

## THIRD CNES WORKSHOP ON EARTH – SPACE PROPAGATION

22 to 24 February 2006, CNES Toulouse, France

### Abstracts

The aim of this workshop is to provide an overview of the propagation phenomena affecting any Earth to space or space to Earth radio links and to depict their impact on the radio-frequency links of space systems. The Workshop is free of charge.

### Topics

#### *Ionosphere*

- EGNOS, ESTB, GALILEO, GPS, GSTBv2, WAAS
- Phase and amplitude scintillation
- Total Electron Content, Electronic density
- Impact on positioning systems
- Monitoring of geomagnetic storms
- Statistical models and time-series synthesizer

#### *Troposphere*

- Climatic parameters modelling
- Statistics of Attenuation due to clear sky and / or precipitations
- Time-varying propagation channel
- Spatial variability of the propagation channel
- Generation of spatially and temporally correlated time series of attenuation

#### *Environmental propagation : Mobile & Indoor*

- Communications/Navigation by satellite in the L-, S- and Ku- bands
- Fading, propagation delay, Doppler spectrum coherence time, coherence bandwidth
- Ray tracing, statistical models, channel measurements
- Mobile propagation (sub-urban, urban, rural, tree-shadowed, mountainous)
- In-door propagation : building penetration, material characteristics (complex permittivity)

#### *Fade Mitigation Techniques*

- Communications by satellite : air interface performances
- Power control, adaptive data rates, codes and modulations
- Standardisation : DVB-S2 and DVB-RCS
- Assessment of C/I
- Site and Frequency diversity

### Abstracts and Further dates

Abstracts for contributions should be emailed attachments to be received **BEFORE 21 OCTOBER 2005** at the following addresses : [Frederic.Cornet@cnes.fr](mailto:Frederic.Cornet@cnes.fr) AND [Frederic.Lacoste@cnes.fr](mailto:Frederic.Lacoste@cnes.fr). Abstracts should be about 1000 words, but give sufficient information to enable an objective assessment to be made by referees. As well as the title of the paper, submissions should indicate the appropriate topic, as listed above, and include the name(s) of author(s), organisation(s), email address(es), phone and fax number(s) and full postal address(es). The meeting and all papers will be in English.

Notification of acceptance of paper: **24 november 2005**

Full paper required for publication: **1 February 2006** (Full papers may be up to 8 pages.)

### Program Committee

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