From Earth Observations to Earth Action: Satellite Applications for Biodiversity Conservation

Sunday, September 4, 2016
2:30 – 7:00 p.m. HST (UTC-10)

An interactive event that will introduce participants to the applications of remote sensing to a variety of IUCN supported conservation initiatives and international climate change agreements. Participants will work through a series of self-paced, hands-on, step-by-step exercises based on readily available web tools. The campus will conclude with a session where participants may provide feedback on the tools presented and identify specific end-user needs in order to address their decision support activities as they concern conservation and biodiversity

Trainers

- Cindy Schmidt, cynthia.l.schmid@nasa.gov
- Jenny Hewson, jhewson@conservation.org
- Karyn Tabor, ktabor@conservation.org
- Brock Blevins, brockbl1@umbc.edu
- Tanya Birch, tanyak@google.com
- Lilian Pintea, lpintea@janegoodall.org

14:30 – 14:45: Who We Are and Why Remote Sensing?

- Introduction to the campus, trainers, and participants
- Objectives of the Campus
- Brief examples of how practitioners use remote sensing for conservation

14:45 – 15:30: Introduction to Remote Sensing

- Key concepts and fundamentals
- How remote sensing data products can be applied to aid IUCN supported conservation initiatives

15:30 – 16:40: Remote Sensing for Conservation and Biodiversity

In support of the IUCN Red List of Threatened Species, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem (IPBES), Ecologically and Biologically Significant Areas (EBSAs) Key Biodiversity Areas, the Convention on Biological Diveristy, and Aichi Targets.

- Animal movement
- Dynamic habitat index for biodiversity
- Citizen science approach to chimpanzee monitoring (Jane Goodall Foundation)

In support of the United Nations Framework Convention on Climate Change (UNFCCC), the United Nations Convention to Combat Desertification (UNCCD), Protected Planet (World Database on Protected Areas) with UNEP-WCMC, the IUCN Red List of Ecosystems, REDD+, and the United Nations Sustainable Development Goals.

- Vegetation carbon stock corridors
- New and emerging uses of remote sensing for land change detection
- Firecast success stories – near real-time monitoring for improved landscape management
- Introduction to Google Earth Engine

16:40 – 16:45: Intermission

16:45 – 18:15: Remote Sensing Tools and Data Exploration Exercises

Land Management and Ecosystem Based Tools:

- Coral Reef Watch*
- Firecast (Near Real-Time Monitoring)
- Global Forest Watch*

Species, Biodiversity, and Habitat Based Tools:

- Google Earth Engine Explorer
- Map of Life
- MODIS NDVI Anomalies and Time Series*

**optional exercises*

18:15 – 19:00 Feedback and Wrap-up

- Report back by groups on tools and exercises
    - With linkages to broader IUCN initiatives
    - Did this campus provide the information needed for robust decision-making activities?
- Completion of survey
- Wrap-up