

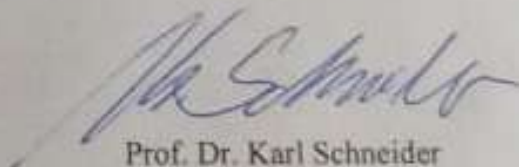
This is to certify that Ms Debashmita De, a Master's student in Geoinformatics (M.Sc.) at the Institute of Environment Education and Research, Bharati Vidyapeeth Deemed University, Pune successfully completed her internship at the Geographical Institute of the University of Cologne, Germany under the mentorship of Prof. Dr. Karl Schneider from 4 April 2018 to 31 July 2018 in partial fulfillment of the program. She was awarded a stipend from the University of Cologne.

She completed the following tasks:

- Research and self-training in using the ESA SNAP toolbox for remote sensing data analysis
- Preparation of a research plan for the analysis of surface temperature patterns for the city of Cologne
- Download of LANDSAT remote sensing data for Cologne from 2000 until 2017
- TIR and NDVI remote sensing data analysis (calibration, atmospheric normalization using the dark object subtraction)
- Analysis of the urban heat island effects for Cologne (statistical analyses) and analysis of the effect of cool surfaces (water bodies, vegetation) upon surface temperature
- Participation in a seminar on "Statistical analysis of environmental data"
- Participation in the conference "Intercarto InterGIS 24" held in Bonn 25-27 July 2018
- Documentation as written report as well as oral presentations in the context of our research seminar

She is commended for her extraordinary scientific achievements, her analytical skills and self-reliant work and outstanding work attitude.

Cologne, 30 July 2018



Prof. Dr. Karl Schneider

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