





WELCOME

SEPTEMBER 26, 2023

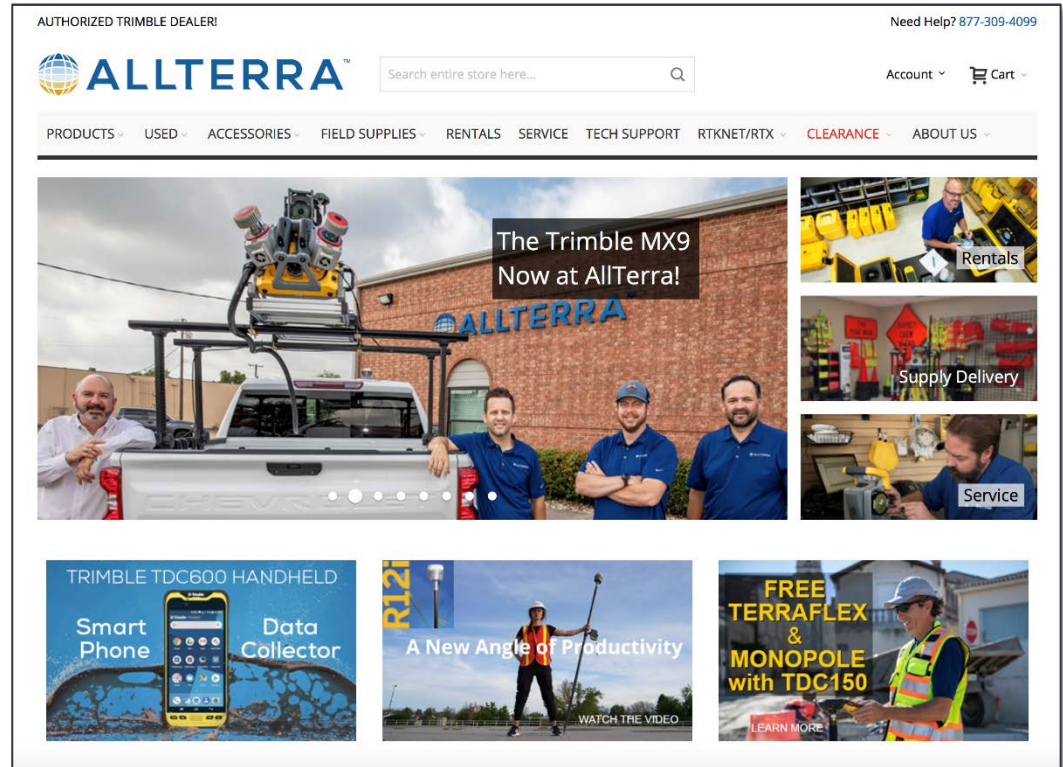
OKLAHOMA CITY, OK

Ethan Heck



What AllTerra offers

- **Complete line of Trimble:**
 - Survey Equipment
 - Mapping/GIS equipment
 - Mobile Mapping
 - Marine
 - UAVs/Drones
 - 3D Scanning
- State-of the Art Website
- Used Equipment
- Rentals
- Accessories and Field Supplies available in every store and online.



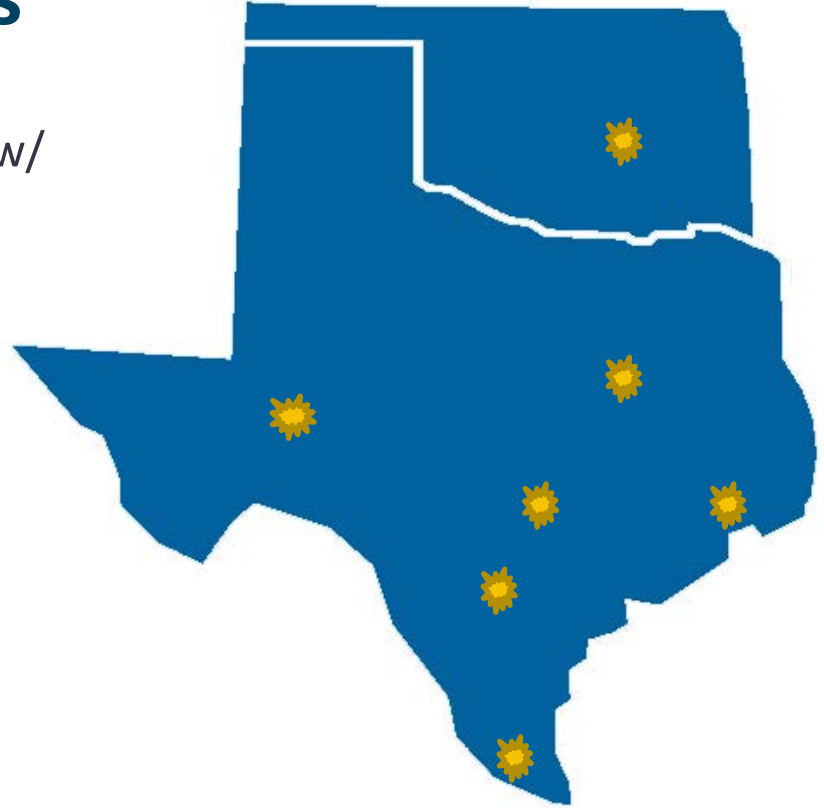
Why choose AllTerra?

- 13 Service Technicians in the State with quick turnaround on equipment
- 12 full time Technical Support Staff available via phone and/or email.
- RPLS on staff
- Trimble Certified Trainer available for on-site training at project field offices.
- Supplies and Accessories available in every store and ONLINE.
- Complete Trimble Line – Marine, Mapping/GIS, Survey, Scanning & UAV's

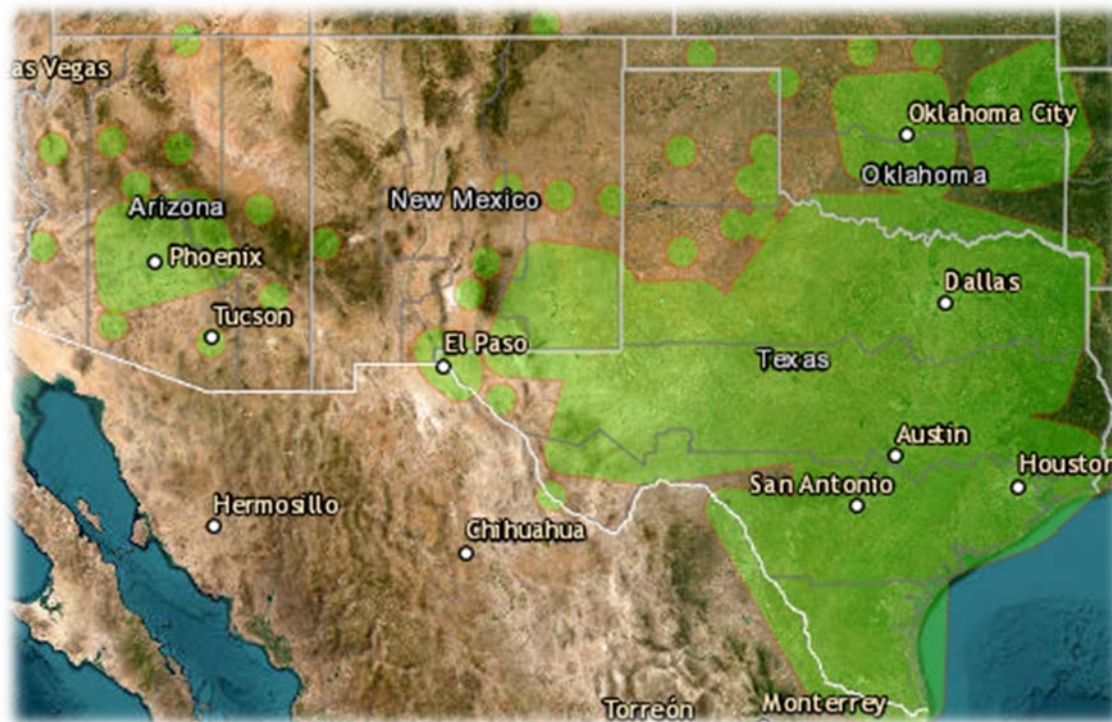


AllTerra Office Locations

- Surveying Companies growing larger w/
Statewide needs
- Offices
 - Austin
 - Dallas-Fort Worth
 - Houston
 - McAllen
 - Midland
 - San Antonio
 - Oklahoma City, OK
 - Phoenix, AZ
 - Albuquerque, NM (MGIS)



Texas/Oklahoma/New Mexico/Arizona VRS Network



- Largest private network in the United States
- 4 states, 209 Stations

Overview



Terra Office

- Overview
- Schema Push to Field
- Create Tasks/Updates

TerraFlex

- Collect Data
- Update Data From Tasks

Terra Office

Works with ArcGIS

- Add-ins for ArcGIS Pro & ArcMap

Easy licensing

- Annual subscription

Simplified geodetics

- Automatic config. prevents mistakes

Data integrity

- Enforces all rules from GIS schema

Offline corrections

- Uses offline GNSS corrections

Compatibility

- Add-in for ArcMap
 - 10.2 or higher
 - Connect to geodatabases
 - Workflows:
 - Real-time, local post-processing, direct connection
- Add-in for ArcGIS Pro
 - 3.0 or higher
 - Connect to geodatabases and feature services
 - Workflows:
 - Real-time, cloud post-processing

Database Integration

Cloud-based synchronization with:

- File Geodatabases
- Enterprise Geodatabase
- Feature Services
- Hosted Feature Layers

Data Integrity

- Export existing schema to the field
 - Cannot be edited in the field
- Enforce data types and other constraints from GIS
- Setup metadata fields and accuracy requirements
- Perform QA/QC on collected data to review feature geometries and accuracies

TerraOfficeWorkshop Command Search (Alt+Q)

Ethan - AllTerra Central EH

Project Map Insert Analysis View Edit Imagery Share Terra Office Help

Clipboard Navigate Selection Inquiry Labeling Offline

Contents

Search

Drawing Order

- Map
 - ☒ Hybrid Reference Layer
 - ☒ Park_FAC
 - ☐ Park
 - ☒ Manhole
 - ☒ Sign
 - ☒ Curb
 - ☒ Median
 - ☒ World Imagery

Map

1:3,384

2,125,081.00E 187,018.01N ftUS

Selected Features: 0

Catalog

Project Portal Computer Favorites

Search Project

- Maps
- Toolboxes
- Databases
- Styles
- Folders
- Locators

TerraOfficeWorkshop Command Search (Alt+Q) Ethan - AllTerra Central EH ? -

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Terra Office Projects Field Data Settings Sign In Terra Office

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Map

1:3,384 2,124,218.45E 186,045.00N ftUS Selected Features: 0

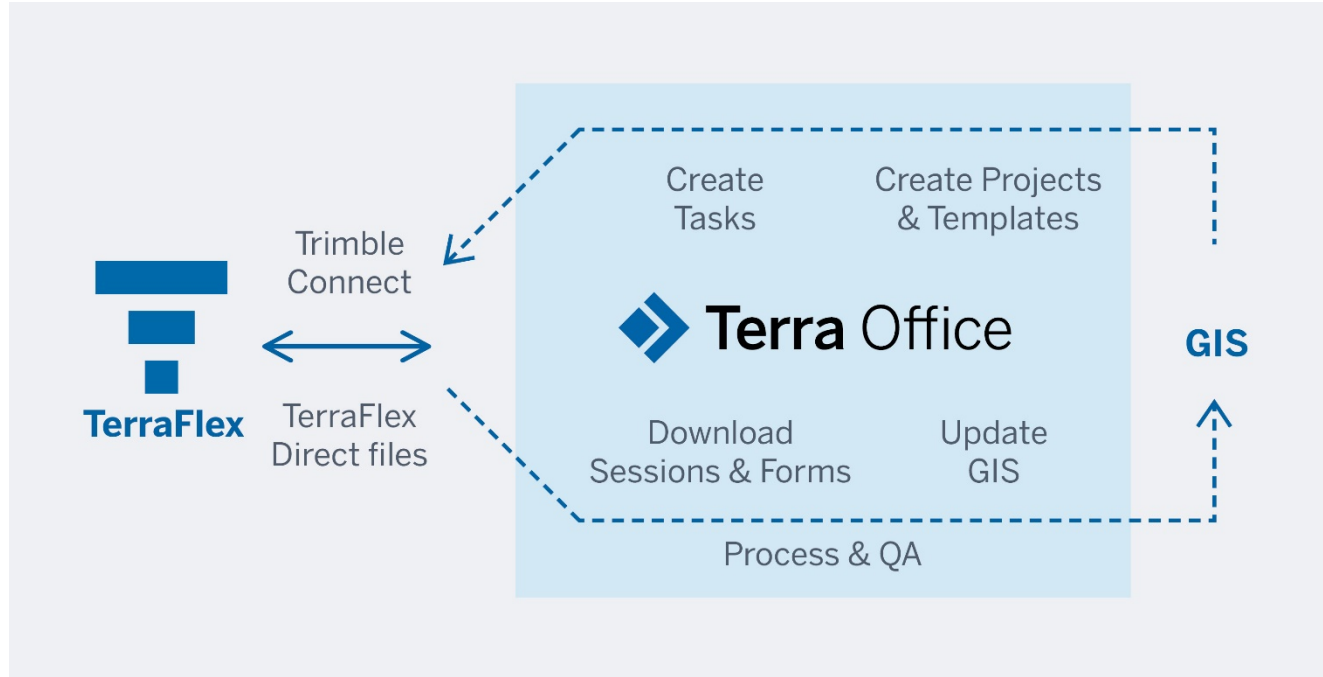
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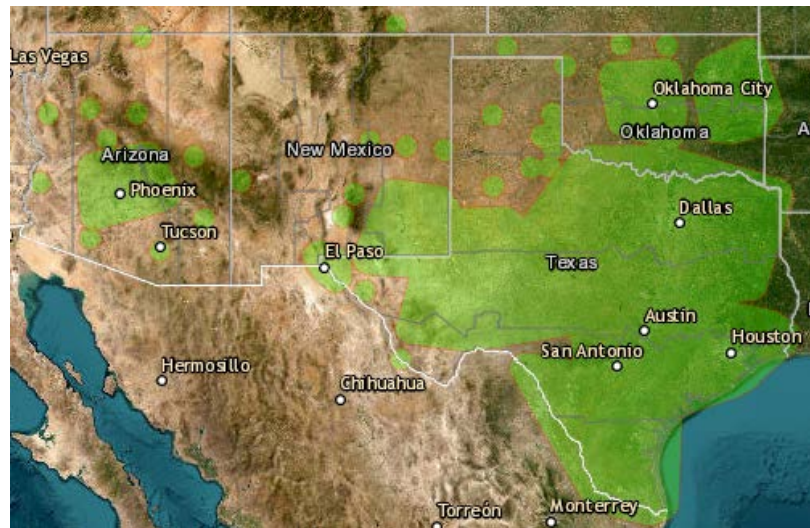
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Workflow Overview



Corrections

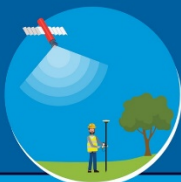
- Real-Time
 - SBAS
 - RTX
 - AllTerra Central's VRS Network
- Cloud Post-Processed
 - Automatic cloud post-processing in Trimble Connect



INTRODUCING TRIMBLE OFFLINE GNSS CORRECTIONS IN TRIMBLE TERRAFLEX

GET AUTOMATED POST-PROCESSING OF FIELD DATA IN THE CLOUD

SO, YOU'RE COLLECTING DATA IN THE FIELD.



THE CHALLENGE

You need your location data to be as accurate as possible. But there are no cellular signals in the field. Offline GNSS corrections are not an option.

THE SOLUTION

Trimble's Offline GNSS corrections enable you to achieve accurate location data without requiring cellular corrections in the field. GNSS measurements are tagged in TerraFlex and processed when data is synchronized. Features are then automatically updated with new accurate locations.



HOW IT WORKS

TerraFlex utilizes a network of public tower stations as a source of high quality GNSS measurements to improve the accuracy of features collected in the field.

TRUST TRIMBLE

By automating the processing of your field data with Trimble's Offline GNSS Corrections, you can be confident of getting the best possible accuracy without being a GNSS expert.



WANT TO FIND OUT MORE?

VISIT [GEOSPATIAL.TRIMBLE.COM/TERRAFLEX](https://geospatial.trimble.com/terraflex)
OR CONTACT YOUR LOCAL TRIMBLE DISTRIBUTOR.

Post-Processed GNSS

Trimble Connect

CPP OK North

Enter an address or city

Data

- Control Point
- Gas
- Utility Pole
- Valve
- Water line
- Water Line
- Service Area

Map Caches

- Offline Satellite basemap
- Offline Satellite basemap...
- Satellite

Accuracy

Estimated accuracy for 7 features

3 features achieved better accuracy using offline GNSS corrections

Control Point

Last Modified: Ethan Heck
14 Feb 23 09:40 AM
Collected Workspace: CPP OK North
Offline GNSS Correction Status: Processed

Estimated accuracy: 0.02 ft

Est. vertical accuracy: 0.02 ft

Water line

Last Modified: Ethan Heck
14 Jun 23 15:54 PM
Collected Workspace: CPP OK North
Offline GNSS Correction Status: Queued

Estimated accuracy: 0.4 in

Estimated vertical accuracy: 0.6 in

Comment: 2

Created on: 14 February 2023 09:40 AM

Line length: 456.42 ft

Delete Edit

Field Data Updates

The screenshot displays the TerraOffice software interface. The main window shows a map with numerous red dots representing picnic tables. A table titled 'Park_FAC' is open, showing a list of selected features. The table has columns for OBJECTID, Shape, Object_ID, Name, Class, Type, and Address. The first three rows are highlighted in blue, indicating they are selected. The status bar at the bottom indicates '169 of 5,649 selected'.

OBJECTID	Shape	Object_ID	Name	Class	Type	Address
1	240	3788	Will Rogers Picnic Table	Site Furnishing	Picnic Table	8601 NW 30TH ST
2	241	3789	Will Rogers Picnic Table	Site Furnishing	Picnic Table	8601 NW 30TH ST
3	242	3790	Will Rogers Picnic Table	Site Furnishing	Picnic Table	8601 NW 30TH ST

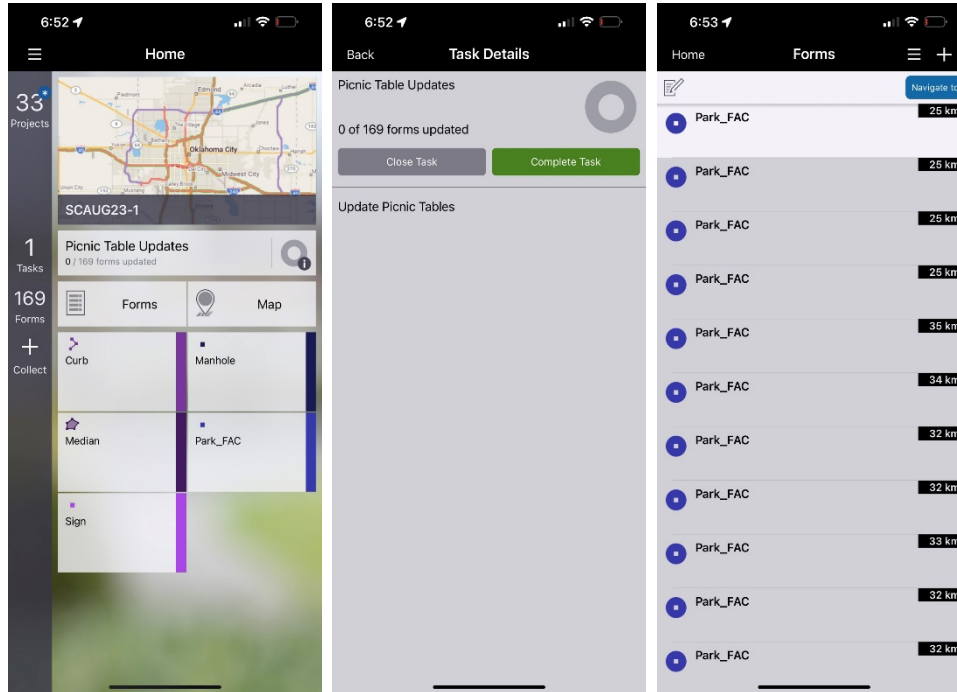
A 'Select By Attributes' dialog box is open on the right side of the screen. It shows the 'Input Rows' as 'Park_FAC' and the 'Selection Type' as 'New selection'. The 'Expression' field contains the following criteria:

Where Type is equal to Picnic Table

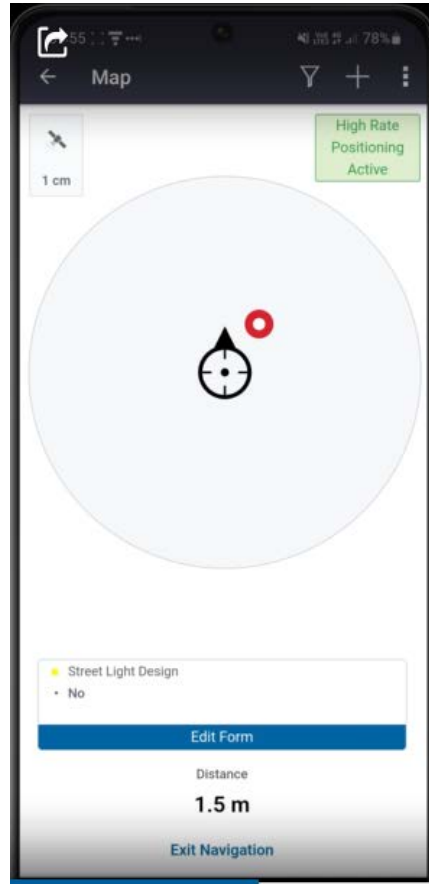
Buttons for 'Load', 'Save', and 'Remove' are visible. There is also an 'Add Clause' button and an 'Invert Where Clause' checkbox.

At the bottom of the interface, there is a 'Trimble Terra Office' section with a 'Create New Task' form. The 'Name' field is empty, and the 'Notes' field contains 'Update Picnic Tables'. A 'Create Task' button is present. Below this, there is a 'Current tasks' section showing 'Picnic Table Updates (0/169)'. At the very bottom, there are buttons for 'Manage Forms', 'Complete Task', 'Select Task for Download', and 'Delete Task'.

TerraFlex – In Field Data Updates



Stakeout



GNSS Hardware Options



Bluetooth Receiver

- Advantages
 - Flexibility (BYOD)
- Disadvantages
 - More Components
 - Additional Connections

Handheld

- Advantages
 - Ultimate Simplicity
 - Lighter Kit
- Disadvantages
 - Less OS Flexibility



GNSS Offsets

GNSS LTI LASER OFFSETS IN TERRAFLEX

