USER GUIDE

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GeoTrak
INCORPORATED

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1 INTRODUCTION

Welcome to PTT Tracker! This program allows the user to process Argos supplied DS data and display the location and sensor data in an easy to read format. Also, the built-in Telnet functionality gives the user the ability to telnet to Argos and download PTT data from their Argos program/account. This data is then automatically processed and added to the PTT database.

In addition to viewing the processed PTT data from within the application, location & sensor data may be exported into several file formats compatible with Google Earth, ArcGIS Explorer, MS Excel, etc.

PTT Tracker is designed and developed to decode & process data only for Argos PTT's provided by North Star Science & Technology.

IMPORTANT: Please be sure to read section 10.1 later in this document regarding the importance of and how to backup your database. Backing up the database(s) is critical in protecting valuable PTT data from unexpected computer/hard drive failures, etc.

2 INSTALLATION

TO INSTALL THE PROGRAM

1. Save the Zip folder containing the executable application and the Windows Installer Package to your local computer.
2. Double Click the setup.exe file from within the Zip folder.
3. The PTT Tracker Setup Wizard will be displayed.

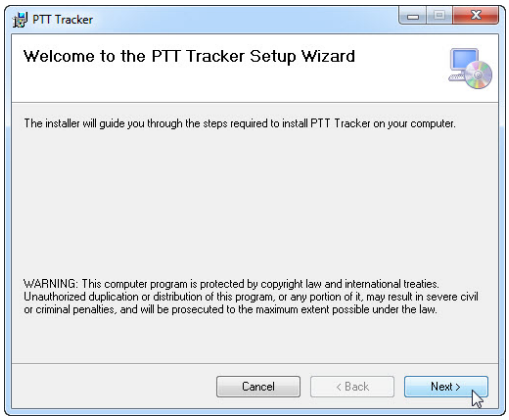


Figure 1. PTT Tracker Setup Wizard.

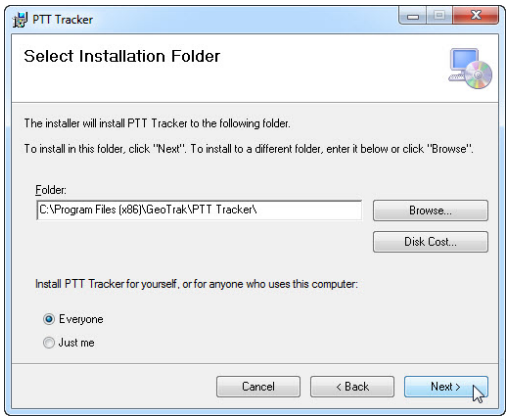


Figure 2. PTT Tracker Installation Folder.

4. Follow the prompts within the wizard. The wizard will allow the user to designate the location to save the program file. See Figures 1 & 2.
5. Click **Finish** to install the program. It will then be available from the location you designated within the Wizard.
6. Shortcuts to the PTT Tracker program will be added to both the Windows Start Menu as well as to the users' desktop.

TO LAUNCH THE PROGRAM

1. Click the Windows Start Menu.
2. Click All Programs.
3. Click the **GeoTrak** folder.
4. Click the **PTT Tracker** program file icon. See Figure 3.

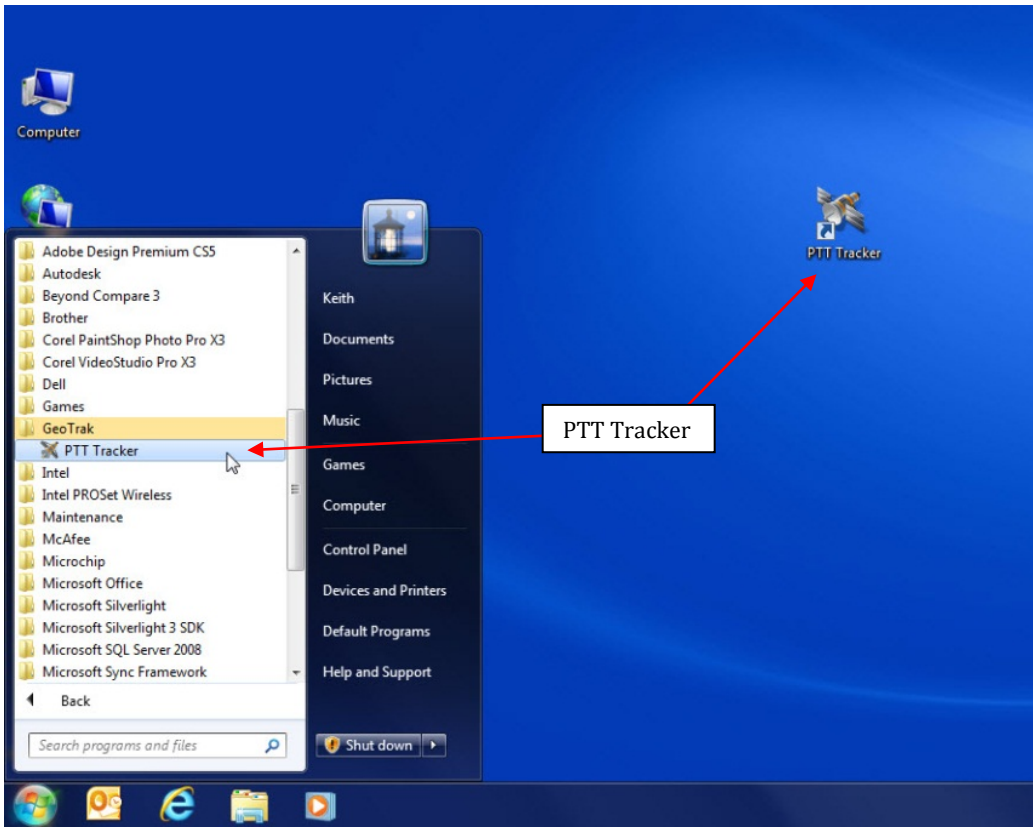


Figure 3. Start Menu & Desktop Shortcuts

If this is the first time that PTT Tracker has been installed on the PC, a dialog box will appear that will prompt the user to either create a new PTT Tracker database or to choose an existing PTT Tracker database. See Figure 4.

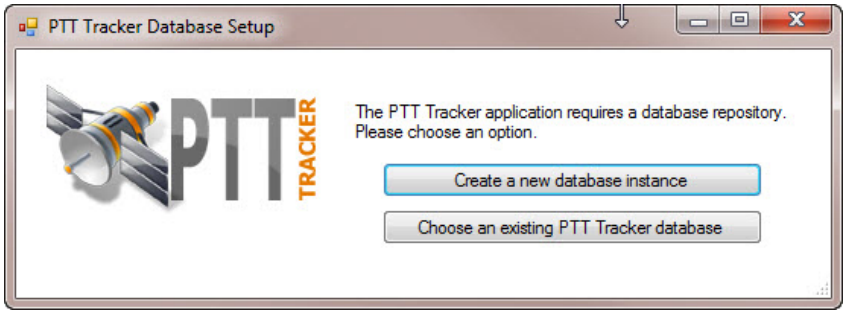


Figure 4. PTT Tracker Database Setup

CREATE A NEW PTT TRACKER DATABASE

1. Select the "Create a new database instance" option.
2. When the browse window appears, browse to the folder/location where you would like to create the database. It is recommended that the user create a new folder specifically for PTT Tracker databases (i.e. PTT Tracker DB).
3. Type in the desired filename for the database & click OK/Save.

CHOOSE AN EXISTING PTT TRACKER DATABASE

1. Select the "Choose an existing PTT Tracker database" option.
2. When the browse window appears, browse to the file/folder location of the existing database.
3. Select the database file and click OK/Save to open the database.

The program will open as displayed in Figure 5.

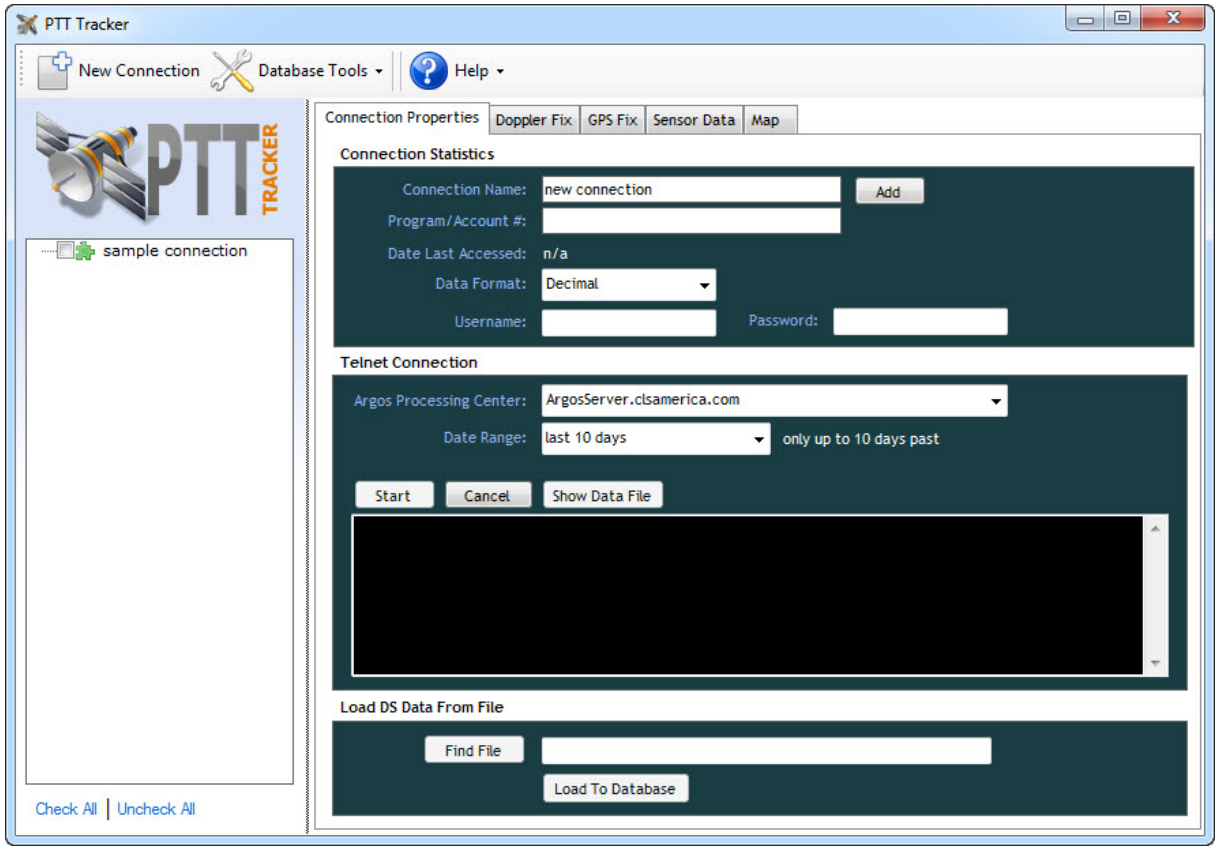


Figure 5. PTT Trackers' Default View

3.1 PTT TRACKER FEATURES

PTT Tracker contains several features to make the data easily accessible. See Figure 6.

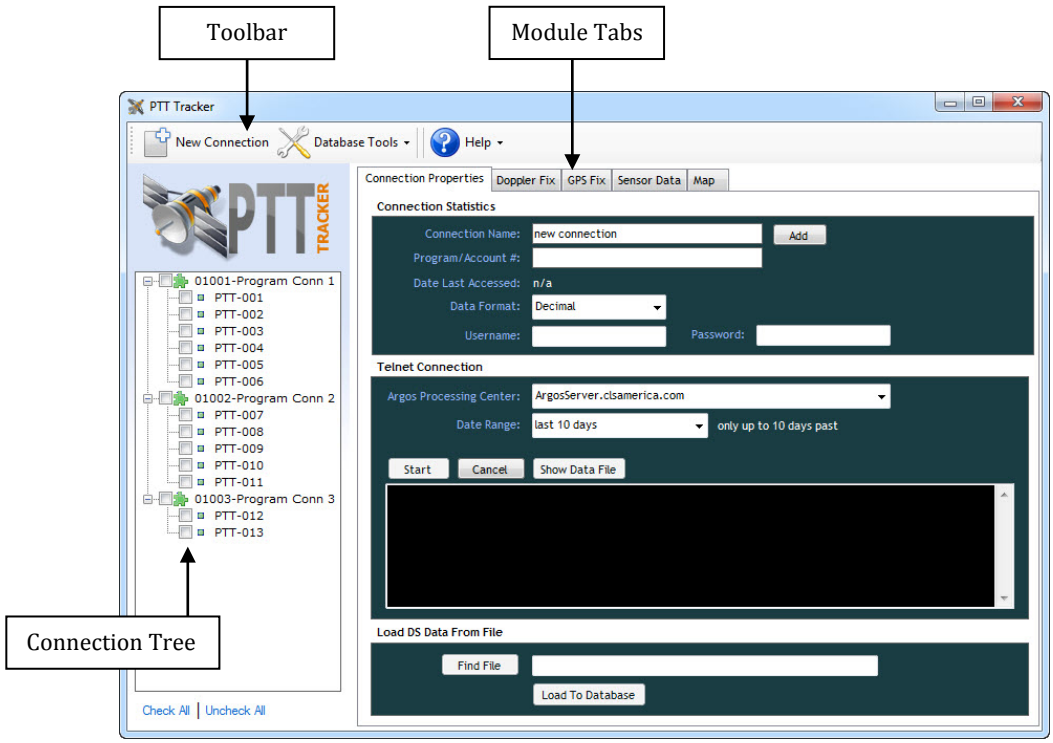


Figure 6. PTT Tracker Features

3.1.1 TOOLBAR

In the toolbar at the top are three icons.

- **New Connection**. Allows the user to create a new connection and creates a new connection template to be populated by the user.
- **Database Tools**. Opens the Tool drop-down. The Tool drop-down contains options to create a new database, create a back-up of the current database or change the current source database for the application.
- **Help** opens the Help drop-down. The Help drop-down contains the **Help Document** and **About** options.

3.1.2 CONNECTION TREE

In the left panel is a collapsible/ expandable tree that contains all of the existing connections and the PTT's associated with that connection. To expand a connection and view its related sensors, click the "+" icon. To collapse a connection and hide its related sensors, click the "-" icon.

Checking the box for a connection will check all PTT's associated with that particular connection. Individual PTT's can be checked if desired. This will determine what PTT data will be displayed and analyzed in the various PTT Tracker modules.

3.1.3 MODULE TABS

At the top of the box on the right are the tabs for the five PTT Tracker modules:

- Connection Properties
- Doppler Fix
- GPS Fix
- Sensor Data
- Map

4 CONNECTION PROPERTIES

The Connection is a key component for which all downloaded and/or processed PTT data will be associated. The Connection is configured by the user to be directly associated with their Argos Program. If a user has multiple Argos Programs, a connection will need to be created and configured for each.

The Connection Properties module allows the user to manage the various properties of the connection. See Table 1 for more information about the Connection Properties Fields.

Table 1. Connection Properties Fields and their Descriptions

Name	Description
Connection Statistics	
Connection Name	User defined and can be anything meaningful to describe the connection.
Program/Account #	Users Argos assigned Program/Account **IMPORTANT:** The Argos Program/Acct # must be 5-digits as Argos represents this value in the PTT data as a 5 digit number. You will need to add leading 0's if your Argos Program # is less than 5 digits (i.e. Program 3341 must be entered as 03341).
Date Last Accessed	Automatically populated field that contains the date/time the connection was last accessed.
Data Format	Argos formatting of the Argos ID's in the users program for which the connection will be associated. The formatting is set up by Argos as Decimal (A1) or Hexadecimal (A2) when the ID's were allocated to the user/program. Use the drop-down to select. Decimal is default and is typically the standard formatting.
Username	Argos Program/Account login ID.
Password	The password associated with the Argos Program login ID.
Telnet Connection	
Argos Processing Center	Argos server for Telnet service connection when downloading Argos PTT DS data. The two server options are located in the U.S. and France.
Date Range	Selection that controls how much Argos PTT data to download. The "*since last connection*" option is the default and will download all new data since the last time it was downloaded.
Load DS Data from File	
Find File	Click to Browse for the desired DS data file to manually load data into the database for the selected connection (DS data file must match the Argos Program for the Connection).

TO CREATE A NEW CONNECTION

The first step in using PTT Tracker is creating a **Connection**. A new connection will need to be created for each Argos Program that the user desires to download and/or process PTT data.

1. Click the **New Connection** icon from the toolbar. The New Connection Properties template will be displayed as shown in Figure 7.

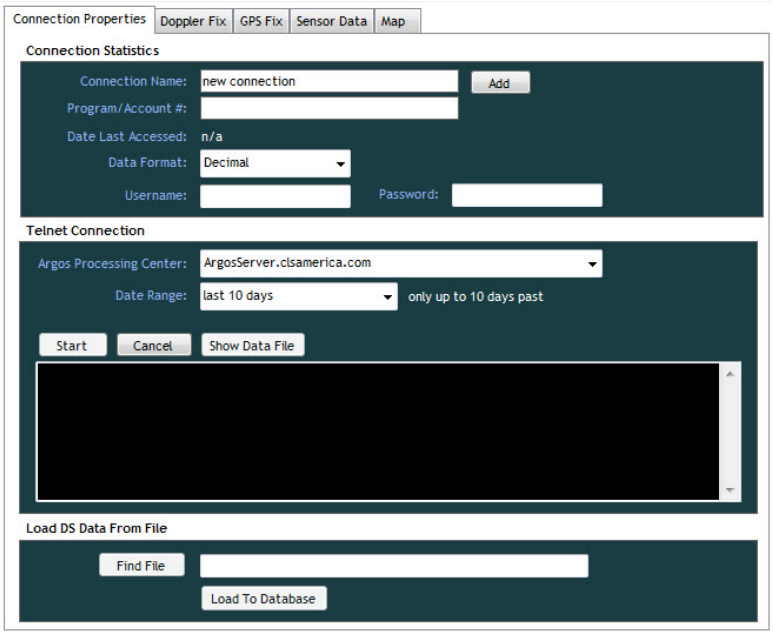


Figure 7. New Connection

2. Populate the connection statistics fields as applicable. See Table 1 above for a description of the fields.

   IMPORTANT: The Argos Program/Acct # must be 5-digits as Argos represents this value in the PTT data as a 5 digit number. You will need to add leading 0's if your Argos Program # is less than 5 digits (i.e. Program 3341 must be entered as 03341).

3. Click **Add** to add the new connection to the Connection Tree.

4.2 UPDATE EXISTING CONNECTION

TO UPDATE AN EXISTING CONNECTION

1. Select the connection you would like to update from the Connection Tree.
2. The data for that connection will be displayed in the Connection Properties Tab as shown in Figure 8.

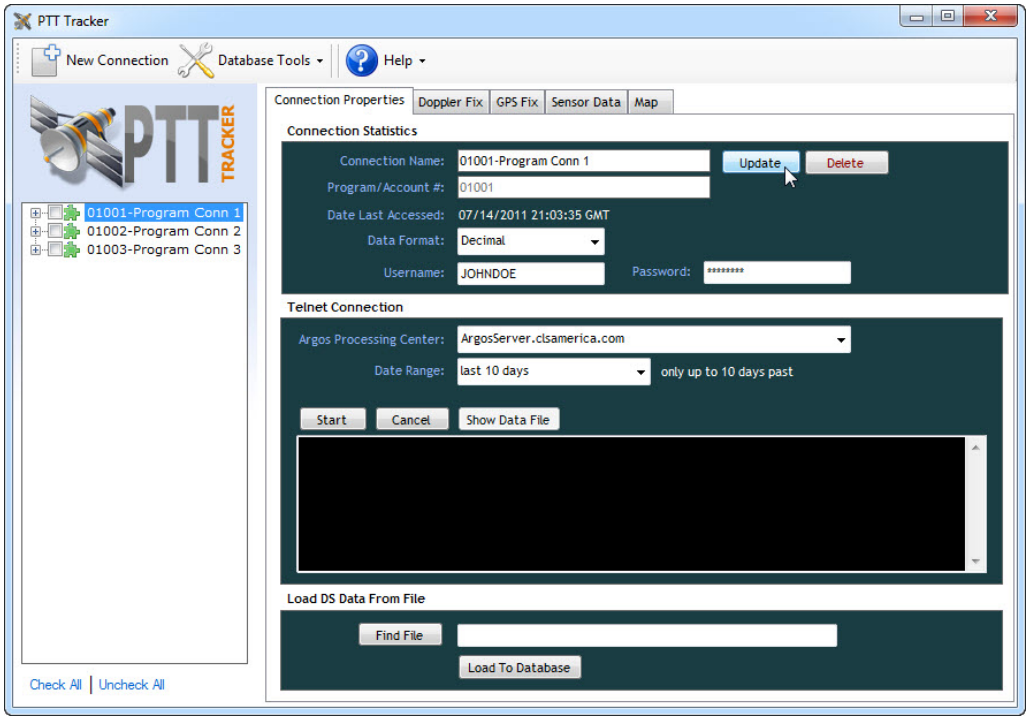


Figure 8. Existing Connection

3. Make the desired updates to the connection.
4. Click **Update**.

NOTE: The Program/Account # field cannot be modified after the connection has been created. If there was an error in entering the correct Argos Program #, it may be necessary to delete this connection and create a new one.

4.3 DELETE EXISTING CONNECTION

TO DELETE AN EXISTING CONNECTION

1. Select the connection you would like to delete from the Connection Tree.
2. The data for that connection will be displayed in the Connection Properties Tab as shown in Figure 8.
3. Click **Delete.**
4. A window will pop-up that says "Delete connection and all associated data?"
5. To decline, click **No**. To accept, thereby deleting the connection and its data, click **Yes**.
6. If you click **Yes**, the connection will be removed from the tree. **

**** WARNING – Deleting a connection will also delete all PTT data in the database associated with that connection. The database should be backed up before deleting a connection or PTT data. This can be accomplished using the Create Back-up Database tool under the Database Tools menu.**

5 DOWNLOADING & PROCESSING DATA

After creating the connection(s) associated with the users Argos Program, there are two methods to loading and processing PTT data.

5.1 TELNET DATA RETRIEVAL & PROCESSING

This method allows the user to connect to the Argos Telnet server and download all PTT data in the Argos Program. An internet connection is required.

1. Select the connection that corresponds with the Argos program & PTT data desired.
2. Select the appropriate Argos Processing Center (Telnet Server).
3. Select a Date Range to decide whether to download all PTT Data *Since Last Connection* or *Last 3, 5 or 10 Days.*
4. Click **Start** to begin the telnet download process.
5. The terminal window will display the Argos login, data receiving process and any messaging received from the Telnet connection.
6. When the data download has completed, PTT Tracker will automatically process the data and add it to the users PTT Tracker database.
7. All PTT's for which there was data received will be listed in the connection tree underneath the respective connection(s).
8. The PTT data is now available for viewing in the PTT Tracker modules/tabs.

5.2 DS DATA FILE & MANUAL PROCESSING

This method is convenient when the user has received a DS data file for their Argos program via ArgosWeb, email, etc.

1. Save the DS file received to an appropriate location on the local computer.
2. Select the connection that corresponds with the Argos program & DS data file.
3. Click **Find File** to browse the local system for the DS data file and select it.
4. Click **Load to Database** to upload the data file for processing.
5. The *Load Status* will populate with the success or failure of the file to load.
6. Once completed, all PTT's for which there was data received will be listed in the connection tree underneath the selected connection.
7. The PTT data is now available for viewing in the PTT Tracker modules/tabs.

**** NOTE: The connection must be selected before trying to load the DS file to the database.**

5.3 DELETE SPECIFIC PTT AND ASSOCIATED DATA

TO DELETE A SPECIFIC PTT BEACON & ASSOCIATED DATA FROM THE DATABASE

1. Right click the PTT/ID beacon you would like to delete from the Connection Tree.
2. Left click **Delete.**
3. A window will pop-up that says "Delete beacon and all associated data?"
4. To decline, click **No**. To accept, thereby deleting the connection and its data, click **Yes**.
5. If you click **Yes**, the PTT beacon will be removed from the tree. **

**** WARNING – Deleting a PTT beacon will also delete all PTT data in the database associated with that PTT/ID. The database should be backed up before deleting PTT data.**

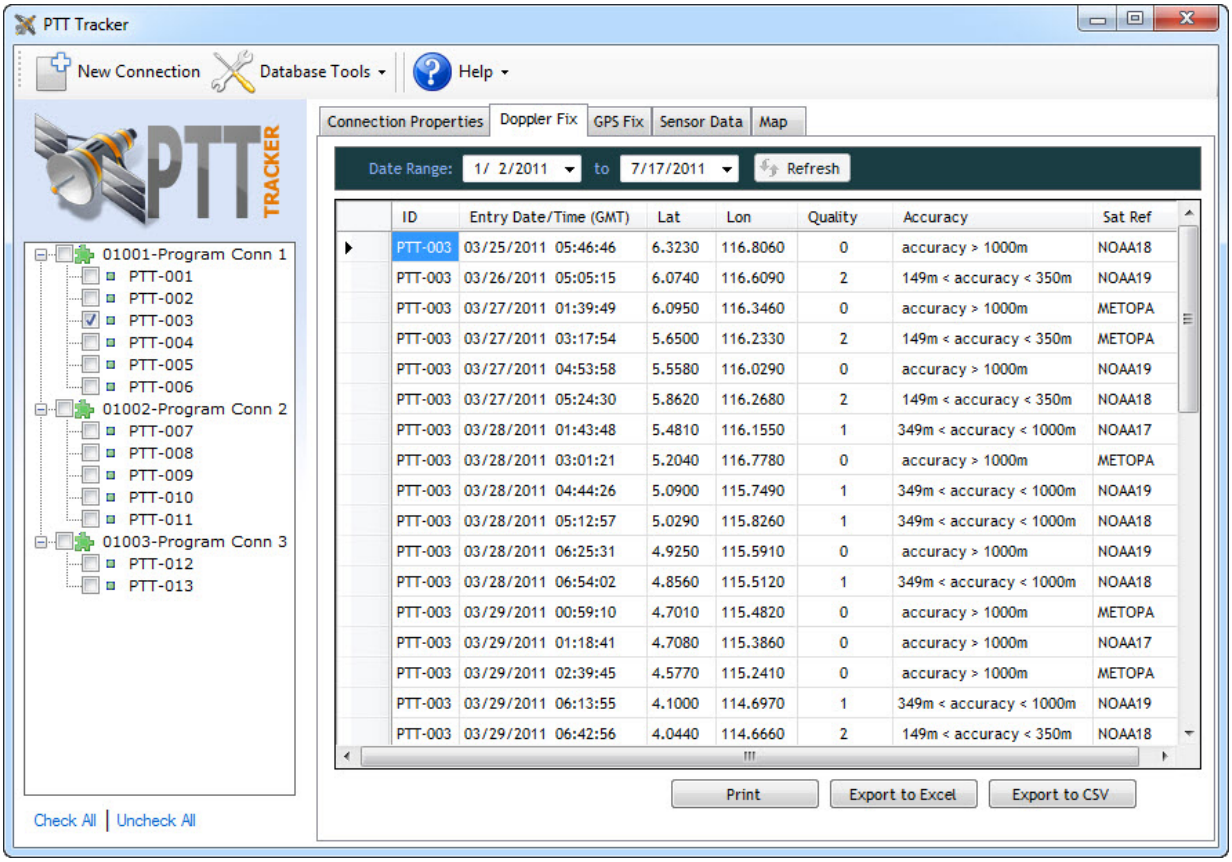
6 DOPPLER FIXES

The Doppler Fix module tab displays the Argos calculated Doppler fix based upon the messages received from the PTT by an Argos satellite. The columns displayed are ID number, Entry Date, Latitude, Longitude, Location Quality Index, Accuracy and Satellite Reference.

6.1 DISPLAYING DOPPLER FIXES

TO DISPLAY A DOPPLER FIX

1. Check the checkboxes for the desired connections or PTT ID's to be displayed.
2. Click the tab for **Doppler Fix**.
3. Click the calendar drop-downs to select the desired date range.
4. Click **Refresh** to view the data for that time period.
5. The data will be displayed as shown in Figure 9.



ID	Entry Date/Time (GMT)	Lat	Lon	Quality	Accuracy	Sat Ref
PTT-003	03/25/2011 05:46:46	6.3230	116.8060	0	accuracy > 1000m	NOAA18
PTT-003	03/26/2011 05:05:15	6.0740	116.6090	2	149m < accuracy < 350m	NOAA19
PTT-003	03/27/2011 01:39:49	6.0950	116.3460	0	accuracy > 1000m	METOPA
PTT-003	03/27/2011 03:17:54	5.6500	116.2330	2	149m < accuracy < 350m	METOPA
PTT-003	03/27/2011 04:53:58	5.5580	116.0290	0	accuracy > 1000m	NOAA19
PTT-003	03/27/2011 05:24:30	5.8620	116.2680	2	149m < accuracy < 350m	NOAA18
PTT-003	03/28/2011 01:43:48	5.4810	116.1550	1	349m < accuracy < 1000m	NOAA17
PTT-003	03/28/2011 03:01:21	5.2040	116.7780	0	accuracy > 1000m	METOPA
PTT-003	03/28/2011 04:44:26	5.0900	115.7490	1	349m < accuracy < 1000m	NOAA19
PTT-003	03/28/2011 05:12:57	5.0290	115.8260	1	349m < accuracy < 1000m	NOAA18
PTT-003	03/28/2011 06:25:31	4.9250	115.5910	0	accuracy > 1000m	NOAA19
PTT-003	03/28/2011 06:54:02	4.8560	115.5120	1	349m < accuracy < 1000m	NOAA18
PTT-003	03/29/2011 00:59:10	4.7010	115.4820	0	accuracy > 1000m	METOPA
PTT-003	03/29/2011 01:18:41	4.7080	115.3860	0	accuracy > 1000m	NOAA17
PTT-003	03/29/2011 02:39:45	4.5770	115.2410	0	accuracy > 1000m	METOPA
PTT-003	03/29/2011 06:13:55	4.1000	114.6970	1	349m < accuracy < 1000m	NOAA19
PTT-003	03/29/2011 06:42:56	4.0440	114.6660	2	149m < accuracy < 350m	NOAA18

Figure 9. Doppler Fix Tab

6. To sort the data by a field, click the corresponding column name at the top of the table.

6.2 DELETING A DOPPLER FIX RECORD

Sometimes it may be desirable to remove/delete a Doppler fix from PTT Tracker. Removing a fix will be permanent and the fix going forward will not be displayed or present in any subsequent exported data or mapping/GIS files. See figure 10.

1. Select checkbox of the desired PTT from the Connection Tree on the left.
2. Click the **Doppler Fix** module tab to display the Doppler fixes for this PTT.
3. Locate the Doppler fix record you would like to delete.
4. Select the record by clicking on the leftmost column in the data grid. This will highlight the entire row/record. Verify that the highlighted record is the desired record for deletion.
5. Right click to display the **Delete** context menu option.
6. Left click on the **Delete** option to delete the record and select **Yes** to confirm.
7. The record will now be deleted from the display and will not be present in any subsequent exported files.

**** WARNING – Deleting a Doppler Fix record is permanent. It is good practice to always back up your database first before deleting data.**

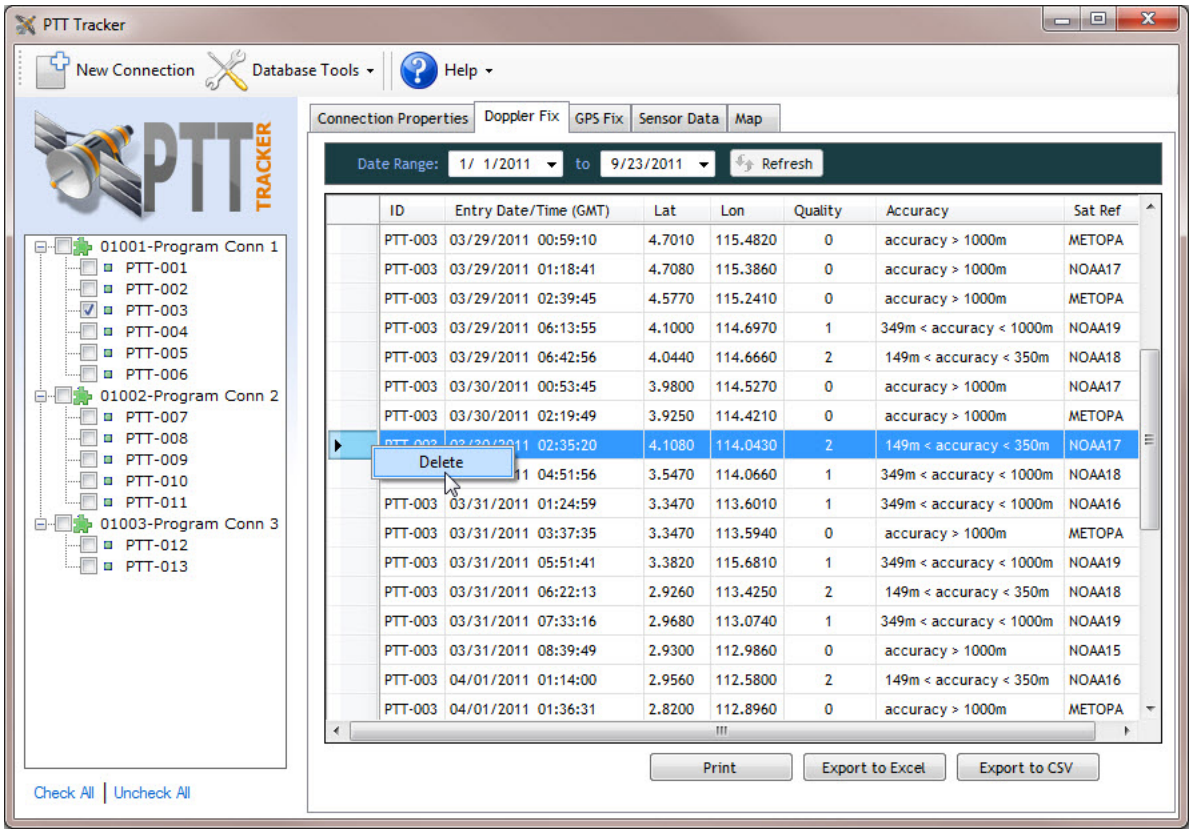


Figure 10. Delete Doppler Fix Record

6.3 EXPORTING AND PRINTING DATA

The data displayed in the Doppler Fix module can be either exported or printed so that it can be viewed outside the program.

6.3.1 PRINTING DATA

TO PRINT DOPPLER FIX DATA

1. When the data displayed in the Doppler Fix module is acceptable, click **Print**.
2. A print prompt will appear. Select the desired printer and click **Print**.
3. A table will print displaying the appropriate data.

6.3.2 EXPORT DATA TO EXCEL

TO EXPORT DOPPLER FIX DATA TO EXCEL

1. When the data displayed in the Doppler Fix module is acceptable, click **Export to Excel**.
2. The data will automatically be exported to an Excel Spreadsheet.
3. The spreadsheet will open containing the appropriate data.

NOTE: Additional formatting of the exported Excel data/cells may be required by the user.

6.3.3 EXPORT DATA TO CSV

TO EXPORT DOPPLER FIX DATA TO CSV

1. When the data displayed in the Doppler Fix module is acceptable, click **Export to CSV**.
2. A prompt will appear asking you to designate a location for the file. Select the desired location.
3. Click **OK**.
4. A window will pop up saying "File has been created:" and the file location.

**** NOTE:** If PTT Tracker is installed on a non-English PC, the "Export to CSV" option will be displayed as "Export to TXT". This will allow the user to export the Doppler data to a simple text file where the data is tab delimited. The resulting file can be then imported into compatible applications (i.e. MS Excel).

7 GPS FIXES

The GPS Fix Module tab displays the GPS fix and corresponding data transmitted by the PTT. The columns displayed are ID, Entry Date, Latitude, Longitude, Accuracy, Course, Speed, Altitude in meters, and Altitude Error Estimation in meters.

7.1 DISPLAYING GPS FIXES

TO DISPLAY A GPS FIX

1. Check the checkboxes for the desired connections or PTT ID's to be displayed.
2. Click the tab for **GPS Fix**.
3. Click the calendar drop-downs to select the desired date range.
4. Click **Refresh** to view the data for that time period.
5. The data will be displayed as shown in Figure 11.

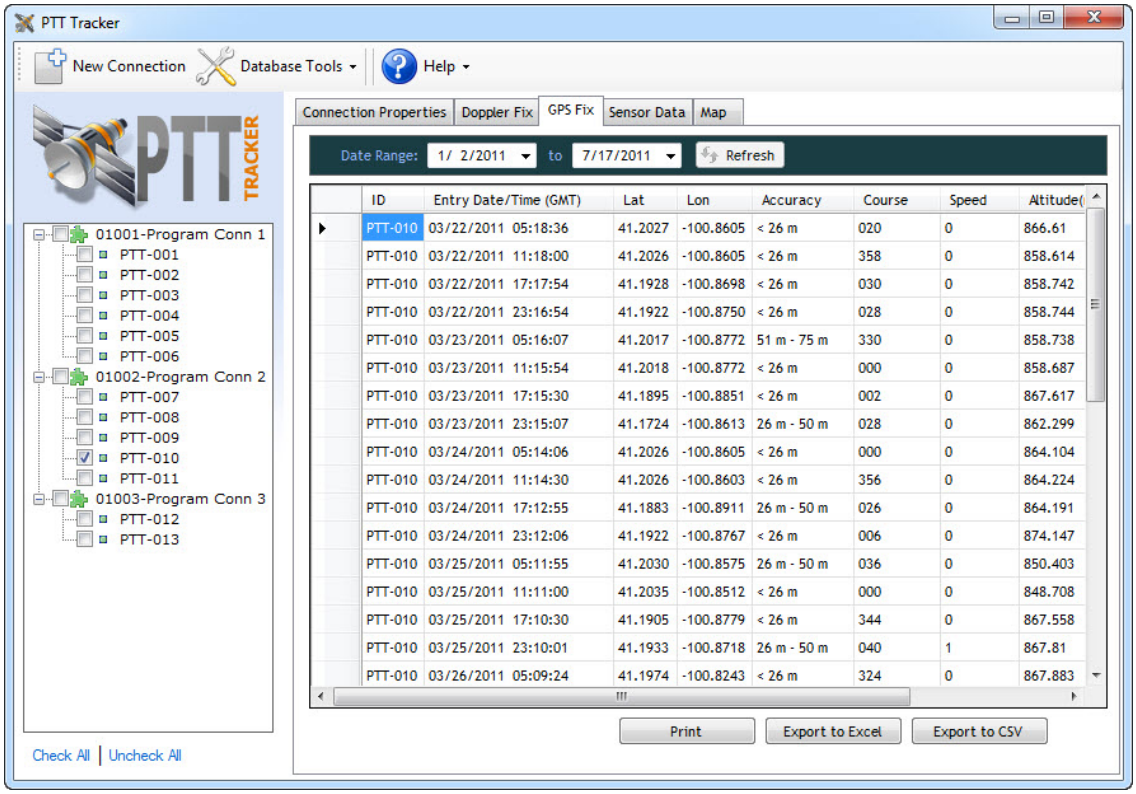


Figure 11. GPS Fix Tab

6. To sort the data by a field, click the corresponding column name at the top of the table.

7.2 DELETING A GPS FIX RECORD

Sometimes it may be desirable to remove/delete a GPS fix from PTT Tracker. Removing a fix will be permanent and the fix going forward will not be displayed or present in any subsequent exported data or mapping/GIS files. See figure 12.

1. Select checkbox of the desired PTT from the Connection Tree on the left.
2. Click the **GPS Fix** module tab to display the GPS fixes for this PTT.
3. Locate the GPS fix record you would like to delete.
4. Select the record by clicking on the leftmost column in the data grid. This will highlight the entire row/record. Verify that the highlighted record is the desired record for deletion.
5. Right click to display the **Delete** context menu option.
6. Left click on the **Delete** option to delete the record and select **Yes** to confirm.
7. The record will now be deleted from the display and will not be present in any subsequent exported files.

**** WARNING – Deleting a GPS Fix record is permanent. It is good practice to always back up your database first before deleting data.**

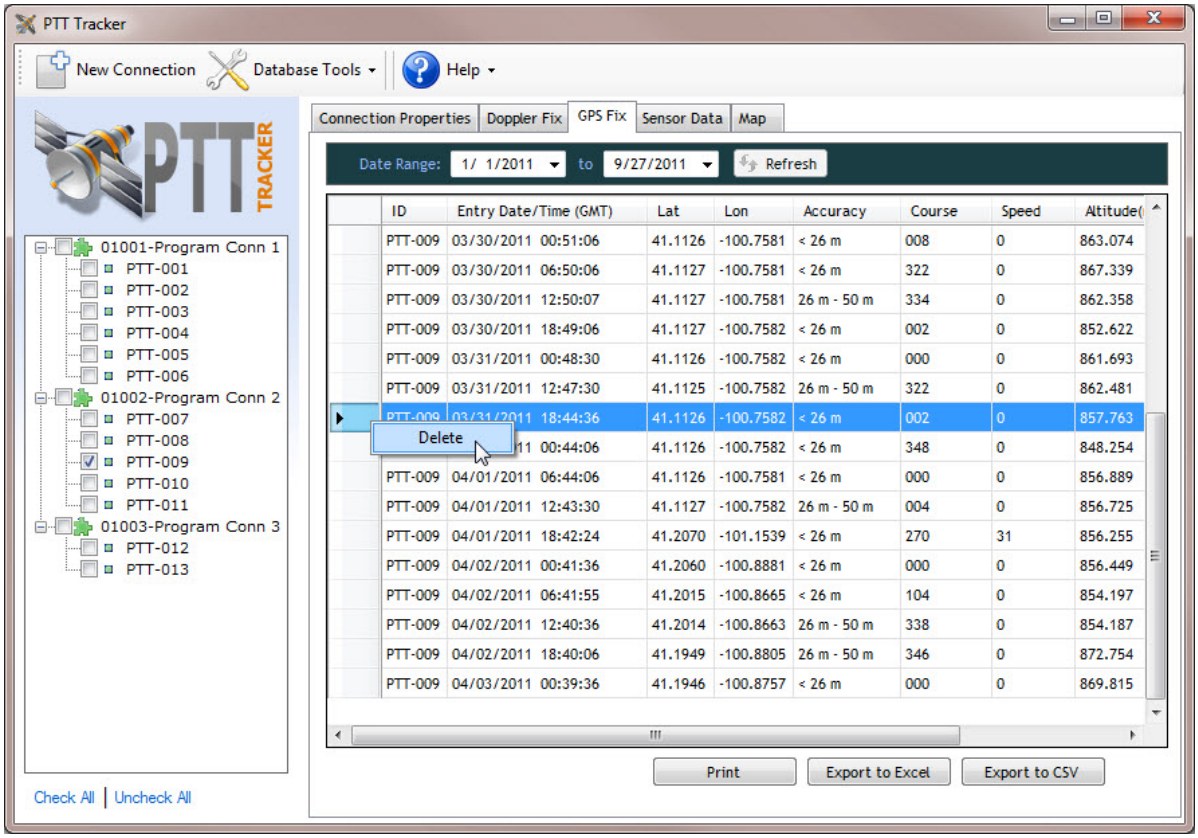


Figure 12. Delete GPS Fix Record

7.3 EXPORTING AND PRINTING DATA

The data displayed in the GPS Fix module can be either exported or printed so that it can be viewed outside the program.

7.3.1 PRINTING DATA

TO PRINT GPS FIX DATA

1. When the data displayed in the GPS Fix module is acceptable, click **Print**.
2. A print prompt will appear. Select the desired printer and click **Print**.
3. A table will print displaying the appropriate data.

7.3.2 EXPORT DATA TO EXCEL

TO EXPORT DOPPLER FIX DATA TO EXCEL

1. When the data displayed in the GPS Fix module is acceptable, click **Export to Excel**.
2. The data will automatically be exported to an Excel Spreadsheet.
3. The spreadsheet will open containing the appropriate data.

NOTE: Additional formatting of the exported Excel data/cells may be required by the user.

7.3.3 EXPORT DATA TO CSV

TO EXPORT DOPPLER FIX DATA TO CSV

1. When the data displayed in the GPS Fix module is acceptable, click **Export to CSV**.
2. A prompt will appear asking you to designate a location for the file. Select the desired location.
3. Click **OK**.
4. A window will pop up saying "File has been created:" and the file location.

**** NOTE:** If PTT Tracker is installed on a non-English PC, the "Export to CSV" option will be displayed as "Export to TXT". This will allow the user to export the GPS data to a simple text file where the data is tab delimited. The resulting file can be then imported into compatible applications (i.e. MS Excel).

8 SENSOR DATA

The Sensor Data Module tab represents a message received that is transmitted by the PTT that contains sensor data such as voltage, temperature, activity, transmission counter etc. Typically on a GPS PTT, this sensor data message is sent in one out of every 5 transmissions with all other transmissions/messages containing GPS location data. On Doppler only PTT's, this sensor data is sent in every transmission with each message containing certain pieces of sensor information and cycled through in a round robin fashion in order to send out all pertinent sensor data.

8.1 DISPLAYING SENSOR DATA

TO DISPLAY A SENSOR DATA

1. Check the checkboxes for the desired connections or PTT ID's to be displayed.
2. Click the tab for **Sensor Data**.
3. Click the calendar drop-downs to select the desired date range.
4. Click **Refresh** to view the data for that time period.
5. The data will be displayed as shown in Figure 13.

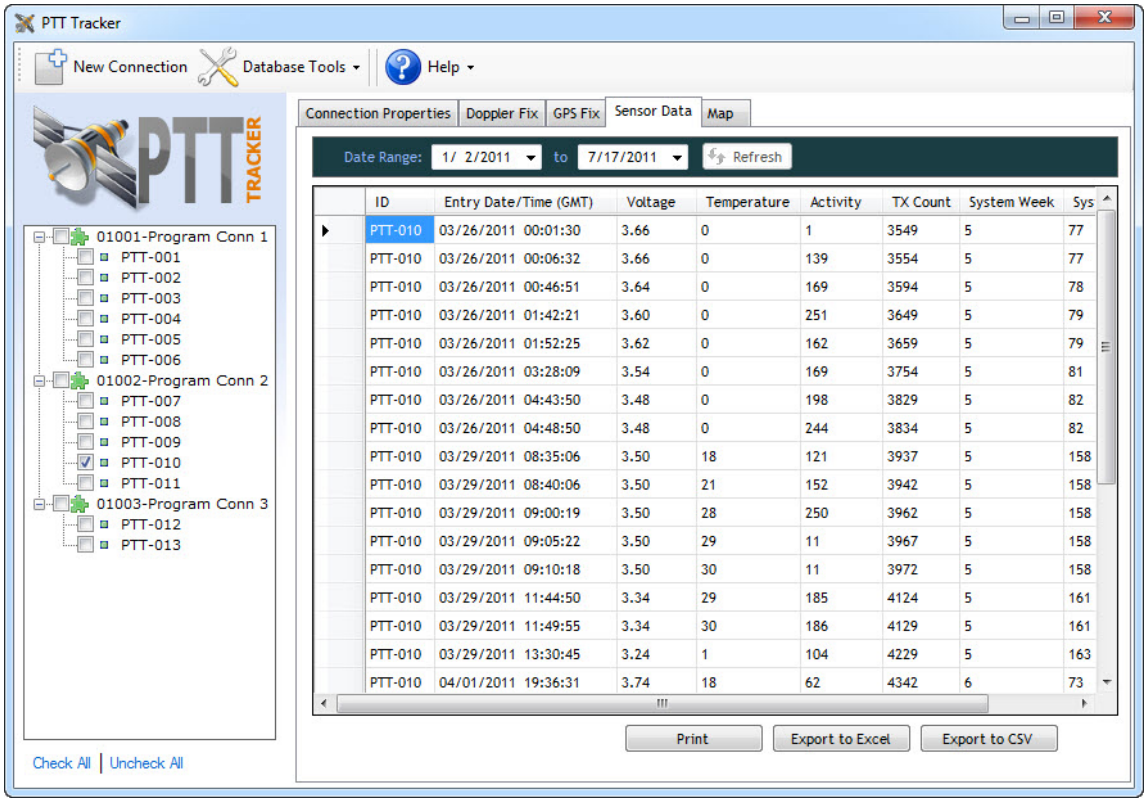


Figure 13. Sensor Data Tab

8.2 DELETING A SENSOR DATA RECORD

Sometimes it may be desirable to remove/delete a Sensor Data record from PTT Tracker. Removing a Sensor Data record will be permanent and going forward will not be displayed or be present in any exported data files.

1. Select checkbox of the desired PTT from the Connection Tree on the left.
2. Click the **Sensor Data** module tab to display the sensor data for this PTT.
3. Locate the record you would like to delete.
4. Select the record by clicking on the leftmost column in the data grid. This will highlight the entire row/record. Verify that the highlighted record is the desired record for deletion.
5. Right click to display the **Delete** option to delete the record and select **Yes** to confirm.
6. Left click on the **Delete** option to delete the record.
7. The record will now be deleted from the display and will not be present in any subsequent exported files.

**** WARNING – Deleting a Sensor Data record is permanent. It is good practice to always back up your database first before deleting data.**

8.3 EXPORTING AND PRINTING DATA

The data displayed in the Sensor Data module can be either exported or printed so that it can be viewed outside the program.

8.3.1 PRINTING DATA

TO SENSOR DATA

1. When the data displayed in the Sensor Data module is acceptable, click **Print**.
2. A print prompt will appear. Select the desired printer and click **Print**.
3. A table will print displaying the appropriate data.

8.3.2 EXPORT DATA TO EXCEL

TO EXPORT SENSOR DATA TO EXCEL

1. When the data displayed in the Sensor Data module is acceptable, click **Export to Excel**.
2. The data will automatically be exported to an Excel Spreadsheet.
3. The spreadsheet will open containing the appropriate data.

NOTE: Additional formatting of the exported Excel data/cells may be required by the user.

8.3.3 EXPORT DATA TO CSV

TO EXPORT SENSOR DATA TO CSV

1. When the data displayed in the Sensor Data module is acceptable, click **Export to CSV**.
2. A prompt will appear asking you to designate a location for the file. Select the desired location.
3. Click **OK**.
4. A window will pop up saying "File has been created:" and the file location.

**** NOTE:** If PTT Tracker is installed on a non-English PC, the "Export to CSV" option will be displayed as "Export to TXT". This will allow the user to export the Sensor data to a simple text file where the data is tab delimited. The resulting file can be then imported into compatible applications (i.e. MS Excel).

9 MAP

In the Map module, the positions for the Doppler and GPS fixes are plotted on the map so that trends can be seen. Doppler Fix data is represented by red dots and GPS Fix data is represented by green dots. The Map interface appears as shown in Figure 14.

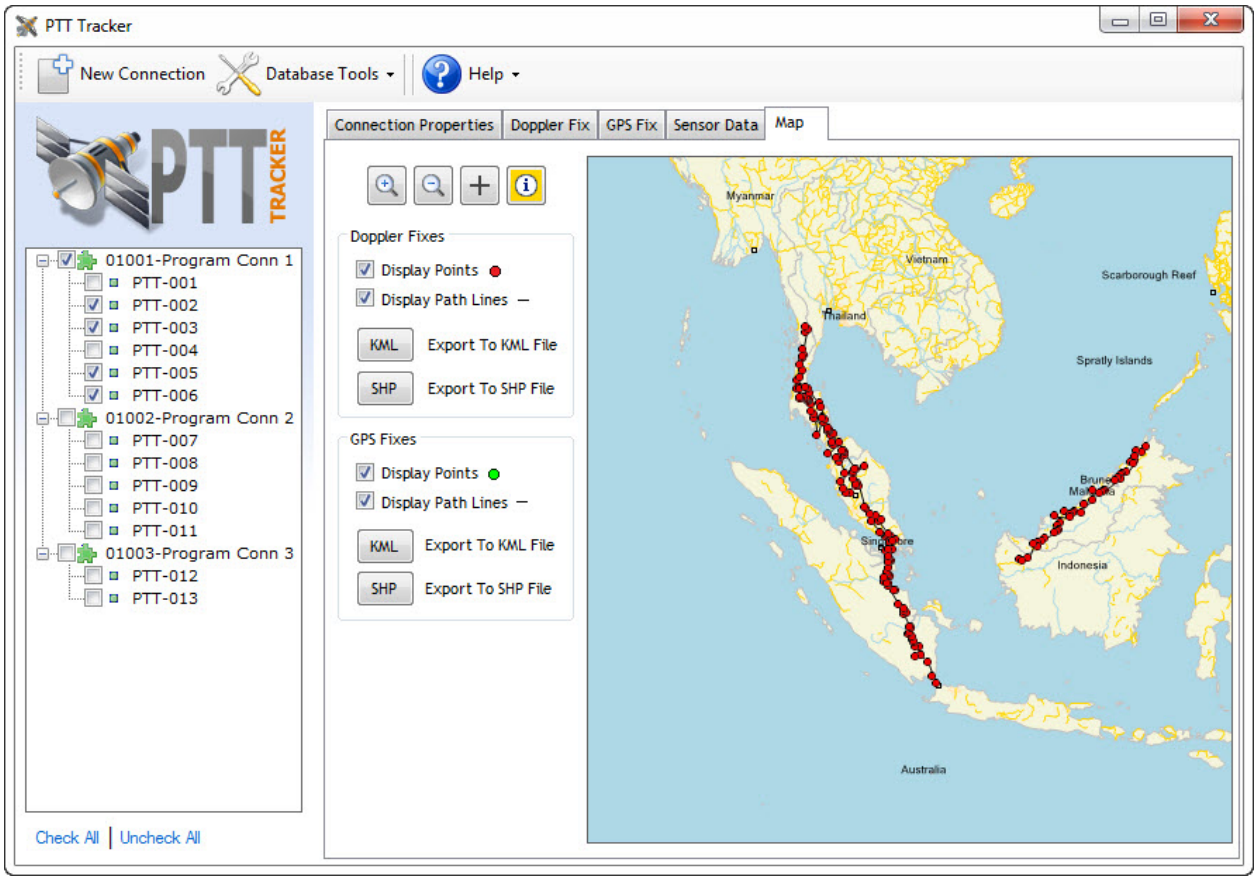


Figure 14. Map Tab

All GPS or Doppler plotted points on the map can be hidden by unchecking the appropriate check box option. By default both GPS & Doppler points will be displayed.

The Map has 4 buttons:

- Zoom In. which allows the user to zoom in on an area where the map is clicked.
- Zoom Out. which allows the user to zoom out when an area where the map is clicked.
- Pan. which allows the user to click and move the map to a different location.
- Identify. which allows the user to click a Doppler or GPS position to view the associated data of that position.

9.1 EXPORTING MAP RESULTS

Both the Doppler Fix and GPS Fix map results can be exported to either a SHP or KML file. These files can be imported into Google Earth, ESRI software and other mapping applications.

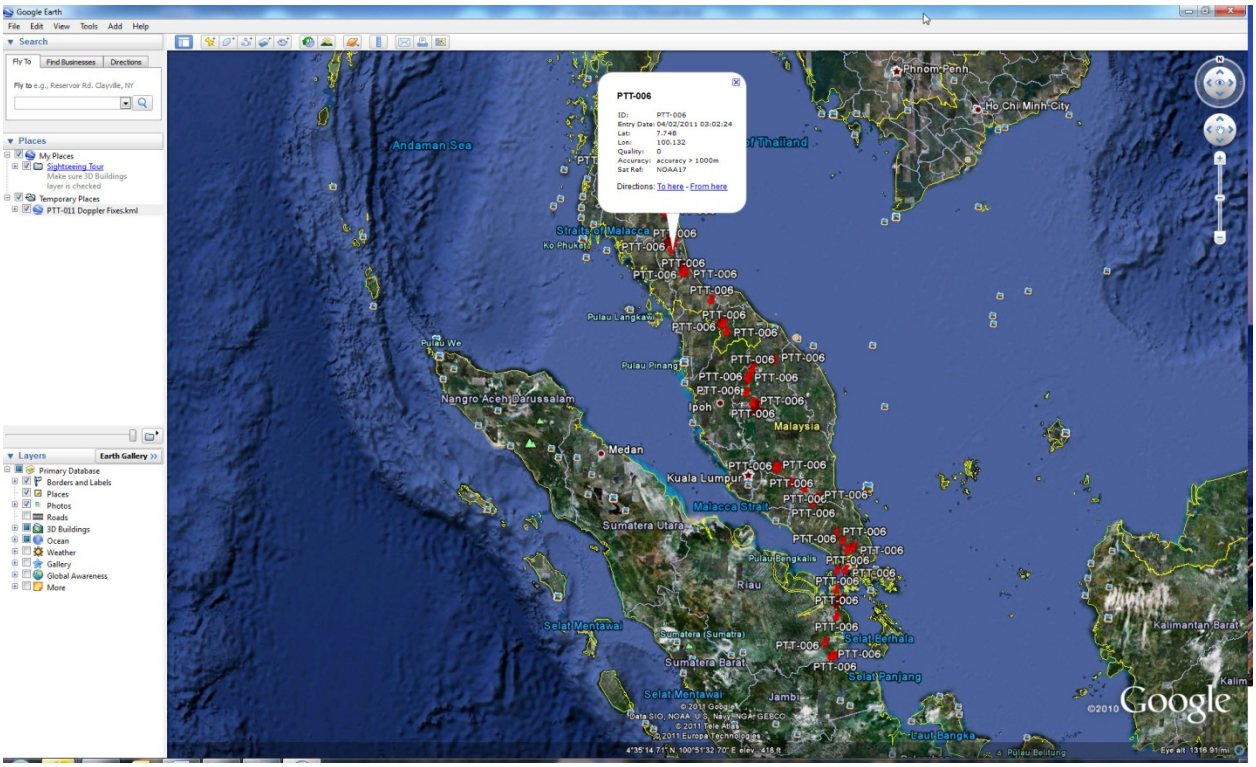


Figure 15. Example of exported KML files opened in Google Earth

9.1.1 EXPORTING DOPPLER FIX TO SHP

TO EXPORT DOPPLER FIX TO SHP

1. Click the **SHP** button below the *Doppler Fix* heading to the left of the map.
2. A message will appear prompting you to designate a location for the file.
3. Designate a location and filename then click **OK**.
4. A message will appear saying "File has been created:" along with the location of the file.
5. The resulting SHP can then be opened in ArcGIS Explorer and other mapping software applications that support the SHP file format.

9.1.2 EXPORTING DOPPLER FIX TO KML

TO EXPORT DOPPLER FIX TO KML

1. Click the **KML** button below the *Doppler Fix* heading to the left of the map.
2. A dialog box will appear that will allow you to select the map point labels (PTT ID or Date/Time Stamp) as well as whether to display path lines between Doppler fix points.
3. Next, another dialog box will appear prompting you to designate a filename & location to save the exported file to. When finished click OK.
4. A message will appear saying "File has been created:" along with the location of the file.
5. The resulting KML file can then be opened in Google Earth and+ other mapping software applications that support the KML file format.

9.1.3 EXPORTING GPS FIX TO SHP

TO EXPORT GPS FIX TO SHP

1. Click the **SHP** button beside *GPS Fix* at the bottom of the map.
2. A message will appear prompting you to designate a location for the file.
3. Designate a location and filename then click OK.
4. A message will appear saying "File has been created:" along with the location of the file.
5. The resulting SHP can then be opened in ArcGIS Explorer and other mapping software applications that support the SHP file format.

9.1.4 EXPORTING GPS FIX TO KML

TO EXPORT GPS FIX TO KML

1. Click the **KML** button beside *GPS Fix* at the bottom of the map.
2. A dialog box will appear that will allow you to select the map point labels (PTT ID or Date/Time Stamp) as well as whether to display path lines between Doppler fix points.
3. Next, another dialog box will appear prompting you to designate a filename & location to save the exported file to. When finished click OK.
4. A message will appear saying "File has been created:" along with the location of the file.
5. The resulting KML file can then be opened in Google Earth and other mapping software applications that support the KML file format.

10 DATABASE TOOLS

All the data obtained and processed in PTT Tracker is stored in a local database file on the user's computer. This database includes all connections created by the user in addition to the subsequent Telnet & DS data processed for the PTT's/Argos Program under the connections. There are tools that allow the user to create a new database, backup an existing database as well as to change/switch to another database.

** NOTE: The database file has an .MDB file extension and can be located, renamed, backed up, etc. through Windows Explorer file manager interface from within Microsoft Windows. It is recommended to name all databases and backups to something meaningful to the user to avoid confusion in the event there are multiple databases being used, reverting to backups, etc.. This database file(s) can be copied & shared to other additional PC's and opened by PTT Tracker. This is helpful in environments where multiple users will be analyzing/sharing data.

10.1 CREATE BACKUP DATABASE

One very important feature of PTT Tracker is the **Create Back-up Database** tool. The user should create frequent backups to prevent data loss due to PC hardware failure, accidentally deleting a connection/PTT data, etc. These backups should be stored on both the local PC as well as on an external storage drive. See Figure 16.

1. Select **Create Back-up Database** from the **Database Tools** menu on the toolbar.
2. A message will appear prompting you to designate a location for the file.
3. Designate a location and filename then click **OK**.
4. The backup database file will be created in the designated location. This file if located on the local PC should then be copied to an external storage drive/media for safekeeping in the event of a PC hardware failure.

NOTE: Should there be the need to revert back to a prior database backup, simply follow the instructions below to change the current database.

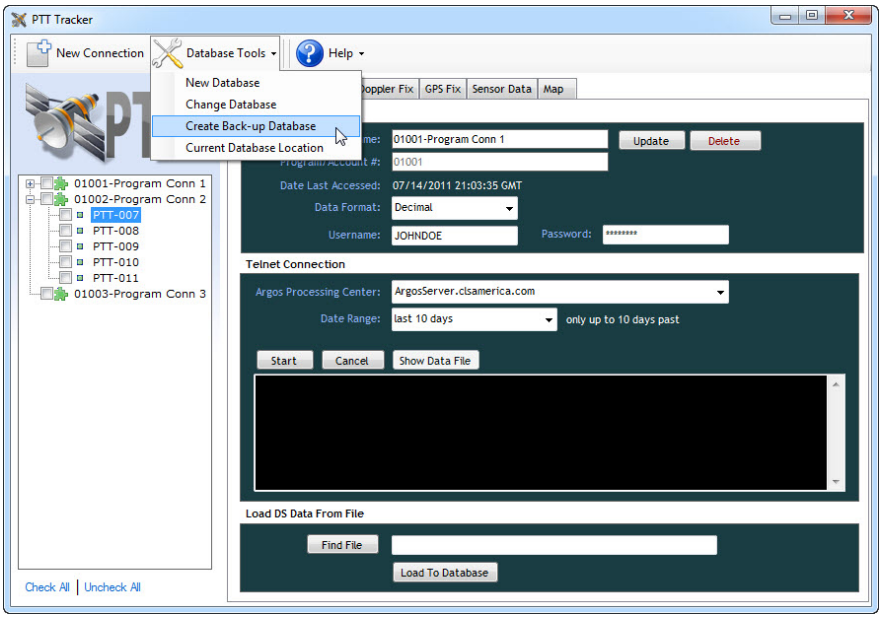


Figure 16. Database Tools

10.2 NEW DATABASE

1. Select **New Database** from the Database Tools menu on the toolbar.
2. A message will appear prompting you to designate a location for the new database file.
3. Designate a location and filename then click **OK**.
4. The new database file will be created in the designated location. The new database being displayed in PTT Tracker will contain no data. A new connection(s) will have to be created to begin the process of obtaining and processing data to populate the database.
5. The user can switch back & forth between databases as desired. (See below)

10.3 CHANGE DATABASE

If a user has created multiple databases, moved the database file(s) to a new location, etc., it is a simple task to switch to another existing database.

1. Select **Change Database** from the Database Tools menu on the toolbar.
2. A message will appear prompting you to browse for the location of an existing database file.
3. After locating the database file, select the .mdb filename then click **OK**.
4. The database file will be opened and the contents of the database will be displayed in PTT Tracker.
5. The user can switch back & forth between databases as desired.

10.4 CURRENT DATABASE LOCATION

This tool gives the user the location & filename of the current database that is open by PTT Tracker.

1. Select **Current Database Location** to view the database filename & location currently in use by PTT Tracker.

**** NOTE:** The database simply consists of one file with an .mdb file extension. This database file can be renamed, moved, copied, etc. from within Windows Explorer.

11 SOFTWARE REGISTRATION/SUPPORT

For PTT Tracker software technical support, please contact:

GeoTrak, Inc.

Phone: (919) 303-1467

Email: ptt-tracker@geotrakinc.com

** Please do not hesitate to contact us with any questions that you may have. Our goal is to make sure you have the best experience possible using PTT Tracker and get the most from your PTT data.

For general inquiries regarding the PTT Tracker software or GeoTrak PTT's, please contact:

GeoTrak, Inc.

Phone: (919) 303-1467

Keith LeSage Email: klesage@geotrakinc.com

Karen Savarino Email: karen@geotrakinc.com

Please register your software so that we may notify you when there are software updates & new releases of PTT Tracker.

Register by sending an email to ptt-tracker@geotrakinc.com. Please include "PTT Tracker Registration" in the subject line as well as your contact information in the body of the message.

PTT Tracker software, updates & future releases will be available for download from the following locations:

http://www.geotrakinc.com/ptt-tracker.html