

FACT SHEET

EGNOS Tools for Educational Research

The European Space Agency has developed tools for students and engineers interested in Satellite Navigation.

Five tools are available for free to the interested users:

- SISNeT User Application Software
- SISNeTlab
- SBAS TeACHER
- SBAS MeNTOR
- SBASSimulator

EGNOS	European Geostationary Navigation Overlay System
EMS	EGNOS Message Server
SBAS	Space Based Augmentation System
SIS	Signal-In-Space
SISNeT	SIS over interNeT

More details on the back page.

General information about the European Global Navigation Satellite Systems

www.satellite-navigation.eu

www.esa.int/nav

ec.europa.eu/enterprise/policies/satnav/egnos

egnos-portal.eu

www.gsa.europa.eu

www.essp-sas.eu

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Various free tools available

SISNeT User Application Software (UAS)

Visually access EGNOS data over Internet using SISNeT!

SISNeT standard protocol provides users with the messages transmitted in the EGNOS Signal In Space from GEO satellites, via the Internet and in real time from Data Server. In the classroom, user friendly access and graphical display of real-time EGNOS broadcast messages is a considerable aid in the understanding of EGNOS.

Free Download at <http://www.egnos-pro.esa.int/sisnet/uas.html>

SISNeTlab

Access EGNOS data archives and graphically analyse its operation and performance!

The SISNeTlab tool is an EMS (EGNOS Message Server)-based application, which provides users with hands-on experience of the information broadcast. The EGNOS Message Server constitutes a non-real-time complement to the ESA SISNeT Data Server. It opens the door to a wide mosaic of potential applications for research scientists, Small and Medium Enterprises and other GNSS Engineering staff.

Free download at <http://www.egnos-pro.esa.int/sisnetlab>

SBAS TeACHER

Visually decode, modify, encode or create SBAS messages!

The SBAS TeACHER was developed with the objective to allow decoding and encoding SBAS messages in a visual and intuitive way, so that the SBAS message contents can be more effectively learned by students and new engineers working in the SBAS field by means of user-friendly interface components.

Free download at <http://www.egnos-pro.esa.int/sbasteacher>

SBAS MeNTOR

Visually create SBAS message/data flows!

SBAS MeNTOR (SBAS Message Generator) is an extension of the SBAS TeACHER tool. Where TeACHER enables users to modify contents of SBAS messages in visual way but one at a time, the SBAS MeNTOR enables users to define the desired values and states of the whole SBAS and let the software generate all the specific messages of the selected period. The EMS output file format allows users to process the simulated results in most of the tools that are currently available to professionals (e.g. Eurocontrol's Pegasus, SISNeTlab, ESPADA, etc.).

Free download at <http://www.egnos-pro.esa.int/sbasmentor>

SBAS Simulator

Virtual SBAS System Simulator

SBAS Simulator will help everybody, from general to professional, to understand and learn SBAS systems. This simulator gives performance based on simplified macro models for ECAC region (European Civil Aviation Conference). The performances are only an approximation with no guarantee of the obtained results.

Free download at <http://www.egnos-pro.esa.int/sbassimulator>