

Arvind Parmar

Head, Science Support Office, ESTEC

ESA Directorate of Science

14 May 2018

# Origin of ESLAB



Need to go back to the start of ESA:

- ESA was founded on 30 May 1975 from ESRO (the European Space Research Organisation) and ELDO (European Launcher Development Organisation).
- ESRO was established in 1964 and when its role was being debated it was unclear whether ESRO should have its own scientific group.

# Origin of ESLAB



Indeed, some delegations felt that it was a bad idea to have scientists in the organisation:

- There would be a brain-drain from national scientific activities to the central scientific laboratory
- The ESRO scientific groups would rapidly become privileged groups with the best staff, best facilities and the best experience
- If there were no such research groups within ESRO, the scientific activity would be more readily distributed among the participating countries
- Concern that the in-house scientific staff would have privileged access to satellites.





ESA UNCLASSIFIED - For Official Use

















## The Formation of ESLAB



However, this view was not universal, and there was support (particularly amongst some smaller Member States) for an alternative view:

"If scientific research were only to be conducted in national institutions, there was a risk that some of the smaller countries which did not possess the necessary resources would feel themselves badly served."

Eventually a compromise was reached and:

"ESRO, besides providing technical facilities, would also provide opportunities for original research beyond those which exist in individual countries".

ESA UNCLASSIFIED - For Official Use

### The Formation of ESLAB



A small research group was envisaged whose main functions were to:

"Undertake theoretical studies and fundamental theoretical research of importance to space science [and] to provide experimental facilities to enable individuals and small institutions to undertake research in space science".

The Research Group should have its own building and a small permanent staff (a director and 2 assistants, with technical, administrative and secretarial staff) and facilities for some 50 research workers and technicians including Research Fellows. It was called the **European Space Research Laboratory (ESLAB)** 

ESA UNCLASSIFIED - For Official Use





















#### The Formation of ESLAB



It was agreed that scientists at ESLAB should be able to do their own research for as much as 50% of their time in three basic areas:

Particle physics

Ionospheric physics

Surface physics



ESA UNCLASSIFIED - For Official Use

#### **ESLAB**





- ESLAB started life in temporary "barracks" at ESTEC.
- When these burned down, ESLAB moved temporarily to this building in Noordwijkerhout before returning to ESTEC.





#### **Evolution**



- On 1 September 1968 ESLAB became the 4<sup>th</sup> Department at ESTEC and was renamed the Space Science Department (SSD).
- After nearly 40 years, in May 2007, SSD was renamed to be the Research and Scientific Support Department (RSSD).
- In September 2013, the department was again renamed to today's Scientific Support Office (SSO) becoming the Science Support Office in 2016.

# Science Support Office



The main interface between ESA and its scientific community:

- > There are still around 50 members and we are the home of the Study and Project Scientists as well as 15 Research Fellows
- Provide "cradle to grave" support to missions to help ensure that the scientific goals are maintained within applicable constraints
- Provide a scientific environment enabling staff and Research Fellows to perform their own research.
- > The ESLAB name survives in the annual symposia which we have organised since 1966 to help foster scientific cooperation.

ESA UNCLASSIFIED - For Official Use

















# Recent and Future ESLABs



47	2013	The Universe as seen by Planck	2 - 5 April 2013
48	2014	New insights into volcanism across the Solar System	17 - 20 June 2014
49	2015	Exploring the Universe with JWST	12 - 16 October 2015
50	2016	From Giotto to Rosetta	14-18 March 2016
51	2017	Extreme Habitable Worlds	4-8 December 2017
52	2018	Comparitive Aeronomy of Terrestrial Planets	14-18 May 2018
53	2019	The Gaia Universe	8-12 April 2019
54	2020	20 years of science with XMM-Newton	15-19 June 2020

ESA UNCLASSIFIED - For Official Use ESLAB 52 | 14/05/2018 | Slide 10































# It only remains to...

- Wish you a very informative and productive symposium....
- Your symposium is going to be highly interdisciplinary as the word cloud from the conference programme shows
- This illustrates the core themes of the conference, but more importantly the diverse collection of fields to be discussed
- ▶ 52 years of ESLAB symposia are certainly worth celebrating. I would like to invite you, on behalf of the Director of Science, to a welcome cocktail at the end of today's session in the main restaurant area.





With thanks to Dima Titov

ESA UNCLASSIFIED - For Official Use



















