

List of Publications

Peer-Reviewed Journal Publications

1. **Subhajit Bandopadhyay**, Anshu Rastogi, Sergio Cogliati, Uwe Rascher, Maciej Gąbka, Radosław Juszcak (2021): “Can Vegetation Indices serve as Proxies for Potential Sun-induced Fluorescence (SIF)? A Fuzzy Simulation Approach on Airborne Imaging Spectroscopy data”. *Remote Sensing*, 13(13), 2545 DOI <https://doi.org/10.3390/rs13132545> ([Link](#)) (Peer-reviewed & Scopus-indexed) (IF: 5.0)
2. **Subhajit Bandopadhyay**, Anshu Rastogi, Radosław Juszcak (2020): “Review of Top-of-Canopy Sun-Induced Fluorescence (SIF) studies from ground, UAV, airborne to spaceborne observations”. *Sensors*, 20(4), 1144. DOI <https://doi.org/10.3390/s20041144> ([Link](#)) (Peer-reviewed & Scopus-indexed) (IF: 3.9)
3. Katja Berger, Miriam Machwitz, Marlena Kycko, Shawn C. Kefauver, Shari Van Wittenberghe, Max Gerhards, Jochem Verrelst.... **Subhajit Bandopadhyay**...et al (2022): "Multi-sensor spectral synergies for crop stress detection and monitoring in the optical domain: A review." *Remote Sensing of Environment*, 280 (2022): 113198. DOI: <https://doi.org/10.1016/j.rse.2022.113198> ([Link](#)) (Peer-reviewed & Scopus-indexed) (IF: 13.5)
4. Alexander Cotrina Sánchez, Andrés Salazar, Carlos Oviedo, **Subhajit Bandopadhyay**, Pedro Mondaca, Riccardo Valentini, Nilton B Rojas Briceño, Cristóbal Torres Guzmán, Manuel Oliva, Betty K Guzman, Gerson Meza Mori (2022). “Integrated cloud computing and cost effective modelling to delineate the ecological corridors for Spectacled bears (*Tremarctos ornatus*) in the rural territories of the Peruvian Amazon”. *Global Ecology and Conservation*, 36, e02126. DOI: <https://doi.org/10.1016/j.gecco.2022.e02126> ([Link](#)) (Peer-reviewed & Scopus-indexed) (IF: 4.0)
5. **Subhajit Bandopadhyay**, Anshu Rastogi, Uwe Rascher, Patrick Rademske, Anke Schickling, Sergio Cogliati, Tommaso Julitta, Alasdair Mac Arthur, Andreas Hueni, Enrico Tomelleri, Marco Celesti, Andreas Burkart, Marcin Stróżecki, Karolina Sakowska, Maciej Gąbka, Stanisław Rosadziński, Mariusz Sojka, Marian-Daniel Iordache, Ils Reusen, Christiaan Van Der Tol, Alexander Damm, Dirk Schuettemeyer, and Radosław Juszcak (2019): “HyPlant-Derived Sun-Induced Fluorescence—A New Opportunity to Disentangle Complex Vegetation Signals from Diverse Vegetation Types”. *Remote Sensing*, 11(14), 1691. DOI <https://doi.org/10.3390/rs11141691> ([Link](#)) (Peer-reviewed & Scopus-indexed) (IF: 5.0)
6. Dany A. Cotrina Sánchez, Elgar Barboza Castillo, Nilton B. Rojas Briceño, Manuel Oliva, Cristóbal Torres Guzman, Carlos A. Amasifuen Guerra and **Subhajit Bandopadhyay** (2020): “Distribution Models of Timber Species for Forest Conservation and Restoration in the Andean-Amazonian Landscape, North of Peru” *Sustainability*, 12(19), 7945; DOI <https://doi.org/10.3390/su12197945> ([Link](#)) (Peer-reviewed & Scopus-indexed) (IF: 3.9)
7. **Subhajit Bandopadhyay**, Lopita Pal, Rahul Deb Das (2021): “Predicting gross primary productivity and PsnNet over a mixed ecosystem under tropical seasonal variability: a comparative study between different machine learning models and correlation-based statistical approaches.” *Journal of Applied Remote Sensing*. DOI <https://doi.org/10.1117/1.JRS.15.014523> ([Link](#)) (Peer-reviewed & Scopus-indexed) (IF: 1.7)

8. Alexander Cotrina Sánchez*, ***Subhajit Bandopadhyay**, Nilton B Rojas Briceño, Polash Banerjee, Cristóbal Torres Guzmán, Manuel Oliva (2021): "Peruvian Amazon disappearing: Transformation of protected areas during the last two decades (2001–2019) and potential future deforestation modelling using cloud computing and MaxEnt approach." *Journal for Nature Conservation* 64 (2021): 126081. DOI: <https://doi.org/10.1016/j.jnc.2021.126081> ([Link](#)) (**Peer-reviewed & Scopus-indexed**) (***contributed equally**) (**IF: 2.0**)
9. Prasenjit Saha*, **Subhajit Bandopadhyay***, Chandan Kumar, Chandana Mitra (2019): "Multi-approach Synergic Investigation Between Land Surface Temperature and Land-use Land-cover". *Journal of Earth System Science*. DOI <https://doi.org/10.1007/s12040-020-1342-z> ([Link](#)) (**Peer-reviewed & Scopus-indexed**) (**IF: 2.0**)
10. Gerson Meza Mori, Elgar Barboza Castillo, Cristóbal Torres Guzmán, Dany A. Cotrina Sánchez, Betty K. Guzman Valqui, Manuel Oliva, **Subhajit Bandopadhyay**, Rolando Salas López, and Nilton B. Rojas Briceño (2020): "Predictive Modelling of Current and Future Potential Distribution of the Spectacled Bear (*Tremarctos ornatus*) in Amazonas, Northeast Peru" *Animals*, 10(10), p.1816; DOI <https://doi.org/10.3390/ani10101816> ([Link](#)) (**Peer-reviewed & Scopus-indexed**) (**IF: 3.0**)
11. Alexander Cotrina Sánchez, Nilton B Rojas Briceño, **Subhajit Bandopadhyay**, Subhasis Ghosh, Cristóbal Torres Guzmán, Manuel Oliva, Betty K Guzman, Rolando Salas López (2021): "Biogeographic Distribution of Cedrela spp. Genus in Peru Using MaxEnt Modeling: A Conservation and Restoration Approach". *Diversity* 13(6), 261; DOI <https://doi.org/10.3390/d13060261> ([Link](#)) (**Peer-reviewed & Scopus-indexed**) (**IF: 2.4**)
12. Gerson Meza Mori, Alexander Cotrina Sánchez, **Subhajit Bandopadhyay**, Nilton B. Rojas-Briceño, Cristóbal Torres Guzmán, Elver Coronel-Castro, Manuel Oliva (2023): "Does climate change impact the potential habitat suitability and conservation status of the national bird of Peru (*Rupicola peruvianus*)?" *Biodiversity and Conservation* ([Link](#)) (**Peer-reviewed & Scopus-indexed**) (**IF: 3.4**)
13. **Subhajit Bandopadhyay** (2016): "Does Elevation Impact Local Level Climate Change?: An Analysis Based on Fifteen Years Daily Diurnal Data and Time Series Forecast" *Pacific Science Review A: Natural Science and Engineering*, Elsevier, DOI <https://doi.org/10.1016/j.psra.2016.11.002> ([Link](#)). (**Peer-reviewed & Scopus-indexed**)
14. Ronita Bardhan*, Ramit Debnath*, **Subhajit Bandopadhyay*** (2016): "A Conceptual Model for Identifying the Risk Susceptibility of Urban Green Spaces using Geo-spatial Techniques". *Modelling Earth Systems and Environment (MESE)*, Springer, DOI <https://doi.org/10.1007/s40808-016-0202-y> ([Link](#)). (**Peer-reviewed & Scopus-indexed**) (**IF: 3.0**)
15. Rahul Deb Das*, **Subhajit Bandopadhyay***, Subhasis Ghosh*, Mridul Das, Mousumi Chowdhury, Alexander Cotrina Sánchez, Chandana Z. Mitra, and Chandan Kumar. "Have COVID Lockdowns Really Improved the Globalair Quality?–Hierarchical Observations from the Perspectives of Urban Agglomerations Using Atmospheric Reanalysis Data." Hierarchical Observations from the Perspectives of Urban Agglomerations Using Atmospheric Reanalysis Data (2023). *Physics and Chemistry of the Earth*, Elsevier. DOI: <https://doi.org/10.1016/j.pce.2023.103452> ([Link](#)) (**IF: 3.7**)
16. Jantol Nela, Egor Prikaziuk, Marco Celesti, Itza Hernandez-Sequeira, Enrico Tomelleri, Javier Pacheco-Labrador, Shari Van Wittenberghe, **Subhajit Bandopadhyay**, Gerbrand Koren, Itza Hernandez-Sequeira, Hrvoje Kutnjak, MaPilar Cendrero-Mateo (2023). "Using Sentinel-2-Based Metrics to Characterize the Spatial Heterogeneity of FLEX Sun-Induced Chlorophyll Fluorescence on Sub-Pixel

Scale." *Remote Sensing* 15, no. 19 (2023): 4835. DOI: <https://doi.org/10.3390/rs15194835> (Peer-reviewed & Scopus-indexed) (IF: 5.0).

17. Cotrina-Sanchez, Alexander, Ligia García, Christian Calle, Fatih Sari, **Subhajit Bandopadhyay**, Nilton B. Rojas-Briceño, Gerson Meza-Mori (2023). "Multicriteria Analysis in Apiculture: A Sustainable Tool for Rural Development in Communities and Conservation Areas of Northwest Peru." *Land* 12, no. 10 (2023): 1900. DOI: <https://doi.org/10.3390/land12101900> (Peer-reviewed & Scopus-indexed) (IF: 3.9).

18. Luke A Brown, Harry Morris, Rosalinda Morrone, Morven Sinclair, Owen Williams, Merryn Hunt, **Subhajit Bandopadhyay**, Xuerui Guo, Haydar Akcay, Jadunandan Dash. (2023) "Near-infrared digital hemispherical photography enables correction of plant area index for woody material during leaf-on conditions". *Ecological Informatics*, Elsevier. DOI: <https://doi.org/10.1016/j.ecoinf.2023.102441> (Peer-reviewed & Scopus-indexed) (IF: 5.1).

Non-Peer Reviewed Journal Publications

1. Saifudheen Kv, **Subhajit Bandopadhyay** (2018): "Spatial Explicit Modeling to Understand the Dynamics of Landuse Switch using Open-Source Satellite data". *Geoplanning: Journal of Geomatics and Planning*, DOI: <https://doi.org/10.14710/geoplanning.5.1.1-16> ([Link](#)).

2. **Subhajit Bandopadhyay** (2015): "Crucial Factors Influencing Environmental Degradation: A Case Study on Raniganj Coal Mine Belt, West-Bengal India" *International Journal of Engineering Development and Research*. (IJEDR), ISSN: 2321-9939, Vol.3, Issue 1,pp. 70-73. ([Link](#)).

3. **Subhajit Bandopadhyay**, Dr. Krishnendu Gupta (2015): "Prospective Research to Investigate the Socio- economic Sketch of Coal Mine Territory: An Integrated Scrutiny". *International Journal of Innovative Research and Creative Technology*, Volume-1, Issue- 2 ([Link](#)).

4. **Subhajit Bandopadhyay** (2018): "A Short Review on Urban Vulnerability due to Seismic activity". *Indian Journal of Science and Technology*, Vol 09 (1): 33-36, 2018. ([Link](#)).

Book and Book Chapters

1. **Subhajit Bandopadhyay**, Dr. Shovan Lal Chattoraj, Dr. P.K. Champati Ray: (2016) "Earth Observation Data & Geospatial Technology for Landslide Modelling" (Subtitle: Mapping of Landslide Vulnerability, Susceptibility and 3-Dimensional Modelling of Debris Flow); *Lambert Academic Publishers, Omniscryptum Publishing Group*, Bahnhofstraße 28 66111 Saarbrücken, Germany. ISBN: 978-3-659-95719-2 ([Link](#)) September 26, 2016

2. **Subhajit Bandopadhyay**: (2017) "Integrated Spatial Platform for Better Flood Management and Mitigation for Local Governments: A Geospatial Approach" *Geo-spatial Data in Natural Resources*,1-12, 2017 (Online Edition), *Gatha Cognition*, DOI: 10.21523/gcb5.1701 ([Link](#))

Conference Proceedings (Peer-Reviewed Full Paper)

1. Rahul Deb Das, **Subhajit Bandopadhyay**, Mridul Das, & Mousumi Chowdhury. (2020, December). "Global Air Quality Change Detection During Covid-19 Pandemic Using Space-Borne Remote Sensing and Global Atmospheric Reanalysis". In 2020 IEEE India Geoscience and Remote Sensing Symposium (InGARSS) (pp. 158-161). IEEE. ([Link](#))

2. **Subhajit Bandopadhyay**, Dany A Cotrina Sánchez (2020): “Amazonian Fire Events Disturbed The Global Carbon Cycle: A study from 2019 Amazon wildfire using Google Earth Engine” proceedings at the *1st International Electronic Conference on Forests*. ([Link](#)).
3. Anshu Rastogi, **Subhajit Bandopadhyay**, Marcin Stróżecki, Radosław Juszcak., (2018) Monitoring the Impact of Environmental Manipulation on Peatland Surface by Simple Remote Sensing Indices. *XLVIII Seminar of Applied Mathematics 2018*. Wroclaw University of Environmental and Life Sciences, Wroclaw, Poland ([Link](#))
4. Mohd Sayeed Ul Hasan, **Subhajit Bandopadhyay**, Seemab Akhtar, Prasenjit Saha (2019): “Deterioration of agricultural yield over 35 years: evidence from simulated sediment export and nutrient discharge data within micro environment”. Full paper publication at *ISPRS WG III/10, GEOGLAM, ISRS Joint International Workshop on "Earth Observations for Agricultural Monitoring"* 18-20 Feb, New Delhi, India ([Link](#))
5. Subhasis Ghosh, **Subhajit Bandopadhyay**, Dany A Cotrina Sánchez (2020): “Long-Term Sensitivity Analysis of Palmer Drought Severity Index (PDSI) Through Uncertainty and Error Estimation from Plant Productivity and Biophysical Parameters” proceedings at the *1st International Electronic Conference on Forests*. Volume 15, Pages 30 ([Link](#)).
7. Ronita Bardhan, **Subhajit Bandopadhyay** (2015): “Rapid Estimation of Predictable Flood Prone Zones under data Constraint Scenario: A Fuzzy Modelling Approach”. *Proceedings at HYDRO 2015 INTERNATIONAL viz. 20th International Conference on Hydraulics, Water Resources and River Engineering*. December 2015 IIT Roorkee, India ([Link](#))
8. Sanchez, Dany Alexander Cotrina, Nilton B. Rojas Briceño, and **Subhajit Bandopadhyay**. "Biogeographic Distribution of Cedrela spp. Genus in Peru Using MaxEnt Modeling: A Conservation Approach." (2021). proceedings at the *1st International Electronic Conference on Biological Diversity, Ecology and Evolution session Biodiversity Conservation* ([Link](#)).
9. Cotrina Sánchez, Alexander, Gerson Meza Mori, **Subhajit Bandopadhyay**, Carlos Oviedo, Nilton B. Rojas Briceño, Manuel Oliva, Ligia García, and Cristóbal Torres Guzmán. "The Challenge of Wildlife Conservation from Its Biogeographical Distribution Perspectives, with Implications for Integrated Management in Peru." *In Biology and Life Sciences Forum*, vol. 15, no. 1, p. 10. MDPI, 2022. ([Link](#))
10. **Subhajit Bandopadhyay**, Barnali Das, Alexander Cotrina Sánchez, Sankar Prasad Banerjee, Bikram P. Banerjee and Subhasis Ghosh. “Canopy Scale High-Resolution Forest Biophysical Parameter (LAI, fAPAR, and fCover) Retrieval Through Machine Learning and Cloud Computation Approach”. (2023). proceedings at the IEEE MIGARS2023 ([Link](#))
11. K C Arun Kumar, **Subhajit Bandopadhyay**, Ujjwal Garai, Mridul Das and Rahul Deb Das. “Comparative retrieval approaches for concentrated Suspended Particulate Matter (CSPM) detection in the Ganges using Sentinel-2 and Cloud Computing”. (2023). proceedings at the IEEE MIGARS2023 ([Link](#))

Conference Abstracts and Posters

1. **Subhajit Bandopadhyay**, Anshu Rastogi, Radosław Juszcak et al., (2018) Examination of sun-induced fluorescence (SIF) signal on heterogeneous ecosystem platforms using ‘HyPlant’. *European Geoscience Union (EGU) General Assembly 2018* at Vienna, Austria ([Link](#))
2. **Subhajit Bandopadhyay**, Anshu Rastogi, Uwe Rascher, Radosław Juszcak et al., (2018) “Capturing the degree of relationships between spectral vegetation indices and SIF through HyPlant for

heterogeneous ecosystems and diverse peatland plant communities”. Poster presented at *Living Planet Symposium (LPS) European Space Agency (ESA)*, 13-17 May 2019, Milan, Italy.

3. Subhajit Bandopadhyay, Anshu Rastogi, Sergio Cogliatti, Uwe Rascher, Maciej Gabka, Radoslaw Juszczak (2019) “Does simple vegetation indices can predict SIF? A fuzzy simulation on airborne imaging spectroscopic data in relation to O₂A and O₂B SIF bands. Poster presented at *Living Planet Symposium (LPS) European Space Agency (ESA)*, 13-17 May 2019, Milan, Italy.

4. Subhajit Bandopadhyay, Anshu Rastogi, Uwe Rascher, Patrick Rademske, Anke Schickling et al. (2019): “HyPlant Derived Sun-Induced Fluorescence – a Way to Understand the Complex Vegetation Signals from Heterogeneous Ecosystems”. Poster presentation at *11th EARSeL Imaging Spectroscopy Workshop*. Page: 92; 6 – 8 Feb. Brno, Czech Republic ([Link](#)).

5. Subhajit Bandopadhyay, Anshu Rastogi, Sergio Cogliatti, Uwe Rasher, Maciej Gabka, Radoslaw Juszczak (2019): “Does Simple Vegetation Indices Can Predict Sun Induced Fluorescence? A Fuzzy Simulations on Airborne Imaging Spectroscopic Data”. Poster presentation at *11th EARSeL Imaging Spectroscopy Workshop*. Page: 93; 6 – 8 Feb. Brno, Czech Republic ([Link](#)).

6. Daria Larcher, **Subhajit Bandopadhyay**, Carmen Meiller, Mike Werfeli, Hellena Kuehnle, R. Duca, Nigel. Fox, Andreas. Hueni (2022): “Reference Scenarios for the TRUTHS Satellite Mission” Poster presented at *Living Planet Symposium (LPS) European Space Agency (ESA)*, 23-27 May 2022, Bonn, Germany.

7. Subhajit Bandopadhyay, Booker O Ogutu, Harry Morris, Jadunandan Dash, Poustomis, F, Duveiller, G., Guanter, L., Papale, D., Maignan, F., Jung, M., Nelson, J., Gensheimer, J., Hamadi, Z., Kraft, B., Peylin, P.; Bacour, C., Hajji, M. EL., Plummer, S. “The Sen4GPP: Synergetic investigation to estimate gross primary productivity over diverse ecosystems of Europe” UK National Earth Observation Conference 2022, 6-8 September 2022 | National Space Centre, Leicester, UK.

8. Subhajit Bandopadhyay, Shovan L. Chattoraj, P.K. Champati Ray (2016): “Application of Information Value Method for Landslide Susceptibility and Vulnerability Mapping: An Approach Towards Resilient Mountainous Planning”, *Indian Society of Remote Sensing (ISRS) - Indian Society of Geomatics (ISG), National Symposium*; Indian Institute of Remote Sensing (IIRS) (ISRO), Dehradun, India.

9. Shovan L. Chattoraj, P.K. Champati Ray, **Subhajit Bandopadhyay** (2014): “Debris flow simulation and Modelling: A Case study from Kedarnath area”. *Proceedings of the National Conference of Geo-hazard and Neo-tectonic activities of Himalaya, November. 2014*, HNB Garhwal University (A Central University), Tehri Campus, India.

10. Gregory Duveille, Booker Ogutu, Jadu Dash, Harry Morris, **Subhajit Bandopadhyay**, Luis Guanter, Elise BELAKEBI-JOLY, Cedric Bacour, Fabienne Maignan, Stephen Plummer (2023): “Cross-comparing different avenues for improving our estimation of GPP by exploiting Sentinel remote sensing data”. *European Geoscience Union (EGU) General Assembly 2023* at Vienna, Austria ([Link](#))

Citations and Score

> Google *Scholar*: 431; H-index: 12

> *Scopus h-index*: 12

Acknowledgement

I hereby state that all the information mentioned above is true as per best of my knowledge.

Date: **20. 03. 2024**

RRU, Gandhinagar, India

A handwritten signature in black ink that reads "Subhajit Bandopadhyay". The signature is written in a cursive style and is positioned above a horizontal line.

Dr. Subhajit Bandopadhyay