

# SSA Space Weather Service Network in Period 2

**Network Overview** 

A Glover, J Luntama SSA Programme Office, ESA/ESOC

> Виларазы Sparse Agranicy European Space Agency



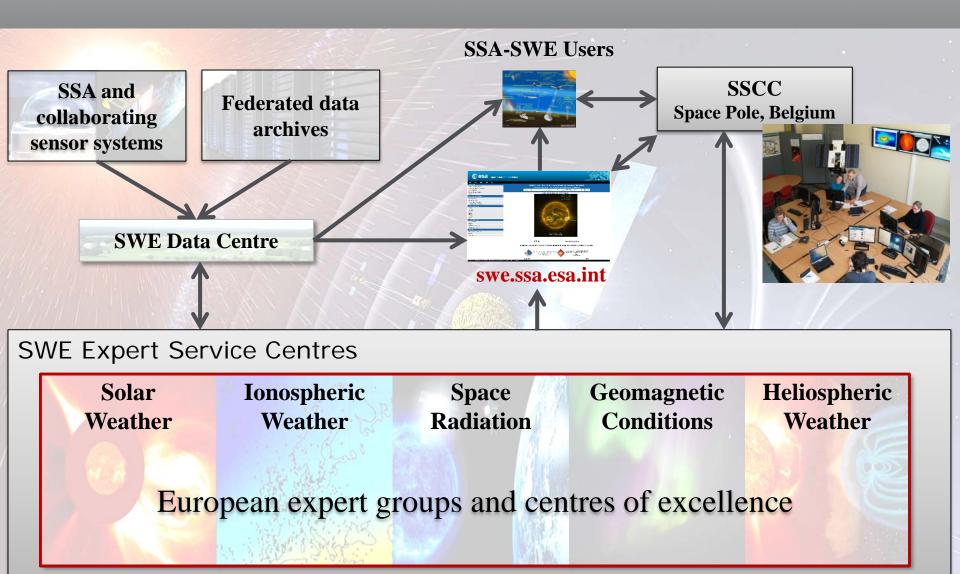
#### SWE Network Development Aims Period 2



- Operate and further develop the SSA SWE Coordination Centre (P2-SWE-VI & P2-SWE-XIX)
- Further develop the concept of Expert Service Centres and evolve from legacy products towards SWE services (P2-SWE-I)
- Expand the range of products available through the ESCs via the SWE portal (P2-SWE-II: Additional Services, P2-SWE-XIII: Advanced Prototypes, P2-SWE-XVI: Swarm data utilisation...)
- Strengthen links with user communities: key task of SSC, ESWW user meetings, dedicated meetings & workshop participation
- Establish a new ESC focusing on Heliospheric Weather (P2-SWE-I)
- Further develop the SWE Data Centre infrastructure to provide improved product access and additional data browsing capabilities supporting users and developers (P2-SWE-XI)

## ESA SSA SWE System





#### **SSA Space Weather Coordination Centre**



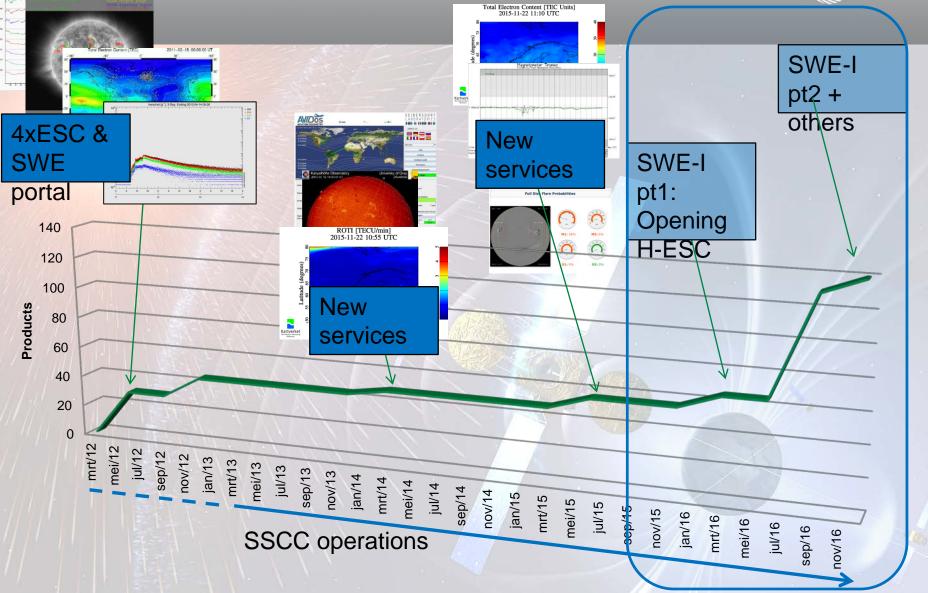
- User Support
  - Helpdesk (8/5) & guidance
- Service Monitoring
  - Overall SWE network performance
    - SWE Data centre applications
    - Federated services
- Service Improvement
  - Engaging with user community
  - Targeted campaigns
  - Facilitating access to new SWE services
- Planning for extended role & responsibilities in P3





#### SWE Network Product Growth





#### **ESC Concept & Definition**



- Review of ESC operation during SSA Preparatory Programme
  - Lessons learned
- Service Availability Assessment for Period 2
  - Based on federated model
- Interface with commercial service providers
  - ESC support to 3<sup>rd</sup> party services
- Templates for ESC Operation and Interfacing
  - Common interfacing & standards
- Definition of ESC QA/QC guidelines & Definition of SLA templates
  - Consistent basis for service development, validation & provision





#### **ESC Development and Planning**



- Service build-up, testing and operational demonstration
  - Benchmark products: testing and validation, assessed against SWE user needs -> with real users
  - Further work towards targeting user needs and delivery requirements
  - Demonstrable steps towards meeting SWE Customer Requirements
- Blueprint for a sustainable network of SWE service provision based on distributed network
  - Service provision according to KPIs
  - Roles & responsibilities within network & interfacing procedures
  - SLA templates to secure critical data



- Review of 37 SWE service roadmaps
  - Reflect progress and identify key technology developments for long term improvement of forecasts



## Network participation and expansion



- Current total of 34 teams spread across all 5 ESCs
- Approx 140 products expected by end of 2016
- Additional targeted service developments:
  - P2-SWE-II: SWE services addressing SWE/SST domain: KO Oct 2015, Prime: Deimos Space UK
  - P2-SWE-XVI: SWARM Utilisation
- Looking towards Period 3: Thematic workshops, Spring 2016 @ESOC
  - identify key assets/expertise/development requirements
  - Roadmap inputs





HTTP://SWE.SSA.ESA.INT HELPDESK.SWE@SSA.ESA.INT

# QUESTIONS?

ESA SSA | A GLOVER |27-11-15