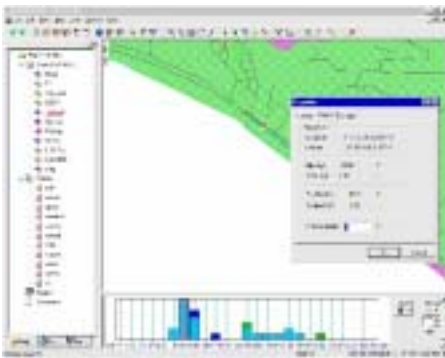


## GIS DataPRO

GIS DataPRO is Leica's software liaison between your GIS in the office and your GS50 in the field. This newsletter gives an overview of the software.

Built on ESRI's MapObjects engine, DataPRO works in a native shapefile format. No more imports or export to ArcView, ArcInfo or any Arc product.

In fact, GIS data-flow becomes so seamless that shapefiles can even be shared between programs.



## Views

DataPRO is a graphical mapping program designed to be intuitive to both experienced and novice GIS users. The main display is separated into three informative views: **Map**, **GPS Summary** and **Tabbed**.

**Map View:** An interactive graphical map allowing selection, edits, deletion and query.

**Summary View:** A graphical timeline showing a distribution of located objects vs. DOP/Accuracy. GPS objects are interactively related to the map view.

**Tabbed View:** Consists of the following views:

- **Project View:** Displays a GIS theme/layer data structure (codes, referenced shapefiles, images and documents).
- **Waypoint Manager:** Allows the creation of GIS waypoints

via co-ordinate input, graphical selection, and import of shapefiles. Waypoint data includes attribution as well as position. Very useful for inventory, inspection, and monitoring of infrastructure assets.

- **Feature Browser:** View and edit attribute information on selected objects.

## Tools

GIS DataPRO offers many tools familiar to SKI-Pro users and tools unique to DataPRO.

**Codelist Manager:** This allows the user to define point, line and polygon feature codes as well as their attribution. Fields can be defined by a range, a picklist or manual entry. Fields can also be specified as mandatory to ensure you get all the information the first time.

**Co-ordinate System Manager:** Allows custom co-ordinate systems, datums, transformations, projections and geoid models to be defined. These are used to convert GPS data stored in WGS84 co-ordinates to more useful local grid co-ordinates. These systems can be used to transform the shapefile for ASCII and CAD export, or simply for transfer to the sensor.

**Sensor Transfer:** Allows co-ordinate systems, jobs, code-lists, antennas and waypoint files to be up or downloaded to a PCMCIA card or to the GS50 Sensor via RS232 cable.

**Workflow Manager:** Unlike a brute force batch-file, the Workflow Manager allows the user to set-up and later walk through a predefined set of steps particular to a collection. The "Next Step" feature enables the user to progress to the next step, step back, or continue with manual functions. This provides ease and flexibility and makes for

streamlined use for both experienced and first time users.

**Image Referencing:** One of the best kept secrets of GIS DataPRO is image referencing. Using a "bmp" or "tif" file and the known co-ordinates for two or more objects are all you need to georeference your own photos. Best of all is the creation of a corresponding world file, which allows subsequent import to your GIS or CAD software of choice. Simple!

## Smarter Selection with SQL

The search by SQL function allows you to query by code, attribute, value, accuracy, and time. Selected data can then be exported to ASCII.

## Post Processing Muscle

DataPRO incorporates the SKI-Pro engine if you should ever need to post-process.

- Smart Internet Download allows the download of data from the nearest stations with 1 click. Add and edit you own custom sites to the DataPRO library and with one click, update the current site list.
- Interpolation to 1 second to smooth data logged at greater intervals.
- Import Reference data from any Leica or RINEX format.

## Import and Export

In addition to ESRI format, DataPRO can import and export to your CAD and GIS. **AutoCad dwg** and **dxf**, **Microstation dgn** and **MapInfo** are all supported.

User-defined ASCII export as well as RINEX are also available.

## Remember

- DataPRO is simple to learn to use, but also extremely versatile and powerful. Try it!