



## POST-DOC POSITION ANNOUNCEMENT

- Institution:** National Institute for Space Research (INPE), São José dos Campos, Brazil
- Department:** Image Processing Division (DPI) and Remote Sensing Division (DSR)
- Project:** e-Sensing: Big Earth observation data analytics for land use and land cover change information
- Website:** <http://www.esensing.org>
- Duration:** 24 months
- Stipend:** R\$ 6,143.40 (monthly)
- Support:** FAPESP – São Paulo Research Foundation (grant 2014/08398-6)
- Supervisor:** Prof. Dr. Gilberto Câmara and Prof. Dr. Ieda Del’Arco Sanches
- Start Date:** 02.01.2017 (expected)
- Task:** Specification and Validation of Tropical Agriculture Monitoring Methods and Data

This Post Doctoral appointment will focus in the specification and validation activities on methods for agricultural monitoring using big Earth observation data. These methods should be based on analysis of satellite image time series.

The tasks to be performed are: (a) Detection of planted area of soybeans, maize and sugarcane, rice and wheat crops in selected areas, using methods that process large scale satellite image time series; (b) Detailed assessment of big Earth observation data analytics for agricultural mapping.

The post-doc will development analytical methods for detecting large agricultural areas in Brasil, with the specific tasks of mapping land cover associated to soybeans, maize and sugarcane. We will compare our results with ground truth data we have acquired and with results from IBGE (Brazil’s Census Bureau).

The methods for agricultural monitoring should be developed in the R language and work with data stored in the SciDB array database.

**Qualification:** The candidate should have a PhD in either Earth Sciences, Remote Sensing or Agriculture, obtained in the last 7 years. Candidates can apply before completing their PhD, but they should provide evidence that the doctorate will be awarded before the expected start of the fellowship.

The candidate should have large experience in remote sensing and geotechnologies for agricultural mapping and monitoring. The candidate should have experience in the use of statistical packages for maps evaluation, preferably in R language, Brazilian agricultural practices, analysis of time series and geospatial databases and field work.

**Rules:** The scholarship is awarded following the rules and procedures of FAPESP for post-doctoral fellowships attached to Thematic Projects. Please read the information provided by FAPESP before applying: <http://www.fapesp.br/en/5100> and <http://www.fapesp.br/en/5427>.

**Support:** The Image Processing Division (DPI) of Brazil's National Institute for Space Research (INPE) will provide institutional support for the awarded post-doctorate researcher. The candidate will have a working infrastructure, room, personal computer, internet connection, and full access to all INPE's facilities.

**Visa:** Foreign nationals are required to have a working visa to receive a post-doc fellowship in Brazil. The Image Processing Division (DPI) of Brazil's National Institute for Space Research (INPE) will provide the support for the researcher to obtain a visa, in case the candidate is not a citizen of Brazil.

**How to Apply:** Please send the following documents to the supervisor and project manager, Prof. Dr. Gilberto Câmara (email: [gilberto.camara@inpe.br](mailto:gilberto.camara@inpe.br)):

- (a) Cover letter stating your qualification and why you are applying for the position.
- (b) Short CV containing your personal data, academic qualifications, and five most relevant publications to date.
- (c) Link to personal page on sites such as Research Gate, Google Scholar or Academia.edu.
- (d) ORCID Research ID, if available.



(e) Link to Lattes CV, if available.

**Deadline:** 15.10.2016