



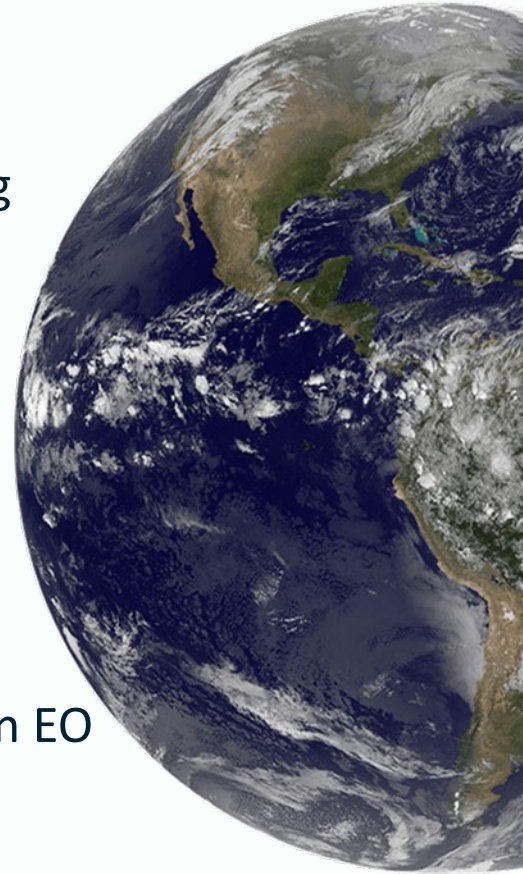
BEODay 2023

Florefe – 9 March 2023



Programme

- 10:00 Opening of the Workshop
- 10:15 The STEREO IV programme
- 11:15 ESA Future EO block 4 programme: funding opportunities
- 12:15 Lunch*
- 14:00 The first STEREO IV projects
- 14:55 Belgian and ESA climate activities
- 15:15 Other announcements and opportunities in EO
- 15:45 Coffee & Networking*
- 16:30 Closure of the Workshop





WELCOME



Laurence LENOIR
Director Space Research and Applications



THE STEREO PROGRAMME



The STEREO team

Jean-Christophe SCHYNS



Joost VANDENABEELE



With the support of Pascale DERMINE

Martine STELANDRE



Pieter ROTTIERS



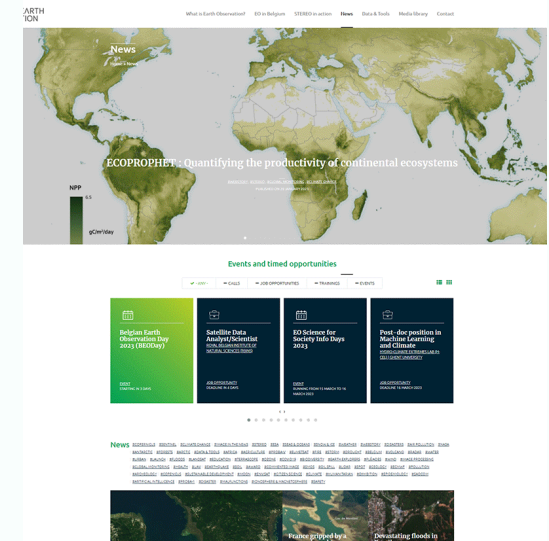


OUTCOME STEREO III PROGRAMME



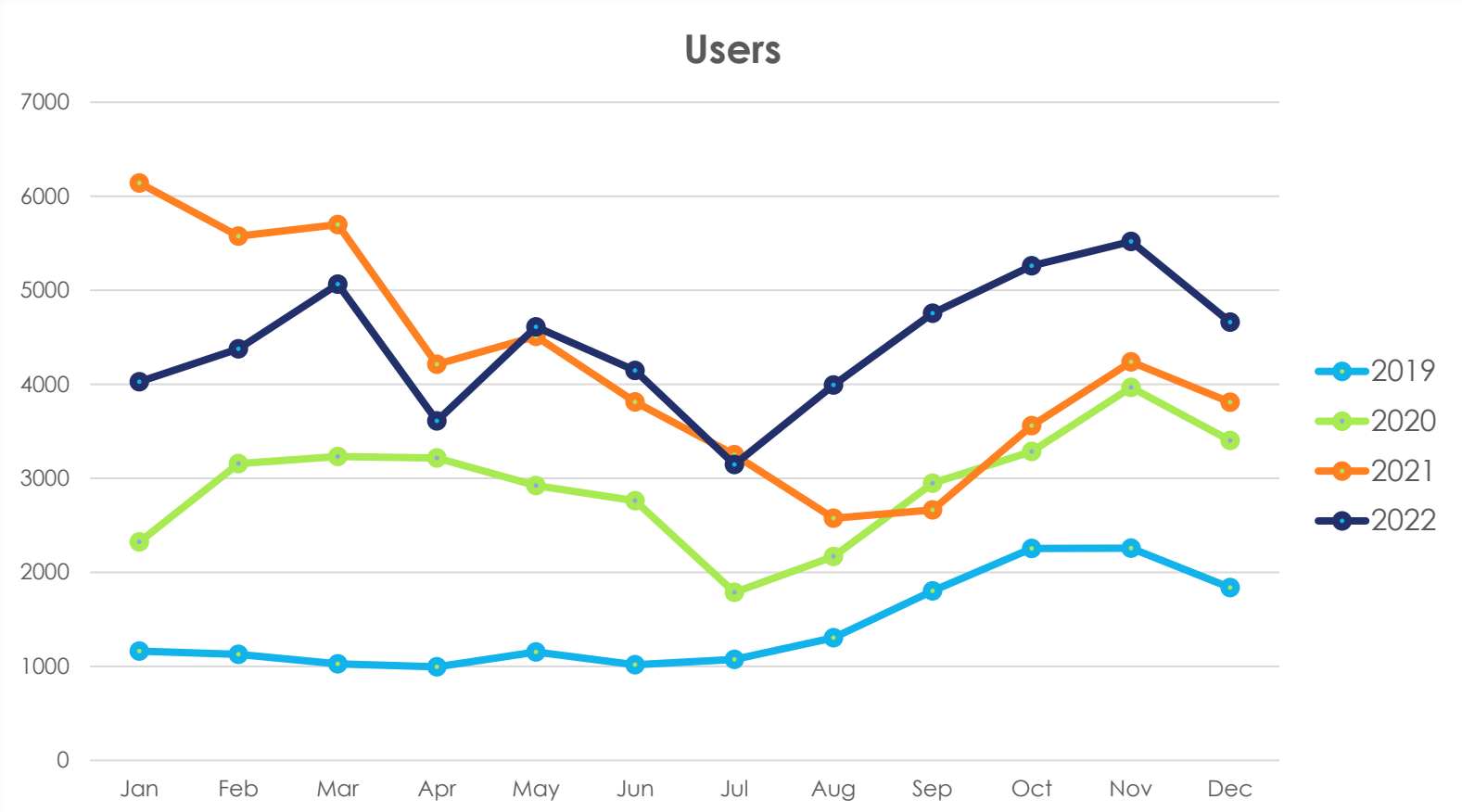
STEREO III accomplishments: valorisation and support

- New website launched in October 2018
 - News items published last year: 251
 - Webstories published since October 2018: 57
 - Events and Opportunities published last year: 219
- Events (co-)organized during STEREO III: 19 (including IGARSS 2021) + 9 sponsored
- Satellite images acquired: 935 for 23 projects





STEREO III accomplishments: valorisation and support



Belgian Earth Observation Website:
<http://eo.belspo.be>



STEREO III projects in figures

- Promotors and organisations:**

	Belgium	Foreign
Promotors	133	56
<i>New to STEREO</i>	94	51
<i>New to RS</i>	15	
PhD students	37	
Research departments/labs	58	44
Organisations	27	43
Number of countries		16

- Peer reviewed papers:** 450 and counting
- Conference presentations/posters:** 287/75
- Open access software/data:** 34/16



Projects and paper output



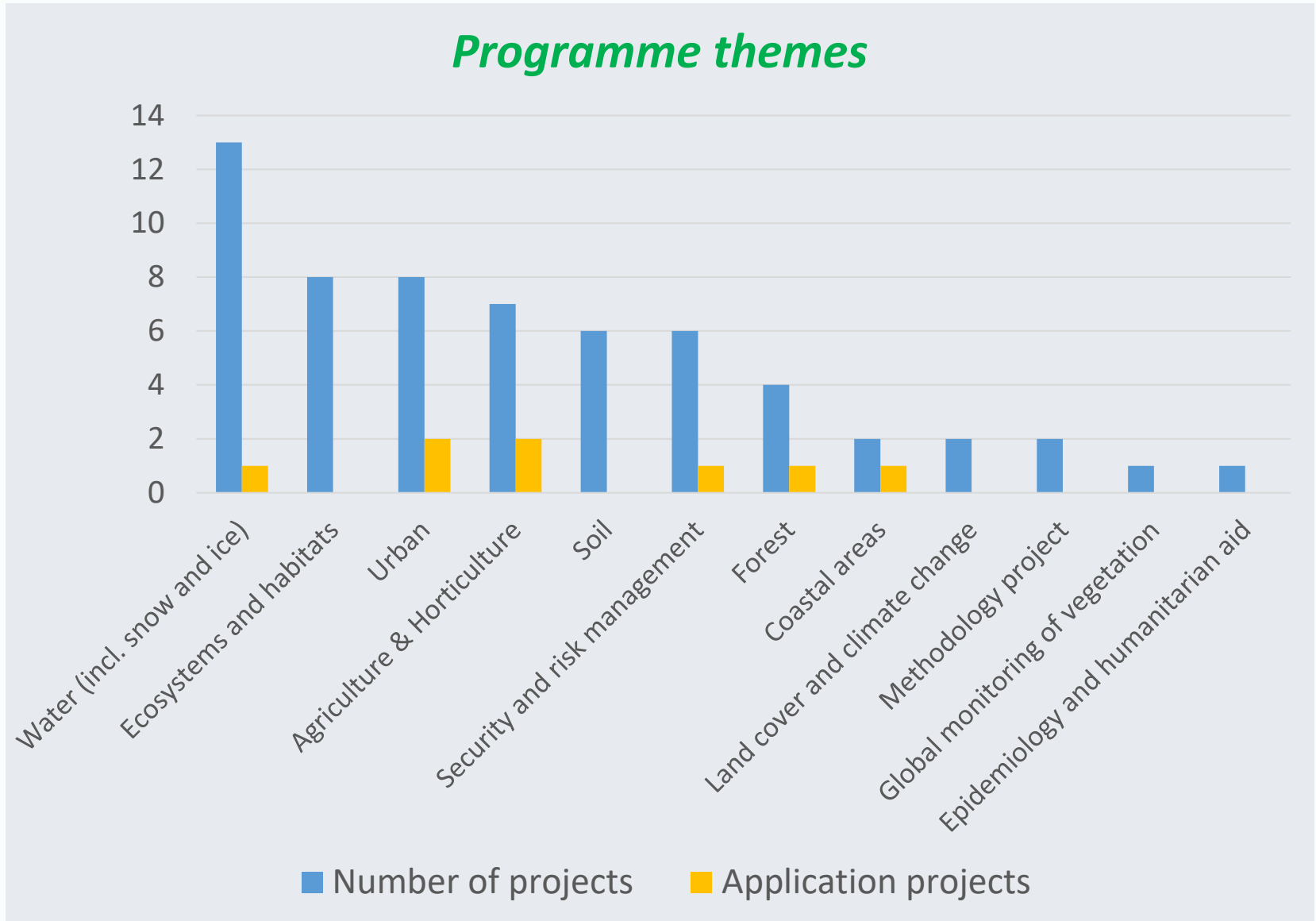
Project type	# of projects	# of papers
PROJECTS RESULTING FROM CALL		
Thematic projects	15	247
Exploration projects	28	151
Innovation	18	101
Spin-off	7	38
BELAIR	2	7
PROBA-V	1	5
Application projects	3 industry/ 4 administrations	6
Shared cost projects	7	21
DISSUP projects	38	16
TRANSVERSAL SUPPORT PROJECTS		
	20	8
TOTAL	115	450

+ 39 in preparation / submitted





Projects per programme theme





International standing STEREO III scientists

- List of world's top scientists per discipline:

29 Belgian SRIII promotor are represented (22%) (<https://research.com/>)



ENVIRONMENTAL SCIENCES	ECOLOGY AND EVOLUTION	EARTH SCIENCE
17	6	3
ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE	PLANT SCIENCE AND AGRONOMY
1	1	1

- List of highly-cited scientists (<https://clarivate.com>)

2021	2022
5	5



- 2022 list of top rising stars in science

(oldest publication is from 12 or less years ago –

<https://research.com/scientists-rankings/rising-stars>)

1 STEREO promotor



STEREO III EVALUATION



SRII programme evaluation

- Contract carried out by consortium **DIALOGIC / EFI**
- Executed second semester of 2021 (several projects still ongoing at the time)
- Evaluation steps:
 - Portfolio analysis
 - Bibliometrics (scientific impact)
 - Survey
 - Interviews
 - Workshop on impact pathways
- **Expert panel** to validate results evaluation – 8 international experts





RECOMMENDATIONS FROM STEREO III EVALUATION



Appraisal by Expert Panel

Programme management

- Well-structured – well managed
- Minor administrative burden
- Diversity of calls
- Evaluation process
- Steering Committees

Community building

- BEODAYS
- Networks
- International partners

Research

- Open science approach
- Strong impact
- Complementing operational projects
- Catalyst for external projects
- Career booster



9/3/2023

BEODAY 2023



Recommendations



Focus on high quality research
Keep variety of project types
Keep international character of projects
Foster new talent



Connect fundamental research with societal needs
Connect projects and groups
Connect research and policy makers and industry
Connect STEREO with ESA and EU



Share datasets and tools
EO = satellite + airborne + in-situ

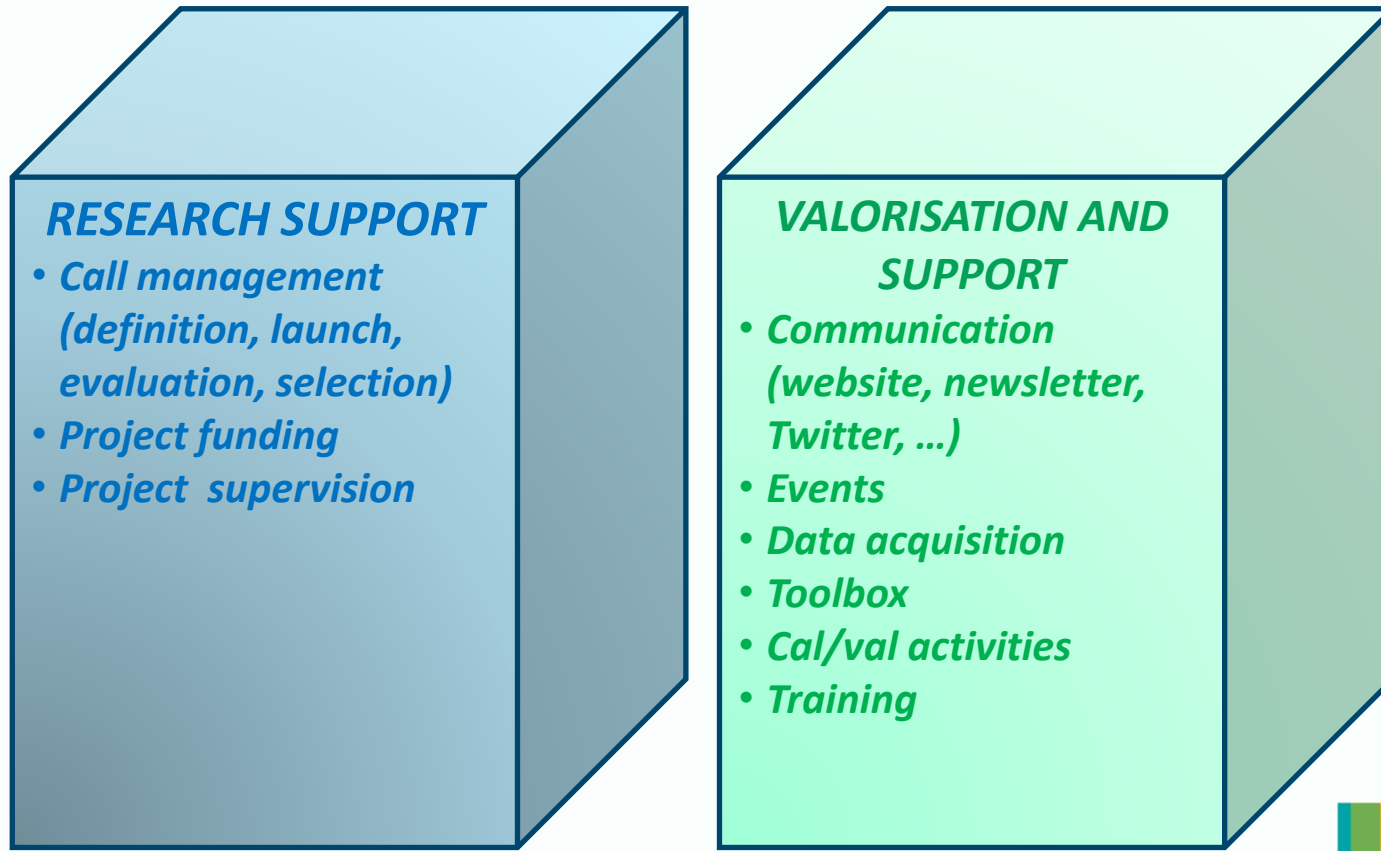


ELABORATION OF STEREO IV PROGRAMME (2022 – 2029)



Programme structure

- **Organization of tasks in 2 pillars**





Programme objective

- ❑ Maintaining a Belgian **topnotch**, **dynamic** and **visible** remote sensing community

Subobjectives

Facilitating quality research

Increase the visibility of Belgian RS research

Support building a dynamic RS community





Research themes

*In line with
European
initiatives
and Belgian
priorities*

Impact **Climate change** on
terrestrial/marine environments
(data exploitation, monitoring,
modelling, mitigation strategies)



Advanced Monitoring and
Assessment of **Hazards**
(including pandemics)



Monitoring **Environment**
for improved environmental
health and **Biodiversity**

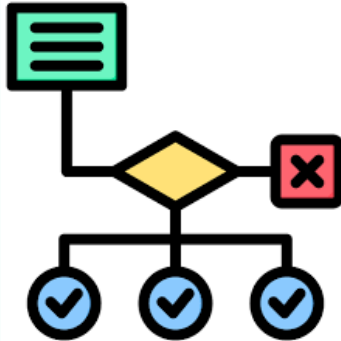


Geo-information for
Sustainable and **Green
Cities**





Programme priorities



Methodological priorities

- AI and deep learning
- Big data exploitation
- Use of multimission and multi-scale data: from space over airborne to close sensing



Sensor priorities in addition to Sentinel

- Thermal
- Hyperspectral
- LiDAR



Programme priorities

Managerial priorities

@ Project level

- **Open access** to data and publications
- Social media and non-traditional **communication**
- Reduction of **carbon footprint**
- Support of **young** career **scientists**
- Collaboration with **other STEREO projects**
- Collaboration with **TERRASCOPE** and **Climate Centre**

Contact Ella JAMSIN

@ Programme level

- Increased international collaboration
- Support of young career scientists and start-ups
- Uptake by new users (new disciplines and non-space industries)
- Foster collaboration with TERRASCOPE and Climate Center
- Prepare use of data from ALTIUS and NITROSAT

Contact Jurgen
EVERAERT





Funding beneficiaries

Eligible for project funding

☐ *Belgian organisations:*

- Universities, public and non-profit research institutions



☐ *Foreign organisations*

- Universities, public and non-profit research institutions
- Max. 20 % of project budget on basis of fund matching
- Must make substantial scientific contribution to project





Project Types

- Thematic network projects → Call 2023
- Exploration projects → Call 2022 and 2024

- Early career scientist grants
- Applications projects
- Shared cost projects
- Dissemination and support (DISSUP) projects
- Cal/val activities

See next



Project Types - II

- **Exploration projects**
 - **Small-scale** projects with focus on **innovation in RS**:
 - Duration **1 to 3 years**
 - Executed by **1 to 3 Belgian teams** – international team optional
 - The projects are directed at either:
 1. Investigating new concepts, technologies and sensors- high risk projects encouraged (**INNOVATION PROJECT**)
 2. Exploring a new research track resulting from previous BELSPO projects (**SPIN-OFF PROJECT**)



Project Types - III

- **Early career scientist grant**
 - 2nd half of programme
 - Grants of max. 2 years to promising young scientists
 - To carry out innovative remote sensing research in a Belgian host laboratory of their choice
 - Outlines still to be defined



Project Types - IV

- **Application projects**
 - **Knowledge and technology transfer** between research institutions and Belgian public **administrations** or **private companies**
 - Non-research organisations in the driver's seat
 - Potential gains in resources, efficacy or business must be clearly demonstrated
 - Non-research organisations cannot obtain funding
 - Max. duration 3 years - Max. 3 research teams



Project Types - V

- **Shared cost projects**
 - **Co-financing** for a **Belgian partner** who was selected for an international, bilateral, regional or national project but did not receive a 100 % financing
 - Mother project must be selected upon basis of **peer review**
 - Only the part of project dealing with **remote sensing** can be financed
 - Co-funding for a Belgian participation in transnational programmes such as ERA-nets is also possible



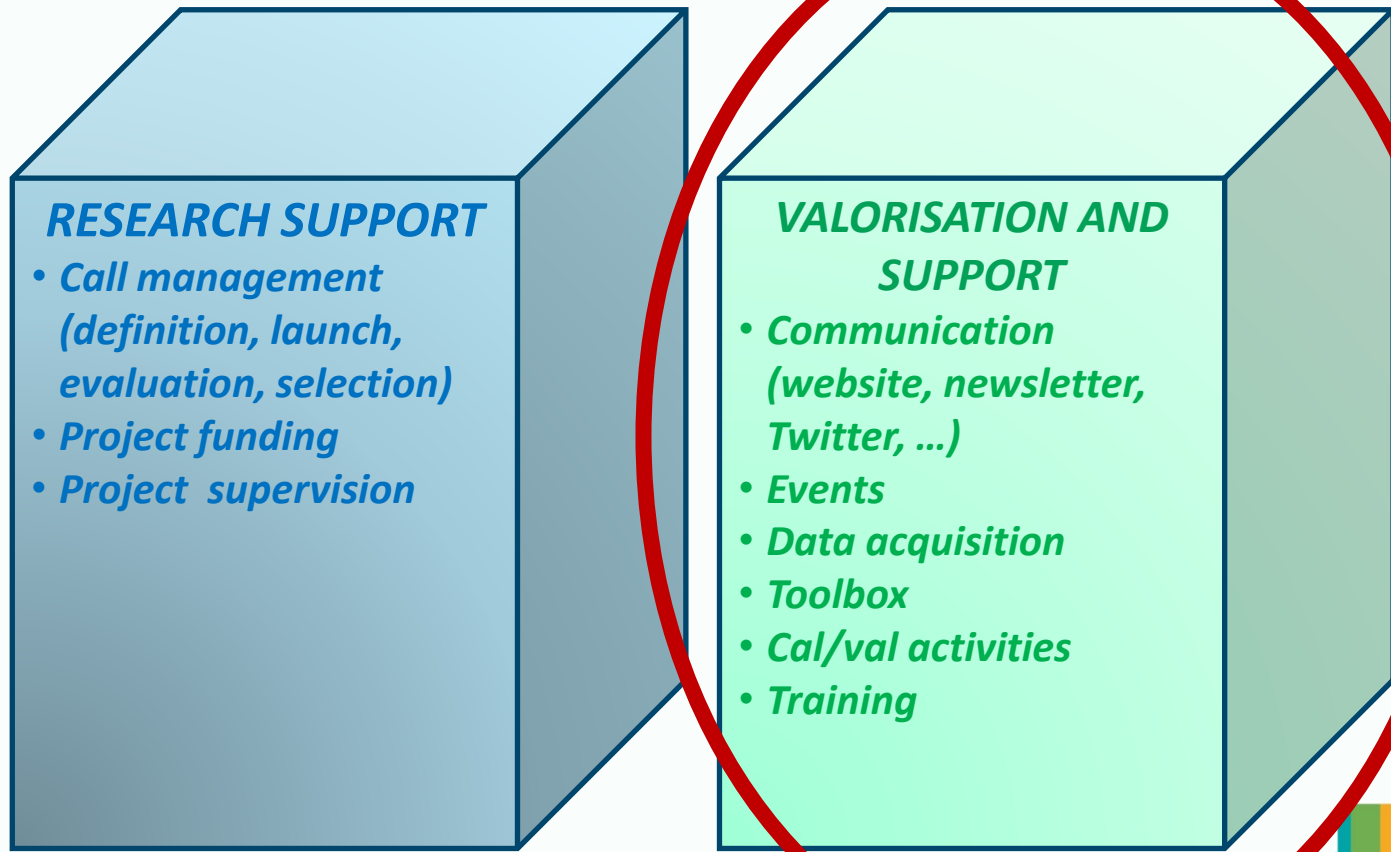
Project Types - VI

- **Dissemination and support (DISSUP) projects**
 - **Small short-term projects** - maximum duration of 6 months - budget not exceeding **€ 30,000**
 - They concern a.o.:
 - Writing up of papers of project research output not initially foreseen or not yet mature by the end of the project
 - Rendering software written for a specific project accessible for RS community
 - Small dedicated research needed for BELSPO or to support use of remote sensing in an unserved specific research domain
 - Linking up of two STEREO projects through comparison of approaches, testing of methodology in study site of other project, joint paper,
 - Training grant for scientist
 -



Programme structure

- **Organization of tasks in 2 pillars**





VALORISATION AND SUPPORT – ACTIVITIES

Support at EO events

such as today!

Outreach

BEO website,
newsletter, Twitter

Image Acquisition

EO imagery for use in
STEREO projects

Cal/val activities

of tools and
instruments

Training

aimed at researchers

Toolbox support

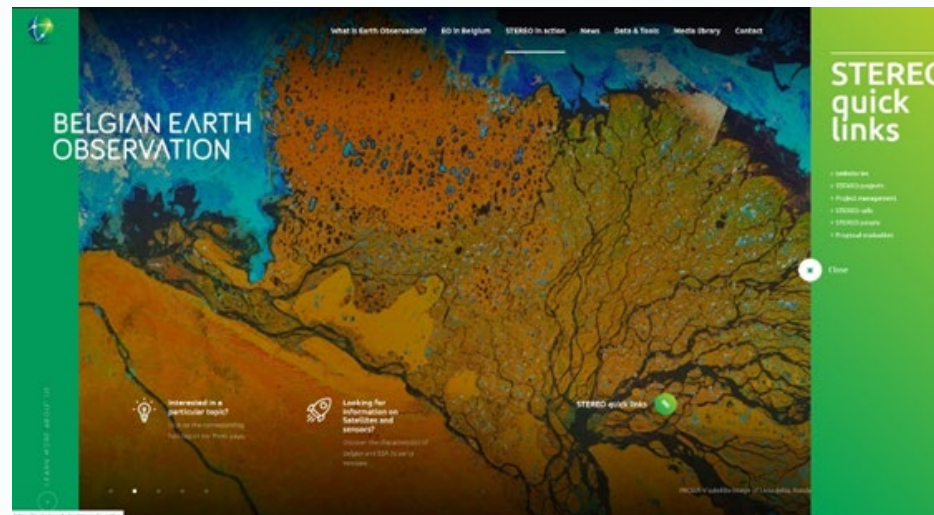
STEREO-generated
software and datasets



VALORISATION AND SUPPORT – OUTREACH

1. Belgian Earth Observation website <https://eo.belspo.be>

- Launch date: October 2018
- Almost 3,000 pages content in EN – FR - NL
- More than 3,000 entries in the Directory section
- 49,000 visitors from all over the world (1/3 from Belgium) – 110,000 page views / last 12 months

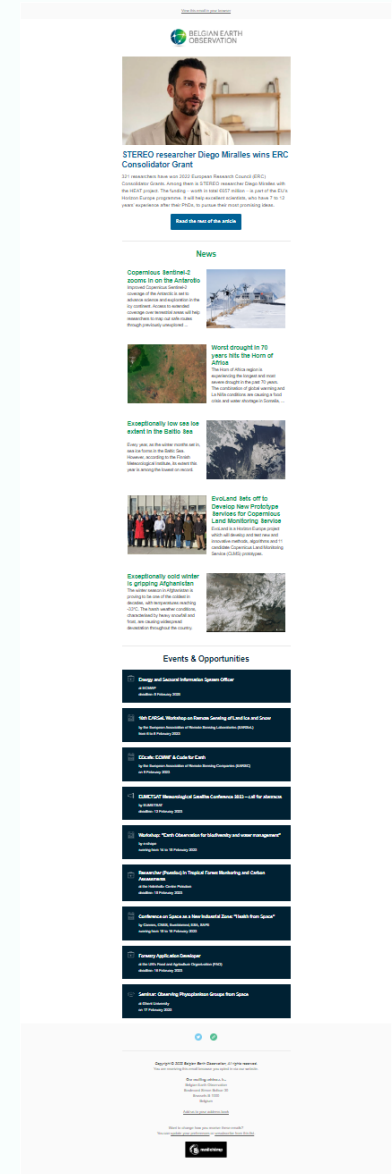




VALORISATION AND SUPPORT – OUTREACH

2. Newsletter

- Twice monthly newsletter sent out to 1,000+ subscribers
- Strong focus on STEREO projects and announcements from partners
- projects get highlighted via a webstory (~once a month)
- Subscribers : 50 % Belgian – 30 % STEREO
- Average open rate: 57.3% (peers' performance: 35.2%)
- Average click rate: 14.7% (peers' performance: 5.6%)
- 68 % subscribers highly engaged (often open & click)





VALORISATION AND SUPPORT – OUTREACH

3. Twitter [@BelgianEO](#)

- Account created on **14/02/2020**
- 1122 tweets in total, averaging **7.0 tweets per week**
- Tweets and retweets focused on
 - Activities of our researchers;
 - News aimed at our (growing!) community
- From 0 to **1487 followers** in just 3 years
- Currently planning to expand to other platforms (for obvious reasons)





VALORISATION AND SUPPORT – IMAGE ACQUISITION

1. Image acquisitions for BELSPO-funded projects

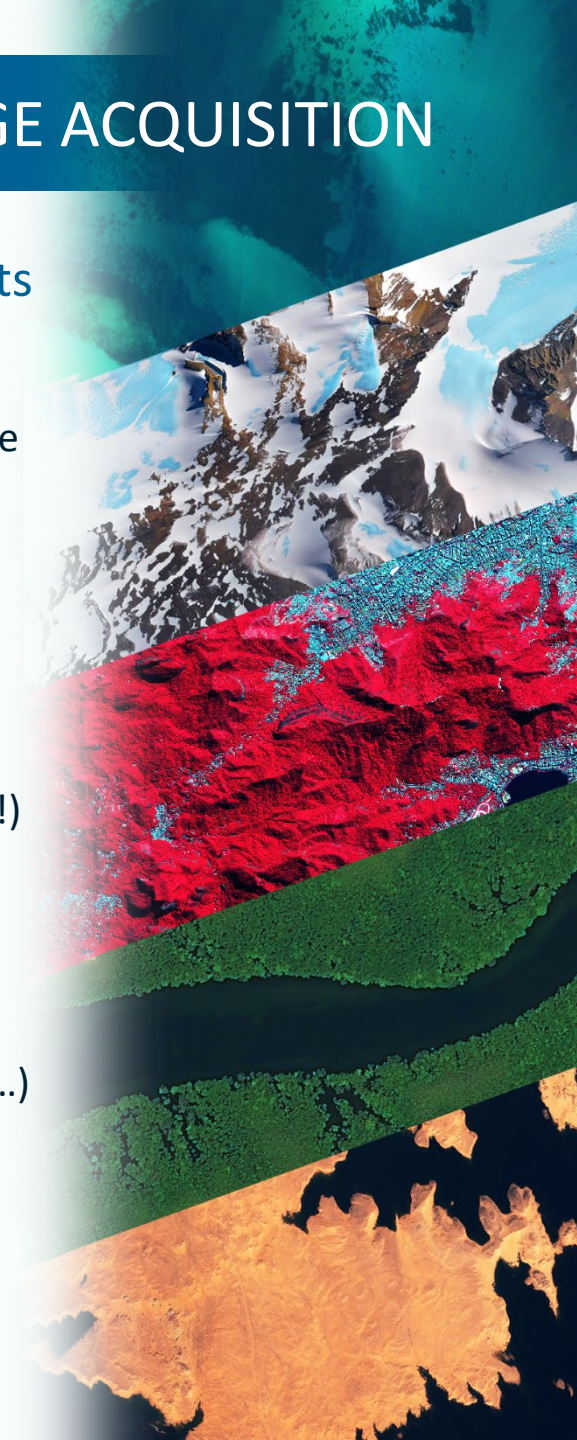
- during STEREO III: 935 images for 23 projects
- All images ever acquired: available in STEREO archive

2. Pléiades 4 Belgium Pleiades4Belgium.be

- Platform available to all institutional users
- Much lower cost for purchase of (new/archive) data
- Free use of all imagery already purchased (BE cover!)

3. Helping users find their way to other distribution portals

- Notably freely available data (Copernicus, Landsat, ...)





WEBSTORY – SOME GUIDELINES

Outreach activities in STEREO IV more and more aimed at general public

- ✓ More frequent updates on STEREO and its projects
- ✓ Articles that are:
 - Shorter
 - less jargon/graphs
 - more “visual”
- ✓ Content: not just big steps or end results, but also:
 - Interesting facts/finds along the way
 - Pictures from lab/field
 - Interviews with new researchers/institutes
 - Anything that is remarkable, shareable, “tweetable”



Calendar of calls

	2022*	2023	2024°	2025	2026	2027	2028	2029
FIXED CALL								
Thematic								
Exploration	8							
OPEN CALL								
Early career scientists grant								
Applications	1							
Shared cost								
DISSUP	1							

CAL-VAL and Toolbox activities: after negotiation – funded by valorisation budget line

*: number of projects granted
 °: joint call with other country investigated



2023 Call for Proposals

Thematic network projects

- **Budget: 8 M€**
- ***Multi-annual multidisciplinary*** and ***inter-disciplinary projects***
- **Duration: 4 to 5 years**
- Aimed at **fundamental to application-oriented research**
- **Innovation** is key: new RS data, new methodologies, innovative thematic use of RS, introduction RS in new research domain
- Must address global societal challenges listed in thematic priorities
- **Partnership** : **2-4 Belgian research teams** and mandatory **1-2 international team(s)**
- Inclusion of **teams from Flemish and French community**
- Frame for **PhD research**
- There should be a **genuine synergy** between all project partners (joint papers and PhDs, stays and training of staff at partner institutes)



Timeline and Evaluation Steps

Launch call	12 February 2023
Submission of expressions of interest	31 March 2023
Feedback on expressions of interest by Programme Managers	14 April 2023
Submission of proposals	9 June 2023
Written evaluation:	
<i>Oral defence of proposals rated best: 6 panel members – 20 ' Q & 25' A</i>	Mid-September 2023
Selection of proposals by STEREO Programme Board	Early October 2023
Approval of selection by State Secretary of Science Policy	
Start of contracts	December 2023

Contact us

Ranking



***Make sure your proposal is not out of scope
Don't hesitate to contact us to discuss your ideas***



Evaluation criteria

- ## Written Evaluation
- Compliance with call
 - Scientific quality
 - Quality of partnership
 - Exploitation plan
 - Feasibility

- ## Review Panel
- Presentation
 - Knowledge of domain
 - Innovative character of proposal
 - Motivation of presenter(s)
 - Clarity and relevance of answers



Further information

- Contact STEREO team here or via e-mail

- Pieter Rottiers – ropi@belspo.be
- Jean-Christophe Schyns – schy@belspo.be
- Martine Stélandre – stel@belspo.be
- Joost Vandenabeele – vdab@belspo.be

- Go to website

- eo.belspo.be

- Subscribe to newsletter

- eo.belspo.be/en/newsletter

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- @BelgianEO



Thank you for your attention

Questions?

