



# PProcessing Software Quick Guide

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# Table of Content

# **Chapter 1 Create A New Project**

1.1	Pro	oject File	3
1.2	Imj	port raw observation files	5
1.3	Cor	ıstraint known points	6
Cha	pter	2 Baseline Processing	
2.1	Sta	tic baseline processing	7
	2.1.1	View	7
	2.1.2	Baseline Process Settings	7
	2.1.3	Static Baseline process	8
	2.1.4	Network Adjustment	
2.2	PPI	K (Post-Processing Kinematic)	
	2.2.1	Dynamic baseline processing	
	2.2.2	Map View	
Cha	pter	3 Report Export	
3.1	Sta	tic Report	
3.2	PPI	K Report	

Chapter 1 Create A New Project

## **1.1 Project File**

- 1) Choose the folder path
- 2) Enter a project name
- 3) Select Modify>>Create>>Datum>>Change.

project template manage	New Project	×	Template Name			×
project template manage Name: Default Created Default Created Default Created Default Create Modify Modify Time zme S Standar S S S S S S S S S S S S S S S S S S	K New Project           Project name:         2022-04-20-17-49           Project path:         D:\T8proPPK           Template:         Default           Template:         Default           Template:         Default           Corested.         2019-11-41           Coordin         COS2000           Time di         GPS Time           Time zone         Invalid           Leap se         18           Distanc         5           Standar         City first level-2011	X Select path	Template Name Detail Datum Time Name: Central meridian: EGM: Projection:	Unit format Import Con CGCS2000 120:00:00:00000E None Transverse Mercator	Change_	
Cose	Fixed 0 5.00 Ratio e 3.00 Time Fo hhtmm:ss.ssss	QK Cancel			1	

Click Add to define new datum, you can set proper parameters (ellipsoid and projection) for your new coordinate system; Also Click Modify to edit the currently coordinate parameters.

Firstly check "use default ellipsoid", select the proper ellipsoid from the list, and then enter the Coordinate System Name.

ne Coordinate   Datum Convert   Se	lect Projection Modle   Sel	ect Geoid Models   Local I		
Coordinate System Coordinate System Name	🔽 use default ellips	oid		
Local	WGS66	-		
Ellipsoid Name	Basitive Coordinate Direction			
WGS66	Positive Coordinate			
Semi Major Axis(m)	North			
6378145				
Flattening (1/f)	C South	C West		
298.24999				

Enter 3 or 7 parameters if needed.

The 7-transfer-parameters fro	om WGS-84	
Translation × 0	Rotation X	0
Translation Y 0	Rotation Y	0
Translation Z	Rotation Z	0
Scale Factor 0	_	
From $(X)$ $(\Delta x)$	(x) (0 a	e )(X)

Select the proper projection model, and enter parameters according to the Project location.

rojection Model	Defect trajection mome [3976cf 06016 800	WTR   FACAT LOIDE
Transverse Mercator		
Scale Factor	False Northing (m)	
Origin Latitude 0	False Easting (m) 500000	
Origin Longitude		

In Geoid Models, check *Add Geoid Modules*, click *Add Geoid File* to input a Geoid module. Then click *OK* to finish datum modify.

efine Coordinate   Datum Convert   Select	Projection Modia Salact Gaoid Models	Local Foint
C Add Geoid Modules	Add Geoid File	
	Max Latitude	Max Lontitud
	0	a
	Min Latitude	Min Lontitude
	0	0

Then you can select the coordinate system you built, click **OK** to active this datum in the current project.

Name		Add
WGS84		•
WGS84 WGS72 Xian80 Beijing54 CGC22000		<u>M</u> odify <u>D</u> elete
Local		
	0.000000000	
	0.000000000	
	0.000000000	
Rotation X	0.000000000000	
Rotation 7	0.0000000000000000000000000000000000000	
Rotauon Z	0.0000000000000000000000000000000000000	
Dreighting Method	Transverse Merceter	
Projection Method	Inansverse mercator	
Projection Origin Landitude	120	
Projection False Northing (m)	0.000	
Projection False Fasting (m)	50000 000	
Projection Scale Factor	1.00000000	
Projection Local Latitude	0	
Projection Local Longitude	0	
Projection Local Height (m)	0.000	
Local Org. Lat	0	
Local Org. Lon	0	12
Local Scaling Ratio (ppm)	0.000	ОК
Local Rotation Angle (degree)	0.00000000	
Local Height Offset (m)	0.0000	Cancel

Tip: the coordinate system and its parameters also can be edited in *Tools* -> *datum manager*.

# **1.2 Import raw observation files**

To import GNSS raw data, click *File* -> *Import* in the menu bar. The static observation file can be imported directly; For PPK and dynamic data, please check "Import Dynamic files".

RTCM32 data	ata
Single difference	file(Msg.919 and Msg.71)
3	( ) ) ,

Tip: PProceesing only can support dynamic raw data in SingularXYZ CNB format.

After importing the raw data, click *Observation* -> *select the observation file* in the navigation pane, then right-click on the file name to edit properties, including station name and antenna information.

Burlant	Map	Report Observation	Static baseline	Station							-	Property		
Nu	um.	File	Start	End	Epoch	Data	Latitude		Longitude	Altitude	Rece	Observation	4220084	K. CNB
Observation	1	4220084K.CNB 3608P2084L.CNB	03.24 02:51:23 03:24 03:28:22	03.24 03:37:02 03.24 03:36:08	2740	Re-link	21-20-59 95679	2N N	121:17:31.83090E 121:17:32.23647E	33.2039 31.9469	1042 1036	■ General		
	3 4 5	3590P2084LCN8 3590P2084LCN8 3590P1084K_CN8	03.24 02:46:55 03.24 03:14:49 03.24 02:37:53	03.24 03:25:56 03.24 03:37:25 03.24 03:08:31		Delete	Delete	2 7 7	121:17:31.28438E 121:17:31.70144E 121:17:31.39824E	29.3227 31.4489 29.9843	1035	Station Path		4220 CI\DOCUMENT\\$2
Import files						Ephemeri	s manager					File Date	_	4220084K.CNB 16-03-24 02:51
<b>O</b>						Rinex con	wert					GPS Nav.	file	C:\DOCUMENT\\$X
Ephemeris						Import RT	Kpoint					Receiver Glonass C	:PB	3 0.0000
•						Propertie	s Alt+Enter					Antenna Antenna	high	0.0000
Download												Antenna Antenna	method type	Phase center Unknown
								1.00	-F0 0CC201			Latitude		31:20:59.96679N
16		Statio	n <u>4220</u>	_			Lat. 3	21:12	7:31.83090E		-	Altitude	-	33.2039
		Antenn	a 0.0000	Ch	ange		Height 3	3.20	39		•			
Static baseline					manhand									
Dynamic baseline												P.		
L5L	2	::61		10 1	linates	/Grid		_			3:37			

# 1.3 Constraint known points

To ensure all stations within your local grid coordinate system, at least 1 station should be fixed on a known point. Click *station* -> *properties* -> *Known Point* to enter coordinate values (check the *Constraint*).

Var.       Static       Type       Latitude       Longbude       Altitude       North       East         ©       Observation       2       4220       1100304001 (00101 3120359/62079)       12117/31233072       33.20039       28882734.754       7033         Static baseline       0       3       36088       Properties       Alt-Enter       int       33.20059/220497       28882734.754       7033         Dynamic baseline       0       5       35008       Properties       Alt-Enter       int       33.20059/220497       7033       28882274.754       7033         Momanic baseline       0       5       3500       Properties       Alt-Enter       int       33.20059/220497       7033       28882274.754       7033         Motioat       0       5       3500       Properties       Alt-Enter       int       33.20059/220497       7033       28882264.977       7033         Motioat       5       3500       Properties       Alt-Enter       int       33.20059/220497       Precision(m)       Introduce	Type         Latitude         Longitude         Altitude         North         East         Station         4220           Utoxolwed noint         312:00:59/46679N         121:17:31:80906         332:00:39         288822792.6997         7033         Image: Control of the co
Observation       N1       4220       Utexc/wsd opint       312059/9569/07/N       121173139000E       320039       28882702.0997       7033         Static baseline       0       2       36008       Delete       pint       312:0059/3586N       1211731.28438E       29.3227       2888273.47542       7033         Opynamic baseline       0       4       3590       Properties       Alt-Enter       Int       312:00.21443N       1211731.39024E       29.984372.28967       7033         Adjustment       5       3590       Properties       Alt-Enter       Int       312:0059/3586N       1211731.39024E       29.98437       28882662.5487       7033         Method       Coordinate       Yeast       Yeast       7033448       703 <th>Lincolved point         312:05:99:967:9N         121:17:31:289:90:E         133:029         28882792:8997         7033         Image: Control of Control</th>	Lincolved point         312:05:99:967:9N         121:17:31:289:90:E         133:029         28882792:8997         7033         Image: Control of Control
Static baseline	jrint         3112100.16573N         1211732.234847E         31.0469         28882825.4176         7033           Alt-Enter         min         312:05.9530N         1211733.24348E         29.3227         2882732.4724.2         7033           Alt-Enter         min         312:00.57.94261N         121:17:33.1209.244.8         29.3227         2882732.4724.2         7033           Station:         231:20:59.42261N         121:17:33.139024E         29.984.3         28882866.1980         7033           Station:         220         X         X         X         X           Original value[Low-Precision]         Known point         X         X         X
Static baseline <ul> <li></li></ul>	Station:         4220         X         Congluder         X           Original value/Low-Precision/         Known point         X         X         X         X
Oynamic baseline         9 4 3990         Properties         Att-Enter         Int 31/21/02/1443N         12/11/31/30/244         31/4489         28882602/3487         7733           Adjustment         Station:         Station: <t< td=""><th>Ait-Enter         Int         31:21:10:21:443N         121:17:31.70144E         31:4439         28882662.3487         7033         Longitude         121:17:31:8309           Station: 4220         Station: 4220         X         Image: Station: 4220         <t< th=""></t<></th></t<>	Ait-Enter         Int         31:21:10:21:443N         121:17:31.70144E         31:4439         28882662.3487         7033         Longitude         121:17:31:8309           Station: 4220         Station: 4220         X         Image: Station: 4220         Image: Station: 4220 <t< th=""></t<>
Oynamic baseline	Station: 4/220         12/11/13/1396/26         2/5/998/3         2/666/2668.190         ///33         Althode         33/209           Station: 4/220         X
Adjustment     Station: 4220     X     Iscal position       Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Station constraint     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Station constraint     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Station constraint     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Station constraint     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Station constraint     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter       Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate parameter     Image: Coordinate	Station: 4220 X Eccal position Original value[Low-Precision] Known point Original value[Low-Precision] Known point
Adjustment     Original value[Low-Precision]     North     21       Adjustment     Method     Coordinate     Height     3       Adjustment     Sistaion     Precision(m)     0       Sistaion     Sistaion     Precision(m)     0       Image: Constraint     Image: Constraint     Image: Constraint     Image: Constraint	Original value[Low-Precision] Known point
Image: Coordinate     Image: Coordinate     Image: Coordinate     Image: Coordinate       Adjustment     Image: Coordinate     Image: Coordinate     Image: Coordinate       Image: Coordinate <td< td=""><th>Original value Low Frecision Room point</th></td<>	Original value Low Frecision Room point
Adjustment parameter     Method     Coordinate     Height 3       Station constraint     Method     Station     Precision(m)     0       V Genetraint     Method     BLH     H     33.2039     Precision(m)     0	East 7033432.8033
Adjustment parameter Station constraint	Method Coordinate Height 33.2039
Adjustment parameter Station constraint	
Parameter          • xyH         · H         yleast)         yleast)         7033432.8053         Precision(m)         0         ·         BLH         H         33.2039         Precision(m)         0         ·         Station         Constraint	x(north) 28882792.8997 Precision(m) 0
Station     C     Frecision(m)     0       <	© xyH
Image: Station constraint     Image: Station constraint     Image: Station constraint     Image: Station constraint       Image: Station constraint     Image: Station constraint     Image: Station constraint     Image: Station constraint	CH v(east) 7033432 8053 Precision(m) 0
Station     Constraint       Constraint     Default	Yeasy resourcess receiping o
Constraint	C BLH
Station constraint Default Default	C BI H 33.2039 Precision(m) 0
constraint Default Default	
Constraint Default -	>
	Constraint Default
OK Cancel Help	
	OK Cancel Help
Sun	OK Cancel Help

Tip: You can get the default coordinate value under current coordinate system by clicking *Default*. It should not be a big difference between the default value and the *known* value; otherwise, check the coordinate system parameters.

# Chapter 2 Baseline Processing

This chapter will introduce how to process GNSS raw data in static and PPK mode respectively, which helps you to learn about the basic settings in the software.

#### 2.1 Static baseline processing

In static mode, PP Software Solution can directly process baseline vectors of different sites with simultaneously recorded GNSS raw data. We recommended that at least 3 receivers observe at the same time to form the simultaneously loop of baselines.

#### 2.1.1 View

The static baseline vector will be automatically formed after importing GNSS raw data. Go to **Project** -> **Map** to check the baseline vectors.



#### 2.1.2 Baseline Process Settings

Before starting static baseline processing, click *Processor* -> *Baseline setting* in the menu bar to set proper processing parameters. The settings are related to data import rules, observations, troposphere and ionosphere.

Sampling interval(Second)	Min time(min)
Ref satellite Auto • Gross error Tol. 3.5 Min epochs 5 Max epochs 9999 Warning[Ratio] 3	Max distance[km] [1000 ☐ Enable loss of lock indicator[LL]]
OK Cancel Help	OK Cancel Help

- Sampling Interval: the data processing interval, the value should be greater than the interval used during recording of the data.
- Elevation Mask: the minimum mask angle to be used. When the data is a good quality the mask should be between 10 and 15 degrees.
- Min Time (Min.): the minimum observation period of GNSS raw data to form the baseline.
- Max Distance (km): the maximum observation distance of GNSS raw data to form the baseline.

etup for baseline process	×	Setup for baseline process
General Import rules Troposphere and Ionosphere Troposphere Inproved Hopfield Ionosphere 7 uto Temperature(C) 18 AirPressure(mb) 6 Relative humidity(%) 50	Observations	General       Import rules       Troposphere and Ionosphere       Observations         Image: Vise GPS observations       GPS:       L1C/N       35       L2C/N       15       L5C/N       32         Image: Vise BDS observation(BDS)       BDS:       B1C/N       35       B2C/N       35       B5C/N       32         Image: Vise GLONASS observation       GLO:       L1C/N       35       L2C/N       35         Image: Vise GLONASS observation       GLO:       L1C/N       35       L2C/N       35         Image: Vise greendorange for static baseline(FI)       Image: A low part of ambiguities fixed(FP)       Compass time offset(seconds, default 14.0)         Image: Combination of observation       Image: Auto       Image: Auto       Image: Auto
0K Cancel	Help	OK Cancel Help

- Select proper correction model for Troposphere and Ionosphere.
- Weather parameters: Temperature, Air pressure and Relative.
- Allow you to disable satellites individually so that data from these satellites will not be part of the solution.
- PP Software time offset: default value is 14.

#### 2.1.3 Static Baseline process

After setting the baseline process parameters, click **Processor** -> **Process Static Baselines**.

		💠 🛞 📙 🖛	ic baseline	20,0	200	000					Property	
Project	Num.	Start	End	Sys. time	Status	Solution	Ratio	RMS	Check	dx	Static baselin	we 3608P1084K - :.▼
Observation		4220084K.CNB 4220084K.CNB	3608P2084LCNB 3608P1084K.CNB	00:07:46 00:34:33	Using Using	Fix Fix	43.5 2.2	0.0109	Valid Valid	-7.2741 11.1407	E General	
Static baseline		4220084K.CNB 4220084K.CNB	3590P2084LCN8 3590P1084KCN8	00:22:13 00:17:08	Using	Fix	5.7	0.0051	Valid Valid	5.3411	Dynamic	False
63	↑ A5	3608P2084LCNB	3590P2084LCN8	00:07:46	Using	Fix.	39.6	0.0138	Valid	12.5971	To	C:\DOCUMENT
Param	AT	3608P1084K.CNB	3590P1084K.CNB	00:21:36	Using	Fix	5.2	0.0052	Valid	-3.9402	Session Epoch	094K 777

After all baseline processed, check the quality value (Solution type, Radio and RMS) and baseline information (dx,dy,dz,ds) shown in the view area. To acquire a high- accuracy result, also check:

- Solution value from Unsolved to Fix
- Radio should be smaller than warning value you set (default as 3)
- RMS value< 0.00X (millimeter accuracy)
- Check: valid

Alternatively, click *Adjustment* -> *Search Loop's Errors* to check PPM value of loop and detailed baseline processing information.

If the baseline RMS and Ratio values cannot meet standard requirements, edit the baseline manually and process it again.

Delete bad observation data in the *Timeline window* based on the *Quality window*. As the below example shown, observation data with a bad quality should be deleted from Timeline window.



Tip: In the Time Line window, selecting the observation means delete the observation data, double choose left checkbox to clear the selecting to restore the deleted observations.

1. Process this baseline again to acquire a better result.

-	64 64	4220084K.CN8	3590P1084K.CNB	0 663	Baseline setup	10.1	0.0048	Valid	7.2014	From	C:\DOCUMENT
203	A 100	3608P2084LCN8	3590P2084L/CINB	0 400		39.5	0.0138	Valid	12.5971	To	CI\DOCUMENT
2225	27	360901094K-CNP	350001094LLUVB	2	Baseline report	0.0	0.0053	Walld	3.0402	Session	084K
Param	Cast 1	DOUDP TO DALLETED	3330F 10046CT40	~	Details of processing	24	0.0032	Parts	3.7402	Epoch E Solution	1241
^					-					Type	Fix
7 4					Baseline analyse					Ratio	2.2
42										RMS.	0.0046
Process					Baseline delete					dx	11.1407
					Baseline forbidden					dy	11.0877
										dz	-7.8015
					Baseline using					Distance	17.5475
EQ					Reverse start and and						
Report					A THE PART OF THE						
					Baseline clear						
$\cap$				_							
6 9				_	Baseline properties Alt+Enter						
$\bigcirc$				-							
Loops											
0	<								>		
-22	~										
N Dynamic baseline	158 A	Il baselines were pro	cessed!				19:24:54	2018-03-13	^		1
(R)									~		1
Adjustment		H Output Satellite	Quality Network								
Process this baseline alone											

You can also edit baselines, including:

- Baseline setup: shortcut to baseline processing setting.
- Baseline report: create report for baseline processing result.
- Details of processing: show details of calculation procedure parameter.
- Baseline delete: delete this baseline from your project, which is not recommended.
- Baseline forbidden: forbid this baseline to be part of the solution, used only when the baseline without good accuracy.
- Baseline using: allow this baseline to be part of the network adjustment.
- Reverse start and end: reverse the direction of baseline vector.
- Baseline properties: include general information, fix solution and float solution.

#### 2.1.4 Network Adjustment

In this section, you will carry out a least squares adjustment using the processed baselines above. First go to *Adjustment -> Adjustment setup* in the menu bar.

Free Adjustment	2D Adjustment Height Fitting Adjustment Settings
Select wanted adju	istment
□ 3D	) ·
₽ 2D	
Height Fitting	
Others	
	Central 120
	Central 120

- 3D: WGS84 coordinate as control points
- 2D: Horizontal adjustment, use local gird coordinates as control points

• Height Fitting: Height adjustment

Tip: we recommend that you apply 2D & Height to adjust baselines.

Then click *Adjustment*->*Run Adjustment*, click *OK* to complete adjustment.



# 2.2 PPK (Post-Processing Kinematic)

For PPK (Post processed Kinematic) mode, it can process trajectories of rover combined with base station static data. Commonly, set the sampling interval of base station as 1/s and fix it on the known point

#### 2.2.1 Dynamic baseline processing

Setting up process parameters for the dynamics baseline, which should be the same as static baseline processing setting (the sampling interval is 1/s).

 Import runes   troposphere an	a ronospiiere	
Sampling Interval (second)	1	
Elevation Mask(Degree)	20	
Ref Satellite	Auto	•
Gross error Tol.	3.5	1
Min Epochs	5	
Max Epochs	9999	
Warning(Ratio)	3	

Right-click on the file's name to process this baseline alone. The figure is shown below:

	Ma	Dynamic baseline	LINGTODOG - 20180018 APR				· Property	Property		
Project	Num	Start	End .	Epoch	Fixed epoch	Fixed precent Point	Dynamir harali	aa 1610700308		
Observation	1/3	1610780308.CN8	20180315_PPK.CN8	20180375_PPK.CN8 633 576 90.995%						
							II General			
Static baseline	1.4						Dynamic	False		
N Description	11						Te	CUSERDARA		
							Service	PPK		
503							Epoch	0		
5255		100000000000000000000000000000000000000					U Base type			
Parem		Solve route				×	Dynamic	Fallet		
		Thinks	Marker Seat - 1/1				Float precent	e 17.90		
		· · · · · · · ·	a second second second		194		Fixed precen	e 91.00		
· · ·							Wde-Fired	0.00		
Processe-					Step#Laft		Los-Foel.	0.00		
							Other precis	et 1,11		
=										
Report satur							_			
E										
EES										
report.										
	-									

Click *Next* to finish dynamic baseline processing, you will see the baseline information, i.e. Epoch Num, Fixed Epoch and Fixed percentage.

	Map Dynamic base	Nene 16A0780A08 - 20180318 PF	5. C				Property	
ender:	Num, Start	End	Epoch	Fixed epoch	Fixed precent	Point	Dynamic basali	as 1410/00308 - *
Observation	1 1610700308.CM	d 20180115_PTK.CNB	611	575	90.995%			
Margaret March 1							ii General	
* Static baseline	and the second se						Dynamic	False
. 7							Pygan	C-W390/91/2
Dynamic baseline							10	COURSEPPIPIE.
~~~~							Inch	3

Double right click on the Dynamic baseline to check detailed information of each point.

Project	: Map	Dynamic ba	iseline 161078	0308 - 20180319_	PPK						•	Property	
riojet	No.	UTC Date	UTC Time	BeiJing Date	BeiJing Time	Marker	Solution	RMS	Sat.N	Lat.	Lor ^	Dynamic baseline	1610780308 -
Observation	428	2018-03-19	03:24:02.000	2018-03-19	11:24:02.000		Fix	0.022	22	31.3499446556	121.291983472		
	429	2018-03-19	03:24:03.000	2018-03-19	11:24:03.000		Fix	0.023	22	31.3499448333	121.291983475	E General	
Static baseline	<b>4</b> 30	2018-03-19	03:24:04.000	2018-03-19	11:24:04.000	PP01	Fix	0.007	22	31.3499448444	121.291983494	Dunamic	Falce
Shade Basenne	431	2018-03-19	03:24:05.000	2018-03-19	11:24:05.000	PP01	Fix	0.005	22	31.3499447889	121.291983422	From	CALISERS/FEI
P Dunamic baceline	432	2018-03-19	03:24:06.000	2018-03-19	11:24:06.000	PP01	Fix	0.003	22	31.3499448667	121.291983480	To	CALISERS
bynamic basenne	433	2018-03-19	03:24:07.000	2018-03-19	11:24:07.000	PP01	Fix	0.004	22	31.3499448583	121.291983466	Serrion	DDV
~~~	A 434	2018-03-19	03:24:08.000	2018-03-19	11:24:08.000	PP01	Fix	0.004	22	31.3499448472	121.291983469	Farab	_PPK
502	A 435	2018-03-19	03:24:09.000	2018-03-19	11:24:09.000	PP01	Fix	0.005	22	31.3499448250	121.291983369	cpoch	10
~~~	<b>4</b> 36	2018-03-19	03:24:10.000	2018-03-19	11:24:10.000	PP01	Fix	0.003	22	31.3499448361	121.291983488	Base type	10-1
Param	<b>4</b> 37	2018-03-19	03:24:11.000	2018-03-19	11:24:11.000	PP01	Fix	0.005	22	31.3499448389	121.291983519	Dynamic	False
	438	2018-03-19	03:24:12.000	2018-03-19	11:24:12.000	PP01	Fix	0.004	22	31.3499448667	121.291983458	E Solution	( market and the second
	<b>4</b> 39	2018-03-19	03:24:13.000	2018-03-19	11:24:13.000	PP01	Fix	0.005	22	31.3499448444	121.291983405	Float precent	7.90
	<b>4</b> 40	2018-03-19	03:24:14.000	2018-03-19	11:24:14.000		Fix	0.003	22	31.3499448611	121.291983447	Fixed precent	91.00
	<b>4</b> 41	2018-03-19	03:24:15.000	2018-03-19	11:24:15.000		Fix	0.037	22	31.3499474611	121.291988080	Wide-Fixed	0.00
Process	442	2018-03-19	03:24:16.000	2018-03-19	11:24:16.000		Fix	0.015	22	31.3499519944	121.291992702	Extra-Fixed	0.00
	<b>4</b> 43	2018-03-19	03:24:17.000	2018-03-19	11:24:17.000		Fix	0.020	22	31.3499577000	121.291999983	Other precent	1.11
	<b>3</b> 444	2018-03-19	03:24:18.000	2018-03-19	11:24:18.000		Fix	0.021	22	31.3499649639	121.292007919		
	<b>445</b>	2018-03-19	03:24:19.000	2018-03-19	11:24:19.000		Fix	0.015	22	31.3499711833	121.292015780		
	<b>446</b>	2018-03-19	03:24:20.000	2018-03-19	11:24:20.000		Fix	0.010	22	31.3499778833	121.292024211		
Banadaatha	<b>447</b>	2018-03-19	03:24:21.000	2018-03-19	11:24:21.000		Fix	0.013	22	31.3499833222	121.292032913		
neport setup	448	2018-03-19	03:24:22.000	2018-03-19	11:24:22.000		Fix	0.029	22	31.3499862194	121.292041041		
	<b>4</b> 49	2018-03-19	03:24:23.000	2018-03-19	11:24:23.000		Fix	0.018	22	31.3499882472	121.292052900		
=	450	2018-03-19	03:24:24.000	2018-03-19	11:24:24.000		Fix	0.007	22	31.3499933389	121.292062791		
(=(=)	451	2018-03-19	03:24:25.000	2018-03-19	11:24:25.000		Fix	0.021	22	31.3500003917	121.292072347		
	452	2018-03-19	03:24:26.000	2018-03-19	11:24:26.000		Fix	0.020	22	31.3500077806	121.292082416		
Report	453	2018-03-19	03:24:27.000	2018-03-19	11:24:27.000		Fix	0.014	22	31.3500132528	121.292094066 *		

#### 2.2.2 Map View

After dynamic baseline processing, you can go to *Project* -> *Map* to have a look at trajectories of your rover.



This chapter will introduce how to export processing reports

## 3.1 Static Report

Go to *Report* in the main menu bar, you can output a network adjustment report in web format. It contains five parts: project property, coordinate system, baseline, 3D non-constraint adjustment and 3D constraint adjustment, which help you to check the result of baselines and adjustments.

The most important parameter you should check is *X* square check, if it shows fail, copy the value of reference factor to *Adjustment* -> *Adjustment Setu*p -> *Free adjustment*, then run adjustment again.



Tip: The *X* square check parameter is meaningful for triangle network adjustment. For single baseline processing, you only need to check parameters, i.e. Solution, Ratio and RMS.

Other report formats can be exported, including brief report, DXF and KML. In the end, click *File* -> *Save* to save your project.

# 3.2 PPK Report

Double-click on this baseline to check the detailed information.

Observation     Num       Static baseline     Image: Compared to the second to the se	n. Start 4220084K.CNB	End 3608P1084K.CNB	2074	Fixed epoch 2069	Fixed precent	Point	Record	
Observation        Static baseline        Dynamic baseline	4220084K.CNB	3608P1084K.CNB	2074	2069	00 750%			
Static baseline Dynamic baseline					33.1 3370			
Dynamic baseline							Speed	
Dynamic baseline							X Speed	-0.003
Dynamic baseline							Y Speed	0.004
<u>دې</u>							Z Speed	0.004
Process Report setup Report								
14 4	H Output Satellite Que	lifty Network						

In the detailed information page, right click to select *Filter* -> *Export format*, *Solution Setup* -> *OK* to set the report format.

Export format:

- Latitude/longitude: export the report in WGS84 coordinate system
- Projection: export the report in local grid coordinate system.
- Relative 2D: Horizontal distance relative to base station
- Relative distance: 3D distance relative to base station

Solve style: Filter the processing results, commonly choose Fixed carrier phase (centimeter accuracy).

A news	Mag Dynamic bareline Static bareline Charmatian Statium 42200486. 35087 98486	Property	
Observation	No.         UTC Date         UTC Time         Reling Date         Marker         Schlos         RMS         Sat/L         Lat         Lat           d-4         2016-01-24         0255111000         2016-02-44         025112000         File         0.027         18         31.3499128722         121.300018872           d-5         2016-02-44         0255112000         File         0.004         19         31.3499129711         121.300018072	Arred	
Static bautine	Report setup X 0.00 Delete Delete 121.202010907	XSpend	-0.006
N Dynamic baseline	010 Doot format 0.00 Selden integ 127.250214980 127.250214980 127.250214980	Tipent	0.008
633			
2255	A 14 P Feed carter phase P Feet Default Default Date (12) 20004000.		
ererese Processe	A 16         IF Well field center phase         IF Point epochs         0.02         Output Mitter         127.250016666           A 17         IF Point center phase         IF Point epochs         0.02         0.02         0.02         127.250017000           A 19         IF Point center phase         IF Une         0.02         0.02         Add photo defs         127.250017000           A 19         IF bots wide fixed canter phase         IF Names         0.02         Add photo defs         127.250017000           A 20         IF Plexidosinge         IF All epochs         0.02         0.02         127.250017000           A 20         IF Plexidosinge         IF All epochs         0.02         0.02         127.250017000		
Report office	A 32 A 33 A 34         F Rem style         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <th></th> <th></th>		
(2) Adjustment	H + + H / Gogul (Sarther Outly (Televes) 25 All baselines were processed 2018-03-18 21:49:20		1

a) Output report, PPK report or KML format, we recommend to save the report in \*\*.csv format, which makes it easier to analyze post-processing result. And the KML allows you to save files in the format

accepted by Google Earth

b) After exporting the report, go to the main menu bar -> *File* -> *Save*, save the project.