PRediction Of Geospace Radiation Environment and Solar wind parameterS

Work Package 1
Management

Deliverable 1.2
Minutes of the Second Stakeholder Meeting

Simon Walker, Robertus von Fay-Siebenburgen, and Michael Balikhin

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1.0	2017-02-10	SNW	Initial draft

Contents

Summary

As part of its management structure project, PROGRESS has set up a Stakeholder Advisory Board (SAB) to oversee the project activities from an industrial/commercial perspective. The SAB is tasked to provide feedback to the project as to how PROGRESS may tailor its activities to provide assets that could be employed within the fields of satellite manufacturing and operations that will lead to an enhancement in the operational planning/provision of services and also the forecast of the Space Weather environment.

This deliverable provides a summary of the proceedings of the 2^{nd} meeting between the SAB and the project, and outlines areas that PROGRESS can actively fulfil.

1 Introduction

This document forms Deliverable D1.2 of the Horizon 2020 funded project PROGRESS.

In order to obtain commercially/industrially related feedback on its activities the project PROGRESS set up a Stakeholder Advisory Board (SAB). The SAB is tasked to provide feedback to the project as to how PROGRESS may tailor its activities to provide assets that could be employed within the fields of satellite manufacturing and operations that will lead to an enhancement in the operational planning/provision of services and also the forecast of the Space Weather environment.

The initial composition of the SAB, as described at the project Kick-off Meeting (held in Brussels, 2015-01-12) was as follows:

- Project Coordinator/Manager
- Dave Pitchford - SES
- David Jackson - UK Met Office
- Maria Kuznetsova - NASA Coordinated Community Modeling Centre
- Jeurgen Volpp - ESA European Space Operations Centre
- Didier Mourenas - CEA

Dave Pitchford was appointed as Chair of the SAB.

Within the lifetime of the project it was foreseen that new members would be invited to join the SAB. During the first year we were able to add Eamonn Daly (ESA European Space Technology Centre) to this list of members.

The second official meeting of the SAB took place in Potsdam on 2017-01-10 in conjunction with the project 2^{nd} Review Meeting, and 4^{th} Project Meeting. The minutes of this meeting form Deliverable D1.2 and are appended to this document.

2 Conclusions

From the discussions during the meeting focused on

- the need to engage Stakeholders regarding the range and type of products that should be available from PROGRESS. products
- the role played by NASA CCMC within the within the space physics community and the potential benefits of collaboration with PROGRESS.

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2^{nd} Stakeholder Advisory Board
January 10, 2017

GFZ, Potsdam, Germany

Minutes

Attendees

Andrej Rozkov (Project Officer, REA), Simon Walker (project manager USD), Michael Balikhin (chair scientific steering committee USD), Richard Boynton (USD), Tony Arber (UW), Keith Bennett (UW), Yuri Shprits (GFZ), Mike Liemohn (UM), Vitaliy Yatsenko (NASU), Peter Wintoft (IRF), Volodya Krasnoselskikh (CNRS/LPC2E), Stepan Dubyagin (FMI), Maria Kuznetsova (SAB).

Via Skype

Zerefsan Kaymaz (external reviewer, ITU Istanbul, Turkey).

Apologies

David Jackson (SAB) Jurgen Volpp (SAB), Didier Mourenas (SAB), Robertus von Fay-Siebenburgen (USD).

Agenda

The agenda, as previously circulated, was adopted.

Summary of Meeting

Maria Kuznetsova provide an excellent overview of the use of models currently installed and running at NASA/CCMC. These points are of interest when discussing Project IPR, in particular the implementation and use of models after the PROGRESS finishes.

- The mission of CCMC, a multi agency partnership, 'is to enable, support, and perform the research and development for next-generation space science and space weather models', (http://ccmc.gsfc.nasa.gov/).
- Everything is offered as open source. The goal is to give users the opportunity to use models in their work, not to make money.
- Use of models is open to all. There are certain rules that need to be followed for both model developers and users. Models are not disclosed.
- CCMC offers a flexible approach to modeling, enabling the coupling between the different models available. Thus it should be possible to compare the results of SWIFT with WSA-ENLIL.
- CCMC currently runs a copy of the VERB and AWESoM-R codes.

- The summer school presents a good opportunity to promote the activities and models of CCMC. A set of interactive exercises could be designed to give students hands on experience of using these models. Since all models are available on line, these exercises could be offered to students anywhere with an internet connection.

- It is important to get feedback from stakeholders and potential users. What products are required to fulfil their needs ? What do they require and how can we provide this data ? How should this data be displayed ? When do parameters reach 'critical values' ?

- CCMC runs a set of 'score boards', in which users can upload their forecasts for CME arrival times and compare them with result from other members of the community. Currently, scoreboards are also being developed for the forecast of Flares and SEP events. There are currently no plans to create a scoreboard for radiation belt forecasts. This could be a potential opening for PROGRESS.

- CCMC is open for collaboration on the implementation and use of new models and techniques. There will be a workshop International CCMC-LWS Working Meeting: Assessing Space Weather Understanding and Applications, April 3 - 7, 2017, Cape Canaveral, Florida (see http://ccmc.gsfc.nasa.gov/CCMC-LWS_Meeting/ for details). It was suggested that participants wishing to make use of CCMC should try to organise collaborative visits. In such cases, CCMC would require up to 1 month lead time to arrange entry etc..

- CCMC also have many links for the dissemination of results, including links with various planetariums and museums.