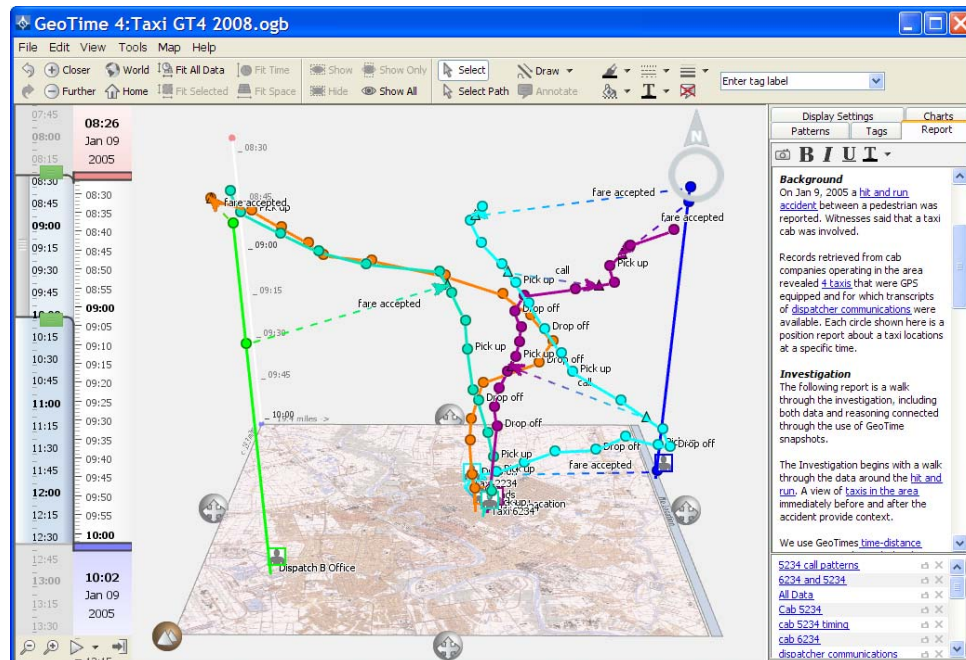


What's New in GeoTime4

Welcome to GeoTime4! GeoTime4 is a radical improvement over previous versions. Everything under the hood has been rebuilt to provide the fastest, most flexible geo-temporal analysis capability yet. The UI has been revamped as well – controls are consolidated and simplified, resulting in a clean and seamless user experience. GeoTime4 also introduces award-winning automatic analysis and reporting capabilities that will change the way you work.

GeoTime4 helps you make sense of complex events in time and space more quickly and effectively with its' unique X, Y, T display where time is displayed in the vertical axis. GeoTime is used for numerous purposes. Popular applications include:

- **Criminal Profiling** – Combine all observations and data sources into an expressive and revealing profile of past events, contacts, transactions and related suspects. Behavior is visible. Link chaining shows connections.
- **Activity Monitoring** – Use GPS feeds, activity logs and pattern analysis to monitor and quickly identify critical events.
- **Trend Analysis** – Examine events over time and geography to identify patterns and exceptions. Use reporting with bookmarks to communicate insights.



*The GeoTime4 window with the Report Tab shown on right.
Time is in the vertical dimension.*

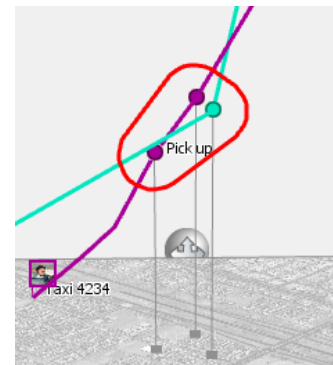
The following describes GeoTime4's *new capabilities*. For further information, see the integrated help documentation or Oculus published scientific papers available on our website at www.oculusinfo.com/expertise.html

New Performance

- **Faster Interaction and Analysis** – Rapid analysis requires rapid interaction. With GeoTime4 you can smoothly scroll through space and time to follow activity without losing context. A new “asynchronous updating” architecture makes GeoTime responsive even if data and map sources are delayed.
- **More Data** – GeoTime4 can display five times more data than GeoTime v2.6 with the same level of interactivity. Data also loads faster from external sources. Sessions are now saved as .ogb files, which are quicker to save and load, and create smaller files. Previous version .ogt files can still be opened and saved in GeoTime4.

New Analysis

- **Pattern Analysis** – New analysis functions have been added to quickly identify behavior patterns of moving entities and networks. All automatic patterns provide one-click results that zoom you to an annotated view of a found behavior.
 - **Meeting Finder:** Search for incidents where meetings occur between moving objects.
 - **Gap Finder:** Find periods of inactivity or missing data.
 - **Speed Finder:** Find movement that occurs at any speed. Helps identify outliers, traffic patterns and data errors.
 - **Links Between Objects:** Select any two objects and show the shortest link connectivity path between them.
 - **Contact Chaining:** Isolate entities that interact with each other or through 3rd parties (e.g. via communications, transactions, relationships, etc).
 - **Link Analysis Filters:** Use link chaining to follow connections between entities to show how they are related.
- **More Flexible Charts**
 - You can chart by any column in the source data, and you can use simple checkboxes to filter or display any category.
 - Link Events, such as communications, financial transactions, movements, and relationships can now be charted.
- **In-scene Chart Annotations** – In-scene charts now appear as callouts attached to events in the time-space view. You can chart any events by any dimension! And even compare multiple charts.
- **Event Timelines** – The Event Timelines in GeoTime4 can show events in time for any data attribute.
- **Data Table** – Events, Places and Entities can now be viewed and edited in a table window. The table displays all attributes, and provides sorting and filtering tools.



Meeting with red annotation highlight

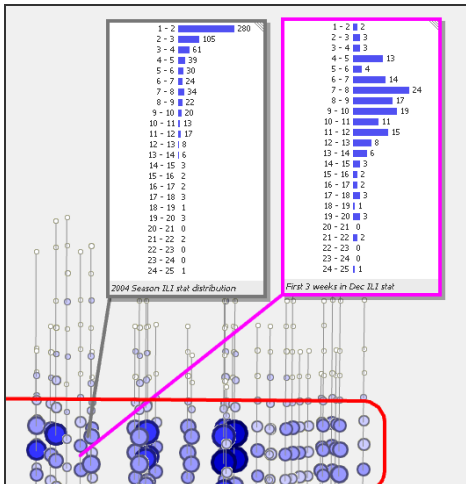
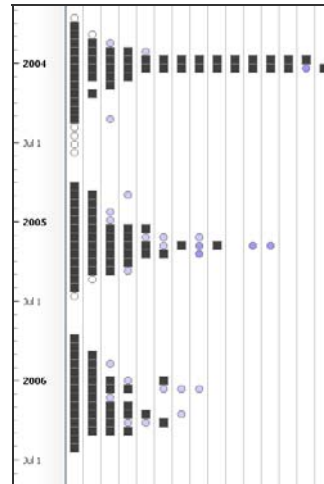
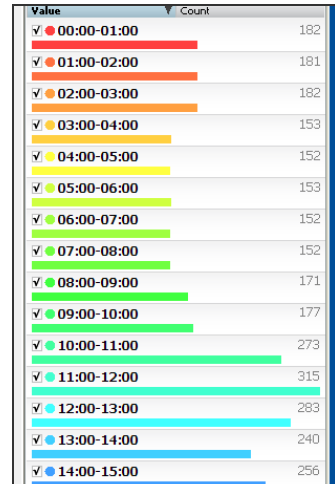


Chart Annotations can be placed in-scene and attached to selected data



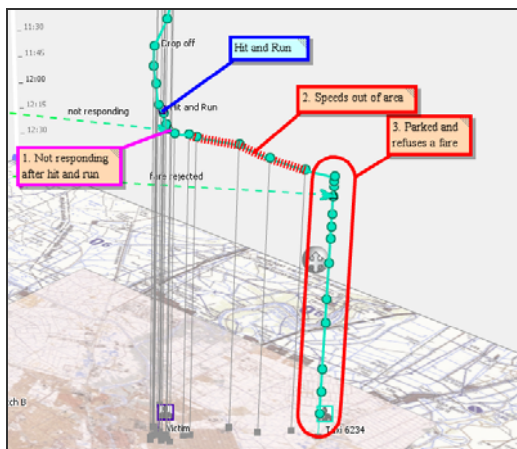
The Event Timeline can show distributions of events over time



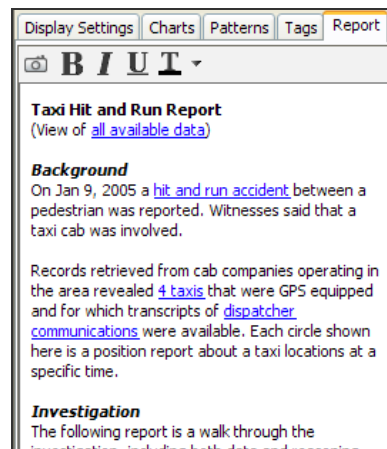
Charts are easier to use for data filtering

New Reporting

- **GeoTime Snapshots** – Snapshots instantly record the viewpoint, data, annotations and extents of what you are looking at. This allows you to record discoveries as you work and then return to them later as part of a report or presentation. These are true bookmarks in time and space that can be recalled, not just screenshot images.
- **Time-Space Annotations** – Events can be annotated in time and space with symbols, text callouts, outlines, miniature charts, and time-distance rulers. A great way to point out discoveries and record analysis.
- **Report Narrative** – Notes, explanations, and hypotheses can be captured in a document that includes hyperlinks to recall captured snapshots. These reports can be exported as HTML documents, complete with snapshot images.



Examples of GeoTime4 Annotations



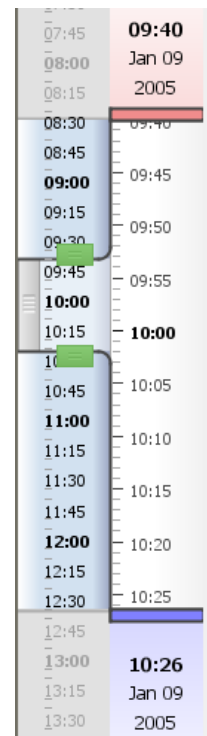
Report window showing links to snapshots

New Connecting to Data and Maps

- **Quick Send Wizard** – A new wizard interface for the ArcMap and Excel extensions that allows fast and easy data import.
- **KML Import and Export** – You can now import KML to Events in GeoTime. Any Placemarks that contain proper time and location attributes will work.
- **WMS for Maps from the Web**– GeoTime can now connect to any Web Map Service (WMS) server for map imagery. A great solution if you have access to the web, or for SOA-enabled environments.
- **ESRI TOC for Flexible Map Access** – If you are using ArcGIS, the familiar ArcGIS table of contents control is now available within GeoTime. Shapefiles, MXDs, and any other map data can be accessed directly from GeoTime.

Enhanced Navigation

- **New Timeline Controls** – GeoTime4’s vertical time slider control is easier to use! It shows both the current visible time range AND where you are within your entire data time extents - so you always know where you are.
- **Smooth Navigation** – Exploration is now more natural and easy – GeoTime4 performs smooth scrolling transitions between viewpoints, providing better context awareness and orientation when changing viewpoints. The new “Closer” and “Further” functions bring selected data into view in one operation.
- **Faster Navigation Gestures** – Pan and zoom with new mouse gestures. Rolling the mouse wheel over the terrain zooms the map, and Shift-right-drag pans.
- **Compass Rose** – A new compass in the top-right corner shows which way is North and provides controls to rotate and pan the map.
- **Tags** – GeoTime4 replaces layers with Tags. Any object can be tagged any number of ways, and then shown, hidden, or selected as a group. You can also chart by tag name and perform filter operations on them.



GeoTime4's New Timeline

And More...

- **Time Zones** – You can choose the time zone that time is presented in
- **More Controls to Customize the View** – The Display Settings Tab presents easier-to-use controls to adjust the display of maps, events and graphics... and your settings are saved between sessions.