

Joint Expert Meeting on Pasture Analysis and Remote Sensing

3rd Workshop of the GEO Rangelands and Pasture Productivity Monitoring (GEOPLAM RAPP) Community of Practice

20th to 22nd July, 2015

Location:

[Matiz Hotel Barão Geraldo](#), Campinas, Sao Paulo, Brazil

Workshop objectives

- To strengthen understanding, relationships, and collaborations involving the international and Brazilian pasture research communities, including but not limited to remote sensing;
- Foster information exchange and interaction involving researchers in Brazil and South America and the global pasture and remote sensing research communities;
- To inform the potential for pasture intensification, and to identify future research directions that can further inform this potential;
- Catalyze development of proposals for collaborative research involving members of the research communities, consistent with GEOGLAM RAPP¹ objectives:
 - Develop a shared understanding of what this project is about and what it hopes to achieve;
 - Continue to grow the RAPP community of practice and contributors to the project;
 - Showcase latest satellite-based rangeland and pasture condition and biomass monitoring activities, as well as integration of this information with livestock productivity modelling, etc;
 - Discuss field measurement protocols and agree upon key ground-based activities at RAPP national pilot;
 - Identify key global satellite datasets and specific data sets for pilot sites, that need to be acquired and analysed via the Committee on Earth Observation Satellites (CEOS) and their satellite data coordination group (SDCG).

¹ Termed “GEOGLAM Rangelands and Pasture Productivity (RAPP)”, this new GEO initiative will provide the global community the means to regularly monitor the world’s rangelands and pasture lands on a routine basis, and their capacity to produce animal protein in real-time, at global, regional and national levels. The primary scope of RAPP will therefore be to monitor those lands that are integral to producing animal protein on a ‘free-range’, open-field basis.

PROGRAM

JULY, 20th – DAY ONE (MONDAY)

9:00 **REGISTERING**

9:30 **WORKSHOP OFFICIAL WELCOME**

Rubens Lamparelli, University of Campinas - Unicamp (Brazil) *confirmed*

Lee Lynd, Dartmouth University (USA) *confirmed*

Alex Held, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia) *confirmed*

9:40 **GEOGLAM OVERVIEW**

Michel Deshayes, Group on Earth Observations Global Agricultural Monitoring Initiative - GEOGLAM (Switzerland) *confirmed*

10:00 **Rationale for Rangelands and Pasture Productivity task, global context and workplan**

To be defined

Alex Held, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia) *confirmed*

10:30 **COFFEE BREAK**

10:50 **Status of GEOGLAM Dashboard**

Juan-Pablo Guerschman, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia)

11:05 **Audience discussion and refine/clarify workshop objectives**

Rubens Lamparelli, University of Campinas - Unicamp (Brazil) *moderator confirmed*

Alex Held, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia) *moderator confirmed*

Lee Lynd, Dartmouth University (USA) *moderator confirmed*

12:00 **Existing regional, national or global rangeland and pasture monitoring projects:**

***Rangeland & pasture monitoring: activities of in Brazil & Rangeland & pasture monitoring: activities of in Argentina**

Laerte Guimarães Ferreira, Goias Federal University - UFG (Brazil) *confirmed*

Mariano Oyarzabal, Agricultural Plant Physiology and Ecology Research Institute - IFEVA (Argentina) *confirmed*

12:30 **PRODUCTIVITY AND MAPPING OF CULTIVATED PASTURES FROM CERRADO: EXISTING DATA, DIFFICULTIES AND POSSIBILITIES**

Edson E. Sano, Brazilian Agricultural Research Corporation – Embrapa Cerrados (Brazil) *confirmed*

13:00 **LUNCH**

14:00 **Existing Regional Global or National Rangeland and Pasture monitoring projects**

*Toward a Coordinated Rangelands Observations and Monitoring System for South Africa

Clement Adjorlolo, South African National Space Agency - SANSA (South Africa) *confirmed*

* Monitoring of Rangeland and Pasture Production in the US

To be defined

*Current status of grassland above ground biomass estimation in China

Dan Zhao, Institute of Remote Sensing and Digital Earth (RAD), Chinese Academy of Sciences (CAS) (China) *confirmed*

*Land Use Monitoring in Brazil

To be defined *confirmed*

* Remote sensing monitoring of forage production in uruguayan ranchers: state of the art and challenges

Marcelo Pereira, *Instituto Plan Agropecuario* (Uruguay) *confirmed*

* Rangeland & pasture monitoring: Activities in Colombia

Alvaro Rincón, Corporación Colombiana de Investigación Agropecuaria – Corpoica (Colombia) *confirmed*

15:30 **COFFEE BREAK**

16:00 **Opportunities and challenges for incorporating territorial intelligence approaches to support policy actions and the sustainability of Brazilian pastoral systems**

Geraldo B. Martha Jr., Brazilian Agricultural Research Corporation - Embrapa (Brazil) *confirmed*

16:20 **Pasture Intensification for a sustainable future**

Mario Herrero, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia)

16:40 **INPE's satellite data available for agriculture and pasture monitoring**
João Viane Soares, National Institute for Space Research - INPE (Brazil) *confirmed*

17:00 **Group discussion**
Key technical characteristics and GEO data needs for an operational RAPP System. Example: "The NASA GEO GLAM interface". Use as discussion starter *Comment on Draft Summary Work Plan, meeting expectations and additional feedback based on what they have seen *Data gathering exercise: Additional national examples/technical approaches. Stakeholders, what other groups are missing and should be approached *Group discussion about what a community practice looks like, how do we want to share information and interact within the group? Website, wiki options. *What's next opportunities, risks, funding, things to avoid
All attendees

18:30 **DINNER**

JULY, 21st – DAY TWO (TUESDAY)

9:30 **Recap of Day 1**
Alex Held, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia) *confirmed*

10:00 **Current status of global rangelands and livestock models and integration with remote sensing**
Marcelo Galdos, Brazilian Bioethanol Science and Technology Laboratory - CTBE (Brazil) *confirmed*

10:20 **National Australian rangelands monitoring activities**
Juan-Pablo Guerschman, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia)

10:40 **COFFEE BREAK**

11:00 **Group discussion and update on global pilot and demonstration sites, data and groups**
Mario Herrero, Commonwealth Scientific and Industrial Research Organisation - CSIRO (Australia) *moderator*

12:30 **GEOGLAM Satellite Data Acquisition Strategy and additional satellite datasets for RAPP**
Alyssa Whitcraft, University of Maryland (USA)

13:00 **LUNCH**

14:00 **Group discussion on ground-based information needs, field protocols, data-sharing via eg GEOWiki**
Laerte Guimarães Ferreira, Goias Federal University (Brazil) *moderator confirmed*

15:30 **COFFEE BREAK**

16:00 **Group discussion on next-steps**
To be defined *moderator*

17:30 **End of meeting**

JULY, 22nd – DAY THREE (WEDNESDAY)

8:30 **Land intensification and environmental consequences: the case of pasture intensification in Brazil**
Luiz Martinelli, Centro de Energia Nuclear na Agricultura, University of São Paulo - CENA/USP (Brazil) *confirmed*

9:00 **Assessing regional GHG mitigation in grassland-based beef production in Brazil: interactions and emerging behavior**
Luís Barioni, Brazilian Agricultural Research Corporation - Embrapa (Brazil) *confirmed*

9:30 **FEWSNET and GEOGLAM**
To be defined

10:00 **Group discussion**

12:00 **End of meeting**

12:30 **LUNCH**