Tools integrated

SGO is equipped with more than ten tools such as CAD, coordinate conversion, road design, instar, decoder, Data QC, Torinex, and antenna management. Install one software to meet almost any geographic data processing needs.

Decoder

For debugging the SOUTH RTK receivers

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✓ DataPars Enter				UBLOX	03.03.160721.170821 NAV-POSECEF NAV-D
T Enter				UBLOX Binex	03.03.160721.170821 NAV-POSECEF NAV-DO 03.00.170110.170821 Binex
└── Enter ↓ Text				UBLOX Binex JAVA	03.03.160721.170821 NAV-POSECEF NAV-D0 03.00.170110.170821 Binex 03.03.160222.170821 SI PG GT GE RC DC
└── Enter ↓ Text				UBLOX Binex JAVA SouthGNSS	03.03.160721.170821 NAV-POSECEF NAV-D0 03.00.170110.170821 Binex 03.03.160222.170821 SI PG GT GE RC DC 03.03.171016.171016 SOUTH DATA EXCHAN
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				UBLOX Binex JAVA SouthGNSS Septentrio Trimble ashTech	03. 03. 160721. 170821 NAV-POSECEF NAV-DU 03. 00. 170110. 170821 Binax 03. 03. 10110. 170821 Binax 03. 03. 160222. 170821 SI PG GT GE EC DC 03. 03. 171016. 171016 SUTH DATA EXCHAM 03. 03. 170704. 171016 AUG4 4027 5981 589 03. 03. 170802. 171016 DURK RT17 RT27 03. 03. 150121. 170821 MPC FBN
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│ Enter │ Text │ Hex Simulate send mulate seStop send				UBLOX Binex JAVA SouthGNSS Septentrio Trimble ashTech RTCM 3.X RTCM 2.X	03.03.160721.170821 NAV-FOSECEF NAV-DO 03.00.170110.170821 NAV-FOSECEF NAV-DO 03.03.160222.170821 SI FG GT GE RC DC 03.03.17016.171016 SOUTH DATA ERCHAN 03.03.170704.171016 4004 4027 5891 580 03.03.170902.171016 CHR KT17 KT27 03.03.170902.171016 CHR KT17 KT27 03.03.170110.170821 1001-1012,1014-10 03.03.161103.170821 1 3 9 18 19 31 59 03.03.17010.170821 1 3 9 18 19 31 59

Torinex

For converting SOUTH 'STH' to 'Rinex'.

File Type *.*		-	nex 3.03	•		File DIR		
File Type			ixed System Rin	nex 💌				
			🔽 GPS					
			🔽 GLONASS					
			🔽 Galileo					
			🔽 SBAS					
			🔽 BDS					
			🔽 QZSS					
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			Select All					
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DIR. Input	F:\southgnss_s	dk\branches\b	or anch20180308	cloubAtlas	\win32bin\1	oRinex4		
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DIR. Input=DIR. Outp	it File	write Overwr	ite 💌	☐ Time	-	☐ SplitTime	1 Hour	•
🔽 Save DIR.Set	☐ DIR.	Input=DIR. Out	put	T AutoD	etect	T IntervalGA	P 1	•
English	-		Cos	avert	Edit	Setting	Cance	el

Instar

For firmware updating and also some settings of modules.



Road Design

The road design now can be done at SGO.

HomePage	Road Design1.00.201809	03.srdE:\其他软件安装路{	⊉\#fSTC\South	i Total Control∖bi				
New Open Save	SaveAs							
Design Attributes		Road Design View	Road design	n result				
Road name	ss	Add Insert Modi	fy Delete					
Curve form	Intersection	rsection Ne North	East	First Cursus	Padius	econd Curv	+ Currue Par	ad Curpin
Start Point N	0.000000		LUST	THUSE CONTE	The did 3	-cond curt	e contre man	nu curre
Start Point E	0.000000							
Piling method	Integer stake number							
Start mileage	0.000000							
Mileage_Interval	100.000000							
	E\其他软件安装路径\新ST							

Antenna management centre

Synchronous antenna files from certificated NGS.

-					11147	
	Manufacturer	Instrument Type	Ant Type	Ant Radius(mm)	H L1(mm)	H L2(mm)
1	OTHERS	AK4	AK4	0	112	110
2	OTHERS	3S-02-TSADM	3S-02-TSADM	0	254.35	283.95
3	OTHERS	3S-02-TSATE	3S-02-TSATE	0	152.85	163.35
4	OTHERS	ACC123CGNSSA_XN	ACC123CGNSSA_XN	0	70.25	74.45
5	OTHERS	ACC2G1215A_XT_1	ACC2G1215A_XT_1	0	3.95	40.15
6	OTHERS	ACC3G1215A_XT_1	ACC3G1215A_XT_1	0	3.15	38.05
7	OTHERS	ACC42G1215A_XT1	ACC42G1215A_XT1	0	7.85	41.05
8	OTHERS	ACC4G1215A_XT_1	ACC4G1215A_XT_1	0	4.95	39.15
9	OTHERS	ACC53G1215A_XT1	ACC53G1215A_XT1	0	30.15	45.15
10	OTHERS	ACC53GO1215AXT1	ACC53GO1215AXT1	0	29.75	44.75
11	OTHERS	ACC72CGNSSA	ACC72CGNSSA	0	49.05	72.65
12	OTHERS	ACC72GNSSA_XT_1	ACC72GNSSA_XT_1	0	61.25	85.45
13	OTHERS	ACCG5ANT_123CAN	ACCG5ANT_123CAN	0	69.55	67.85
14	OTHERS	ACCG5ANT_2AT1	ACCG5ANT_2AT1	0	4.45	38.55
15	OTHERS	ACCG5ANT_3AT1	ACCG5ANT_3AT1	0	8.35	37.25
16	OTHERS	ACCG5ANT_42AT1	ACCG5ANT_42AT1	0	6.95	38.25
17	OTHERS	ACC G5ANT 52AT1	ACC G5ANT 52AT1	0	36.35	54.75



Coordinate Convertor

For converting the coordinates from the different datumn.

Source coord sys Argentina (POSGAR94) • Faja 1 Argentina (POSGAR94)

Faia 1 Basic Expand Basic Expand Semi-major A 6378137.00 Semi-major Axi 298.257223 North-East False Easting False Nort Single Point Tr BLH O XYZ I BLH O XYZ --> ⊖ xyh O xyh2 () xyh O xyh2 B(dd.mmss) 0 L(dd.m н

SOUTH GEOMATICS OFFICE

SOUTH Target your success

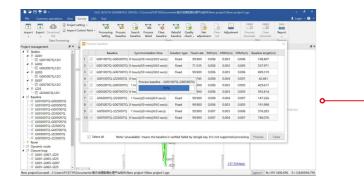
SOUTH SURVEYING & MAPPING TECHNOLOGY CO., LTD.

Add: South Geo-information Industrial Park, No. 39 Si Cheng Road, Tian He IBD, Guangzhou 510663, China Tel: +86-20-23380888 Fax: +86-20-23380800 E-mail: mail@southsurvey.com export@southsurvey.com impexp@southsurvey.com gnss@southsurvey.com http://www.southinstrument.com http://www.southsurvey.com



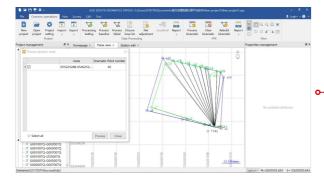
SGO-SOUTH GEOMATICS OFFICE is a brand new office software for surveyors. There are many enhanced modules integrated. It is not just a post-processing software anymore, but a comprehensive office software for surveyors. It can edit, process, analysis the data of GNSS receivers, Total Stations, Levels. Besides, the new SGO also supports CAD, Cloud, Online map, Road design, GIS/image processing, EGSTAR project analysis, Earthwork calculation, Data quality check and some tools of debugging. SGO is your reliable partner which can meet your most of job requirements.

Features



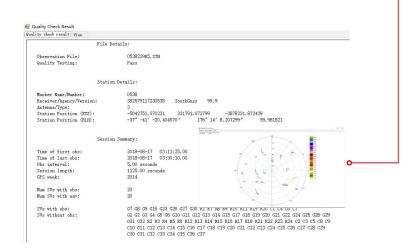
New high-speed processing engine

The new data processing engine can quickly import geographic data, process static baselines, and dynamic baselines. The processing speed is more than three times higher than the old ones.



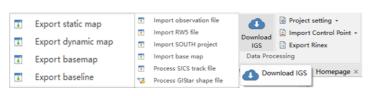
PPK processing

The recording PPK data combined with SGO's powerful data postprocessing function can accurately calculate the azimuth coordinates in areas where the differential signal is not covered. At the same time, it supports multi-format track export, which is convenient for graphic re-editing.



Data QC

The quality of raw data can be easily checked at integrated module, data quality check function. It provides complete data quality analysis, such as multi path, epoch quantity, clock jump, cycle slips, real received data, and sky plot of satellites.



Multi formats

Provides multi import & export format and online IGS data downloading.

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Station edit

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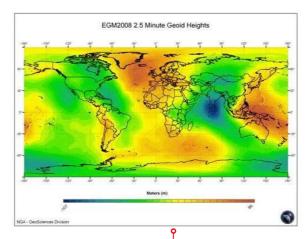
P

7

2017-09-14 2017-09-14 SAT./Fre 71420.sth Interval 1.0, Sample number 3864 G20 7-09-14 14:15:53 To 2017-09-14 14:35:3 Recove C01 B1 C02 C03 B

New algorithm

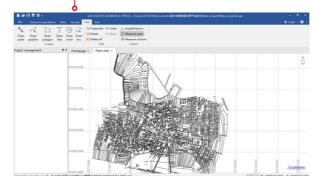
Supports multi-constellation (GPS/GLONASS/BDS/Galileo) free combination solution, single-constellation solution, intelligent elimination of gross error data, accurate reading of data segments. Adopting the new "tropospheric estimation" algorithm, which increases the accuracy and achieve high-precision solution for long baseline by improving data volume and data quality.



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CAD

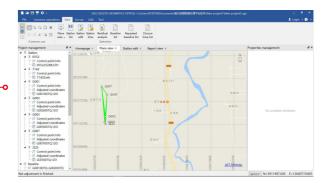
Match CAD's attribute structure, layers and symbols; Support DXF data format import and export; Measure volume quickly and easily; Automatically simulate terrain, and create CAD results.

Adopting the global ultra-high-order Earth Gravitational Model, EGM2008, which the global coverage of the data exceeds 80%, and the elevation accuracy is improved while ensuring the accuracy of the plane.

Road file	File name	Creation date	File size	Progress bar
Stakeout file	1 🗆 aaa.json	2018-07-27 15:25:10	323 BYTE	
Coordinate syste	2 daxuechengtest.json	2018-07-27 15:25:10	402 BYTE	
Job file	3 🗆 test20180525.json	2018-07-27 15:25:10	365 BYTE	
Point file	4 🗆 b.json	2018-07-27 15:25:10	603 BYTE	

Cloud

Powerful cloud function makes the work between field and office more timely. The filed data can be real-time sent to the Cloud server and get precision result back shortly, which improves the efficiency a lot for surveyors.



Base map

The new base map function is added to combine the software with Google Maps intelligence. The data processing personnel can intuitively obtain the distribution of the control net and the environmental conditions around the site through the visual communication of the base map, thereby judging the data receiving quality of the station to accurate data editing.

	Net adjust report		
Report head			
Project name:	C:\Users\PC8739	9 Documents 南方地理数据处理平台	茨件·New project1 New project1.s
The company of	project : Default		
Project start time	2018-09-06 10:0	7:47	
Coordinate syst	em		
Central meridian	72.0000000dW		
Projection metho	d Gauss-Kruger(T	ransverse Mercator)	
3D known poin	t information		
Point nam	e Point type	X(m)	Y(m)
G001	XYZ	-2327760.297	5387282.706
G002	XYZ	-2327760.297	5387282 706

Net adjustment

SGO supports adjustment processing of total station and level measurement data, and combines GNSS control network with traverse processing, which can provide you with accurate measurement standards.