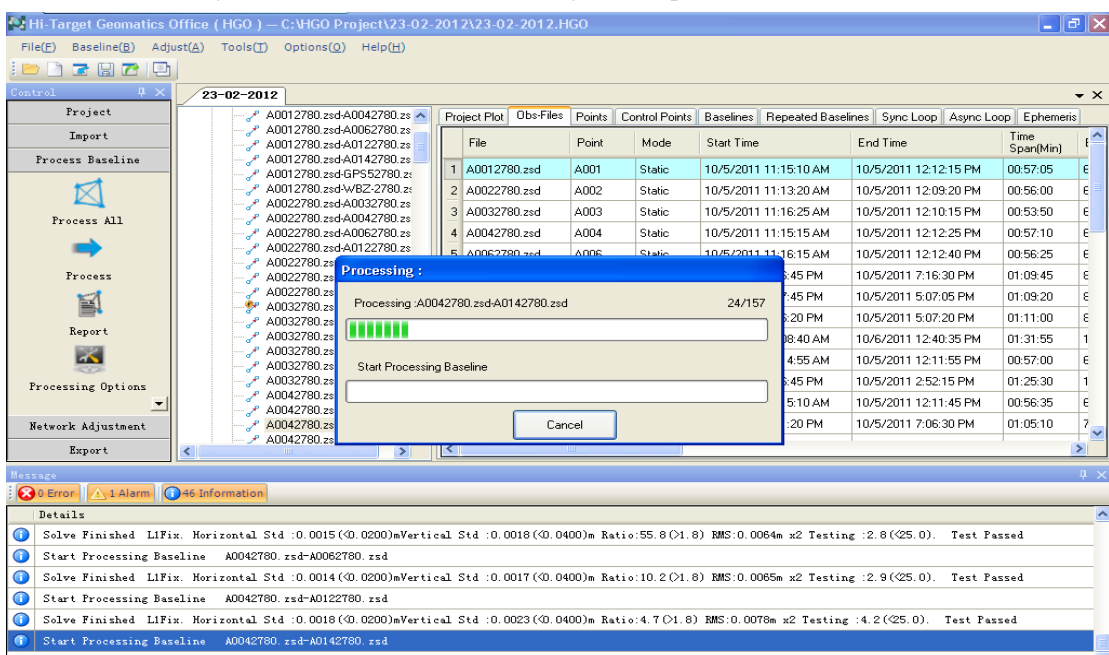


All files will be displayed after the data are imported. You can set the antenna height, the receiver type and the antenna type by double clicking the observation files.

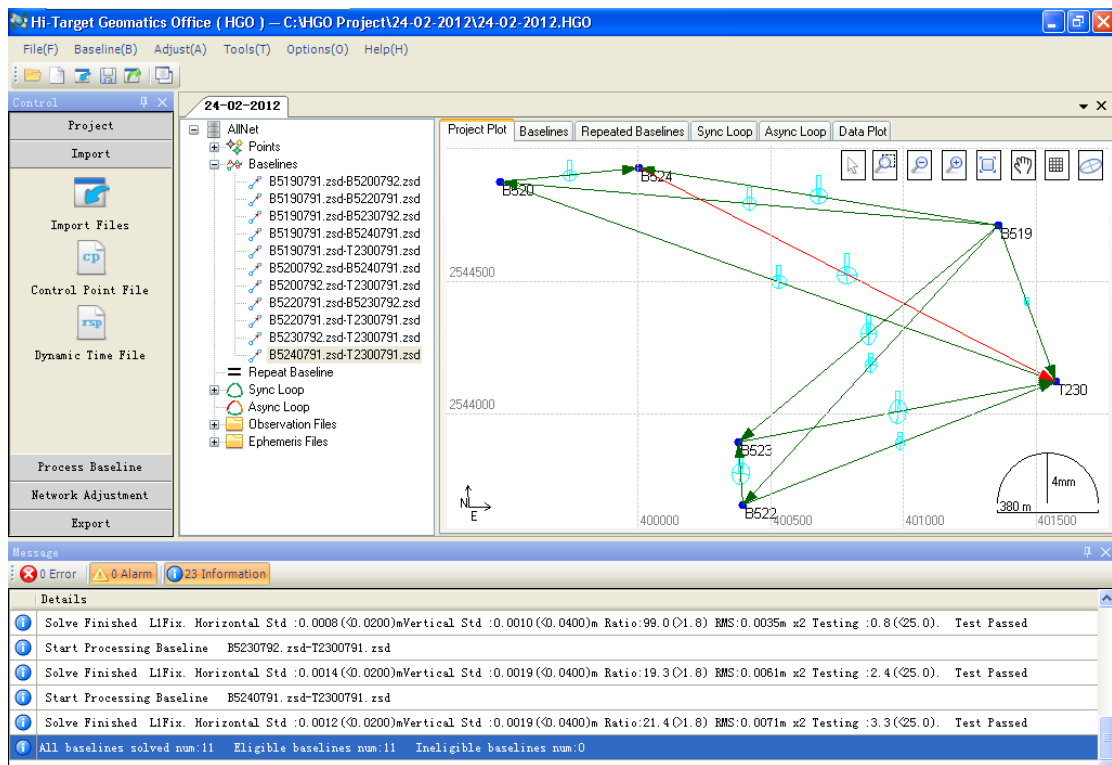


## 6 Baseline processing

Click “Process Project”(“Baseline”—“Process Project”) to process all the baselines.



The process time of the baselines is decided by the quantity of the baselines, the observation time, the baseline processing settings and the running speed of the computer.

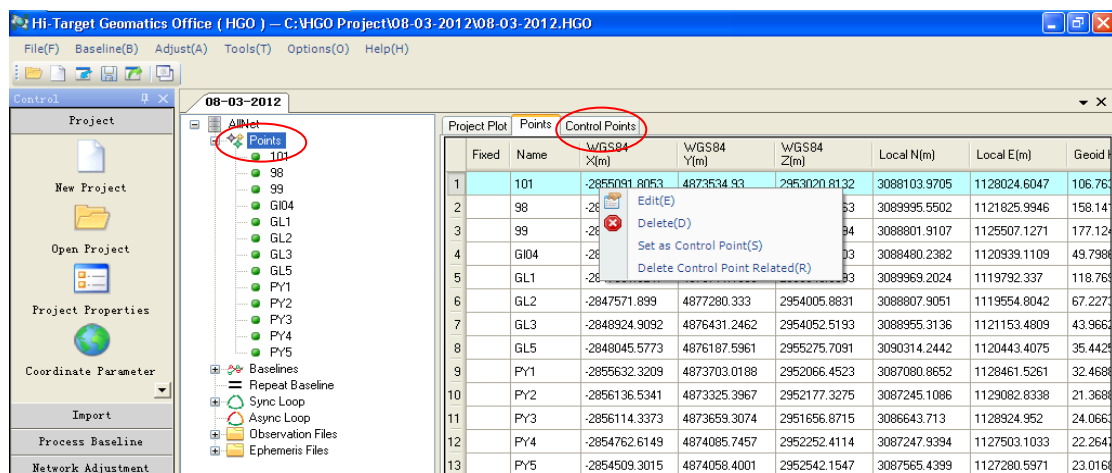


## 7 The settings before adjustment

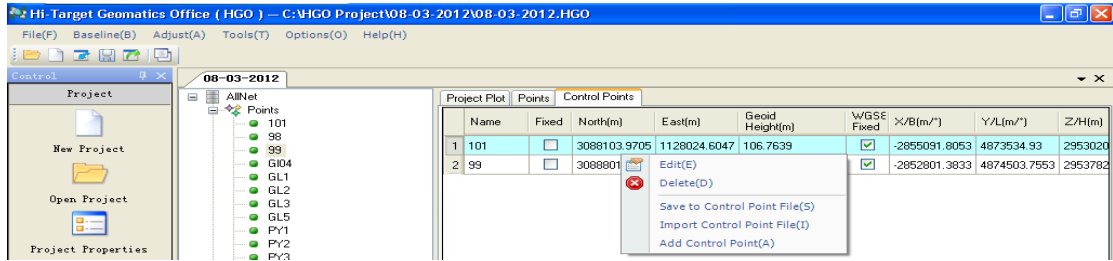
After processing, we need to check the result. As this instruction is a brief one, we suppose that all the baselines which participate in the processing are qualified. Normally if the observation condition is good, we can process all the baseline successfully one time.

Before network adjusting, we need to confirm the control points first.

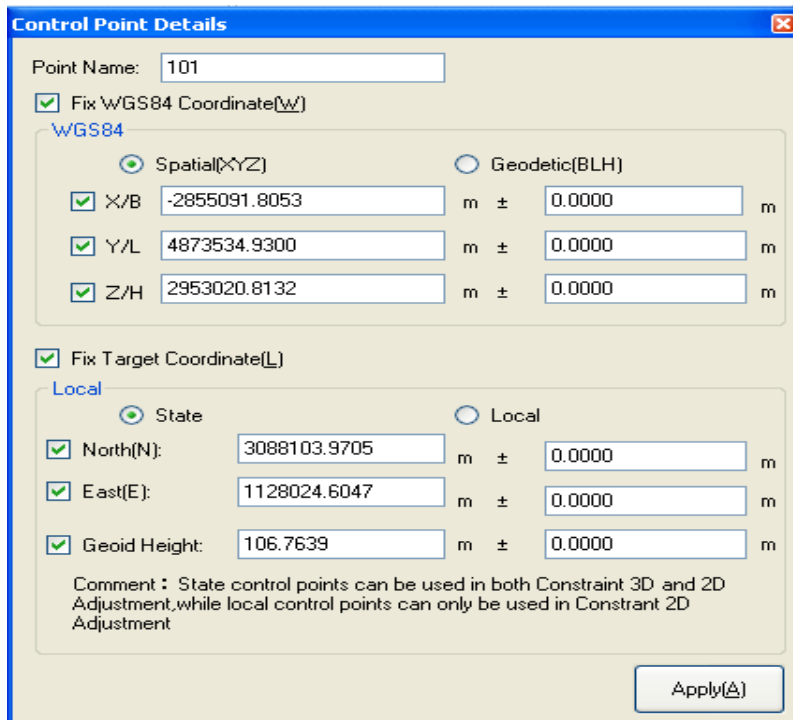
Look at the picture below: click “Points”, then right click the points in the right frame and set the points as control points.



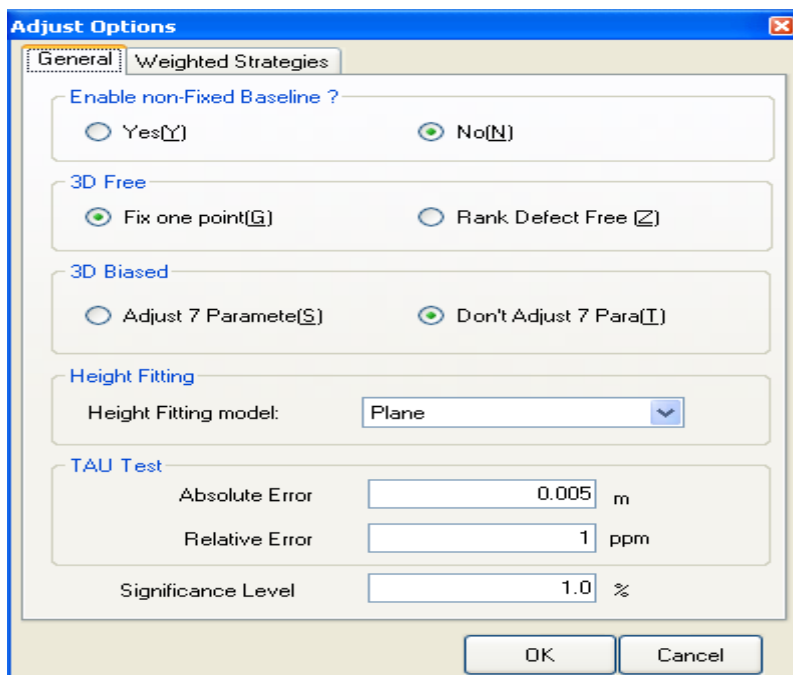
Then click “control points” to edit the control points.



Edit the control points in the interface below:

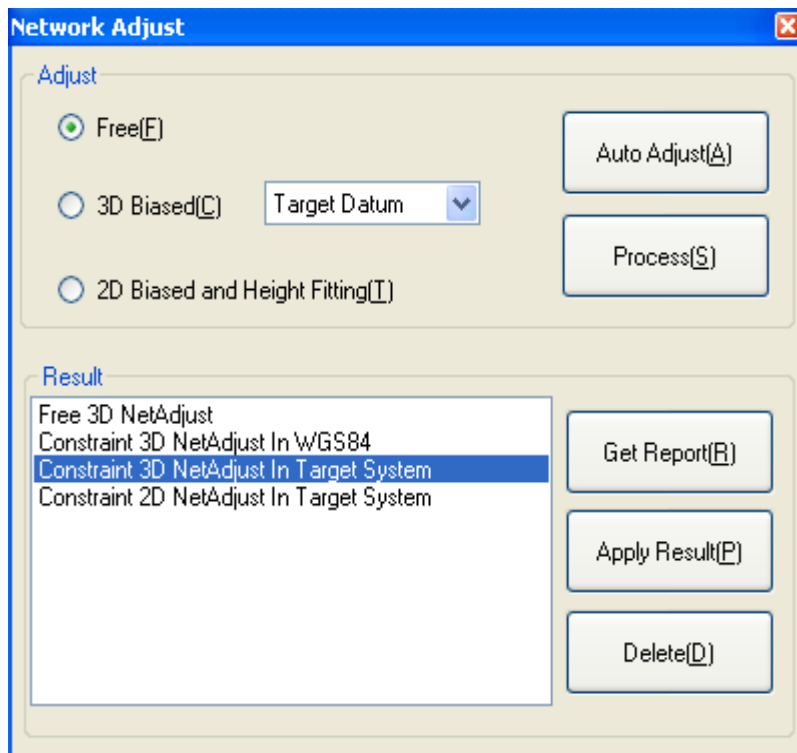
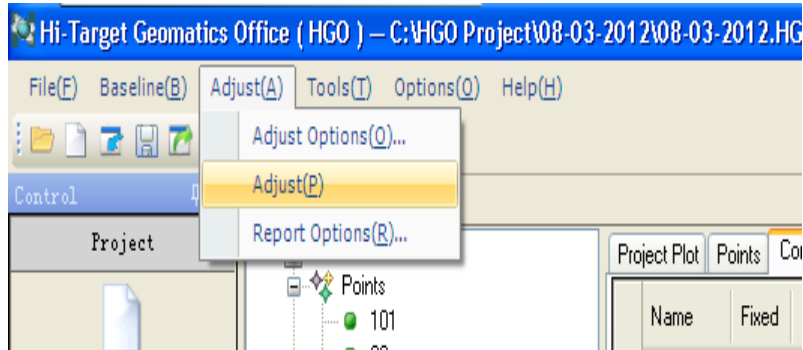


Then go to "Adjust Options" interface("Adjust"→"Adjust Options"):



## 8 Network adjustment

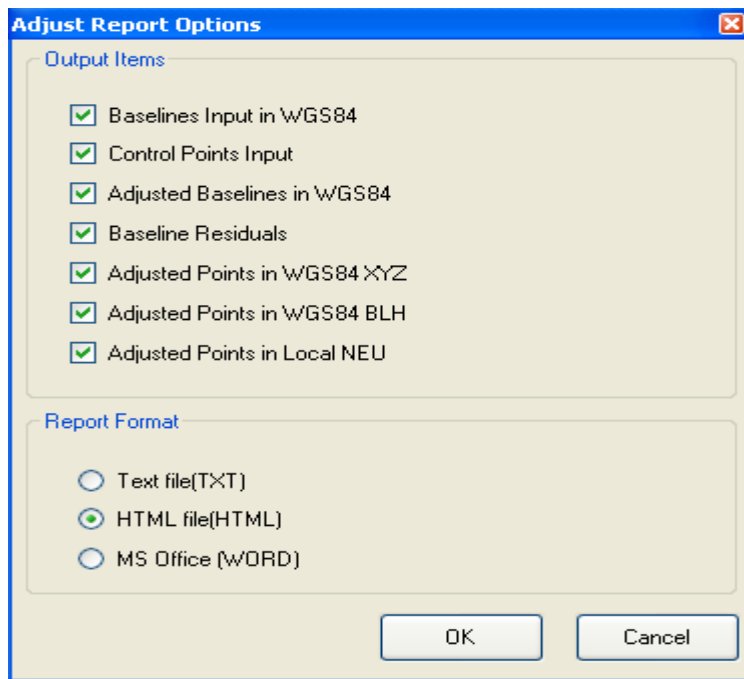
Click “Adjust(A)” then “Adjust(P)” to go to the adjustment interface.



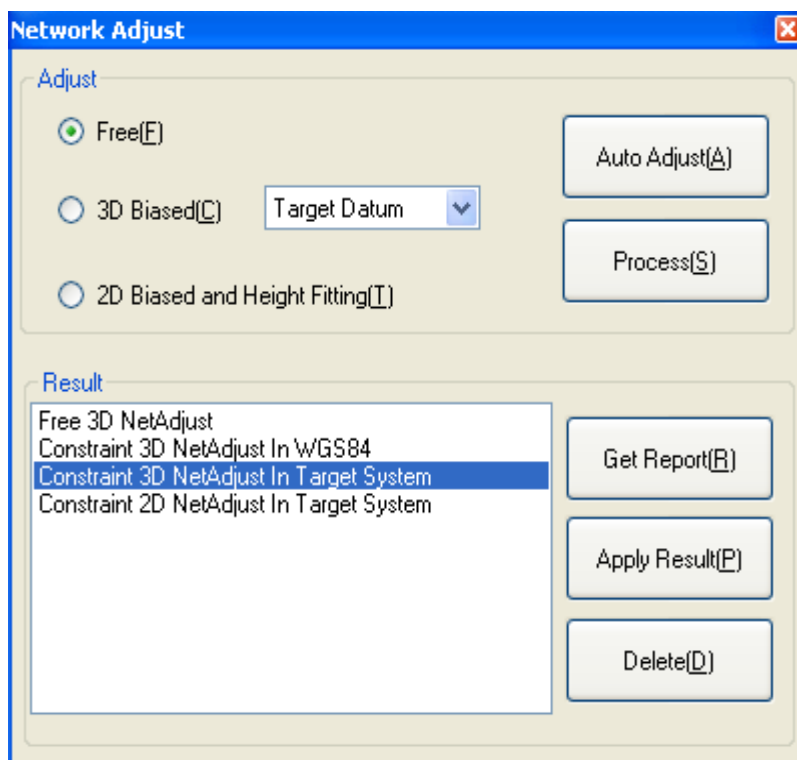
Click “Auto Adjust”, the software will do free 3D net adjust, constraint 3D net adjust in WGS84, constraint 3D net adjust in target system and constraint 2D net adjust in target system automatically and there will be a result listing. You can scan the corresponding report by choosing the net adjustment type and clicking “Get Report”.

## 9 Result Output

Click “Report Options” in “Adjust”, then you can set the content and the format of the report.



Then click "Get Report" to see the report.



Constraint 2D NetAdjust In Target System - 360安全浏览... inlong2008@126.com 文件(E) 查看(V) 收藏(B) 帐户(U) 工具(T) 帮助(H)

file:///C:/HGO%20Project/08-03-2012/Adjust/Constraint5

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A025	-1633320.4976	0.00	5462326.9826	0.00	2852513.3409	0.00
A026	-1632551.0569	0.00	5462379.4539	0.00	2852842.8598	0.00
A027	-1631090.0572	0.00	5463188.6133	0.00	2852114.0719	0.00
A028	-1630543.7680	0.00	5463423.2474	0.00	2851969.0726	0.00
A030	-1629786.2146	0.00	5463790.9644	0.00	2851696.4392	0.00
A031	-1629127.5849	0.00	5464026.4263	0.00	2851614.9029	0.00
A032	-1628257.8780	0.00	5464255.6784	0.00	2851664.0852	0.00
GP24	-1634941.8786	0.00	5460375.5894	0.00	2853401.1159	0.00
GP26	-1632952.6771	0.00	5462390.8382	0.00	2852605.4003	0.00
GPS5	-1631720.8664	0.00	5463533.6775	0.00	2851183.0607	0.00
WBZ-	-1636621.3212	0.00	5462968.3619	0.00	2849746.8740	0.00
ZEP-	-1635617.7494	0.00	5453858.5830	0.00	2867479.0200	0.00

**6. Adjusted Points in WGS84 (BLH)**

Station Name	Latitude	Std.Dev(mm)	Longitude	Std.Dev(mm)	Height(m)	Std.Dev(mm)
A001	026:43:07.70406N	0.09	106:40:16.77092E	0.09	1265.0929	2667.06
A002	026:42:45.46416N	905.49	106:40:02.92204E	588.28	1255.2428	0.00
A003	026:43:23.56815N	421.94	106:40:18.24126E	311.97	1260.4725	0.00
A004	026:43:48.49039N	354.40	106:40:42.06524E	360.25	1261.7860	0.00
A006	026:44:34.20833N	387.61	106:40:23.42543E	297.21	1250.6075	0.00
A007	026:45:05.62758N	0.09	106:40:45.85561E	0.09	1248.2825	4018.80
A009	026:45:47.27318N	291.16	106:40:52.54754E	352.31	1268.3104	0.00
A010	026:46:02.08184N	305.78	106:40:37.11615E	351.77	1272.8214	0.00
A011	026:45:54.69278N	312.50	106:41:07.09973E	314.73	1274.8543	0.00
A012	026:44:38.04303N	375.62	106:39:49.51822E	292.99	1257.5201	0.00
A013	026:44:40.53231N	0.09	106:40:21.64246E	0.09	1246.0586	437.95
A014	026:45:08.32646N	398.80	106:39:53.39177E	299.80	1261.0263	0.00
A015	026:44:59.67462N	255.67	106:40:28.82990E	232.53	1254.2150	0.00
A016	026:44:57.75194N	255.25	106:40:36.03523E	234.11	1253.4075	0.00

These are the basic operation steps of static data processing.