

SCOOP Science Review



SCOOP – Mid Term Review

Objectives

- **Review Task 1: Scientific Review and Requirements Consolidation**
- **Agree specifications for L1A-L1BS and L1B-L2 processing and test data sets.**
- **Review and discuss plans in Phase 1 Validation and Processing Scheme Developments**
- **Identify and critical dependencies and major risks**

1. Welcome, Adoption of the Agenda

Day 1- 26 Jan

		Open
1	13:30	Welcome, adoption of the agenda (SatOC / NOC / ESA)
2	13:45	SCOOP - Project Status (SatOC)
3	14:00	WP1000 Scientific Requirements Consolidation (NOC) Overview
4	14:10	WP1100 Review of the State of the Art in SAR Altimeter Data (NOC).
5	14:30	WP2000 – Data Management (SatOC) <ul style="list-style-type: none"> - Overview of SCOOP Test Data Set for Phase 1. Temporal and Spatial Coverage. - Input Data Requirements - Access arrangements
6	14:45	WP2400 – RDSAR processing and Provision (TU Delft)
	15:00	Coffee Break
7	15:30	WP7000 – Wet Troposphere Model (U Porto) Description of activity, required inputs, outline of deliverables, risks
8	16:00	WP5000 – Open Ocean Study (CLS) Overview
9	16:15	WP5100 – Open Ocean Study - Description of validation approach and expected outputs (CLS, TU Delft)
10	16:30	WP5200 Sea State Bias (NOC, and TU Delft) Report of progress EUMETSAT Sea State Bias Study (NOC) Confirmation of plans for SSB studies (NOC and TU Delft)
11	17:00	WP5300 Swell Study (TU Delft) Description of proposed approach
	17:30	Close

Day 2- 27 Jan

	09:00	Open
1	09:00	WP3000 Doppler Stack Processing (isardSAT) Overview
2	09:15	WP3100 L1B Processing Approach for Phase 1 Test Data Set (also WP1200-1400) / - Doppler Stack Processing (isardSAT) Description of proposed approach - discussion
3	09:30	WP3100-WP3300 Processing Approach options to be developed for evaluation in Phase 2- Doppler Stack Processing (isardSAT, CLS, NOC) Description of proposed approaches - discussion
4	10:00	WP4000 Echo Modeling and Retracking (Starlab) Overview
5	10:10	WP4100 L2 Processing Approach for Phase 1 - Echo Modeling and Retracking (Starlab) (also WP1200-1400) Description of proposed approach - discussion
6	10:30	WP4500, WP4600 Processing Approach for Phase 1 - options to be developed for evaluation in Phase 2 (Starlab, NOC) - Description of proposed approaches - discussion
	11:00	Coffee
7	11:30	WP6000 Coastal Zone Study Overview (NOC)
8	11:45	WP6100, 6200 Coastal Zone Study - Description of validation approach and expected outputs (NOC)
9	12:00	WP6300 – Swell Study (Noveltis)
10	12:15	WP6400 – SAR Mode Performance in German Bight (University of Bonn)
11	12:30	WP6600 – Land Proximity, Ground Track Orientation Study (NOC)
	12:45	Lunch
12	14:30	Discussion – Review of any major points of discussion
13	15:00	WP8000 Outreach and Promotion – Meeting Plans (Living Planet)
14	15:30	AOB, Next Meetings, Actions
	16:00	Close

2. Project Status

SCOOP Objectives:

- Accurately characterise the expected performance of Sentinel-3 SRAL SAR mode altimeter products over the open ocean and coastal zone
- Develop and evaluate enhancements to the current baseline Sentinel-3 SRAL SAR data processing schemes, in order to provide improved performance over the open ocean and in the coastal zone
- To support correct interpretation and application of SRAL SAR L1 products by providing clear technical information on these products and their processing to the user community.
- Provide recommendations for further developments and implementations through a scientific roadmap.

SCOOP – Work Packages

	Work Package	Led by	Starts	Ends
WP1000	Scientific Requirements Consolidation	NOC	09/10/15	09/01/16 09/02/16 *
WP2000	Data Management	SatOC	09/12/15	09/05/17
WP3000	Doppler Stack Processing	isardSAT	26/01/16	09/04/17
WP4000	Echo Modelling / Retracking	Starlab	26/01/16	09/04/17
WP5000	Open Ocean Study	CLS	26/01/16	09/06/17
WP6000	Coastal Zone Study	NOC	26/01/16	09/06/17
WP7000	Wet Troposphere Model	U Porto	26/01/16	09/04/17
WP7000	Outreach and Roadmap	SatOC	09/10/15	09/10/17
WP8000	Project Management	SatOC	09/10/15	09/10/17

* Completion date to be confirmed

SCOOP – Overview KO to MTR

<i>Time</i>	<i>Task</i>	<i>WP</i>	<i>Description</i>	<i>Lead</i>
T0	Kick Off		Project Starts	
T0 – T0 + 3	Task 1	WP1000	Scientific Review and Requirements Consolidation	NOC
		WP2000 (starts)	Data Management	SatOC
<i>Summary</i>	<i>Generates Requirements Baseline and establishes Project Database</i>			
T0 + 3	Science Review		Approves specification of initial processing algorithms and of Task 2 initial Test Data Sets.	
T0 + 3 to T0 +12	Task 2 / Phase 1	WP2000 (cont)	Data Management	SatOC
		WP3000	Doppler Stack Processing	isardSAT
		WP4000	Echo Modelling / Retracking	Starlab
		WP5000	Open Ocean Study	CLS
		WP6000	Coastal Zone Study	NOC
		WP7000	Wet Troposphere	U Porto
<i>Summary</i>	<ul style="list-style-type: none"> - Implement SAR processing as specified in Task 1 / Science Review - Generate first L1B and L2 Test Data Sets (Open Ocean and Coastal Zone) - Validate first L1B and L2 Test Data Sets (Open Ocean and Coastal Zone), and characterise anticipated performance of S-3 products (by applying Sentinel-3 processing on CryoSat SAR FBR data, and Sentinel-3 simulator data). - Initiate indicated Open Ocean and Coastal Zone studies, including developing and testing modifications to SAR processing 			
T0 + 12	Mid Term Review		Approves specification of modified processing algorithms and of Test Data Sets for Phase 2.	

SCOOP Deliverables Q1-Q2 2016

	Title	Due date	Format	Responsible	Restrictions on re-use
D1.1	TN-1: State of the Art Technical Note	09/01/16 09/02/16	External Document	NOC	Fully open
D1.2	RB: Requirements Baseline	09/01/16 09/02/16	External Document	NOC	Fully open
D1.3	ATBD: Algorithm Theoretical Basis Document (First Draft)	09/01/16 09/02/16	External Version	SatOC (All)	Fully Open
D1.3*	ATBD: Algorithm Theoretical Basis Document (First Draft)	09/01/16 09/02/16	Internal Version	As Necessary	SCOOP Use Only
D1.4	Processing Options Configuration Control Document	09/01/16 09/02/16	External Document	SatOC	Fully open
D2.8	Database for Task 2	09/01/16 09/02/16	Data Set	SatOC	See Data Table
D2.1	IODD: Input Output Definition Document	09/02/16	External Version	isardSAT / Starlab / (All)	Fully Open
D2.3	PSD: Product Specification Document	09/02/16	External Document	isardSAT / Starlab/ U Porto	Fully open
D2.4	PVP: Product Validation Plan	09/02/16	External Document	CLS / NOC	Fully open
D2.8	Test Data Set (Phase 1)	09/02/16	Data Set	SatOC	See Data Table
D2.10	Source Code of Prototyped Algorithms	09/02/16	sw	isardSAT / Starlab	See source code table
D2.11	SPMT: Software Programme Management Tool	09/02/16	Internal tool	isardSAT / Starlab	SCOOP use only

SCOOP Milestones and Payments

Milestone	Time	Event	Deliverables	Other Requirements	Value	%
M1 – PM1	09/10/15	Kick Off		Contract signature Acceptance of Project Management Plan	€104,782	30
M2	Jan 2016	Science Review	D1.1, D1.2, D1.3, D1.4, D2.8, D4.1, D4.2	Successful completion of Science Review		
M3 – PM2	Oct 2016	Mid Term Review	D2.1, D2.3, D2.4, D2.5 (phase 1), D2.8, D2.10, D2.11, D4.1, D4.2	Successful completion of Mid-Term Review	€139,710	40
M2	Jul 2017	Acceptance Review	D1.3 (updated), D2.5 (phase 2), D2.8 (phase 2), D2.7, D2.9, D4.1, D4.2, D4.3, D4.4, D4.5	Successful completion of Acceptance Review		
M3 – PM3	Oct 2017	Final Review	D3.1, D4.1, D4.2, D4.3, D4.4, D4.5	Successful completion of Final Review	€102,505	29.35
Final Settlement	Oct 2019	Contract End		Maintained website and bibliography	€2,277	0.65

Administration Issues

- New partner: University of Bonn replaces TU Darmstadt
 - Requires CCN to ESA contract
 - sub-contract between SatOC and U Bonn.
- Initial payment made to all partners **except**:
 - CLS, NOC, U Bonn.

13. WP8000 Outreach (SatOC)

Links to Other SEOM S34Sci Projects

- DeDop, Spice and Shape

Meeting Plans:

- EGU (17-22 April, Vienna)
- Living Planet (9-13 May, Prague) – Publicity Material needed?
- OSTST 2016 (1-4 Nov, La Rochelle)
- SAR Altimetry Workshop 31/10/16 (La Rochelle)
- Coastal Altimetry Workshop, coordinated with OSTST.
- COSPAR 2016
- AGU (December 2016)

14. Next Meetings

Meeting	Place	Time	Attendees	Purpose
Kick-off	Teleconf	09/10/15	All	Kick-Off, Acceptance of project management plan
Science Review	NOC (Southampton)	01/16	All except NOVELTIS and TUDa	Review of Task 1: Scientific Review and Requirements Consolidation
PM 1	Teleconf	04/16	Teleconf	Review of early progress in Phase 1. Product specifications, validation plans, data processing implementation, plans for data production
PM 2	Teleconf	07/16	Teleconf	Review of progress in Phase 1. Product availability, issues from validation work
Mid-term review	U Porto	10/16	All, except NOVELTIS	Mid Term Review: Results from validating first phase data sets. Plans for modifications.

- Teleconf in Feb to discuss data processing volumes / timing
- PM1 (Apr 2016) – Teleconf – 7,8 April
- Scope for review meeting during Living Planet (May 9-13) ?
- NB - OSTST 2016 (1-4 Nov, La Rochelle)
- SCOOP MTR Oct/Nov Porto – TBA following discussions on processing for Test Data Set