

## 1. Personal Data

Name: Evlyn Novo

Email: [evlyn.novo@inpe.br](mailto:evlyn.novo@inpe.br)

Date of birth: 12/16/1952

Higher degree: PhD Physical Geography (1984). Institution: University of São Paulo

Actual Position: Senior Researcher. Institution: National Institute for Space Research (since 1974)

ORCID: <https://orcid.org/0000-0002-3221-9774>

## 2. Career path and professional experience

Since 1995: Senior Researcher at the *Remote Sensing Division*, National Institute for Space Research, Brazil

Since 2001: Project Scientist at the *Earth Research Institute (ERI)*, UCSB, in collaboration with Dr John Melack, USA.

Since 1985: Faculty at the *Remote Sensing Graduate Program*, National Institute for Space Research, Brazil.

2004-2005: Academic Coordinator of the Remote Sensing Graduate Program, National Institute for Space Research, Brazil.

1989-2005: Faculty at the Graduate Program *Environmental Engineering Sciences*, São Carlos Engineering School, University of São Paulo, Brazil

1988-1998 : Faculty at the Graduate Program *Geography (Spatial Organization)*, Rio Claro, University of the São Paulo State (UNESP)

1992-1993: Visiting Scholar at Jet Propulsion Laboratory, Pasadena, USA

1986-1987: Post doc on Radiometry at Sheffield University, under supervision of Dr. Paul Curran, UK.

1984-1990: Research Associate at the Remote Sensing Division

1980 - 1984: Research Assistant at the Research Division in the Remote Sensing, National Institute for Space Research, Brazil

1974-1980: Research Assistant at the Remote Sensing Project, National Institute for Space Research, Brazil

## 3. List of the relevant publications for the project

Abe, C. A. ; Lobo, F.L.; Dibike, Yonas ; Costa, M. ; dos Santos, V. ; **Novo**, E. M. L. M. . Modelling the Effects of Historical and Future Land Cover Changes on the Hydrology of an Amazonian Basin. **Water**, v. 10, p. 932, 2018.

Arraut, E. M.; Arraut, J. L.; Marmotel, M.; Mantovani, J. E.; **Novo**, E.M.L.M. Bottlenecks in the migration routes of Amazonian manatees and the threat of hydroelectric dams. **Acta Amazônica** v. 47, p. 7-18, 2017.

Barbosa, C.C.F. ; **Novo**, E.M.L.M ; Ferreira, R. ; Sander de Carvalho, L. A.; Cairo, C. ; Lopes, F. ; Stech J.L. ; Alcântara, E. Brazilian inland water bio-optical dataset to support carbon budget studies in reservoirs as well as anthropogenic impacts in Amazon floodplain lakes: Preliminary results. ISPRS - **International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences**, v. XL-7/W3, p. 1439-1446, 2015.

Curran, PJ , **Novo**, EMM The relationship between suspended sediment concentration and remotely sensed spectral radiance: a review, **Journal of Coastal Research**, 351-368, 1988.

Lobo, F.; Costa, M. ; **Novo**, E.M.L.M; Telmer, K. . Effects of Small-Scale Gold Mining Tailings on the Underwater Light Field in the Tapajós River Basin, Brazilian Amazon. *Remote Sensing*, v. 9, p. 861, 2017.

Lobo, FL.,Costa, M PF, **Novo**, EMM Time-series analysis of Landsat-MSS/TM/OLI images over Amazonian waters impacted by gold mining activities. **Remote Sensing of Environment**, v. 157, p. 170-184, 2015.

Luize,BG., MagalhãesJLL, Queiroz, H, Lopes, MA, Venticinque, EM, **Novo**, EMM, Silva, TSFS The tree species pool of Amazonian wetland forests: Which species can assemble in periodically waterlogged habitats? *PlosOne* May 29, 2018 <https://doi.org/10.1371/journal.pone.0198>

Martins, VS ; Lyasputin, A. ; Carvalho, L. A. S. ; Barbosa, C. C. F. ; **Novo**, E. M. L. M. . Validation of high-resolution MAIAC aerosol product over South America. **Journal of Geophysical Research- Atmosphere** v. 7, p. 7537-7558, 2017.

Martins, V.S.; Soares, J. V. ; **Novo**, E. M.L.M. ; Barbosa, C. C.F. ; Pinto, C. T. ; Arcanjo, J.S. ; Kaleyta, A.. Continental-scale surface reflectance product from CBERS-4 MUX data: Assessment of atmospheric correction method using coincident Landsat observations. **Remote Sensing of Environment**, v. 218, p. 55-68, 2018.

Martins, V.S.; Barbosa, C. C.F.; **Novo**, E. M.L.M.; Lobo, F. L. Remote sensing of large reservoir in the drought years: Implications on surface water change and turbidity variability of Sobradinho reservoir (Northeast Brazil). **Remote Sensing Applications: Society and Environment**, v. 13, p. 275-288, 2019.

Melack, J. M. ; **Novo**, E. M. L. M. ; Forsberg, B. R. ; Piedade, M.T. F. ; Maurice, L. . Floodplain Ecosystem Processes. In: Michael Kelle; John Gash; Mercedes Bustamante; Pedro Silva Dias. (Org.). **Amazonia and Global Change**. 1ed.Washington: American Geophysical Union, 2009, v. 1, p. 525-541.

Montanher, O. C.; **Novo**, E. M.L. M.; Souza Filho, E. E. de. Temporal trend of the suspended sediment transport of the Amazon River (1984-2016). *Hydrological Sciences Journal*, v. x, p. 02626667.2018.1546387-x, 2018.

**Novo**, EMM , Hansom, JD , Curran, PJ The effect of viewing geometry and wavelength on the relationship between reflectance and suspended sediment concentration **International Journal of Remote Sensing** 10 (8), 1357-1372, 1989.

**Novo**, EMM, Steffen, CA Results of a laboratory experiment relating spectral reflectance to total suspended solids **Remote Sensing of Environment** 36 (1), 67-72,1991.

**Novo**, EMM, Barbosa, CCF, Freitas, R.M., Shimabukuro, YE, Melack, JM, Pereira Filho, W Seasonal changes in chlorophyll distributions in Amazon floodplain lakes derived from MODIS images. **Limnology** 7 (3), 153-161, 2006.

#### 4. Project coordination over the last 05 years

- **Project:** Automatic extraction of the Amazon Basin drainage network using data mining in DEM-SRTM and evaluation of result in geomorphology, geology, ecohydrology and species distribution applications **PI:** Dr. Evlyn Novo. **Sponsor:** São Paulo Research Foundation (FAPESP). 2016 – 2018.
- **Project:** Factors controlling temporal and spatial variability of the underwater light field of the Mamirauá Lake, Amazon Basin. **PI:** Dr. Evlyn Novo. **Sponsor:** National Council for Scientific and Technological Development (CNPq). 2014-2017.
- **Project:** Remote sensing applications for modelling human impacts on the ecological properties of wetland and aquatic environments in the Solimões/Amazon floodplain.. **Institution:** Instituto Nacional de Pesquisas Espaciais (INPE). **PI:** Dr. Evlyn Novo. **Sponsor:** São Paulo Research Foundation (FAPESP). 2012- 2014.
- **Project:** Effect of human disturbance on the floristic structure and functioning of floodplain forests and their impact on aquatic ecosystems of the Solimões-Amazonas River. **Institution:** Instituto Nacional de Pesquisas Espaciais (INPE). **PI:** Dr. Evlyn Novo. **Sponsor:** National Council for Scientific and Technological Development (CNPq). 2010 – 2013.

#### 5 Master, PhD orientation and post-doc supervision in the last 05 years

Camila Andrade Abe. Land Use Change Impacts on Hydrology and Water Quality in an Amazonian Basin: a Modelling Approach using SWAT. 2017. Dissertation (Master degree in Remote Sensing) – National Institute for Space Research, CAPES/Brazil.

Everton Hafemann Fragal. Reconstructing historical forest cover change in the Lower Amazon floodplains using the LandTrendr algorithm LandTrendr. 2015. Dissertation (Master degree in Remote Sensing) – National Institute for Space Research, CAPES/Brazil.

Luiz Felipe de Almeida Furtado. Using PolSAR data for mapping vegetation structure. 2014. Dissertation (Master degree in Remote Sensing) – National Institute for Space Research, CNPq/Brazil.

Otávio Cristiano Montanher. Empirical modelling for estimating suspended sediment concentration in Amazon white water Rivers using Landsat images. . Dissertation (Master degree in Remote Sensing) – National Institute for Space Research, CNPq/Brazil.

Vivian Fróes Renó. Amazon varzea: spatial and temporal dynamics of flooded forest cover and their impact on forest ecosystem and population well-being. 2016. Thesis (PhD in Remote Sensing) – FAPESP.

Lino Augusto Sander de Carvalho. Bio-optical characterization of Amazon floodplain lakes and evaluation of the retrieval of optically active constituent using remote sensing. 2016. Thesis (PhD in Remote Sensing) – National Institute for Space Research, CNPq/Brazil.

Regla de la Caridad Duthit Somoza. Water propagation within the Amazon/Solimões várzea forest 2015. Thesis (PhD in Remote Sensing) – National Institute for Space Research, FAPESP/Brazil.

Conrado de Moraes Rudorff. 2013-2015 Modelling Carbon Cycle in the Amazon Floodplain, Pos-doc research, , National Institute for Space Research. Fellowship sponsored by CNPq within the Young Scientist Program.

Gabriela Paola Ribeiro Banon. 2014-2018. Modelling Crocodylian Nesting Sites based on Environmental Variables derived from remote sensing data National Institute for Space Research. Fellowship sponsored by CAPES.

Felipe de Lucia Lobo. 2015-2017 Detecting cyanobacteria harmful algae bloom (cyanoHAB) in the Tapajós River using a 2-year dataset of Sentinel-2 images and Normalized Chlorophyll-a Index. National Institute for Space Research. Fellowship sponsored by CNPq.

#### **Academic quantitative indicators**

books: 4

publications in periodicals with selective editorial policy: 196

book chapters: 25

Masters theses concluded: 30

Doctoral theses concluded: 14

My Citations, total = 5654, h-index 35, i10-index 91

MyCitations (Google Scholar): [https://scholar.google.com/citations?user=ez\\_ZbCoAAAAJ&hl=](https://scholar.google.com/citations?user=ez_ZbCoAAAAJ&hl=)