



# **PRediction Of Geospace Radiation Environment and Solar wind parameterS**

Project Overview

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- Status
- Deliverables/Milestones
- Dissemination
- Risks
- Amendment to DoA

## 3rd Review Meeting (2017-01-01 to 2017-12-05)

### Deviations from work plan

- A 7 month extension was requested and granted to enable GFZ to continue the work started by SIST.
- Deliverable submission dates for tasks involving GFZ were adjusted

### Ethical issues

- No ethical issues were identified
- No ethical issues are expected to arise during the next reporting period

### IPR

- No IPR issues have been raised.

## 3<sup>rd</sup> Review Meeting (2017-01-01 to 2017-12-05)

### Use of resources

- There have been no changes in the planned use of project resources

### Dissemination/exploitation

- Project members have or are in the process of publishing 12 papers in peer reviewed scientific journals in the current reporting period (project total 33)
- 15 presentations at conferences/workshops (including summer school) have been made (total 81 – list incomplete)

### Deliverables

- All deliveries made on time

### Risks

- No new risks were encountered

- New deliverables submitted according to schedule in GA
- All deliverables available from
  - EC participant portal
  - Project web site (project only section)

	Title	Due	Delivered
D1.2	Minutes of second stakeholder meeting	2017-02-28	2017-02-28
D6.2	Incorporation of data assimilation into VERB	2017-02-28	2017-02-16
D3.5	AE Models	2017-06-30	2017-07-03
D7.1	Forecast results	2017-10-31	2017-10-31

## D2.3 Full user and developer documentation

Participants: UW, UM, USFD

Due: Dec, 2017 (Month 36)

## D3.6 TN on real-time implementation

Participants: IRF, USFD, SRI

Due: Dec, 2017 (Month 36)

## D5.4 Trial version of forecast model for low energy electrons.

Participants: FMI, USFD, UW, UM, IRF

Due: Dec, 2017 (Month 36)

## D5.3 Report on VERB-IMPTAM low energy seed population provided to VERB radiation belts model

Participants: FMI, GFZ

Due: Jan, 2018 (Month 37)

## D7.3 Forecasts of the energetic electron populations along a user selected satellite orbit

Participants: USFD, GFZ, FMI

Due: Jan, 2018 (Month 37)

# Milestones

#	Title	WP	Due	Completed
MS1	NARMAX models for electrons at GEO	WP 6	M6	100% - Results available on web
MS2	Availability of models for Kp, Dst, and AE	WP 3	M18	75% Model results available on web
MS3	Statistical wave models	WP 4	M24	90% - Models on request
MS4	Fusion of VERB and IMPTAM	WP 5	M24	On going
MS5	Availability of AWSOM/ SWIFT for testing within the consortium.	WP 2	M20	100% - Models are available on request
MS6	Fusion of NARMAX and VERB	WP 6	M30	On going

## **There have been 10 papers published in high impact, peer-reviewed journals**

J. Geophysical Research (Space Physics), Astrophysical Journal, and Journal of Space Weather and Space Climate.

## **2 Papers currently accepted**

This brings the total number of journal publications to 33.

Papers are listed on the project web site

<https://sbg.group.shef.ac.uk/progress/html/dissemination.phtml> together with a link to publishers web site.



**There have also been a number of oral/poster presentations at scientific conferences.**

**EGU General Assembly**, Vienna, Austria, 24-28 April 2017

**14th European Space Weather Week**, Oostende, Belgium, 27 Nov-1 Dec, 2017

**Other conferences/workshops attended are as follows:**

17th Ukrainian Conference on Space Research, Odessa, Ukraine, 21-25 August, 2017

**A total of 81 presentations are currently listed (the list on the web site is incomplete).**

PDF file of presentations are listed on the project web site <https://ssg.group.shef.ac.uk/progress/html/dissemination.phtml>.

## **PROGRESS Summer School**

Alcudia, Mallorca, Spain, 26-28 July, 2017

**Attracted 15 students from Europe and China**

**14 presentations on aspects of PROGRESS science**

**Presentations available from the PROGRESS web site**

[https://ssg.group.shef.ac.uk/progress2/html/summer\\_school.phtml](https://ssg.group.shef.ac.uk/progress2/html/summer_school.phtml)

## Participant moves to a different institution

- Participant at SkolTech moved to GFZ.
- Amendment to include GFZ as new beneficiary completed
- PROGRESS was given a 7 month extension to allow GFZ time to complete their tasks
- The work schedule and deliverables for WP 5,6,7 has been modified accordingly.
- No new sources of risk have been identified.

## DoA modified

- Movement of participant (Y. Shprits) from Skolkovo to GFZ
- Changes to work schedule
- Includes budget details of GFZ

## External reviewer

- Following the second review meeting feedback was received from our external reviewer. All points raised were answered.
- Deliverables were updated based on specific comments
- Still to deliver a document outlining role of SRI within PROGRESS