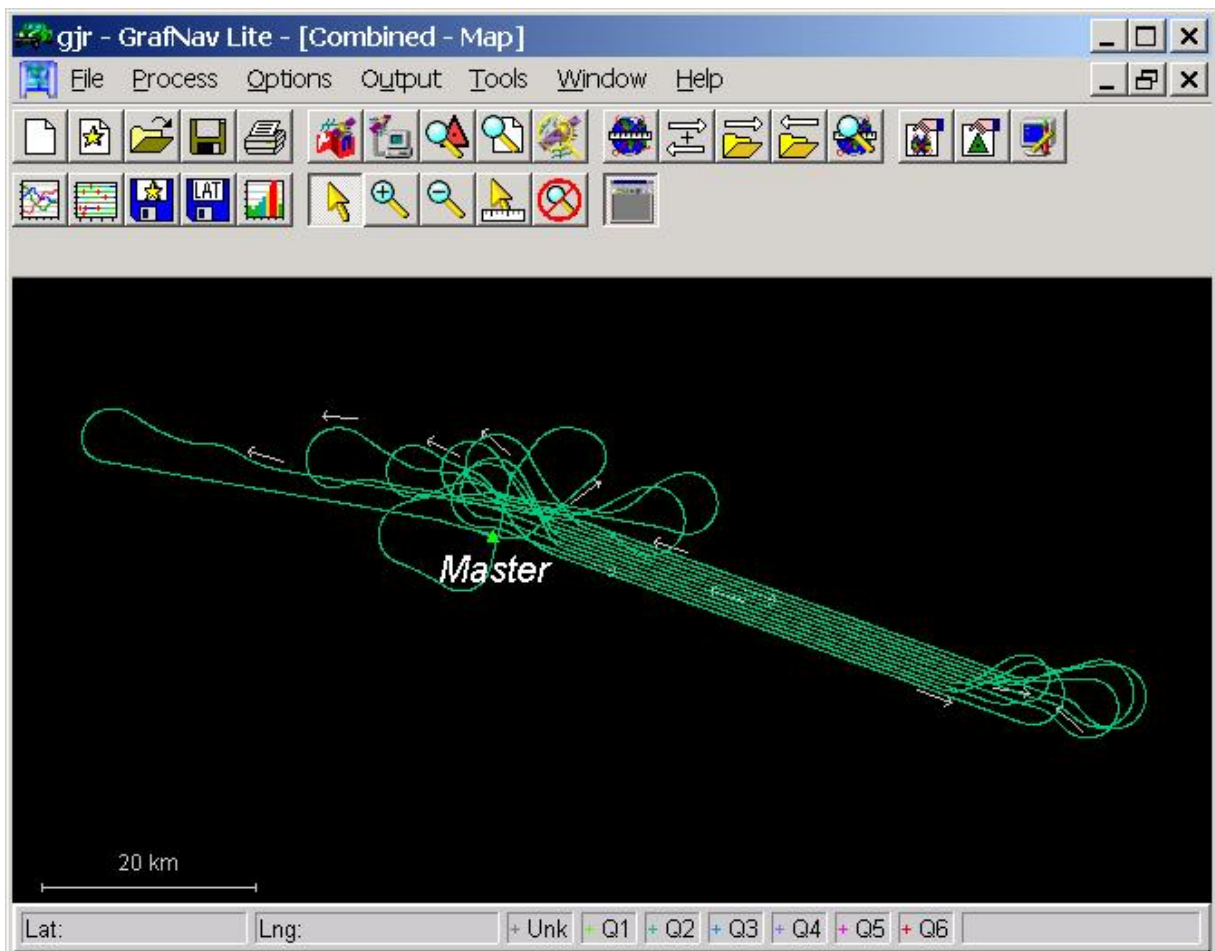


# GrafNav Lite

## GPS Post-Processing Software

GrafNav Lite is a scaled down version of **Waypoint Consulting Inc.**'s popular GrafNav/GrafNet software package that post-processes raw GPS data from a number of GPS receiver formats. Using data collected at base and rover stations, GrafNav Lite processes single frequency carrier phase, as well as code-only (DGPS) data. This gives the user access to accuracies ranging from 10 cm to 5 metres depending on the processing mode selected and the GPS receiver used. GrafNav Lite is ideal for user's requiring sub-metre accuracies, and its easy-to-use interface means new users will be processing data in minutes.



GrafNav Lite Windows 95 Interface

## GrafNav Lite supports the following GPS receivers:

- Ashtech G8, G12, Z12, P12, M12 and GG24 (GPS only)
- Canadian Marconi (All Star) Leica (MX and SR formats)
- Motorola 6 and 8 channel Oncore
- NavSymm and Navstar (all models)
- NovAtel (all models)
- Rockwell Jupiter, PLGR, MPE12
- Trimble 4000 series (.DAT format)
- Rinex (receiver independent format)
- Javad/Topcon
- Allen Osborne
- Conexant Jupiter, Navcor
- Garmin 25/35
- Leica SR/MX, System 500
- Magellan

## Features included with GrafNav Lite:

- Seamless static and kinematic processing.
- Kalman Filter supporting C/A code, carrier phase and L1 Doppler data. Float static solution.
- Forward, reverse and combined solutions
- Easy-to-use graphical interface supports plotting of 22 statistical parameters.
- Data can be exported in a number of projections, including: US State Plane, UTM, Geographic, Lambert, Transverse Mercator, local, and ECEF.
- Fast processing!
- Up to 1 Hz data rates.
- Accurate velocity determination
- Achievable accuracies of 5 cm in static, 20 cm in kinematic using the L1 carrier phase, and 1-5 metres using C/A code only processing.

## Features included with GrafNav/GrafNet and not GrafNav Lite:

- GrafNet static network processing program. This includes a network adjustment and can be used for batch static processing.
- Kinematic Ambiguity Resolution (KAR). This allows the user to achieve centimetre results in kinematic mode.
- Dual frequency processing. Improves KAR reliabilities and can increase long baseline accuracies with ionospheric processing. Also allows the P-code to be included in Kalman Filter. However, this feature needs dual frequency GPS receivers at base and remote.
- Fixed static solution. This allows the user to obtain centimetre or even millimetre accuracies in static mode.
- Quick static solution. Centimetre accuracies can be achieved with minimal observation times.
- Data rates greater than 1 Hz.
- Occupation mode processing, which improves accuracies under tree cover.
- Interpolation of event marks, which can be used to load camera pulse information from a variety of GPS receivers.
- Precise ephemeris, which improves accuracies on long baselines.
- Remote initialization. This feature allows the user to enter the coordinates of a known point to initialize the carrier phase ambiguities.
- Specialized input and output formats such as Leica IDEX.