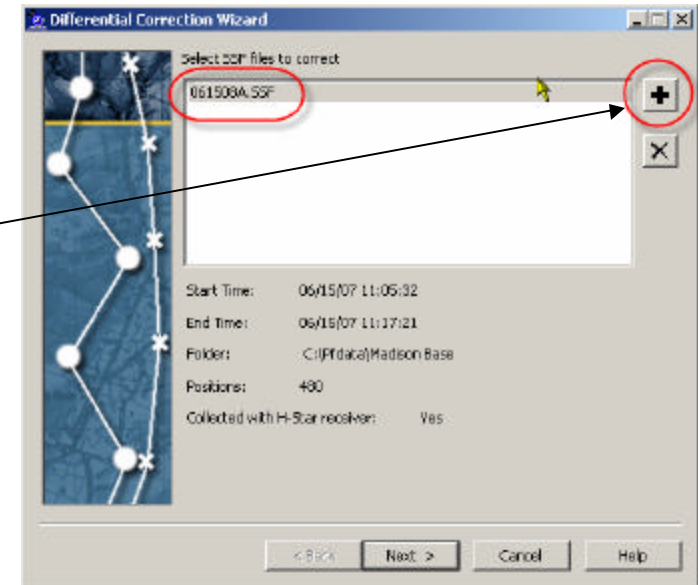
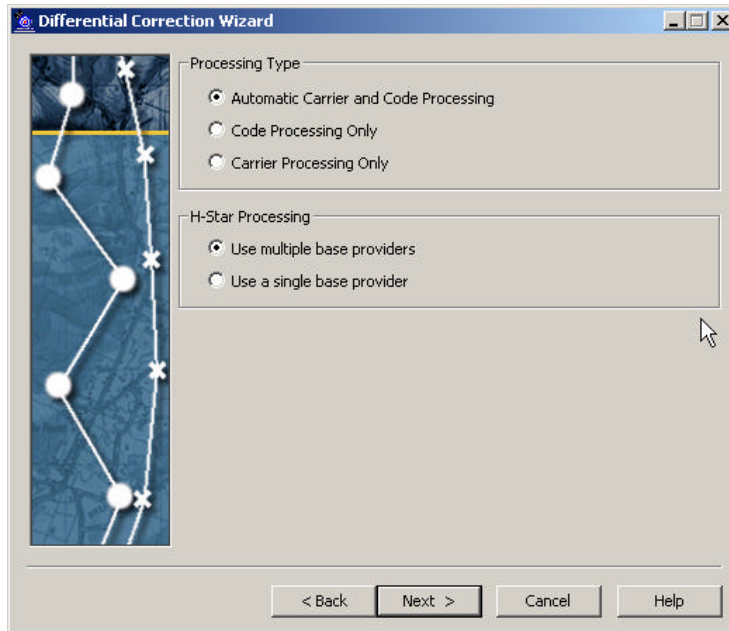


Create a NEW Base station properties for the City of Madison MAON CORS 2009

1. Run Trimble Pathfinder Office and open SSF file or files to be corrected
2. Select menu option **Utilities** → **Differential Correction**
3. Be sure you have an .SSF file or files selected for correction, then press **NEXT**
---if no file or files appear, press the “**Plus sign**” to add files, navigate to the SSF then press **OPEN**
4. Select User preferences. Typically, users select *Automatic Carrier and Code Processing*. If your GPS receiver is H-star capable (GeoXH, ProXH etc), select single or multiple base providers depending on your distance from single base then press **NEXT**

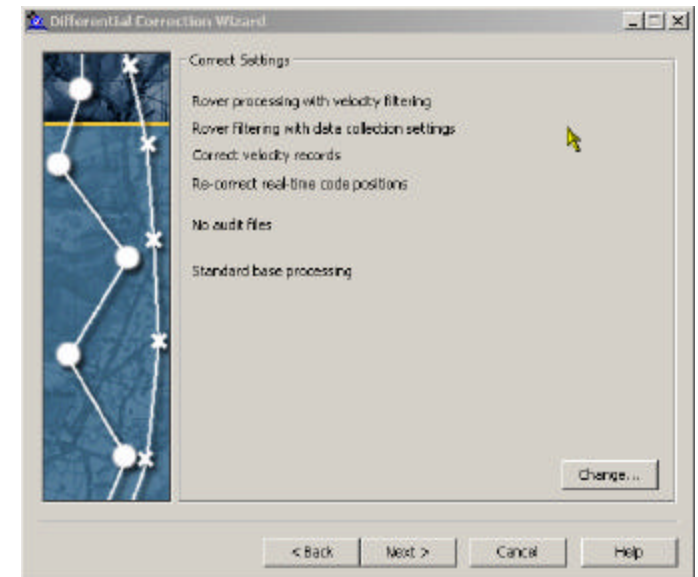


STEP 3 IMAGE



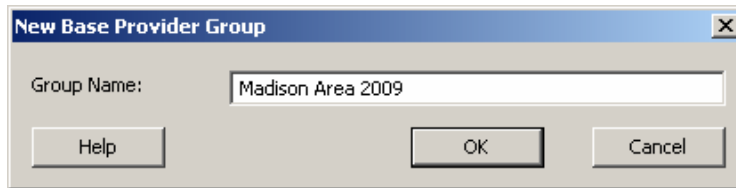
STEP 4 IMAGE

5. Set the “Correct Settings” appropriately then press **NEXT**

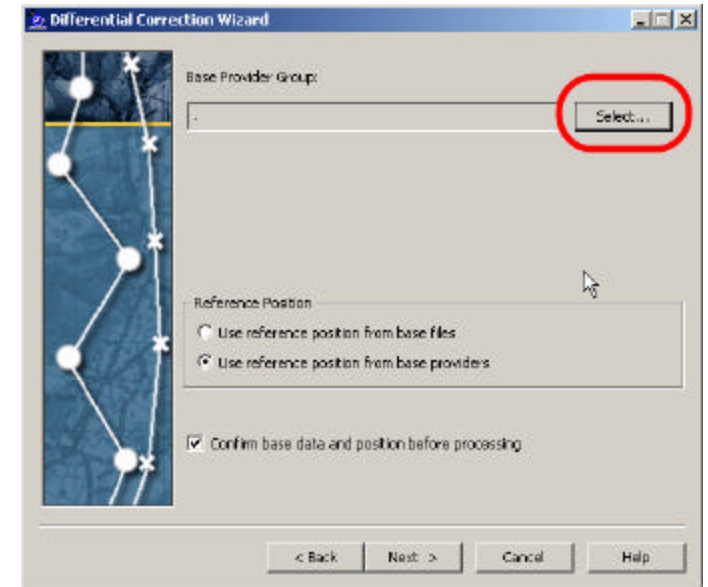
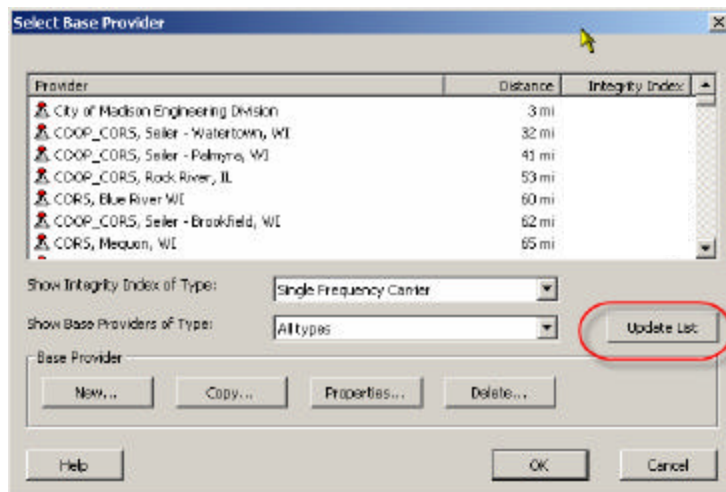
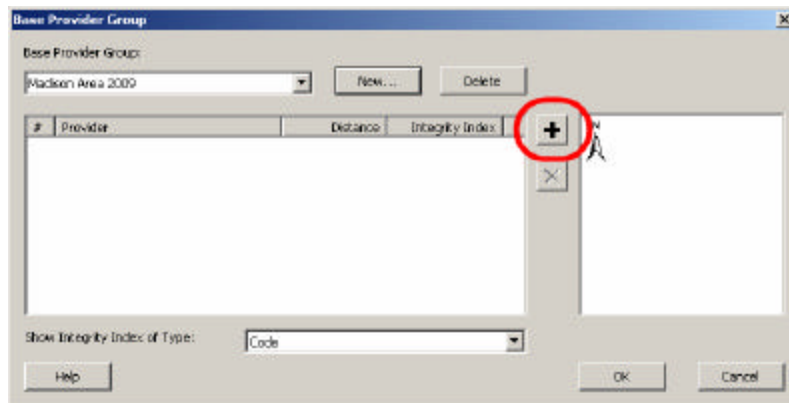


STEP 5 IMAGE

- If running H-Star and selected 'Use multiple base providers' at Base Provider Group dialogue box, press **Select**
- Set Base provider Group Name, press **NEW**, name the group **Madison Area 2009** then press **OK**

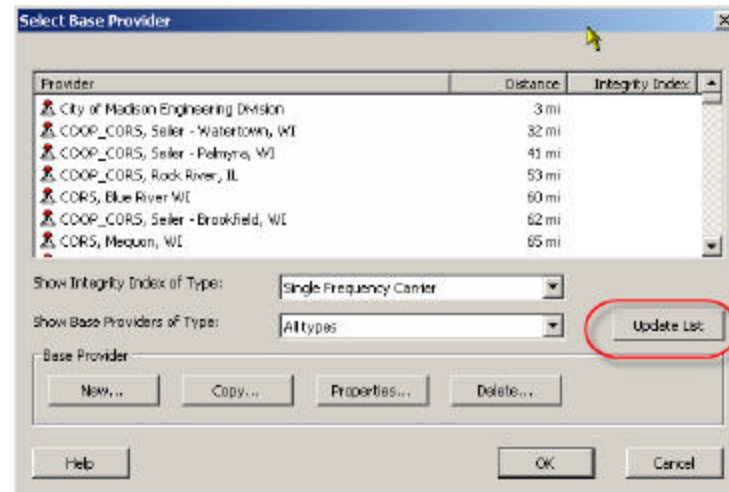
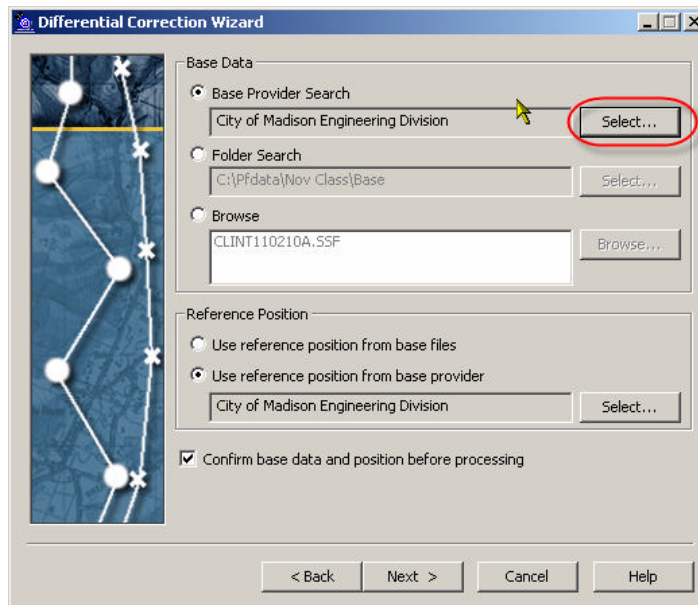


- To add Reference Stations to this Base Provider Group press the "Plus sign", then Press **UPDATE LIST** button to get the current list from the Trimble website.

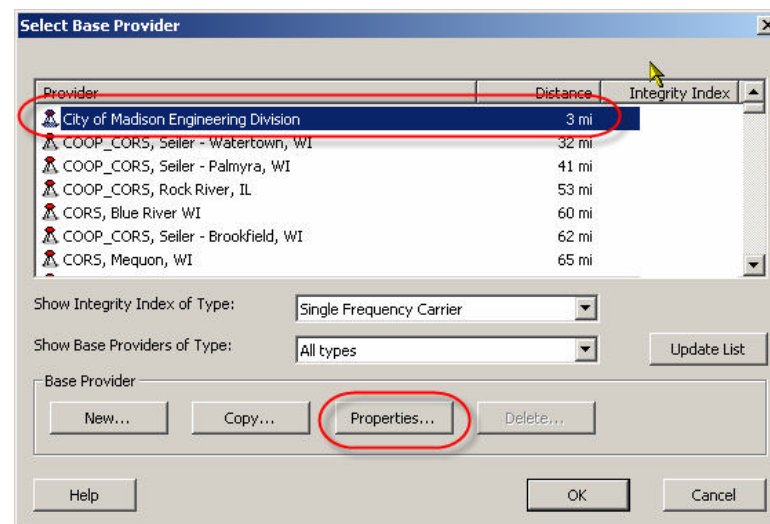


STEP 6 IMAGE

9. If running “Use a single base provider” option, under Base Data → Base Provider Search press **Select** then , Press **Update List** button

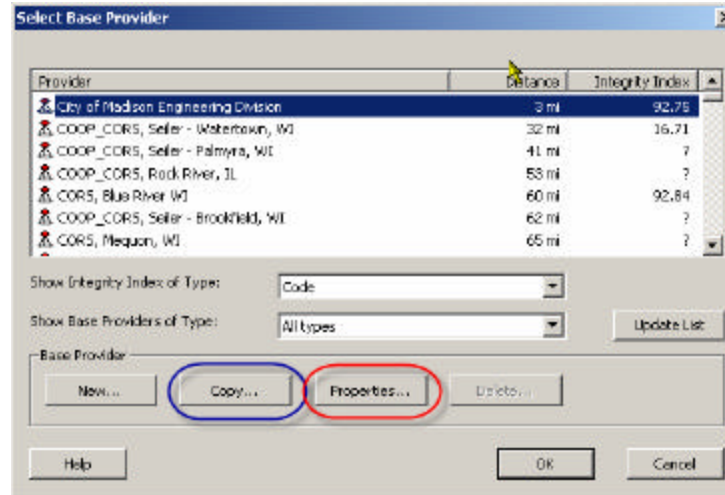


10. Locate *CITY OF MADISON ENGINEERING DIVISION* then press **Properties...** to confirm all BASE PROVIDER information below is correct. If it is correct then Trimble site has updated the online base to match Madison’s new (JANUARY 2009) file locations. Press OK and continue to process your Data



If it does NOT match continue to next steps to add a Madison the new updated 2009 MAON CORS to your Base Provider list.

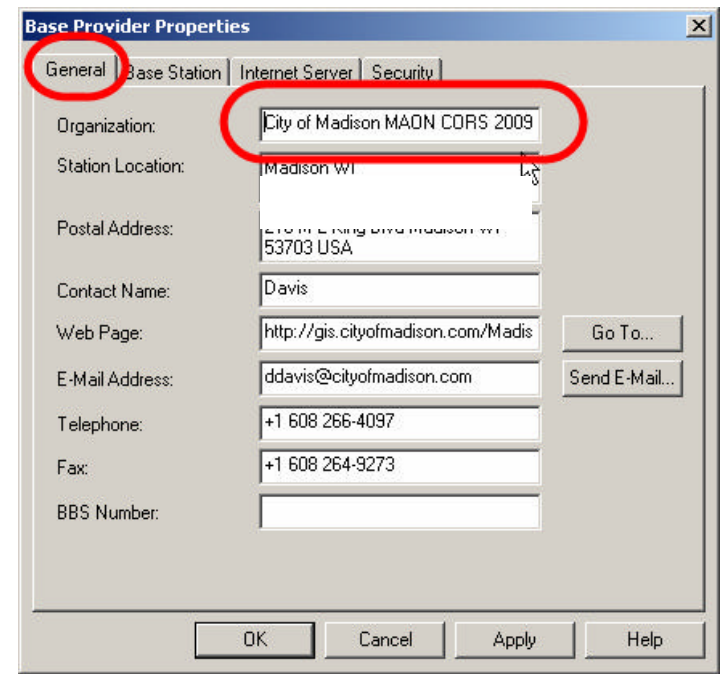
11. Locate *CITY OF MADISON ENGINEERING DIVISION*, click on it to highlight then press **COPY** to create a “BLUE” duplicate, it will open the properties automatically, fill in the information below:



Confirm the following information is correct on all tabs:

General tab

Organization: **City of Madison MAON CORS 2009**
 Station Location: **Madison WI**
 Postal address: **Engineering Division Office, Emil Street, Madison**
 Contact Name: **Dave Davis**
 Web Home page: **http://gis.cityofmadison.com/Madison_GPS/index.htm**
 Email address: **ddavis@cityofmadison.com**
 Telephone: **(608) 266-4097**
 Fax: **(608) 264-9273**
 BBS number: **None - no bulletin board for this site**



Base Station tab

Receiver type: **Trimble NetR5 receiver and Type II Zephyr Geodetic antenna with groundplane**

Base station Type: **Trimble GPSBase software**

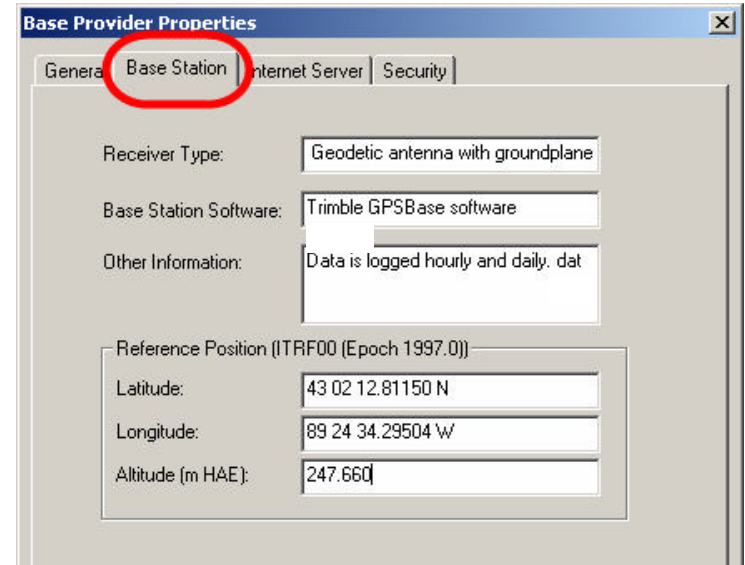
Other information: **Data is logging hourly and daily DAT RINEX and almanac files 13 degrees elevation mask 6.0 PDOP mask**

Select radio button: **Always use the following information**

WGS84 Latitude: **Latitude 43 02 12.81150 N**

WGS84 Longitude: **Longitude 89 24 34.29504 W**

Altitude: **Ellip Ht 247.660 m (ARP)**



NOTE: The Reference Position is listed as an ITRF00 (Epoch1997) position. This IS different from the published NAD83(NSRS2007) datum position. The Wisconsin Department of Transportation CORS network WISCORS (wiscors.wi.gov) generated the coordinates to coincide with their whole network . City of Madison staff confirmed these final coordinates sufficiently match the existing City adjustment to use. The actual adjusted coordinates in NAD83(NSRS2007) are Latitude:43° 02' 12.782773" N Longitude: 89° 24' 34.270994" W Ellipsoid Height: Bottom of antenna mount / Antenna Reference Point = 248.694 m If you are doing H-star processing, you should use the “Use reference position from base providers”, as you are combining this reference station with other stations and to be consistent, Trimble converts all reference positions to a single reference frame: ITRF 00(Epoch 1997). If you are using single base and are always working in NAD83(NSRS2007), select the “use the Reference position from the base file” option to use the broadcast position.

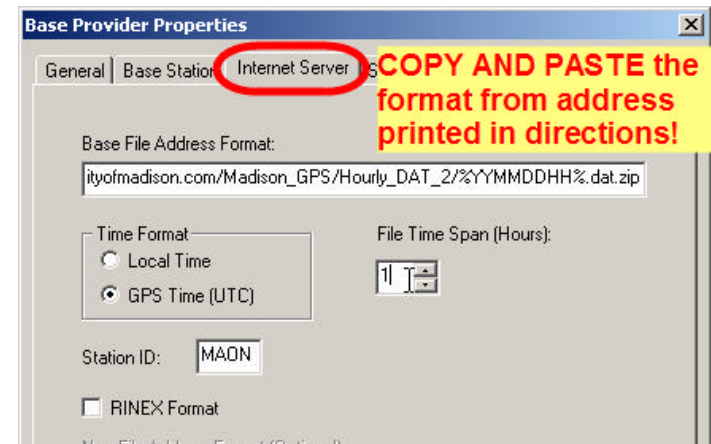
Internet Server tab

Address format field: Copy the following information shown below -
(**MUST BE EXACTLY AS SHOWN - Use cut and paste**)
[http://gis.cityofmadison.com/Madison_GPS/Hourly DAT 2/%YMMDDHH%.dat.zip](http://gis.cityofmadison.com/Madison_GPS/Hourly_DAT_2/%YMMDDHH%.dat.zip)

Base Server Type: Select radio buttons **Other** and **GPS time (UTC)**

Set File time span to **1 hour**

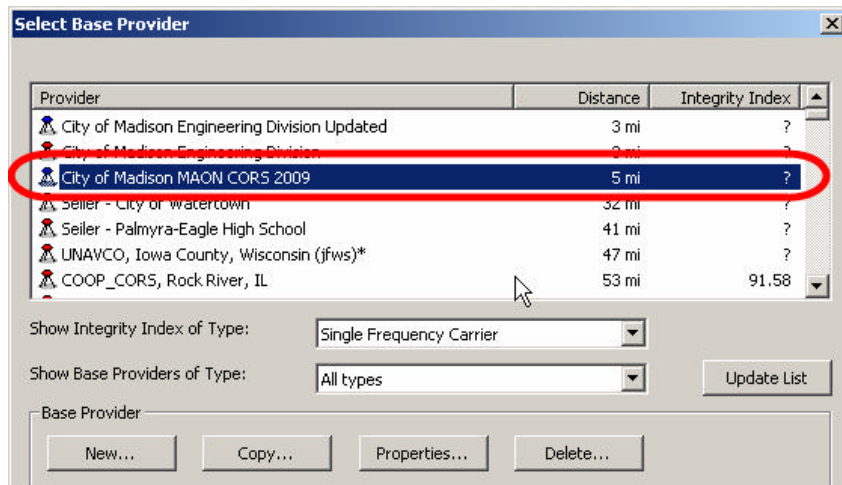
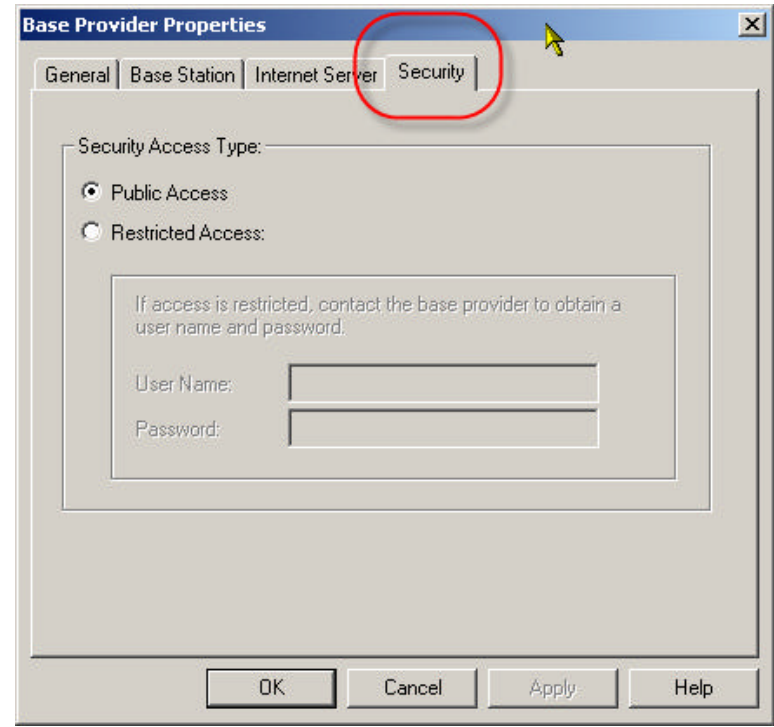
NOTE: The City of Madison also offers a DAILY zip file of the data created at the end of each work day. To create a second copy of the base, follow instructions above and the only difference will be this Base File Address Format
http://gis.cityofmadison.com/Madison_GPS/Daily_DAT_2/%YMMDDHH%.dat.zip



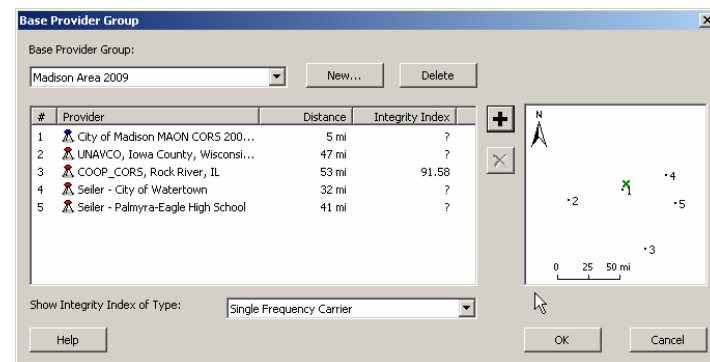
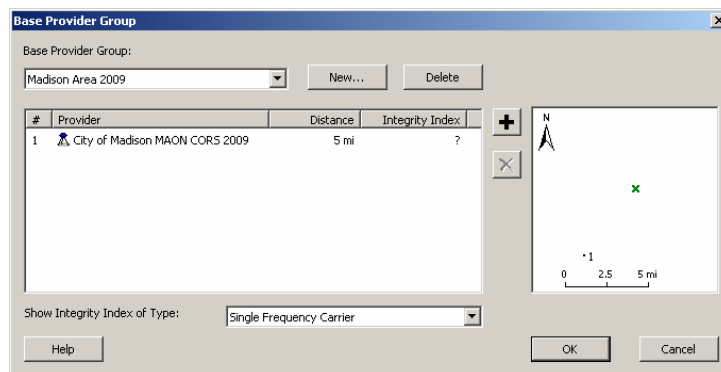
Security tab

Select radio button **Public access**

12. Press **OK** to close *Base Provider Properties* dialogue box and allow Pathfinder Office to add the UPDATED City of Madison reference station to your current base station list.
13. Highlight the new reference station then press **OK** to add the “City of Madison Engineering Division Updated” to the base group

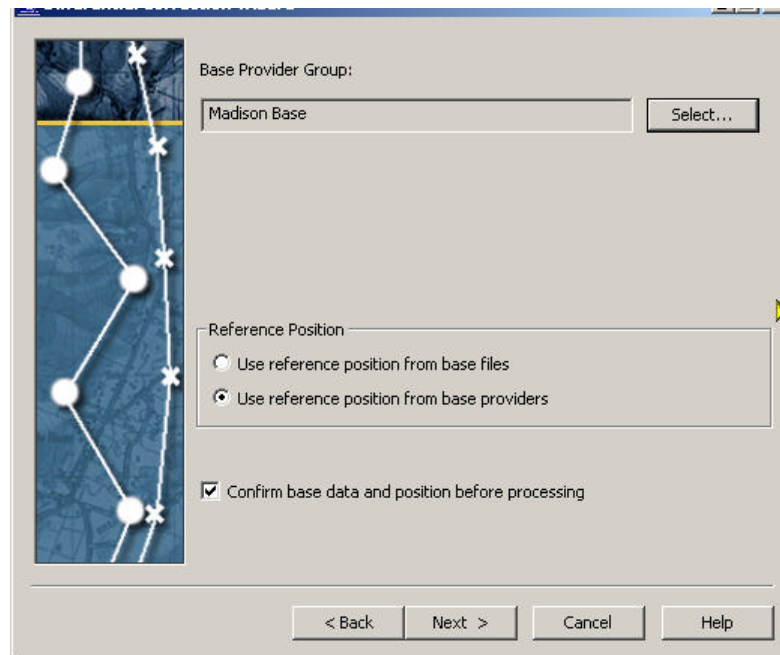


14. To actually retrieve Base Internet files from Madison Base only, press **OK** and continue with differential correction or press the **PLUS SIGN** to add more reference stations to this Base group for H-star processing- example shows five but three surrounding your project is typical. To leave Internet search without retrieving any files press **Cancel**.



15. To use ITRF00 (Epoch1997) position select *Use reference position from base providers (usually selected when using multiple ref sta)*
To use NAD83(NSRS2007) Epoch 2002 position select *Use reference position from base files*

To continue with differential correction, Press **NEXT** then **START**
To exit differential correction without performing a correction press **Cancel**.



16. The newly added “**City of Madison MAON CORS 2009**” reference station will appear in the list until Trimble Pathfinder Office is removed or reinstalled even if you UPDATE LIST as you should do on a regular basis.