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## 1<sup>st</sup> Day (16/03)

Time in Netherlands	Time in Brazil	Name	Title	Duration
12:30	8:30	Leila Fonseca	Introduction	10 min
12:40	8:40	Luiz Aragão	Research & Development on Earth Observation at INPE	15 min
12:55	8:55	Wietske Bijker & Rachel Fadgyas & Sander Blokhorst	Research & Development on Master's programme Spatial Engineering	30 min
13:25	9:25	Karine Ferreira & Gilberto Queiroz	Brazil Data Cube	20 min
13:45	9:45	Hugo Bendini	Use of dense Landsat and Sentinel time series for mapping land use and land cover in the Cerrado biome in Brazil	20 min
14:05	10:05		Q&A	40 min
14:45	10:45		Short Break	10 min
14:55	10:55	Lenio Galvão	Hyperspectral Remote Sensing in Brazil: Concepts and Applications	20 min
15:15	11:15	Thales Körting & Leila Fonseca	Image Processing & analysis for remote sensing applications	20 min
15:35	11:35		Q&A	40 min
16:15	12:15	Leila Fonseca	wrap-up	5 min

## 2nd Day (18/03)

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Time in Netherlands	Time in Brazil	Name	Title	Duration
12:30	8:30	Thales Körting	Introduction	5 min
12:35	8:35	Victor Prudente	Remote Sensing for Agricultural Applications	20 min
12:55	8:55	Lorena Santos	Assessing and improving land use and cover samples using satellite image time series	20 min
13:15	9:15	Ricardo Dal'Agnol	Monitoring forest resources with remote sensing in the age of big data	20 min
13:35	9:35	Q&A		40 min
14:15	10:15	Short Break		10 min
14:25	10:25	Evandro Taquary	Applying Deep Learning for mapping deforestation and savannah vegetation	20 min
14:45	10:45	Luiz Aragão	Remote Sensing: A tool for understanding the role of the Amazon in the Earth System	20 min
15:05	11:05	Dalton Valeriano	Some impacts of climate change in Brazil: - Amplification of Amazon river hydrologic regime- tangible impacts - Coastal environments- sea level rise and hydropower production impacts - Agriculture and biodiversity- Differential resiliences and impacts	20 min
15:25	11:25	Q&A		40 min
16:05	12:05	Thales Körting	wrap-up	5 min

## People - INPE



**Luiz Aragão**

Head of Remote Sensing Division at INPE and the leader of the TREES lab (<http://trees-research.weebly.com/>). PhD in Remote Sensing from INPE. Senior Lecturer at the University of Exeter, UK and a full-time Scientist at INPE. Published over 100 scientific papers, including first authorship in the journals *Nature* and *Science*. Research focus on: carbon dynamics, environmental change, ecology and remote sensing.  
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**Karine Ferreira**

Works at INPE, with research in Geoinformatics and coordinating development and technological innovation projects, such as TerraLib, TerraBrasilis and Brazil Data Cube (<http://brazildatacube.org/>). PhD in Applied Computing and associate professor of Geoinformatics in the Applied Computing Graduate Course at INPE. Main research topics are representation, processing and analysis of spatio-temporal and big Earth observation data.  
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**Gilberto Queiroz**

Gilberto is an Associate Professor of Geoinformatics at INPE. One of the Brazil Data Cube project leaders.  
Research interests in geographic databases, remote sensing applied to Land Use and Land Cover mapping and geospatial big data platforms.  
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**Leila Fonseca**

Graduate in Electrical Engineer, Master of Electrical Engineering and Computer Science at the Technological Institute of Aeronautics (ITA) and PhD in Applied Computing at INPE. Served as Head of the Image Processing Division and Earth Observation Coordination at INPE. Currently working on environmental monitoring, Image Processing and Pattern Recognition for Remote Sensing applications.  
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**Thales Körting**

Researcher in Pattern Recognition and Remote Sensing Image Processing. <http://youtube.com/tkorting>  
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**Lenio Galvão**

Graduate in Geology from Federal University of Rio Grande do Norte, master's at Geosciences from INPE, PhD in Geophysics from University of São Paulo (1994). Research interest in Geosciences, Remote Sensing, hyperspectral remote sensing.  
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**Dalton Valeriano**

B.S. in Biology/Ecology at the Federal University of Rio de Janeiro, M.S. in Remote Sensing at INPE, Ph.D. in Geography at University of California. Started in INPE in 1978 as trainee in land use mapping. Hired as researcher in INPE in 1982, in the areas of landscape analysis and vegetation and species distribution modelling until 2003 when was commissioned with INPE's Amazon Deforestation Monitoring Program. Today is developing a vegetation mapping initiative for non-amazonian vegetation domains of Brazil.  
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**Lorena Santos**

Ph.D. in Applied Computing from INPE, M.S. degree in Electronic and Computer Engineering, and B.S degree in Computer Science. Research areas include artificial intelligence, machine learning, and spatiotemporal analysis for Earth Observation applications.  
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**Ricardo Dal'Agnol**

*Background in Environmental Engineering, MSc and PhD in Remote Sensing from INPE. Postdoctoral Researcher in the Earth Observation and Geoinformatics Division of INPE. Conducts quantitative research using large-scale datasets of high-resolution airborne lidar and satellite time series in combination with advanced image processing methods such as deep learning, to map and quantify the forest structure. Tackles scientific questions in regards to the carbon cycling, biodiversity and human disturbances.*

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**Evandro Taquary**

*Bachelor and Master in Computer Science at Federal University of Goiás (UFG). Ph.D. student in Remote Sensing at INPE. Collaborated with research and development projects NexGenMap and MapBiomias. In 2018 was selected to participate in the Google Summer of Code in cooperation with NASA's JPL. Currently working in the FIP Cerrado project as an Artificial Intelligence consultant in charge of developing Deep Learning solutions to map Cerrado biome.*

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**Victor Prudente**

*Graduated in Agricultural Engineering at UNIOESTE. Received his master's degree in Agricultural Engineering from UNIOESTE. Ph.D. student in Remote Sensing at INPE. Experience in remote sensing, optical and microwave, applied to agricultural monitoring, precision agriculture, and land use and land cover changes.*

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**Hugo Bendini**

*Agricultural Engineer graduated on UNESP. Master in Computer Science, with emphasis on Digital Image Processing and Signal, on the Federal University of Sao Carlos (UFSCar). PhD in Remote Sensing by INPE, focusing on Landsat-like image time series analysis for crop mapping. Research focus on risk models for agriculture, epidemiology of plant diseases, image processing and multi-temporal analysis.*

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**In case of problems with Microsoft Teams, we can try Google Meet**

**<https://meet.google.com/cdj-ycai-bkh>**

**(same link for 1st and 2nd days)**

## PEOPLE – TWENTE UNIVERSITY



Sander Blokhorst

BSc Creative Technology, Master Research: ITC Research Theme: PLUS, Topic: Settlement Synergies: R&D for Regional Development Supervisor: dr.ir. L.G.J. Boerboom.  
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Jan Eggenkamp

BSc. Advanced Technology Master Research, ITC Research Theme: PLUS Topic: Settlement Synergies: R&D for Regional Development Supervisor: dr.ir. L.G.J. Boerboom  
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Demi Vonk

BSc Technology and Liberal Arts and Sciences Master Research ITC Research Theme: 4D-Earth, Topic: Balancing forecast-based preparedness action and prevention efforts for risk reduction – a case study of wind-induced building damage in the Philippines. Supervisor: prof.dr. M.K. van Aalst, Professional interests: ranges from planning for outdoor recreation to hazard prevention and impact reduction.  
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Elsa Boogaard

BSc Liberal Arts and Sciences Master Research ITC Research Theme: WCC Topic: Remote Sensing assessment of the impact of the 2018 and 2019 droughts on the forests in the Netherlands Supervisor: dr.ir. C. van der Tol.  
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Kisanet Molla

BSc. Civil Engineering, Master Research: ITC Research Theme: FORAGES, Topic: Spatial-temporal assessment of irrigated crops at using the combination of PROBA-V and sentinel 2 as input for a better informed horticultural supply chain, Supervisor: dr.ir. C.A.J.M. de Bie, interests: Spatial Planning and Governance - how mankind behaves and organize themselves.  
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Sarah Joey Salgado

BSc Agricultural and Biosystems Engineering, Master Research: ITC Research Theme: FORAGES, Topic: Assessment of Spatial Pattern of Soil Salinity in Coastal Agricultural Areas using Multi-Sensor Approach Supervisor: prof.dr. A.D. Nelson, interests: studies related to agriculture and assessment of it's resources, evaluate and estimate the agricultural fields through remote sensing (satellite data) in combination with machine learning algorithms  
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Master Research: ITC Research Theme: STAMP, Topic: Indigenous Toponyms in Landslide Hazard Mapping for Land Use and Infrastructure Planning Supervisor: dr. F.O. Ostermann, Profession: Environmental Planner/Urban Planner

Rachel Guibatan



Golnar Naeimi

MSc in Civil Engineering / Water Resources Engineering, Master Research: ITC Research Theme: WCC Topic: Assess the drought impact on vegetation in the Netherlands within Google Earth Engine (GEE). Supervisor: dr.ir. R. van der Velde Professional, interests: water-related projects, especially hydrology and water management.  
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Fauzan Muzakki

BSc Agriculture, Master Research ITC Research Theme: FORAGES Topic: Sustainability Certification Supervisor: dr. I.C. van Duren, interests: GIS and Remote Sensing within natural resources and disaster management, promote GeoAI to help policymakers in decision making for land cover change and disaster risk analysis in combatting deforestation, illegal logging, poaching and wildfire. [fauzanmuzakki@student.utwente.nl](mailto:fauzanmuzakki@student.utwente.nl)



Michael David

BSc Geo-Information Science (honours), Master Research: ITC Research Theme: PLUS Topic: Strengthening Spatial Planning for Disaster Risk Reduction Supervisor: prof.dr. R.V. Sliuzas. [d.m.s.david@student.utwente.nl](mailto:d.m.s.david@student.utwente.nl)



David M. Shipepe

Bsc Geoinformation Science, University of Namibia, Windhoek. Geostatistic, remote Sensing, cartography, GIS for Governance, Spatial Planning, Spatial Modeling, Climatology, Pedology Physical Geography. Master Spatial Engineering, University of Twente (August 2019- July 2021). [msdavid591@gmail.com](mailto:msdavid591@gmail.com)



Synthia Wierenga

Bsc Landscape Architecture and Spatial Planning, Master Research, Topic: Multi-actor challenges for development and implementation of Sustainable Mobility in rural areas in the Netherlands Supervisor: dr. A.B. Grigolon, Interests: spatial planning and transportation, working in an organization where both mobility, transportation and stakeholder management are involved. [s.w.m.wierenga@student.utwente.nl](mailto:s.w.m.wierenga@student.utwente.nl)



Bakul Patil

B.Eng Civil Engineering (Remote sensing and GIS). Master Research: Detecting slow, gradual changes with remote sensing: Fuzzy random forest classification for Coastal Management, Supervisor: dr.ir. W. Bijke, Interests: Interdisciplinary works which has vast application in real-world problems, coastal management, urban governance. Someday I wish I could work for Indian space research organization (ISRO) or any international platform (UN, WRI). [b.a.patil@student.utwente.nl](mailto:b.a.patil@student.utwente.nl)



Conner Milton

Master of Arts (Honours) Geography, Master, Topic: Urban Resilience, Supervisor: dr. D. Reckien, Professional interests: I am a physical geographer who focused on doing fieldwork and data analysis in my undergrad, particularly using GIS programs. In the future I hope to work as a researcher or GIS analyst/officer where I get to take part in a wide variety of projects. [c.m.milton@student.utwente.nl](mailto:c.m.milton@student.utwente.nl)



Bisrat Araya Gebreegziabher

BSc. Civil Engineering Master Research, ITC Research Theme: FORAGES, Topic: Deep Learning For Food Value-Chain Intelligence, Supervisor: V. Venus MSc, Professional interests - Working around the integration of artificial intelligence, geo-spatial analysis and complex (adaptive) systems analysis - Getting involved in projects with strong relevance to wicked societal problems - Starting up a geo-spatial intelligence tech company. [b.a.gebreegziabher@student.utwente.nl](mailto:b.a.gebreegziabher@student.utwente.nl)

Ranju Pote

BEng Geomatics, Master Research: Polygonal mapping and change detection of greenhouses using a deep learning strategy, Supervisor: dr. C. Persello, Interest: work with the spatial data and how those data can be utilize properly into the application, how deep learning it can be used for the delineation of the object of interest (in my case Greenhouse) for the remote sensing imagery, how deep learning can be used for the geoscience application, manipulating the spatial data, analyze those data and use it for proper application [b.a.patil@student.utwente.nl](mailto:b.a.patil@student.utwente.nl)



**Chiara Ferrario**

*Ba Environmental Architecture, MSc Architecture Master Research: ITC Research Theme: PLUS Topic: Strengthening Spatial Planning for Disaster Risk Reduction Supervisor: prof.dr. R.V. Sliuzas.*  
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**Laura Hielkema**

*Bsc. Spatial Planning and Design, Master Research: ITC Research Theme: 4D-Earth, Topic: Post-Seismic Landslide Risk during the Western Monsoon Season in Northern Pakistan, Supervisor: prof. Dr M.K. van Aalst, Professional interests: risk assessment, disaster response, or early warning. I want to help accommodate and reduce the effects of climate change.*  
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**Martijn Kuik**

*BSc. Future planet studies, Master Research: ITC Research Theme: 4D-Earth, Topic: Introducing a hydro dynamic perspective to flash flood Susceptibility analyses Supervisor: prof.dr. V.G. Jetten.*  
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**Philip Stobbelaar**

*BSc Geography with Informatics, Master Research: ITC Research Theme: FORAGES, Topic: Prediction of Leaf Area Index using the Integration of the Thermal Infrared and Visible Short-Wave Infrared Data acquired with an UAV for a Mixed Forest, Supervisor: dr. E. Neinavaz, Interests: learn from others to broaden my horizon regarding knowledge and skills, and then be able to apply what I have gained. After my study, I want to find a job where I can look forward to going to work every day, where my skillset and expertise is needed, and I can continue to develop myself. This includes working with other skilled people from different disciplines.*



**Dr. ir. Wietske Bijker**

*Assistant professor, coordinator of the International Module of the MSc Spatial Engineering Department of Earth Observation Science (EOS) Faculty of Earth Observation Science and Geo-information Science, University of Twente. My research focusses on remote sensing of Earth surface processes with gradually evolving changes in time and in space. Over the years, this research included monitoring individual trees as vague objects that gradually change through time, monitoring gradual changes in lakes and shorelines using fuzzy approaches, mapping and monitoring agricultural crops and their gradual development over time as well as monitoring of deforestation and related land cover changes, like regeneration of forest.*  
<https://people.utwente.nl/w.bijker>



**Drs. Tiny Luiten MBA**

*Programme manager, study adviser Master Spatial Engineering t.r.luiten@utwente.nl linkedin.com/in/tinyluiten For my work environment I strive to have it challenging so I get to use as much of my qualities, knowledge and skills as possible and where I can contribute to the development of people, the organisation and the environment. Competences: Creative, Decisive, Responsible, Leadership, Inquisitive Specialties: change management, Career coaching and advise, Human Resources Development and Management, Geographic Information, Development cooperation, Land-evaluation, physical geography*



**Yolla Al Asmar ( MSc)**

*Lecturer Earth observation Science (EOS) Department Faculty of Earth Observation Science and Geo-information Science, University of Twente I have been working in ITC since 2015. I teach topics related to Earth observation, Unmanned Aerial Vehicles, Photogrammetry, Surveying and Geographical Information Science, and carry out capacitybuilding projects. Besides working in the educational sector, I also worked in Jordan's public and private sector with several organizations and institutions (GTZ - USAID- Ministry of Water and Irrigation) as a geoinformation specialist.*  
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