

OØ, 25.10.2017

GMSG200 Exercise_GNSS_3

Computation of azimuth and elevation angles to GPS-satellites.

Reference:

“GMSG200 Exercise_GNSS_2,
Computer program to compute ECEF coordinates in WGS84 from Broadcast
Ephemerides given in the RINEX format.”

Exercise a)

Use the satellite-coordinates in “GMSG200 Exercise_GNSS_2” and receiver
coordinates from site T827 to compute azimuth and elevation angles to PRN10, PRN12,
PRN13 and PRN15.

Exercise b)

Visualize the satellite coverage with the help of a polar plot.

RINEX Navigation file:	T827158A.17N
Satellitenr:	PRN10, PRN12, PRN13, PRN15
Epoch:	2017 06 07 07 30 00.00

Coordinates of T837:

$x = 3179085.143$ $y = 603490.567$ $z = 5478049.283$

Deliverables:

You submit your exercise digitally on Canvas. The different files shall be packed into one single zip-file.

- Description of the program
- Program listing (e.g. m-file)
- Output-file.
- README.TXT (a text-file explaining the content of the zip-file)

Deadline: 08.11.2017



