Where All the GNSS High Precision Development Are Going?

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SUMMARY

If the surveyors and geodetic engineers were benefiting of the GNSS high precision development that led to real time kinematic and PPP, nowadays it looks like the producers are looking to extend their market share to a much larger community.

In the recent past, the surveyors have been kicked out the agricultural fields and road construction projects because the machine manufacturers adopted also GNSS high precision receivers for providing to non-surveyors a direct assistance. If we extend that model further away and with the advent of low-cost high precision GNSS hardware that anyone can order from the internet, what will remain to the surveyors? Cm RTK for everyone and on the mobile with new processing scheme named “mRTK”, the author is questioning about the future.

We are forced to recognize that new incomers like UAV operators are much at ease to share any of their progress through multiple forum places while surveyors are remaining cautious about such viral exchanges.

While most of the development on GNSS high precision have been made by surveyors and geodetic engineers to reach their final centimetric goal, will the surveyors keep their job as specialist of qualified geospatial data providers?

Are there any new fields where the surveyors would engage their skills in applications and services based on positioning techniques?

That paper deals with these questions and the author who more than 30 years in the GNSS industry has will bring new perspectives for surveyors who are scarily looking for their future. Structural
monitoring applications, high-rise structures, UAV photogrammetry, robotics, Industry 4.0 and IoT, there are just so many new horizons for surveyors who wants to keep the pace and remain the solely specialists in delivering not only the coordinates but their quality.