Analysis of data recorded in the frame of ESA Monitor project

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This paper will present the results obtained in the frame of the ESA Monitor project [1], regarding the scintillation data measured at low latitudes in the west African sector and at high latitudes in Scandinavia. In a first stage, a comparative analysis will be presented for these two regions, regarding the different parameters, in particular the fades statistics, the cycle slips and loss of lock, the spectrum, the drift velocity, the indices and the time and location of appearance. In a second stage, we will evaluate the effects of these scintillations on a navigation system. Maps of the two regions will be produced.

References

[1] Y. Béniguel, R Orus-Perez, R. Prieto-Cerdeira, S. Schlueter, S. Scortan, A. Grosu "MONITOR 2: ionospheric monitoring network in support to SBAS and other GNSS and scientific purposes", IES Conference, Alexandria (Va), May 2015-05-22