Dear Colleagues:

We would like to announce the next version 5.9.1 of the UNB GPS Analysis and Positioning Software (GAPS).

The new version of our precise point positioning software includes several updates and new features as listed below:

- Creation of GAPS "Basic" and "Advanced" user submission pages.
  - GAPS "Basic" user submission page allows for quick and easy submission of observation files for users who frequently use GAPS' default processing options.
  - GAPS "Advanced" user submission page includes:
- User-selection of the orbit and clock products to be used.
- User-selection of the carrier-phase and pseudorange observables to be used.
- Optional use of GPS L2C in place of P2 for all satellites currently transmitting L2C.
- Optional use of GPS L5 in place of L2 for all satellites currently transmitting L5.
- Optional use of static-mode satellite clock interpolation (if 30s clock product is used and logging interval < 30s).
- User-selection of GDOP cut-off threshold.
- User-selection of positional convergence condition and maximum number of iterations for least-squares filter.
- Enhanced the cycle-slip detection algorithm (following Blewitt, 1990).
- A minimum of 4 satellites per epoch are required before estimation begins.
- User-selection of all available neutral atmosphere delay (NAD) prediction model and mapping function (MF) combinations.
  - NAD prediction models include: UNB-VMF1 (NCEP), UNB-VMF1 (CMC), VMF1 (ECMWF), UNB3m, GPT2 (1x1 deg.), ESA 2.5 and None.
  - Mapping function options are: Vienna MF and Niell MF.
- User option to not estimate NAD.
- User option to not estimate tropospheric gradients.
- Optional use of a user-provided receiver antenna calibration file.
- NAD estimation automatically terminated if receiver rises above neutral atmosphere threshold (50,000 ft = 15,240 m).
- Added option to estimate precipitable water (if a meteorological file is submitted).
- New .ion, .cmp, .nad, and .DOP output files as well as modified formatting of the .par file.
- Improved reporting of processing parameter options and results in the HTML output.
- Added receiver clock and DOP plots.
- Added height component to kml output.

For information on the processing strategy please visit the following Web page:
http://gaps.gge.unb.ca/gaps_summary.txt

Your feedback (suggestions, bug reports, etc.) is welcome via the GAPS Development Team email:
gaps@unb.ca

To use GAPS, please visit the following Web page:
http://gaps.gge.unb.ca

With best regards,
The GAPS Development Team