



## 2017 Positioning & Measurement Stream Articles

June 2017

### *SNAP webinars*

Due to user demand LINZ, Otago University & NZIS are producing webinars to provide training for LINZ's SNAP least-squares adjustment software. The webinars are aimed to be completed for delivery in June/July 2017. The first webinar will serve as an introduction to SNAP, and will step through some typical workflows and aim to be accessible to users with limited experience. A second webinar will address more complex features of SNAP, and will be aimed at more advanced users.

SNAP users are invited to submit requests of elements of the software which they would like to see included in the webinars to the producers: Nic Donnelly (LINZ, [ndonnelly@linz.govt.nz](mailto:ndonnelly@linz.govt.nz)) and Chris Pearson (Otago University, [chris.pearson@otago.ac.nz](mailto:chris.pearson@otago.ac.nz)).

The webinars will be added to the library of material on LINZ's YouTube channel: [www.youtube.com/user/LINZVideoOfficial](http://www.youtube.com/user/LINZVideoOfficial).

SNAP = Survey Network Adjustment Program, and is licensed freeware (free download from: [www.linz.govt.nz/data/geodetic-services/download-geodetic-software/snap-concord-downloads](http://www.linz.govt.nz/data/geodetic-services/download-geodetic-software/snap-concord-downloads)).

While not officially supported, SNAP is periodically enhanced and it is the only software (including commercial packages) which fully supports all the components of the NZGD2000 system (including the 2005, 2009 & 2016 NZGeoid models, and the NZ Deformation Model). It also has in-built support of the legacy NZGD1949 coordinate systems, NZ Map Grid, and commonly used international reference frames. Users are also able to customise their own coordinate systems, making it adaptable for use in other countries. The software settings and commands are highly customisable, making for an extremely versatile survey computational tool. If your firm is not already using SNAP regularly, maybe it is time you took another look at it?

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### ***Network RTK discussion paper***

Last year we talked about a project the stream had embarked on, which was to compile a paper summarising Network RTK technology and its implementation in New Zealand. This project was well progressed - and then the Kaikoura earthquake happened. We can now report that the paper is again being advanced. It is hoped to be circulated for expert comment within the next few weeks, and published in June. We hope that this document will serve both as a valuable reference resource, but also encourage some discussion about the future of Network RTK in New Zealand. In the meantime, an excerpt will be published in the June issue of NZIS's Survey+Spatial magazine.

### ***Stream events***

Of late the Positioning & Measurement stream has been assisting the Engineering stream to organise and promote the one day seminar held in Auckland at the end of May. We hope that those who attended the event found it worthwhile and left with a greater understanding about the contribution these two streams can make to NZIS and the surveying/geospatial sectors. It is hoped that similar seminars will be held on an annual basis, so we welcome any feedback about this event and any suggestions for future events.

### ***Getting involved***

To date our stream has: set up a LinkedIn group as a venue for sharing information and having discussions; conducts regular committee meetings via on-line platforms such as GoToMeeting and FaceMe; helped produce webinars/webcasts; written articles for stream slots in Survey+Spatial; organised speakers at conferences and seminars; and compiled the soon to be published Network RTK paper.

For those who would like to contribute to the stream, now would be a great time to volunteer to get involved. To date most of the output of the stream has come from the efforts of only a small fraction of its membership. For the stream to grow and become more representative of the diverse professional interests of our wider membership, we need greater engagement and participation of our members.

Perhaps the biggest challenge confronting the stream is that (unlike branches) our members are scattered nationwide. Therefore, physical events will probably remain infrequent, and we will have to reduce the tyranny of distance via social media and other digital platforms.

The stream's LinkedIn group is currently the best place to start a conversation with other stream members. Those ready to take a more active role might like to consider seeking nomination onto the stream committee (this process occurs during the NZIS AGM, but does not require nominees to be physically present at the AGM). To engage with the stream, join the LinkedIn group ([tinyurl.com/njbpejn](https://www.linkedin.com/groups?trk=hb_email&trk_email=stream&trk_bic=stream&trk_sid=stream)) and start a conversation.

Alternatively, email the stream chair Rachele Winefield ([rwinefield@linz.govt.nz](mailto:rwinefield@linz.govt.nz)). It's your stream!

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