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Status Update: New WAAS Satellites and Trimble GPS Receivers

This document provides an update on the status of the two new WAAS (Wide Area Augmentation System) satellites, and describes the Trimble® GPS receivers that are able to use the WAAS satellite that was recently taken out of “Test Mode” and placed in “Normal Mode”.

Instructions are also provided on how to install a new SBAS.ini file and configure your GPS receiver to use the new WAAS satellite.

Status of the new WAAS satellites

- WAAS satellite PRN 135 (PanAmSat, 133 deg W) is now broadcasting WAAS corrections and can be used by some Trimble GPS receivers. See [Supported GPS receivers](#) for more details.
- The second new WAAS satellite, PRN 138 (Telesat, 107.3 deg W), is still undergoing testing. The following information is from the FAA status document:
 - The service from PRN 138 is still undergoing testing and has not been certified. It is not yet being operated to FAA standards.
 - Unplanned outages may occur at any time.
 - The schedule information may change without notice.
 - The signals will be left on overnight and during weekends but if there is a failure, repairs will not be done until the next normal working shift.

For more information on the status of the PRN 138 satellite, go to http://www.nstb.tc.faa.gov/incoming/New_WAAS_Geo_Status.pdf.

Trimble will release a Support Bulletin when WAAS satellite PRN 138 has been approved by the FAA to confirm that corrections from this satellite are suitable for use with Trimble Mapping & GIS GPS receivers.

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Trimble Navigation Limited, 10355 Westmoor Drive, Suite #100, Westminster, CO 80021, USA

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Supported GPS receivers

The following GPS receivers support the new WAAS satellites:

- The GPS Pathfinder® XB receiver supports both new WAAS satellites with existing firmware. No additional firmware or software updates are required.

Note: *The GPS Pathfinder XB receiver only operates in 'Auto' mode. You can not configure the receiver to track a particular satellite, or prevent it from tracking a SBAS satellite such as WAAS PRN 138.*

- The following receivers require you to install the [new SBAS.ini file](#) before they can use WAAS PRN 135:
 - GeoExplorer® 2005 series handhelds (GeoXM™, GeoXT™ and GeoXH™ handhelds)
 - GPS Pathfinder Pro series receivers (ProXH™ and ProXT™ receivers)

Note: *Other Trimble GPS receivers and GPS handhelds require firmware and/or software changes to support the new WAAS satellites.*

New SBAS.ini file

A new SBAS.ini file is available for use with the GeoExplorer 2005 series handhelds and the GPS Pathfinder ProXH and ProXT receivers. The new SBAS.ini file contains information on both new WAAS satellite (PRN 135 and PRN 138).

Note: *Trimble recommends that you do not use PRN 138 until it is placed into 'Normal Mode' by the FAA. To prevent PRN 138 being tracked and used, configure the satellite to "Disabled" in your Trimble field software.*

To install the new SBAS.ini file and configure your receiver to use the new WAAS satellite:

1. Download the new SBAS.ini file from the Trimble website. The file contains the new WAAS satellite information.

To do this, go to the *Support / Downloads* area for the required Trimble Mapping & GIS receiver and software. For example, for the TerraSync™ software, go to www.trimble.com and then click *Support / TerraSync / Downloads*.

2. Install the SBAS.ini file.

Do one of the following, depending on the software and device that you use to configure the GPS receiver:



Software	Instructions
On an office computer: <ul style="list-style-type: none"> • TerraSync software • GPS Controller software • GPSCorrect™ extension for the ESRI ArcPad software • An application developed using the GPS Pathfinder Tools SDK 	Copy the SBAS.ini file into the folder C:\Program Files\Common Files\Trimble\Config.
On a device running the Microsoft® Windows® CE or Windows Mobile® for Pocket PCs operating system: <ul style="list-style-type: none"> • TerraSync software • GPS Controller software • GPSCorrect extension • An application developed using the GPS Pathfinder Tools SDK 	Copy the SBAS.ini file into the folder \Program Files\Common Files\Trimble\Config. This folder is on the Disk or in RAM, depending on where the software is installed.
GPS Analyst™ extension for ESRI ArcGIS version 2.00 and later	Copy the SBAS.ini file into the folder C:\Program Files\Trimble\GPS Analyst\Bin.
GPS Analyst extension for ESRI ArcGIS version 1.20 and earlier	Copy the SBAS.ini file into the folder C:\Program Files\Common Files\Trimble\Config.

3. Configure your GPS receiver to use the new WAAS satellite, PRN 135, and disable tracking of WAAS PRN 138.

The GeoExplorer 2005 series handhelds, and the GPS Pathfinder ProXH and ProXT receivers contain a default list of SBAS satellites. When you select “Auto” mode in Trimble field software the receiver’s default list of SBAS satellites is used. That default list does not currently contain the new WAAS satellite PRNs.

To use the new WAAS satellite, PRN 135, and to disable tracking of WAAS PRN 138 or other SBAS satellites, select “Custom” mode.

4. Do one of the following, depending on the software that you use to configure your GeoExplorer 2005 series handheld or your GPS Pathfinder ProXH or ProXT receiver:

Software	Instructions
<ul style="list-style-type: none"> • TerraSync software • GPS Controller software • GPSCorrect extension • An application developed using the GPS Pathfinder Tools SDK 	<ol style="list-style-type: none"> a. Select: <i>Setup \ Real-time Settings</i> b. In the <i>Choice 1</i> field, select <i>Integrated SBAS</i>. c. Tap  and set the Tracking Mode to <i>Custom</i>. d. To enable a particular SBAS satellite to be tracked (such as PRN 135), select the drop-down list below the satellite PRN and then select <i>Enabled, Heed Health</i>. e. To disable tracking of a particular SBAS satellite (such as PRN 138), select the drop-down list below the satellite PRN and then select <i>Disabled</i>.
<p>GPS Analyst extension for ESRI ArcGIS software</p>	<ol style="list-style-type: none"> a. Depending on the version of the GPS Analyst extension do one of the following: <ul style="list-style-type: none"> – In version 2.00 and later, select the Field Settings drop-down and select: <i>Receiver Settings \ Real-time Settings</i>. – In version 1.20 and earlier, select the GPS Analyst drop-down menu and select: <i>Receiver Settings \ Real-time Settings</i>. b. In the <i>Choice 1</i> field, select <i>Integrated SBAS</i>. c. Tap  and set the Tracking Mode to <i>Custom</i> d. To enable a particular SBAS satellite to be tracked (such as PRN 135), select the drop-down list below the satellite PRN and select <i>Enabled, Heed Health</i>. e. To disable tracking of a particular SBAS satellite (such as PRN 138), select the drop-down list below the satellite PRN and select <i>Disabled</i>.