

Computation of Receiver Position from Code Pseudoranges.

Laboratory work 1, 2

Compute the coordinates of a GPS receiver at observation epoch: 2004-02-02, 1 h XX¹ min 00 sec, using P1-code pseudo ranges. You will find necessary data in the following files:

- 0lov033b.04o - observation file in RINEX format
- 0lov033b.04n - navigation (ephemeris) file in RINEX format
- rinex.txt - description of the RINEX format

It is not necessary to use more than 5 satellites for the given epoch. If your epoch contains observations to more than 5 satellites, you may choose the first five ones. You may neglect the ionospheric and tropospheric corrections.

Write report according to IMRAD structure. The report should include:

- Commented code (Matlab, Excel or some other computing tool)
- Numerical results: coordinates of satellites, receiver's coordinates, their standard errors and PDOP value.

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¹ Replace XX by the number given in file xx.xlsx