GRAZIELA LUZIA

Holds a Bachelor's degree in Physics from the Federal University of Rio Grande do Sul (UFRGS) and a Masters' degree in Meteorology from the National Institute for Space Research (INPE) with focus in atmospheric modelling. Has collaborated with the Modelling and Development Division (DMD) of the Center for Weather Forecasting and Climate Studies (CPTEC) evaluating systematic errors of the global model and sensibility tests for physical processes, especially surface and cloud microphysics. Collaborated with the Brazilian Research Network for Global Climate Change (in Portuguese, REDECLIMA), subgroup "Climate Modelling", providing climatic information for elaborating the Fourth National Communication (4CN) of Brazil to the United Nations Framework Convention on Climate Change (UNFCCC). Currently works as consultant for the Brazilian Ministry of the Environment and for the agency GIZ-Brazil in Meteorology for Renewable Energy.

PERSONAL INFORMATION

Nationality: Brazilian

Birth date: 27/10/1983

Phone: +55 11 941924778

Email: grazi.luzia@gmail.com

WORK EXPERIENCE

10/2018 – today (last product: up to September/2019)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) / Ministério do Meio Ambiente / Laboratory of Modeling and Studies of Renewable Energy Resources (LABREN/INPE)

Multi-scale (global, mesoscale and microscale) study analyzing the influence of several meteorological systems over the solar and wind resources in Brazilian territory;

Evaluating of possible future climate impacts on renewable energy resources using regional model outputs made available by CPTEC/INPE.

01/2017 – 11/2018

Rede Brasileira de Pesquisas em Mudanças Climáticas Globais (REDECLIMA)

Provided climate data from different models to REDECLIMA network in order to prepare the 4CN of Brazil to the UNFCCC;

Assisted the team in manipulating climate datasets and in any meteorological issues;

11/2012 – 02/2015

Brazilian Earth System Model (BESM)

Evaluation and development of model set to improve physical processes related to cloud microphysics and shallow convection.

02/2011 – 03/2012

Large-Scale Experiment of Biosphere-Atmosphere in Amazon Project (APLBA)

Evaluation of the impacts on precipitation over South America from the convection parameterizations schemes in the CPTEC global model.

EDUCATION

2012-2015: Master's degree in Meteorology - National Institute for Space Research

2006-2010: Bachelor's degree in Physics - Federal University of Rio Grande do Sul

TRAINING AND CERTIFICATIONS

2016 - Programming in FORTRAN (IAG/USP)

2015 - Cloud Microphysics (Hugh Morrison/NCAR)

2014 - Parameterization of PBL and convection processes (Dr. Sungsu Park/NCAR)

2014 - Climate Data Operators (CDO) e Grid Analysis and Display System (Grads)

2010 - Radiometry and Hyperspectral Remote Sense (INPE)

LANGUAGES

Portuguese - Native speaker

English - Advanced Reading and speaking

Spanish - Advanced Reading and speaking

COMPUTER SKILLS

Programming: MATLAB/Octave, Fortran, Shell, Python

Softwares: CDO, NCview, Grads, NCL

REVIEWER

2018 - today: Journal of Climate

PUBLICATIONS

FIGUEROA, S. N.; BONATTI, J. P.; KUBOTA, P. Y.; GRELL, G. A.; MORRISON, H.; BARROS, S. R. M., FERNANDEZ, J. P. R.; RAMIREZ, E.; SIQUEIRA, L.; LUZIA, G. et al. The Brazilian Global Atmospheric Model (BAM). Performance for Tropical Rainfall forecasting and sensitivity to convective scheme and horizontal resolution. Weather and Forecasting, v. 31, p.1547-1572,WAF-D-16-0062,2016.