



HE Space is a successful international space company. For nearly 40 years, we have been supporting our customers with qualified experts in the field of engineering, science and administration. We are currently looking for a System Performance Engineer (Biomass Project) to support our customer in the Netherlands.

System Performance Engineer (Biomass Project)

Key Tasks and Responsibilities

Working within the Earth Observation Directorate at ESA – ESTEC, the holder of this post will contribute to all aspects relevant to the system performance of the Biomass mission up to Level 1 products. This includes project internal activities and monitoring/review of the relevant industrial activities.

As part of the Biomass Team, you will have the following responsibilities:

Requirement Engineering:

- Support the maintenance and coherence of system level requirements including mission observation, Biomass End-to-End Simulator (BEEPS) and Ground Processor Prototype (GPP), external and internal calibration, ITU and RFI protection requirements;
- Monitor and critically analyse the system level performance requirements allocation, their flow down to the relevant contributors, the associated margins and their evolution;
- Support the payload team for aspects relevant to instrument performance requirements flow-down and instrument performance verification, including relevant models and tools;

Performance Budgets and Performance Modelling:

- Maintain system level performance budgets in coordination with the Biomass Payload and Engineering/AIV sections. Critically monitor and analyse the compliance of the system performance budgets with the end-to-end system performance requirements and propose corrective actions in case of deviation;
- Develop and maintain system performance mathematical models and tools to support the performance assessment;
- Support the BEEPS / GPP verification and acceptance activities;

End-To-End (E2E) Calibration and Calibration Transponder:

- Monitor and critically analyse the calibration transponder performance budget, its coherence with the system performance budgets and compliance with the end-to-end system performance requirements;
- Verify and ensure the coherence of the E2E and external calibration approaches and ground processing implementation with the instrument internal calibration and instrument / system;
- Monitor and review the Biomass calibration plan and the specification, procurement and verification/validation of the relevant external calibration equipment;

General Support Activities:

- Support the definition of cal/val and in-flight commissioning plans and the preparation, execution and analysis of the relevant in-flight operations during the commissioning phase;
- Support Payload Data Ground Segment (PDGS) reviews regarding the SAR processor and L1-L2 processing interface aspects including cross-verification activities of the PDGS operational SAR processor;
- Support the interactions with the Biomass Mission Advisory Group (MAG) regarding system performance aspects;
- Support Agency Project reviews.

Skills & Experience

You will have the following qualifications and relevant experience:

- University degree (Masters or higher) or equivalent qualification in a relevant physical science or engineering subject, together with a demonstrated background and experience in SAR systems, SAR performance/calibration and SAR processing, preferably acquired in a space project environment. Background and experience on the specific issues relevant to low frequency, full-pol SAR systems is an asset;
- Solid analytical skills and command of the physics and techniques of SAR systems, together with the capability to critically analyse the work performed by industry in the relevant areas, identify problems and propose/instigate corrective actions;
- Proficiency with programming tools and languages relevant to the implementation and maintenance of the system performance models (e.g. MATLAB, Python);
- Fluency in English is mandatory; knowledge of another European language is an advantage.

This job is located in Noordwijk. We welcome applicants who are available from July 2020 (or as soon as possible thereafter).

If you think you have what it takes for this job, please send your CV together with a letter of motivation (both in English and in Word) to Chiara Grossardi, by clicking on the button "Apply for this job" quoting job **NL-4270** before **29-Apr-20**.

An exciting and dynamic international working environment awaits you!