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The ESA Scientific Exploitation of Operational Missions element

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SEOM is a program element within the fourth period (2013-2017) of ESA's Earth Observation Envelope Programme (http://seom.esa.int/). The prime objective is to federate, support and expand the international research community that the ERS,ENVISAT and the Envelope programmes have built up over the last 25 years. It aims to further strengthen the leadership of the European Earth Observation research community by enabling them to extensively exploit future European operational EO missions. SEOM will enable the science community to address new scientific research that are opened by free and open access to data from operational EO missions.

Based on community-wide recommendations for actions on key research issues, gathered through a series of international thematic workshops and scientific user consultation meetings, a work plan has been established and is approved every year by ESA Members States. The 2015 SEOM work plan is covering the organisation of three Science users consultation workshops for Sentinel1/3/5P, the launch of new R&D studies for scientific exploitation of the Sentinels, the development of open-source multi-mission scientific toolboxes, the organisation of advanced international training courses, summer schools and educational materials, as well as activities for promoting the scientific use of EO data.

The first SEOM projects have been tendered since 2013 including the development of Sentinel toolboxes, advanced INSAR algorithms for Sentinel-1 TOPS data exploitation, Improved Atmospheric Spectroscopic data-base (IAS), as well as grouped studies for Sentinel-1, -2, and -3 land and ocean applications and studies for exploiting the synergy between the Sentinels. The status and first results from these SEOM projects will be presented and an outlook for upcoming SEOM studies will be given.