
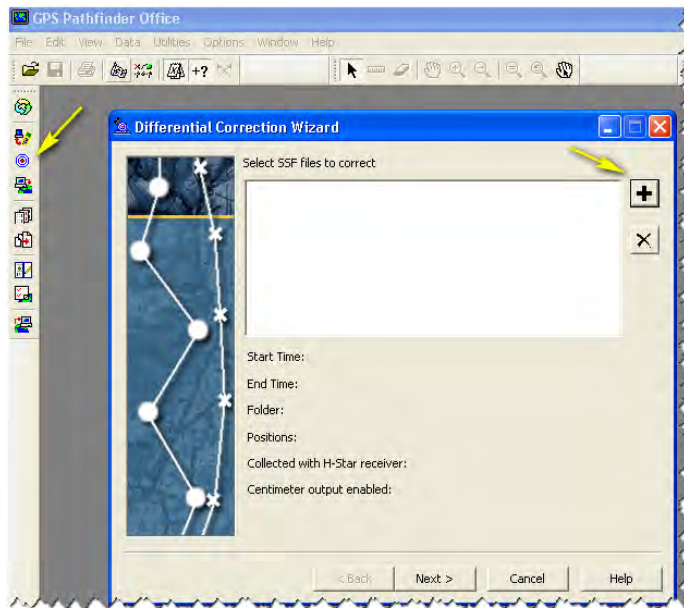


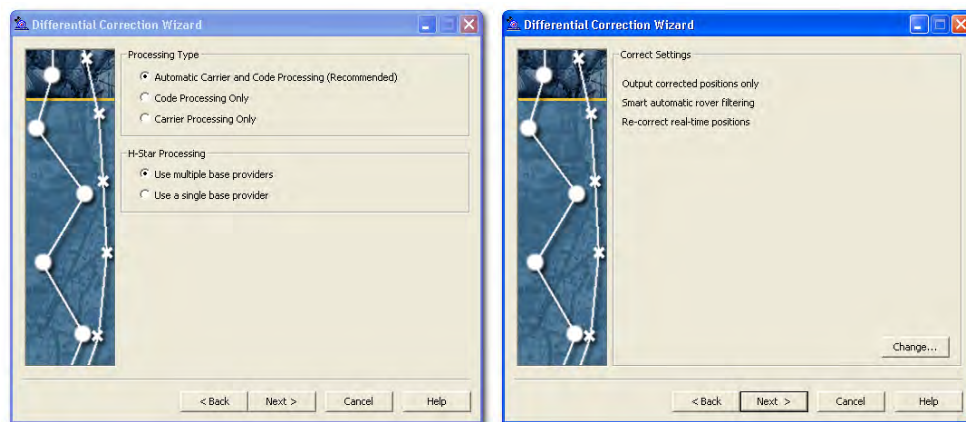
Setting up User Defined Base Station in Pathfinder Office (similar in GPS Analyst and Trimble Positions)

Open software and initiate differential correction 

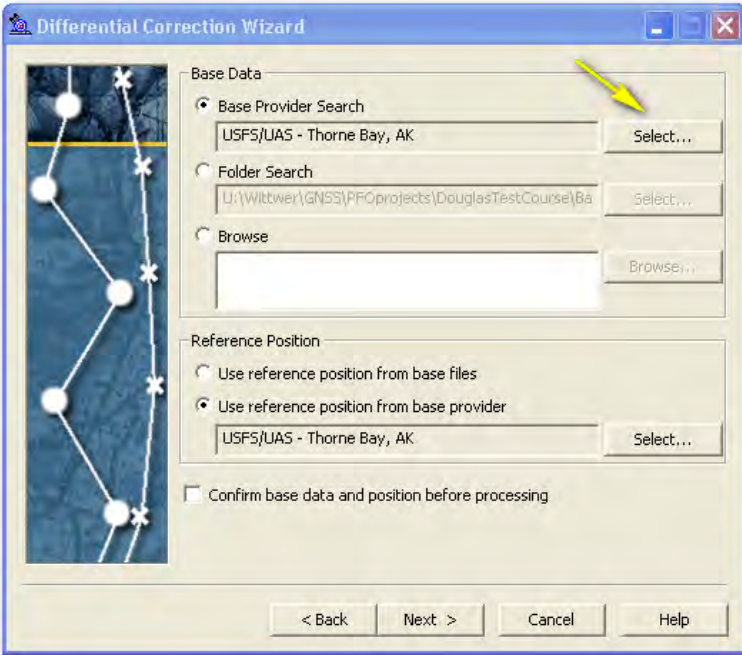
Add a SSF file to correct using the + button. Any SSF file will work; we simply need one to bring up the differential correction dialog boxes.



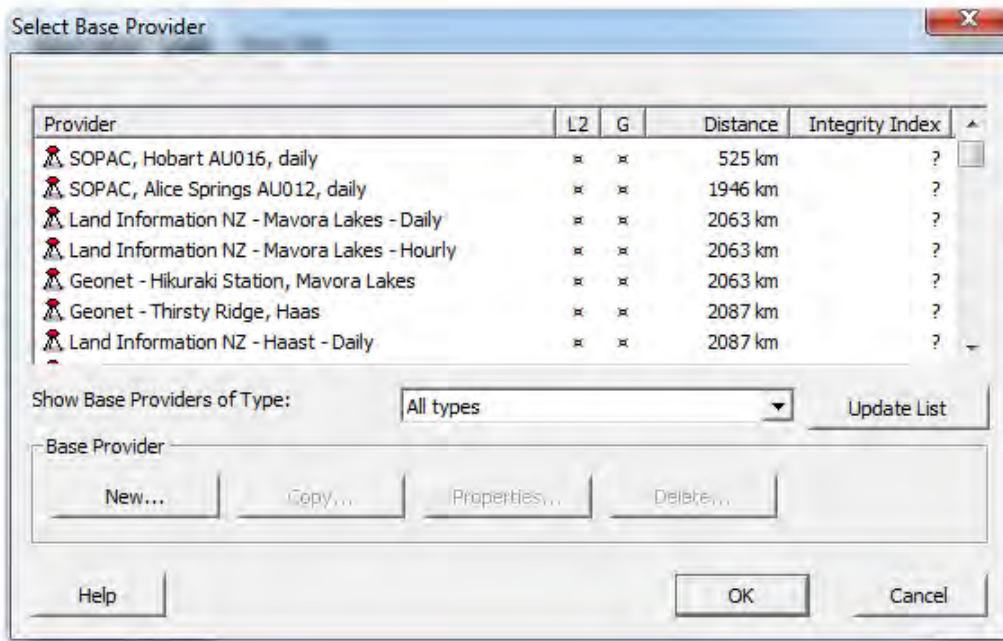
Click Next 3 times to advance to the base provider selection screen.



Once on the base provider selection screen, choose the **select** button.



Then click the **New...** button to add a new base provider.



Populate field under each tab for the Base Provider Properties. Required fields are marked with a *.

Tab: General

GNSS Station	Juneau - NSRL	Petersburg - PRD	Thorne Bay - TBRD
*Organization:	USFS/UAS – Juneau (NSRL), AK (ITRF00 (1997)-Derived from IGS08 (NEW))	USFS/UAS - Petersburg, AK (ITRF00 (1997)-Derived from IGS08 (NEW))	USFS/UAS - Thorne Bay, AK (ITRF00 (1997)-Derived from IGS08 (NEW))
Station Location:	Juneau (NSRL), AK	Petersburg Ranger District, AK	Thorne Bay Ranger District, AK
Postal Address:	USDA Forest Service, PO Box 21628, Juneau, Alaska, 99802-1628	USDA Forest Service, PO Box 21628, Juneau, Alaska, 99802-1628	USDA Forest Service, PO Box 21628, Juneau, Alaska, 99802-1628
Contact Name:	Dustin Wittwer	Dustin Wittwer	Dustin Wittwer
E-Mail Address:	dwittwer@fs.fed.us	dwittwer@fs.fed.us	dwittwer@fs.fed.us
Telephone:	907 586 8764	907 586 8764	907 586 8764

General | Base Station | Internet Server | Security

Organization:

Station Location:

Postal:

Contact Name:

Web Page:

E-Mail Address:

Telephone:

Fax:

BBS Number:

Tab: Base Station

GNSS Station	Juneau - NSRL	Petersburg - PRD	Thorne Bay - TBRD
Receiver Type:	Trimble NetR9	Trimble NetR9	Trimble NetR9
Reference Position (ITRF00 (Epoch 1997.0))			
*Latitude:	58 22 13.74795 N	56 48 41.98364 N	55 41 15.63736 N
*Longitude:	134 36 36.62923 W	132 57 7.24477 W	132 31 45.80358 W
*Altitude (m HAE):	25.868	31.764	26.997
Capability			
*GPS L1:	checked	checked	checked
*GPS L2:	checked	checked	checked
*GLONASS:	checked	checked	checked

General | **Base Station** | Internet Server | Security

Receiver Type:

Base Station Software:

Other Information:

Reference Position (ITRF00 (Epoch 1997.0))

Latitude:

Longitude:

Altitude (m HAE):

Capability

GPS L1

GPS L2

GLONASS

Note: the latitude, longitude positions above were calculated using NGS HTDP tool, <http://www.ngs.noaa.gov/TOOLS/Htdp/Htdp.shtml>, to transform the current OPUS solution from ITRF2008 or IGS08 to ITRF2000 or IGS00/IGb00 (EPOCH = 01-01-1997 (1997.000)). See the trailing Appendix to the OPUS solution at each site.

Tab: Internet Server

GNSS Station	Juneau - NSRL	Petersburg - PRD	Thorne Bay - TBRD
*Base File Address Format:	http://seakgis.alaska.edu/gnss/t02/%YYYY%/%DDDDD%/NSRL/%YYMMDDHH%A.zip	http://seakgis.alaska.edu/gnss/t02/%YYYY%/%DDDDD%/PRD/%YYMMDDHH%A.zip	http://seakgis.alaska.edu/gnss/t02/%YYYY%/%DDDDD%/TBRD/%YYMMDDHH%A.zip
*Time Format:	GPS Time (UTC)	GPS Time (UTC)	GPS Time (UTC)
*File time Span (Hours):	1	1	1
*Station ID:	NSRL	PRD	TBRD

General | Base Station | Internet Server | Security

Base File Address Format:

Time Format: Local Time GPS Time (UTC)

File Time Span (Hours):

Station ID:

Nav File Required

Nav File Address Format (Optional):

Tab: Security

GNSS Station	Juneau - NSRL	Petersburg - PRD	Thorne Bay - TBRD
*Security Access Type:	Public Access	Public Access	Public Access

Type: Public Access

General | Base Station | Internet Server | Security

Security Access Type:

Public Access




Restricted Access:

If access is restricted, contact the base provider to obtain a user name and password.

User Name:

Password:

Click OK. The new user defined provider should show in the provider list with a blue icon.

Provider	L2	G	Distance	Integrity Index
 USFS/UAS - Thorne Bay, AK (ITRF00 (1997)-Derived ...	x	x	38 km	
 USFS/UAS - Petersburg, AK (ITRF00 (1997)-Derived ...	x	x	91 km	
 USFS/UAS - Juneau (NSRL), AK (ITRF00 (1997)-Deri...	x	x	286 km	

To add additional user defined provider with many of the same field values you can highlight the similar provider and click the **Copy...** button. Then highlight the copied provider, click **Properties...** and change the appropriate fields.

Appendix

OPUS Solution: Juneau - NSRL

FILE: 5225K50240201409170000F.14o OP1412720114382

1008 NOTE: Antenna offsets supplied by the user were zero. Coordinates
1008 returned will be for the antenna reference point (ARP).
1008

NGS OPUS SOLUTION REPORT =====

All computed coordinate accuracies are listed as peak-to-peak values.

For additional information: <http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: dwittwer@fs.fed.us

DATE: October 07, 2014

RINEX FILE: 52252600.14o

TIME: 22:18:56 UTC

SOFTWARE: page5 1209.04 master91.pl 022814 START: 2014/09/17 00:00:00
EPHEMERIS: igs18103.eph [precise] STOP: 2014/09/17 23:59:00
NAV FILE: brdc2600.14n OBS USED: 62117 / 65624 : 95%
ANT NAME: TRM55971.00 NONE # FIXED AMB: 271 / 291 : 93%
ARP HEIGHT: 0.000 OVERALL RMS: 0.014(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.7109)

X:	-2354750.746(m)	0.016(m)	-2354751.714(m)	0.016(m)
Y:	-2387014.702(m)	0.027(m)	-2387013.616(m)	0.027(m)
Z:	5407513.254(m)	0.050(m)	5407513.447(m)	0.050(m)

LAT:	58 22 13.73413	0.001(m)	58 22 13.73997	0.001(m)
E LON:	225 23 23.44688	0.008(m)	225 23 23.35757	0.008(m)
W LON:	134 36 36.55312	0.008(m)	134 36 36.64243	0.008(m)
EL HGT:	25.747(m)	0.059(m)	25.862(m)	0.059(m)
ORTHO HGT:	23.622(m)	0.100(m)	[NAVD88 (Computed using GEOID12A)]	

	UTM COORDINATES	STATE PLANE COORDINATES
	UTM (Zone 08)	SPC (5001 AK 1)
Northing (Y) [meters]	6470024.301	728098.774
Easting (X) [meters]	522804.941	763459.965
Convergence [degrees]	0.33193877	-0.79222293
Point Scale	0.99960638	0.99992778
Combined Factor	0.99960235	0.99992375

US NATIONAL GRID DESIGNATOR: 8VNK2280470024(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DK6231	GUS6 GUSTAVUS 6 CORS ARP	N582503.916	W1354149.300	63779.3
DF4367	JNU1 JUNEAU WAAS 1 CORS ARP	N582145.262	W1343508.456	1681.5
DM7454	AB50 MENDENHALLAK2005 CORS ARP	N582500.383	W1343242.999	6401.7

NEAREST NGS PUBLISHED CONTROL POINT

UV1482	MENDENHALL PEN TWR OBS LT	N582156.109	W1343804.498	1526.8
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OPUS Solution: Petersburg – PRD

FILE: 5302K41550201306080000F.13o OP1370895206948

1008 NOTE: Antenna offsets supplied by the user were zero. Coordinates

1008 returned will be for the antenna reference point (ARP).

1008

NGS OPUS SOLUTION REPORT

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All computed coordinate accuracies are listed as peak-to-peak values.

For additional information: <http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: dwittwer@fs.fed.us

DATE: June 10, 2013

RINEX FILE: 53021590.13o

TIME: 20:17:14 UTC

SOFTWARE: page5 1209.04 master12.pl 082112 START: 2013/06/08 00:00:00

EPOCH: igr17436.eph [rapid] STOP: 2013/06/08 23:59:00

NAV FILE: brdc1590.13n OBS USED: 61040 / 63775 : 96%

ANT NAME: TRM55971.00 NONE # FIXED AMB: 157 / 248 : 63%

ARP HEIGHT: 0.00 OVERALL RMS: 0.013(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2013.4343)

X:	-2384561.156(m)	0.002(m)	-2384562.097(m)	0.002(m)
Y:	-2561428.245(m)	0.005(m)	-2561427.141(m)	0.005(m)
Z:	5314474.801(m)	0.004(m)	5314474.982(m)	0.004(m)

LAT:	56 48 41.96926	0.005(m)	56 48 41.97698	0.005(m)
E LON:	227 2 52.82564	0.003(m)	227 2 52.74071	0.003(m)
W LON:	132 57 7.17436	0.003(m)	132 57 7.25929	0.003(m)
EL HGT:	31.699(m)	0.003(m)	31.759(m)	0.003(m)
ORTHO HGT:	33.237(m)	0.008(m)	[NAVD88 (Computed using GEOID12A)]	

UTM COORDINATES STATE PLANE COORDINATES
UTM (Zone 08) SPC (5001 AK 1)
Northing (Y) [meters] 6298291.262 554354.297
Easting (X) [meters] 625029.239 862323.119
Convergence [degrees] 1.71414746 0.59806314
Point Scale 0.99979170 0.99990619
Combined Factor 0.99978674 0.99990123

US NATIONAL GRID DESIGNATOR: 8VPH2502998291(NAD 83)

BASE STATIONS USED
PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m)
DJ3035 LEV6 LEVEL ISLAND 6 CORS ARP N562756.364 W1330532.512 39479.5
DK6423 BIS5 BIORKA ISLAND 5 CORS ARP N565116.164 W1353221.388 157997.9
DM7457 AB51 PETERSBURGAK2005 CORS ARP N564751.433 W1325448.739 2822.1

NEAREST NGS PUBLISHED CONTROL POINT
TT8959 PETERSBURG LUTHERAN CH SPIRE N564847.287 W1325704.691 169.7

OPUS Solution: Thorne Bay – TBRD

FILE: 5225K50240201304170000F.13o OP1366310870003

1008 NOTE: Antenna offsets supplied by the user were zero. Coordinates
1008 returned will be for the antenna reference point (ARP).
1008

NGS OPUS SOLUTION REPORT =====

All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: <http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: dwittwer@fs.fed.us DATE: April 18, 2013
RINEX FILE: 52251070.13o TIME: 18:49:49 UTC

SOFTWARE: page5 1209.04 master93.pl 082112 START: 2013/04/17 00:00:00
EPHEMERIS: igr17363.eph [rapid] STOP: 2013/04/17 23:59:00
NAV FILE: brdc1070.13n OBS USED: 60204 / 63175 : 95%
ANT NAME: TRM55971.00 NONE # FIXED AMB: 315 / 326 : 97%
ARP HEIGHT: 0.00 OVERALL RMS: 0.014(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2013.2918)

X: -2435945.003(m) 0.008(m) -2435945.935(m) 0.008(m)
Y: -2655633.151(m) 0.001(m) -2655632.037(m) 0.001(m)
Z: 5244948.720(m) 0.001(m) 5244948.891(m) 0.001(m)

LAT: 55 41 15.62279 0.004(m) 55 41 15.63100 0.004(m)
E LON: 227 28 14.26481 0.006(m) 227 28 14.18240 0.006(m)
W LON: 132 31 45.73519 0.006(m) 132 31 45.81760 0.006(m)
EL HGT: 36.844(m) 0.004(m) 36.878(m) 0.004(m)
ORTHO HGT: 40.803(m) 0.009(m) [NAVD88 (Computed using GEOID12A)]

UTM COORDINATES STATE PLANE COORDINATES

UTM (Zone 08) SPC (5001 AK 1)

Northing (Y) [meters] 6174085.848 429580.541
Easting (X) [meters] 655310.554 890205.909
Convergence [degrees] 2.04108740 0.95010035
Point Scale 0.99989588 0.99991112
Combined Factor 0.99989011 0.99990535

US NATIONAL GRID DESIGNATOR: 8UPG5531074085(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
	LEV6		93447.1	
	AB51		125861.3	
	AIS5		90648.0	

NEAREST NGS PUBLISHED CONTROL POINT

UV6056 SLIP 1966 N553948.822 W1322935.701 3513.5