

VN 21/64 Flight Dynamics Engineer (2 Posts)

The Carbon Dioxide Monitoring (CO2M) mission is part of the Copernicus component of the European Union's Space Programme. Under the EU-EUMETSAT Copernicus Contribution Agreement, and in partnership with ESA, EUMETSAT is contributing with the development of a significant part of the CO2M ground segment for EUMETSAT to undertake the responsibilities for routine operations of CO2M and the data processing and product dissemination to users.

The Flight Operations (FLO) Division is tasked with conducting space flight operations and supporting the development of future missions, including flight dynamics and mission analysis activities. This Flight Dynamics engineer post will be in the Flight Dynamics & Mission Analysis team in FLO, and integrated with the CO2M Operations Preparation Team in support of the Copernicus Missions Division (CMD).

The post holder will be responsible for, and contribute to, the flight dynamics and mission analysis aspects of system development and operations preparation, validation and routine operations of the Copernicus CO2M mission. They will also participate in the engineering, operations and maintenance of Flight Dynamics operational systems for current low Earth orbit satellites, as well as support the development of other future missions.

The Flight Dynamics Engineer will report to the LEO Flight Dynamics Team Leader in FLO and follow the technical direction of the CMD Operations Preparation Manager for CO2M activities.

Duties

The main duties of the post will be as follows:

- Provision of mission analysis support to system and flight dynamics facilities' requirements specification, design, development and verification phases;
- Provision of flight dynamics support to the
- Performance of flight dynamics routine, special, contingency and End of Life/disposal operations of LEO satellites, including:
 - generation of flight dynamics products required within the ground segments
 - maintenance of the operational orbit



LOCATION

Darmstadt,
Germany



QUALIFICATIONS

A university degree in a relevant discipline (e.g. computer sciences, physics, aerospace engineering, mathematics).



LANGUAGES

The official languages of EUMETSAT are English and French. Candidates must be able to work effectively in English and have some knowledge of French.



DEADLINE

15 February 2022

definition, operations preparation and execution of Launch & Early Orbit Phase (LEOP), Satellite In-orbit Verification (SIOV) and/or system Commissioning activities, as needed;

- Provision of flight dynamics support to the operations concept definition and operations preparation of routine operations activities;

through implementation of manoeuvres

- effective monitoring & management of collision risks and related mitigation actions
- implementation
- evaluation of satellite performance, including fuel lifetimes
- support to, and implementation of, anomaly resolution and investigation
- identification of improvements to increase Flight Dynamics performance, efficiency or robustness
- implementation of the necessary system evolutions (operational procedures, databases, configurations) as per the identified, and approved, anomaly resolution or enhancement actions/plans.

- Ensure readiness of Flight Dynamics operational systems for future LEO missions (e.g. CO2M), including of new recurrent satellites within existing missions, via support and effective contribution to operations

- preparation and validation activities;
- Support to the re-engineering of existing flight dynamics and conjunction management systems including to the specification, development, integration and acceptance of such new systems.

Skills and Experience

- In-depth knowledge of space flight mechanics, covering both orbit and attitude dynamics, for Earth orbiting spacecraft;
- Proven solid professional experience in operations and maintenance of Earth Observation LEO space flight dynamics systems;
- Knowledge of system engineering standards and methodologies in aspects relevant to space operational systems;
- Familiarity with software libraries and tools specific for flight dynamics & mission analysis of LEO satellites (e.g. NAPEOS, Orekit);
- Familiarity with Linux systems and programming languages with focus on mathematical applications (in particular Java, Python or MatLab);
- Strengths in analysis, synthesis and presentation, coupled with very good interpersonal skills and a proven ability to apply these to the interactions within a team and between teams.

Employment Conditions

The initial contract will be of 4 years' duration, with subsequent 5 year contracts being awarded thereafter, subject to individual performance and organisation requirements. There is no limit to the amount of follow-up contracts a staff member can receive up to the EUMETSAT retirement age of 63 and there are certainly opportunities to establish a long career perspective at EUMETSAT.

This post is graded A2/A4 on the EUMETSAT salary scales. The minimum basic salary for this post is EURO 5,363 per month (net of internal tax but excluding pension contribution and insurances) which may be negotiable on the basis of skills and experience. The salary scale provides for increments on the anniversary of taking up employment, and scales are reviewed by the EUMETSAT Council with effect from 1 January each year. In addition to basic salary, EUMETSAT offers attractive benefits. Further information, including salary details, is available on the EUMETSAT web site.

EUMETSAT is committed to providing an equal opportunities work environment for men and women.

Please note that only nationals of EUMETSAT Member States may apply. The EUMETSAT

Convention requires that Staff shall be recruited on the basis of their qualifications, account being taken of the international character of EUMETSAT.

About EUMETSAT

EUMETSAT is Europe's meteorological satellite agency. Its role is to establish and operate meteorological satellites to monitor the weather and climate from space - 24 hours a day, 365 days a year. This information is supplied to the National Meteorological Services of the organisation's Member States in Europe, as well as other users worldwide.

EUMETSAT also operates several Copernicus missions on behalf of the European Union and provide data services to the Copernicus marine and atmospheric services and their users.

As an intergovernmental European Organisation, EUMETSAT has 30 Member States (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.)

[Apply Now](#)