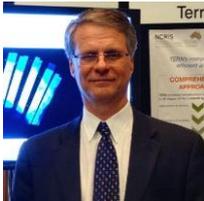


## **GEOGLAM RAPP**

### *(Rangelands And Pasture Productivity)*

#### Newsletter #1

#### **FOREWORD** from Dr Alex Held (CSIRO - Group Leader Landscape Observation and Simulation Group)



GEOGLAM Rangeland and Pasture Productivity ([RAPP](#)) is an initiative under the GEO initiative called [GEOGLAM](#), which has established a coordination mechanism for several national and global crop monitoring systems, and via its

successful "[Crop Monitor](#)" system, services the crop information needs of [AMIS](#) (Agricultural Market Information System). The condition and production of wheat, rice, soybean and maize are being monitored world-wide via this 'Crop Monitor'.

RAPP in turn, was initiated later in 2013, to complement GEOGLAM, and monitor the productivity and sustainability of global open rangelands and extensive grazing lands, that support livestock for the production of protein, whose consumption is also estimated to rise sharply at population continues to grow. One key goal for RAPP has been to eventually provide information to AMIS as well, about the condition and productivity of global livestock production systems via a dedicated, online "RAPP Dashboard Monitor" system. The key to the success of RAPP, however is to link the remote sensing-derived information on grassland

condition and biomass, to livestock production models, as a way to also provide future production forecasts.

One key task for RAPP therefore, has been to assemble a community of practice from major national agricultural and livestock research organisations, and to establish a series of national pilot sites in key livestock production countries. So far almost 10 countries have expressed their interest, 6 sites have been confirmed, and the RAPP coordination team is working closely with relevant national institutes to identify key satellite data requirements used for monitoring of grazing-lands in these countries, and also gather information about any existing ground-based or modelled standing biomass at these sites, as a way to help calibrate and validate livestock production models. RAPP is working closely with GEOGLAM and CEOS (Committee on Earth Observation Satellites) to help gather the necessary satellite data to serve the needs of our key partners and pilot sites. This newsletter outlines some key activities towards establishment of a comprehensive and active community of practice, as well as initial progress on development of a rangeland monitoring dashboard, analogous to the GEOGLAM Crop Monitor. Lastly, we wish you a happy end of 2015 and success for 2016.

#### **Community-of-Practice Building Workshops: University of Campinas (São Paulo, in Brazil), July 2015**

The 3rd RAPP workshop was held in **Brazil** from 20 to 22 July 2015. It has been co-hosted by the University of Campinas in São Paulo ([Unicamp](#)), and [NIPE](#) (Interdisciplinary Centre of Energy Planning, in Campinas - Brazil), with a generous funding from [FAPESP](#) (São Paulo Research Foundation). CSIRO (Australia) has collaborated closely with Unicamp to help organising the event in coordinating the GEOGLAM RAPP community.



This 3-days workshop was the occasion to **strengthen the links between the Community of Practice**, to review progress and continue the establishment of a Global Rangeland and Pasture Productivity monitoring system, under GEOGLAM and the "Group on Earth Observation" (GEO).

Around **40 participants** from all over the world (Brazil and other South American countries, Australia, and others from Europe, Africa, and Asia) attended the workshop. About **20 presentations** were given, whether on their rangeland research work, or related to RAPP. They generated very fruitful interactions and proactive discussions, with promising ideas for the very near future of the project. For more information (agenda and links to the presentations, see details on the GEO-RAPP [website](#)). New **pilot sites** have been proposed and will be described later on the website after consultation

and validation. For more information, please visit the GEO-RAPP website on these pages: [Pilot sites in general](#) and [Description & criteria](#) for pilot sites validation.

The CSIRO team (as the initial interim task to lead the project) was very pleased with the workshop's outcomes.

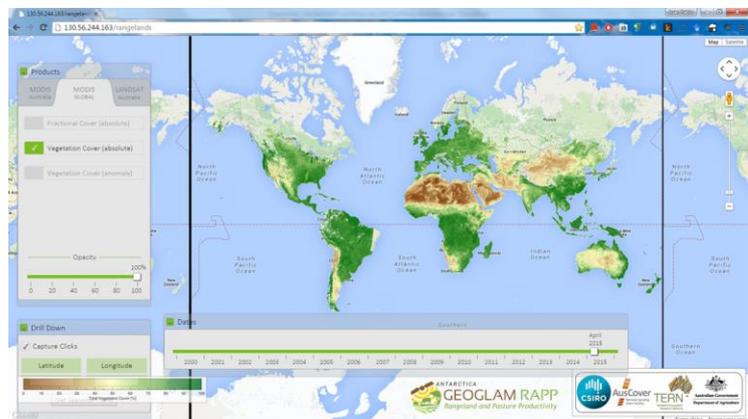


- ▶ **Again, a huge thank to Unicamp and FAPESP for the event's organisation. We look forward to working closer with all motivated members of this community of practice.**
- ▶ **We are considering to have our 4<sup>th</sup> workshop in Africa, in 2016 (check website for updates!)**

## Global Dashboard: RAPP Monitor is on track

Satellite images can tell powerful stories about the state of the environment, but they are better transmitted when placed in the right visual framework.

A CSIRO team is developing a **global dashboard**, which will allow users to visualise remotely-sensed derived information on the state of global rangelands and pastures. Users will be able to create maps of vegetation cover (including the green and dry components), soil moisture, rainfall and other relevant indices such as NDVI, as absolute quantities and as anomalies from the long-term mean. The dashboard will also provide the means for requesting time-series analysis for a given location and make comparisons between locations and selected regions.



- ▶ **Stay tuned for more news in this space!**

## A new website for GEOGLAM RAPP

As you may have already noticed, a **dedicated website** - managed by CSIRO, which has been created for the GEOGLAM RAPP community: [www.geo-rapp.org](http://www.geo-rapp.org)

The website aims to:

- **COMMUNICATE** all general information about the project (general plan, research, pilot sites, partners)
- **PROVIDE INFORMATION** about all National Pilot Sites (some are already online, while others are still under construction: waiting for detailed information from the national teams)
- **UPDATE** the community (YOU) on specialized events and workshops
- **INFORM** about : R & D, RAPP Monitor, Capacity Development and Outreach (still under construction)
- **LIST** the partners



- ▶ **If you haven't already done it, click [here](#) now to have a first look at it! Please feel free to send any news, papers, comments or suggestions to improve the website to Flora Kerblat ([fkerblat@yahoo.com](mailto:fkerblat@yahoo.com)).**

## Next steps for GEOGLAM RAPP

### Working groups

During the workshop, one issue raised was that more dedicated "Technical teams" should be established to work on various RAPP components. We are therefore considering setting up teams to address the following issues:

1. Satellite Data Acquisition Planning:
  - Specific a map of global *grazing lands*
  - Grassland types & seasonal dynamics
  - Wall-to-wall global acquisition needs
  - Specific Pilot sites & R&D needs
2. Model – Data Integration & Validation
3. In-situ measurements & methodologies
4. R&D Coordination; new sensors, new methodologies
5. Livestock stats and production modelling
6. Capacity Development and Stakeholder Engagement
7. Global Dashboard & Data Access, Information Products

► ***It is now important to further discuss these topics, and to engage regular discussions. We are also seeking volunteers who wish to be involved, so please contact us!***

### Pilot sites to be nominated and validated

The objective for establishing several global pilot sites has been to help in validation of global satellite datasets, develop global sampling and data management protocols and to conduct dedicated R&D activities across a variety of global rangeland and pasture systems.

At least 9 countries have proposed such sites (see more on the website about the [pilot sites](#)). We will soon be confirming additional sites including from Colombia and South Africa.

The website and the main role of the pilot sites have been presented to the audience in Brazil. However we would like to agree on the **process of validation** of these pilot sites.

► ***Feel free to propose one or two pilot sites, according to the criteria.***

### Participation in the AGU Fall Meeting (San Francisco, 14-18 Dec 2015)

The "RAPP team" is preparing a poster on "GEOGLAM Rangelands and Pasture Productivity Activity: Recent Progress and Future Directions" (B43A-0531), to be presented by Juan Pablo Guerschman at the AGU Fall Meeting in San Francisco, 14-18 Dec 2015.

► ***If you plan to attend the conference, please don't forget to attend the poster session, and discuss with our RAPP representative! ([juan.guerschman@csiro.au](mailto:juan.guerschman@csiro.au))***

### Next workshop: May-June 2016, in Africa?

The next workshop aims to start the implementation plan, and it would gather stakeholders who are focused on RAPP (restricted working group, 20-30 people). As the previous meetings were hosted in Australia, France and Brazil, we would like to organize the next one in **Africa**, around **May-June 2016**. If you think your organization would be pleased to host such a workshop, please contact us. We are hoping to get more information and keep you informed early next year.

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## We look forward to receiving your propositions on ...

- Your commitment regarding the **working groups**
- The nomination/confirmation of **new pilot sites**
- Your interest in hosting the **next workshop**
- And **other brilliant ideas** to move forward with RAPP!

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You are receiving this email because you have participated in an event, or you are a member of the RAPP community. If you are not interested in getting these emails anymore, please let us know ([fkerblat@yahoo.com](mailto:fkerblat@yahoo.com) and [juan.guerschman@csiro.au](mailto:juan.guerschman@csiro.au)), and you will be removed from our list.