Ecsite Space Group Annual Meeting



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ESA/ESRIN, ESA's Earth Observation Centre Frascati, Italy 27-28 January 2020







1. The Ecsite Space Group

The Ecsite Space Group offers a platform for science centres and museums to improve and extend communication about ESA and European space activities by sharing experiences, expertise, knowledge, tools, resources and best practices.

The group is chaired by Marc Moutin, Director of Exhibitions at Cité de l'Espace, France, Ana Noronha, Executive Director of Ciência Viva - Pavilion of Knowledge, Portugal, and Maria Menendez, Head of ESA Corporate Exhibitions and Events, France.

Joining the Ecsite Space Group is an opportunity to get closer to space professionals and science centres willing to communicate about space. It also allows participants to be better informed about space news, programs, achievements and next launches.

For European Space Agency (ESA), national space agencies, industries, research institutions, and academia, the Space Group offers the possibility to build close collaborations with science communication professionals. The group benefits from the already established European networks of Ecsite and the European Space network of ESA and its member states.









2. Overview of the meeting

As announced during the Ecsite Space Group's pre-conference workshop 'Space for All, Space for Earth' held in Copenhagen (Denmark) in June 2019, the 2019 edition of the Annual Meeting was hosted by ESA/ESRIN, ESA's Centre for Earth Observation.

The two-day workshop offered representatives of science engagement organisations the opportunity to explore in more depth the benefits of Earth Observation in for monitoring global change and its relevance to today's environmental and socio-economic challenges, as well as a behind-the-scenes look at ESA/ESRIN, including the interactive Φ Experience and insights on ESA's Earth Observation programme and applications.

This report provides an overview of the meeting, as well as links to presentations and other materials. The compilation of presentations can be downloaded via this link.

2.1 Day 1, 27 January 2020

The meeting started with a welcome by **Simonetta Cheli**, Head of Strategy, Programme & Coordination Office in ESA's Directorate of Earth Observation Programmes who introduced participants to the host institution ESA/ESRIN and ESA's Vision for Earth Observation. Access Simonetta Cheli's presentation.

Catherine Franche, Executive Director of Ecsite, also welcomed the group. Her address emphasised the mission shared by science engagement organisations to empower citizens to understand and use data coming from space programmes.

María Menéndez, Head of ESA Corporate Exhibitions and Events, Ana Noronha, Executive Director of Ciência Viva - Pavilion of Knowledge, Portugal, and Marc Moutin Director of Exhibitions at Cité de l'Espace, France, took the floor as co-chairs of the group to give a <u>brief overview of the composition, aims and activities of the Ecsite Space Group</u> as well as the objectives of the Annual Meeting.







A <u>Tour de Table</u> followed, participants being able to present themselves, their institutions and their motivations in attending the meeting. Among the recurring expectations shared by the group were wishes to explore the latest content and news, share and receive inspiration, resources and know-how; identify ways to get involved and build synergies and collaborations.







The co-chairs present the Space Group and its objectives



Catherine Franche shares welcome words from Ecsite

Keynote addresses

After a <u>video previewing ESA highlights for 2020</u>, **Philippe Willenkens**, Head of the Communication Department at ESA, took the floor to outline the <u>three-year communication</u> <u>strategy currently in place to build a strong ESA brand internally and externally</u>, including the road to ESA's Council at Ministerial Level, cultural and film activities, Space Talks and ESA Web TV. In the years ahead, three cross-programme editorial lines have emerged: the climate crisis, space safety, and inspiration through space exploration. <u>Download the presentation</u>.

Next, **Frederic Le Gall**, Head of Production and Management Support Division at ESA, presented the <u>new organisation and planning of the ESA Communication Department</u>, including an Outreach Coordination Office that will develop relationships with entities in the ESA Member States and ensure ESA's participation in the Ecsite network. His presentation went into more detail about the three narrative lines introduced by Philippe Willekens. Download the presentation.









Philippe Willekens presents ESA communication activities in the run up to Space19+, ESA's Council at the Ministerial Level

Lastly, **Fabrizio Zucchini**, from the Italian Space Agency's External Relations team, presented the agency's <u>collaboration with museums and science festivals</u> to deliver a variety of temporary and permanent exhibitions, in Italy and abroad. He emphasised the added value of mixing art and science: the possibility to reach the general public differently. <u>Download the presentation</u>.

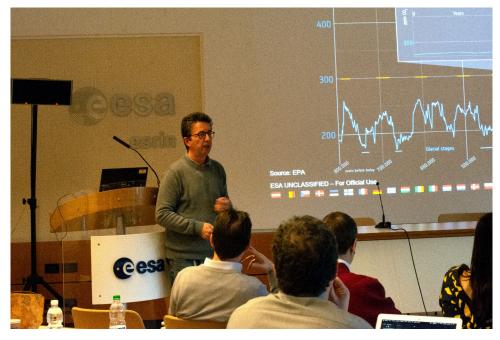
Focus on Earth Observation

The rest of the afternoon was dedicated to the topic of Earth Observation. It began with a presentation by **Ana Noronha**, Executive Director of the Pavilion of Knowledge Ciência Viva, about the recent developments on the third pilot project 'Climate change: Ocean Colour from Space', which intends to develop a set of posters linking the colour of the ocean as seen from space with topics such as chlorophyll, the hidden forests of phytoplankton and harmful algal blooms – each of great important to life on earth and facing various threats from climate change. QR codes would direct those interested to a website where they could obtain more information. Download the presentation.





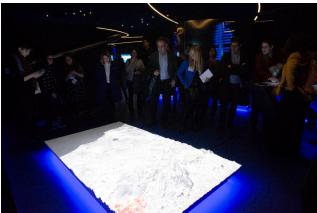




Robert Meisner discusses the role of Earth Observation in the context of the climate change crisis

Robert Meisner, Earth Observation Programmes Outreach and Φ Experience coordinator at ESA, took the floor to <u>contextualise ESA Earth Observation programmes in the context of the climate change crisis</u>. For several variables, space is a vantage point allowing reliable and comprehensive data for climate change models to be collected. <u>Download the presentation</u>.





Φ Experience visit: the interactive table (left) and the elevation model (right)

This set the context for the <u>visit of the Φ Experience</u> led by Michele Martino (Earth Observation and Data Visualisation, ESA) and the discussion that followed. The visit included four interactive exhibits:

 A half-dome globe projection of various earth dynamics as seen from space, e.g. level of carbon monoxide, global sea surface temperatures;







- A control room with information about ESA missions and the lifecycle of satellites;
- An elevation model of central Italy; and
- An interactive table exploring various phenomena through image and video content.

2.2 Day 2, 28 January 2020

Sessions

Following an introduction to Day 2 of the workshop by **Barbara Budassi**, Ecsite Space Group coordinator for ESA, **Fatima Pinto**, Science Didactics Expert with the ESA Education Office gave a comprehensive presentation on <u>ESA's educational programme linked to Earth</u>

<u>Observation</u>: Climate Detectives. She presented the resources and tools available and how the Earth Observation browser was enabling students to do 'DIY Earth Observation' investigations for their projects. The work of ESA-ESERO Working Groups focused on Climate Detectives, Air Pollution and best practices in the ESERO network of working with Earth Observation was also discussed. <u>Download the presentation</u>.

Stefano Badessi and Massimiliano Ferrante were next with a presentation of the 'Air Quality Platform' (AQP), a tool developed by ESA/ESRIN engineers for the 2019 edition of the Living Planet Symposium. The AQP kit consists of hardware components that can be purchased at a moderate cost from the internet. Once put together, it can measure different characteristics of the ambient air. The data registered by each AQP station are locally archived, geo-located and sent in real time to an online map. Download the presentation.

The **team at ESA Digital Resources** ran participants though the <u>imagery and videos available</u> and how to locate it, and technical details on formats, permissions, and contacts to submit requests. The recently launched ESA Web TV was also presented in more detail. <u>Download the presentation</u>.

Hugo Simoes, Head of Print Media and Merchandising Production Office at ESA, presented the <u>ESA Space Shop</u> (extensive collection of merchandise) and ESA On Demand (themed designs that reflect ESA's current activities). A welcome discount is offered to museum partners for three purchase proposals based on existing sales; similar discounts are offered







for a bulk order scheme. Moreover, the team is open to establish partnerships. <u>Download the presentation</u> to find out more.



Stefano Badessi and Massimiliano Ferrante demonstrating the AQP

Showcase session

Ecsite Space Group events regularly feature sessions where participants themselves can share innovative resources and ideas following a call for presentations made by Ecsite. A total 13 projects were brought to the attention of fellow participants. Two additional presentations that could not be delivered on the day are also included in this report.

• ESA Archives and pictures as artefacts for exhibitions. Pierre Kirchner, Andreja Casar, ESA Archives

Access the presentation for a glimpse at a collection of original pictures related to the history of space in the 1970s and early 1980s discovered recently in the ESA Archives. This special collection was produced for ESRO and ESA by Magnum Photos agency photographers such as Erich Hartmann, Guy Le Querrec, Ian Berry, etc. ESA Archives are interested in offering their expertise on space and ESA history to support science engagement organisations wishing to valorise these artefacts.







• Cosmo Academy, Guido Zucchi and Letizia Davoli, Rainbow MagicLand, Italy

Guido Zucchi, CEO of Rainbow MagicLand, an amusement park located next to Rome, and scientific journalist and consultant Letizia Davoli spoke about their ongoing project for an 'edu-tainment' attraction dedicated to space. Among other experiences, it will allow visitors to discover how the International Space Station is made, take a voyage through the solar system and walk on Mars. The project is being developed for a 3,000 meters square surface around the existing planetarium.

• Space Week resources, Clair McSweeney, CIT Blackrock Castle Observatory, Ireland.

<u>Access the presentation</u> to find out more about the evolution of Space Week celebrations in Ireland and a wealth of education resources developed for event organisers.

• **Destination Space**, Abi Ashton, The UK Association for Science and Discovery Centres, United Kingdom.

<u>Access the presentation</u> to find out more about Destination Space Programme implemented by the UK Association for Science and Discovery Centres with the support of the UK Space Agency. A wealth of hands-on activities, school workshops, a family show and other resources are available in the Destination Space Handbook.

Academic course for observers, Naama Charit, Davidson Institute, Israel.

Naama Charit, affiliated with the Davidson Institute, the educational arm of the Weizmann Institute of Science shared with participants the suggestion to collaborate on developing a course to train observers. The work of Netta Shalem Sokolovsky, observational astronomy guide and illustrator, the 'Stars Atlas' was also showcased. <u>Access the presentation</u>.

• Inventerre2, Juliette Gouesnard, Cité de l'Espace, France.

<u>Access the presentation</u> to learn more about a new travelling exhibition about Earth Observation being developed at Cité de l'espace. It will show the challenges of climate change and convey the extraordinary nature of the Earth.







• The spaceEU exhibition 'Step into Space' and toolkit resources, Cristina Paca, Ecsite, Belgium.

Cristina Paca presented a first draft of the toolkit being developed by the EU-funded spaceEU project. It will contain a detailed manual for the adaptation and building of the modular exhibition 'Step into Space' and guidelines for the implementation of space-related activities for schools, young people, families and stakeholders from the field of space, with a focus on making activities inclusive of underprivileged communities. Visit the <u>spaceEU project website</u> to find out more.

• La Cité des petits, Marc Moutin, Cité de l'Espace, France

Access the presentation for an overview of a new permanent exhibition area for 4 to-year olds which opened in February 2020. La Cité des petits has two immersive environments dedicated to rockets and astronauts which are fitted at the scale of younger children and constantly attended by a facilitator.

• Past, present (and future) projects with ESA and ASI, Luca Reduzzi, National Museum of Science and Technology, Italy.

<u>Access the presentation</u> for an overview of the museum and its permanent and temporary exhibitions, events and programmes linked to space, including the recently launched Earth Observation exhibition 'Fragility and Beauty', curated by Viviana Panaccia.

• Not everything is space junk - How we should preserve orbital artefacts in Space as part of our cultural heritage, Christian Klösch, Technisches Museum Wien, Austria.

Access the presentation to discover a novel proposal on how to approach the topic of space debris objects and what they represent in context of humankind's drive to explore the unknown.

• Space42, Fulvio Marelli and Marzia Campanelli, Space42, Italy.







Fulvio Marelli presented Space42, a new start-up on Earth Observation outreach that builds on the work done to engage publics with the Phi Experience located in ESA/ESRIN. Watch this ESA video about the Living Planet Symposium Open Days in Milan (May 2019) to a glimpse of the kind of Earth Observation-related activities offered to school groups and the public on such occasions.

• The National Space Centre's Next Planetarium Show, Tori Tasker and Elspeth Lewis, The National Space Centre, United Kingdom.

The National Space Centre's next planetarium show on the topic of climate change is currently in development and Tori Tasker and Elspeth Lewis used their pitch to hear from participants about the topics, messages and general directions in which the show could go.

• Resources from Airbus Foundation Discovery Space, Didier Laval, Culture Instable Ltd – Airbus Foundation, United Kingdom.

<u>Access the presentation</u> to learn more about the Discovery Space platform, the type of activities available and next steps.

• Starwalks in Rome, Stefano Giovanardi, Planetarium and Astronomical Museum of Rome, Italy.

Access the presentation to learn more about the astronomical promenades organised by Planetarium and Astronomical Museum of Rome to explore the connections between Rome and the sky through history, art and science.

• Gravity. Imagining the Universe after Einstein, Vincenzo Napolano, Istituto Nazionale di Fisica Nucleare, Italy

<u>Access the presentation</u> to learn more about this exhibition, the result of a collaboration between the curatorial teams specialised in physical and spatial sciences (Istituto Nazionale di Fisica Nucleare, Agenzia Spaziale Italiana) and contemporary art (MAXXI).







Next steps - Towards Ecsite 2020



Reflecting on next steps

Participants reflected together on the inputs and discussions had during the two-days of the meeting. They shared ideas about what they and their organisations would be interested in building on in the near future. These ideas can be found in Section 3 of this report and will go on to offer inspiration for the work carried out during the next pre-conference workshop organised by the Ecsite Space Group at the Ecsite Annual Conference 2020 on 9-10 June 2020 in Ljubljana, Slovenia. Titled title 'Space for Today's Challenges', the workshop's focus will be the role that Space can play at this time when science engagement organisations and professionals are increasingly called upon to foster more sustainable futures.







3. Results from the session 'Towards Ecsite 2020'

Make the Phi Experience shareable

Participants expressed interest in acting as pilots to make the tools found in the Phi Experience (i.e. interactive table, projection map, globe) usable by science engagement organisations. They wish to build on the ongoing pilot (mentioned to be taking place at Euro Space Centre, Belgium) and consider how to adapt and localise these tools. For example, they thought to start with smaller sets of content and data.

Interested: Mischa; Jacopo; Thierry; Ana; Rosa; Cristina G.; Clair.

Adapt and roll out the Air Quality Platform for science centres and schools

Participants expressed interest in "calibrating" the AQP for the group (i.e. it might require simplification for greater usability) and using it to develop Earth Observation-related skills among various audiences. They emphasised the importance of both working on a local aspect/challenge while integrating data from locations and projects in a single (citizen science) platform/network, also covering aspects such as water and soil. ESA experts should be encouraged to return feedback on data reading and treatment.

Interested: Jacopo; Thierry; Rosa; Cristina G.; Clair, Naama, Netta, Max, Valentina.

Collaborate with ESA Education

Participants expressed interest in building on existing educational resources of ESA Education and ESERO to ease their use by science centres and museums. Participants wish to receive specialised training and 1-day public presence so they are able to act as ambassadors of ESA Education towards their own networks.

Interested: Cristina G.; Clair

Space Group Platform

Participants expressed interest in the set-up of a platform which supports two-way communication and where it would be easier to share resources and establish collaboration. This platform could also be used to process content requests from the Space Group to ESA. Mailing lists, Slack, Basecamp and Trello were mentioned as suggestions.

Interested: Clair; Juliette; Rosa; Thierry; Tina; Mischa; Naama; Ana

Linked to this is the idea that participants should work on making their own resources more shareable with other members of the group (Interested: Mischa, Jacopo; Thierry; Ana).

An EU-funded "Space Group" project

Interested: Netta; Naama; Tina; Mischa; Thierry; Cristina G.; Clair; Jacopo; Ana.

Challenge - Science - Action

Participants expressed interest in developing narratives linking challenges such as climate change, EO space science and technology content and concrete actions. These could serve as a starting point for the development of resources related to climate change, such as planetarium shows, communication campaigns, exhibitions etc.







4. Programme

Monday, 27 January 2020

Time	Session title	Speaker
13:30-14:00	Arrival and welcome coffee at ESA/ESRIN	
14:00-14:15	Welcome address	Simonetta Cheli, Head of Strategy, Programme & Coordination Office, Directorate of Earth Observation Programme, ESA
14:15-14:20	Welcome words from Ecsite	Catherine Franche, Executive Director, Ecsite
14:20-14:30	Ecsite Space Group: objectives of the Group and presentation of the two-day meeting	Co-chairs of the Space Group
14:30-15:00	Roundtable	All participants
	Introduction and expectations from the meeting	
	Keynote addresses	Moderated by Maria Menéndez , co-chair of the Space Group
15:00-15:30	ESA Highlights for the year ahead - video	
	Welcome by Head of Communication Department, ESA	Philippe Willenkens, Head of Communication Department, ESA
	New ESA Communication Organisation & Communication activities in 2020	Frederic Le Gall, Head of Production and Management Support Division, ESA
15:30-15:45	ASI (Italian Space Agency) and Italian organisations – working with science centres and museums (tbc)	Fabrizio Zucchini, ASI (Italian Space Agency)
	Focus on Earth Observation and the Φ Experience	Moderated by Marc Moutin , cochair of the Space Group
15:45-16:15	Ecsite Space Group resources: Climate change: Ocean Colour from Space, recent developments	Ana Noronha , Pavilion of Knowledge, Ciência Viva
16:15-16:30	The Climate Crisis and Earth Observation	Robert Meisner, Earth Observation Programmes Outreach and Φ Experience







		coordinator, ESA
16:40-17:30	Visit of the Φ Experience	Michele Martino, Earth Observation Data Visualisation, ESA
17:30-18:15	ESA Earth Observation resources and open discussion	All participants

18:30: Bus from ESA/ESRIN to Piazza Marconi (Frascati's main square).

20:00: An informal dinner will take place in the evening at <u>Ristorante Al Cortiletto</u>.

Tuesday, 28 January 2020

Time	Session title	Speaker					
08:30 Bus to ESA/ESRIN from Piazza Marconi, Frascati's main square.							
9:15-9:30	Welcome to the second day and overview of the programme	Barbara Budassi , Ecsite Space Group coordinator for ESA					
9:30-10:00	ESA Education updates	Fatima Pinto, Science Didactics Expert, ESA Education Office					
10:00-10:30	Air Quality Platform A small platform developed by ESA/ESRIN Engineers that measures different characteristics of the ambient air. The data registered by the station are locally archived, geolocated and sent in real time to an online map.	Stefano Badessi, PDGS Operations Manager, EO Programmes, ESA Massimiliano Ferrante, AF and EO Lab Manager, ESA					
10:30-11:05	ESA Digital Resources, Video and Photo Distribution Including Q&A on how to better meet the needs of science engagement organisations	Maria Bennet, Head of digital media & web production unit, ESA Hugo Auffret, Video Distribution, ESA Paola Casini, Graphics and images coordinator, ESA					
11:05-11:30	Coffee break and networking						
11:30-13:00	Showcase session 5-minute pitches followed by networking to further explore resources and activities.	All participants Moderated by Cristina Paca , Ecsite					







13:00-14:30	Lunch			
	Catering in the Cook Meeting Room			
14:30-15:15	Toward Ecsite 2020 'Echoes from the Future', 11-13 June 2019, Ljubljana, Slovenia Preparing the Space Group's presence: pre-conference workshop, conference session, business bistro booth	Co-Chairs and all participants		
15:15-15:45	The ESA Online Shop	Hugo Simoes, Head of Print Media&Merch Prod. Office, ESA		
15:45-16:15	Conclusion and next steps	Co-chairs and participants		







5. Participants list

	Name	Surname	Position	Organisation	Country
1	Chiara	Anguigaele	Special Projects Fund-raising and	Explora, il Museo dei Bambini di	Italy
		Anguissola	External Relations	Roma	Italy
2	Abi	Ashton	Space and Physics Project Manager	The UK Association for Science and Discovery Centres	United Kingdom
3	Miriam	Atienza	Head of Contents	City of Arts and Sciences	Spain
4	Hugo	Auffret	Video distribution	European Space Agency - ESA	Int. org.
5	Stefano	Badessi	Payload Data Ground Segment Operations Manager, EO Programmes	European Space Agency - ESA	Int.org.
6	Maria	Bennett	Head of Digital Media Production Office	European Space Agency - ESA	Int.org.
7	Thierry	Botti	Head of communication and outreach	Observatoire des Sciences de l'Univers Institut Phytéas	France
8	Barbara	Budassi	Scientific Communication Officer	European Space Agency - ESA	Int.org.
9	Marzia	Campanelli	Member	Space42	Italy
10	Naama	Charit Yaari	Physics facilitator, Curator	Davidson Institute	Israel
11	Simonetta	Cheli	Head of Stategy, Programme & Coordination Office, Directorate of EO Programme, ESA	European Space Agency - ESA	Int.org
12	Letizia	Davoli	Science journalist	Collaborator of Cosmo Academy	Italy







13	Jacopo	Diamani	Student and science communicator	University Tre Roma	Italy
14	Massimiliano	Ferrante	AF and EO Lab Manager	European Space Agency - ESA	Int.org.
15	Catherine	Franche	Executive Director	Ecsite	Belgium
16	Juliette	Gouesnard	Exhibition Designer	Cité de l'espace	France
17	Cristina	Guerra	Director	AmbienteParco Impresa sociale srl	Italy
18	Mischa	Horninge	Product Manager	Columbus Earth Center	Netherlands
19	Tina	Ibsen	Astrophysician	Tina Ibsen Formidling	Denmark
20	Christian	Klösch	Head of Department	Technisches Museum Wien	Austria
21	Didier	Laval		CultureInstable - Airbus Foundation	United Kingdom
22	Frederic	Le Gall	Head of Production and Management Support Division	European Space Agency - ESA	Int. org.
23	Elspeth	Lewis	Education Presenter and Environmental Policy Officer	National Space Centre	United Kingdom
24	Fulvio	Marelli	Founder	Space42	Italy
25	Rosa	Martí	Exhibitions Department	City of Arts and Sciences	Spain
26	Michele	Martino	EO Data Visualization	European Space Agency - ESA	Int. org.
27	Clair	McSweeney	Centre Manager	CIT Blackrock Castle Observatory	Ireland
28	Robert	Meisner	EOP Outreach & Phi Experien. Coordinator	European Space Agency - ESA	Int. org.







29	Maria	Menendez	Head of Corporate Exhibitions and Strategic Events	European Space Agency - ESA	Int. org.
30	Marc	Moutin	Exhibitions Director	Cité de l'espace	France
31	Vincenzo	Napolano	Communications Department	Istituto Nazionale Fisica Nucleare	Italy
32	Ana	Noronha	Executive Director	Ciência Viva - Pavilion of Knowledge	Portugal
33	Cristina	Paca	Project Manager	Ecsite	Belgium
34	Viviana	Panaccia	Director	Vivi&Partners Srls	Italy
35	Fatima	Pinto	Science Didactics Expert, Education Office	European Space Agency - ESA	Int.org.
36	Simona	Rachetto	Communications and Marketing	Infini.to -Museum of Space and Astronomy, Planetarium of Torino	Italy
37	Luca	Reduzzi	Curator of the Astronomy and Space collection	National Museum of Science and Technology	Italy
38	Simona	Romaniello	Education Manager	Infini.to -Museum of Space and Astronomy, Planetarium of Torino	Italy
39	Camilla	Rossi-Linnemann	Development - International Partnership Coordinator	National Museum of Science and Technology	Italy
40	Netta	Shalem Sokolovsky	Observational Astronomy Guide and Designer	Independent	Israel
41	Hugo	Simoes	Head of Print media&Prom.Merch&Prod. Office	European Space Agency - ESA	Int. org.







42	Wendy	Slater	Outreach Coordination Officer	European Space Agency - ESA	Int. org.
43	Tori	Tasker	Exhibitions and Public Engagement Manager	National Space Centre	United Kingdom
44	Philippe	Willenkens	Head of the Communication Department	European Space Agency - ESA	Int.org.
45	Guido	Zucchi	Chief Executive Officer	Cosmo Academy	Italy
46	Fabrizio	Zucchini	Press Office	Agenzia Spaziale Italiana - ASI	Italy