

Doctoral Thesis Title: Treatment and analysis of GNSS raw data from smartphones and its applicability to urban mobility

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Abstract: In May 2016 Google announced that its new version of Android (Nougat) would give direct access to GNSS raw data. In May 2018, the first multi-constellation dual frequency mobile phone (Xiaomi mi 8) was launched on the market. These two milestones have marked a new era in positioning and navigation. This thesis aims to complement, expand and introduce different analyzes on the GNSS signal received in these devices in terms of precision and accuracy both in post-processing and in real time, with special emphasis on the signal to noise ratio of the signal; In this way, clear parameters can be established on the applicability of the solution to different scenarios, with urban mobility and smart cities being the most interesting of all of them nowadays.

Available Means: Material from the Department of Cartographic Engineering (GNSS receivers) and material of the student and the directors (mobile devices, laptops, etc.)

References:

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