

#### CALL FOR APPLICATIONS

## R&D engineer at Météo-France Observation Department

Applications are invited for a 12 months position starting in autumn 2019, to work at Météo-France Upper-Air Observation Department on the following topic: "Pre-operational implementation and evaluation of a virtual wind profiler based on Mode-S EHS data"

#### **Practical information**

Location: Toulouse, France

Duration: 12 months

Start date: 1 October 2019, or as soon as possible after this date.

Salary: from 2000 to 2600 € net monthly, according to qualification and work experience

The deadline for applications is 22 July 2019.

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### Scope

The role of Météo-France's observation department is to provide state-of-the-art measurements for numerical prediction systems, climatological databases and direct users, in order to facilitate decision-making in all weather-dependent activities. Observations derived from air navigation data have been identified as a high potential measurement source for civil aviation and airport operations. As part of the enhancement of its services, Météo-France wishes to operationally produce vertical wind profiles calculated from Mode-S EHS data from secondary surveillance radars.

# Work description

Météo-France's observation department has set up several Mode-S EHS data collection channels, and is working on providing observation derived from these data to the numerical prediction system of Météo-France.

The person we are looking for for this position will be responsible for the development, evaluation and documentation of a software chain which will use Mode-S EHS data to produce wind observation in a form similar to that of a wind profiler. The software structure, the final data format (BUFR), and the tools used (Python, ...) will be those of the operational environment of Météo-France. The evaluation will be carried out through sensitivity analysis and comparisons with other sources of observation, and will lead to the preparation of a technical note, as well as oral presentations, internally or to civil aviation stakeholders.

Required skills: the applicant is expected to have an engineering degree, or university degree in Physics, Mathematics, Meteorology, Computer Science, or equivalent. Documented experience in data analysis, python programming and results reporting is required. Familiarity with atmospheric observation and/or Mode-S EHS data is an asset.

Good oral and written communication skills in French or English is mandatory.

The selection will be made on the adequacy between the training, experience, and the required work. No distinction will be made based on age, gender, national origin, religion, or mental or physical disability.

For full consideration, an application letter including a detailed statement of the candidates' motivation for the position, alongside a full curriculum vitae (experience in data analysis, programming skills and languages) as well as contact details for two referees (names, e-mail and phone) should be sent by e-mail (in French or English) by 22 July 2019 to: Bruno Piguet (bruno.piguet@meteo.fr) and Elvis Renard (elvis.renard@meteo.fr).
Our email server limits the size of attachments to ~5 Mo so please take this into account when sending us your application or we may not receive it in due time