

PERCEIVED SYNERGIES WITHIN eHEROES CONSORTIUM AS SEEN FROM SRC-PAS PERSPECTIVE

Magdalena Gryciuk and SRC-PAS eHeroes Team

Solar Physics Division, Space Research Centre, Polish Academy of Sciences , Poland



- Survey of the eHeroes programme work package contents and task definitions shows many complementary areas where joint actions can be undertaken among consortium members.
- Some of these synergies are not limited to one group of members assigned to a particular task but also extend across eHeroes work packages.
- Common benefits may be obtained from collaborative work of different groups within the Consortium.

From this reason I'll show and discuss examples of possible synergies as seen from SRC-PAS perspective.

KO, INAF

T 2.1

Active region magnetic configurations as flare precursors

UOulu, Hvar

T4.3

Study of activity forecasting methods in different time-scale



SRC-PAS

T 2.4

Study of the plasma heating and eruptive process (nanoflares, bright points, micro-dimmings ect.) in small scale coronal structures and their relevance with transient slow solar wind

SRC-PAS

T 4.2

Parameters for spatial-temporal distributions of flares and CMEs



UCT, UCL, OBSPARIS, KU Leuven

T 3.1

Build-up of free magnetic energy and helicity prior to eruptions, helicity depletion via CMEs and Precursors of eruptive event

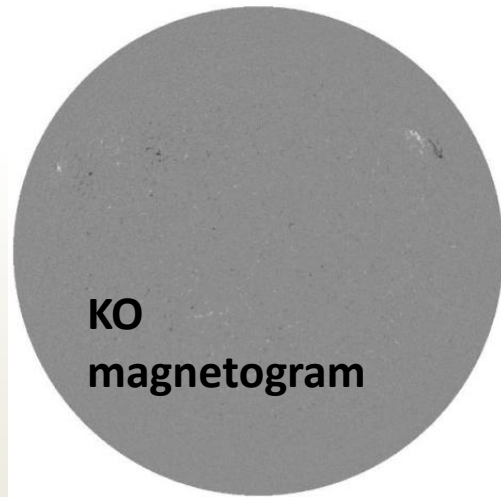
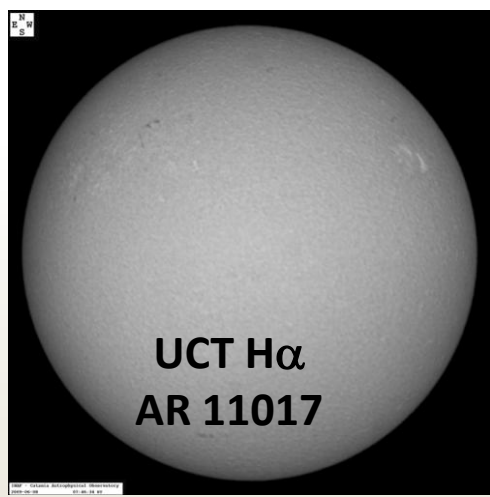
SRC-PAS synergy tree
At a first glance

How collaboration during work
towards deliverables
can extend and improve them.

D 2.1 Scientific report on photospheric flare precursors. **KO, INAF**

D 3.1 Pre-Event Build-up of free magnetic energy and helicity, event precursors. **UCT, UCL, OBSPARIS, KU Leuven**

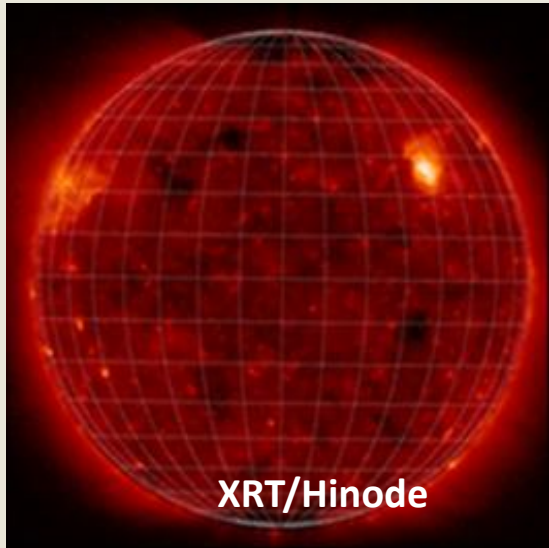
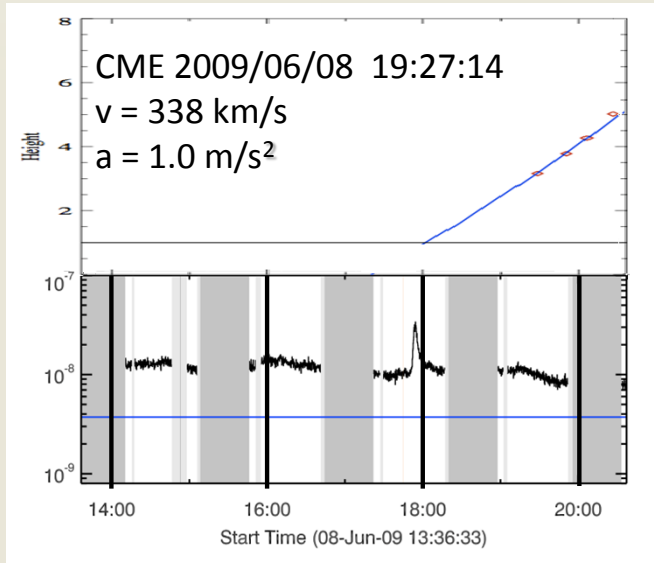
Cross-package, Cross-tasks



Small flares and brightenings catalog



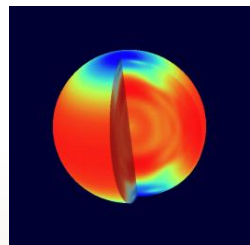
Photo/chromospheric flare precursors



D 2.4 Online report "Small-scale solar activity as the source of the transient solar wind" **LPI, KU Leuven, ROB, UCL, SRC-PAS**

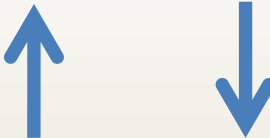
D 4.3 Reports and maps of spatial-temporal distribution of flares and CMEs. UOulu, Hvar

Cross-task

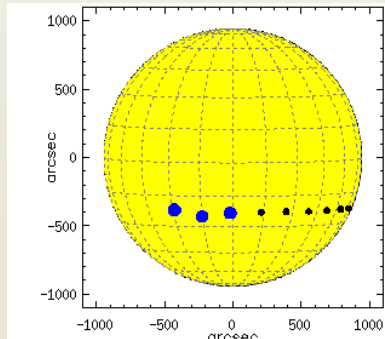


maps of heliographic latitude, longitude and distance

X-ray data for SW forecasting methods. Minimum - reference point

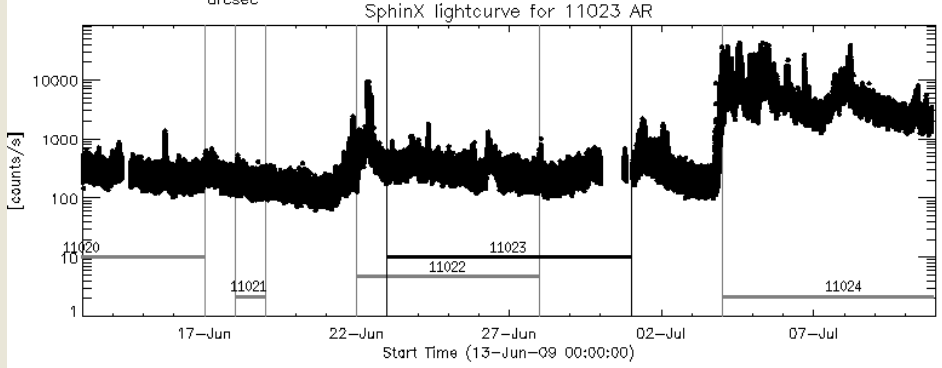


USAF/NOAA report



AR 11023 USAF/NOAA report

Id	Loc. date	Loc.	L0	Area	Z	LL	NN	Type	Mag.	Type
1	2009-06-23	S22E29	018	0040	Cso	05	03	ARS	β	β
2	2009-06-24	S25E15	019	0030	Cso	07	02	ARS	β	β
3	2009-06-25	S23E01	020	0040	Cso	07	04	ARS	β	β
4	2009-06-26	S23W14	022					HaP		
5	2009-06-27	S23W27	022					HaP		
6	2009-06-28	S23W40	022					HaP		
7	2009-06-29	S23W53	022					HaP		
8	2009-06-30	S23W66	022					HaP		
9	2009-07-01	S23W79	022					HaP		



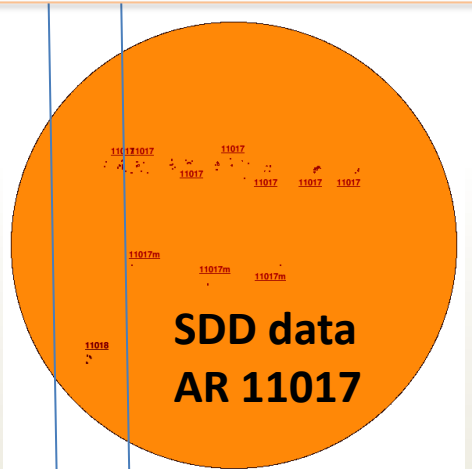
No	NOAA AR No	day start	day end
1	11012	2009-02-21	2009-02-24
2	11013	2009-02-25	2009-03-06
3	11014	2009-03-07	2009-03-14
4	11015	2009-04-22	2009-04-24
5	11016	2009-04-30	2009-05-02
6	11017	2009-05-14	2009-05-25
7	11018	2009-05-24	2009-05-31
8	11019	2009-06-01	2009-06-11
9	11020	2009-06-09	2009-06-17
10	11021	2009-06-18	2009-06-19
11	11022	2009-06-22	2009-06-28
12	11023	2009-06-23	2009-07-01
13	11024	2009-07-04	2009-07-12
14	11025	2009-09-01	2009-09-10
15	11026	2009-09-22	2009-10-04
16	11027	2009-09-23	2009-10-02
17	11028	2009-10-21	2009-11-01
18	11029	2009-10-24	2009-11-01
19	11030	2009-11-06	2009-11-13
20	11031	2009-11-16	2009-11-24
21	11032	2009-11-19	2009-11-28
22	11033	2009-11-19	2009-11-29

D 4.2 Report on optimum parameters for the spatial-temporal distribution of flares and CMEs. UOulu,ROB, SRC-PAS

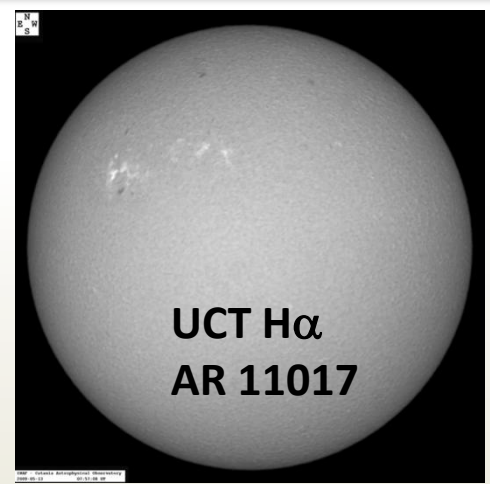
D 2.1 Scientific report on photospheric flare precursors. **KO, INAF**

D 3.1 Pre-Event Build-up of free magnetic energy and helicity, event precursors. **UCT, UCL, OBSPARIS, KU Leuven**

Cross-package

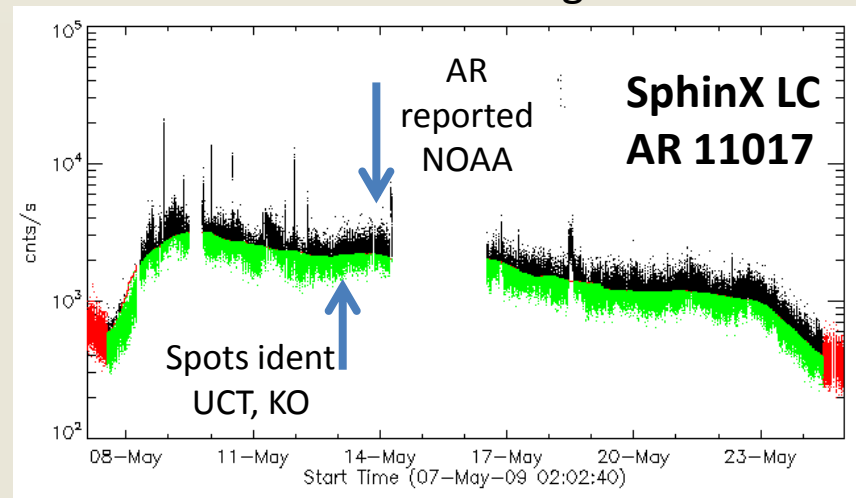
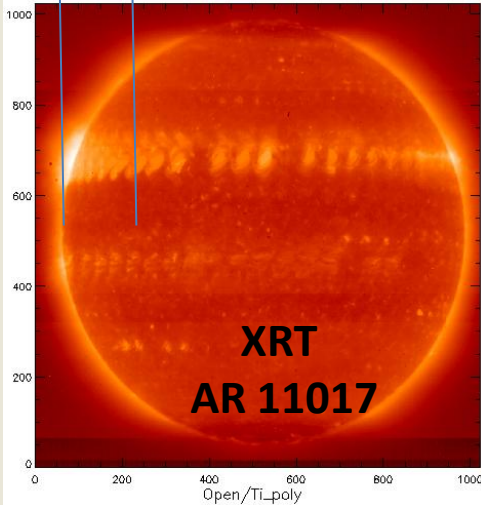


**X-ray
AR and flaring
deep minimum in
2009**



photo/chromospheric
background, magnetic
configuration

$\Delta T?$
X-ray context
SphinX AR
catalogue



D 4.2 Report on optimum parameters for the spatial-temporal distribution of flares and CMEs. **UOulu, ROB, SRC-PAS**

Thank You

We are sure there are many more possibilities for beneficial collaboration between Consortium members,
I just mentioned about a few of them