

Earth and Space Sciences in Europe using CNES balloons

ESA Perspectives

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- In Atmospheric Sciences, ESA has two type of activities
 - Mission development and Commissioning Phase
 - These activities are linked to the development of new instruments and to gather enough information to prepare the initial version of the algorithms and data processing facilities.
 - It also covers the preparation of Calibration activities
 - Mission Operation Phase
 - Mainly Long term Routine Calibration and Validation





- A proposal for another concept is being proposed
 - Long term Multi-Mission Calibration and Validation support
 - To support Cross Calibration of overlapping missions
 - To have the possibility for a longer term planning
 - To de-correlate the funding from a specific mission.
 - Support sciences between missions
 - So far that concept has difficulties to make its way
 - Might be a topic of a future Balloon Science workshop





- Vicarious Calibration and Geophysical Validation Functional Baseline
 - Mission-independent Strategy for Long-term Cal/Val and Monitoring with Balloons

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	
Tropical (Teresina)													
High latitude (Kiruna)													
Mid-latitude (North)													
High priority Lower priority													

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- Routine Phase
 - Envisat and ERS-2 are flying for another few years.
 - Limited by funding and technology
 - Some scenarii foresee new calibration campaigns

Future missions in preparation but still in the early phases

So far no plan to cover any gap between missions





 Mission development and Commissioning Phase

- Some proposals linked to the ADM-Aeolus mission.
- Preparation work for balloon contributions for SWARM.

