

CloudCT Mission

Simulation and Analysis of Communication Concepts

Bachelor Thesis / Practical

CloudCT is an Earth observation formation mission of 10 nanosatellites with an intersatellite distance of about 100km. To downlink observation data, the X- or S-Band shall be used and multiple groundstations.

Task Description

- Set-up simulation (Omnet++, Orekit) for the CloudCT mission scenario
- Compare S-Band and X-Band downlink for various ground station options
- Propose operational concept
- Derive possible mission output

Preliminary Knowledge

- C++, Java
- Mission Analysis, Wireless Communication

Contact

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