

**SARAL International Science and Applications Meeting  
22-24 April, 2014, SAC Ahmedabad**

**Technical Program (DRAFT)**

**DAY 1: 22 April 2014: TUESDAY**

**Registration: 09:30 – 10:00**

**Inaugural Session: 10:00 – 10:30 hrs**

**Welcome Address: Dr. P.K. Pal, SAC/EPISA/GD-AOSG**

**Opening Remarks: Dr. J.S. Parihar, Deputy Director, EPISA, SAC, Dr. J. Verron  
(PI -France)**

**Session I: General Presentations 10:30-11:00 hrs Chairman : Dr. JS Parihar**

	Lambin J. (CNES)	CNES Ocean Program Status
	Raj Kumar (ISRO)	ISRO Ocean Program Status

**11:00 – 11:15 hrs: Tea/coffee Break**

**Session II: Project Overview: 11:15-12:00 hrs**

	P. Sengenés (CNES) and D.V.A. Raghavamurthy (ISRO)	SARAL Project Overview
	R.M. Gairola (SAC)	SARAL: ISRO status
	N. Picot (CNES)	CNES/SALP status
	Pushplata Shah (SAC)	SARAL Data Dissemination from MOSDAC

**Session III: CAL/VAL Part I 12:00 – 13:00 hrs**

**Co-Chair: Dr. B.S. Gohil (SAC, India) A. Guillot (CNES)**

	P. Prandi (CLS)	Global Ocean data quality assessment of SARAL/AltiKa GDR data
	A. Couhert(CNES)	SARAL POD Status
	P. Bonnefond (OCA)	Absolute Calibration of SARAL/AltiKa in Corsica
	K.N. Babu (SAC)	Absolute Calibration of SARAL-AltiKa in Kavarati during its initial phase

**13:00 – 14:00 hrs: LUNCH and Poster Session**

**Session IV: CAL/VAL Part II 14:00 -15: 00 hrs**

**Co-Chair: Dr. Venkateshan (NIOT, India) Dr Pascal Bonnefond(OCA, France)**

	Suchandra A. Bhowmick (SAC)	Analysis and Validation of SARAL-AltiKa SWH and SLA using Global Buoys and Jason-2 data
	TN Shyni (NPOL)	Comparison of sea level data from SARAL, JASON-2 and <i>in-situ</i> measurements
	KVSR Prasad (Andhra Univ)	Contribution of Satellite Altimetry in providing wind wave information in east coast of India

**15:00 – 16:30 hrs: Poster Session & Tea/coffee**

**Session V: Instrument Performance and Processing 16:30 – 17:30 hrs**

**Co-Chair Santanu Chaudhari (SAC, India) Nathalie Steunou (CNES, France)**

	Steunou N. (CNES)	AltiKa instrument performances: in orbit performances, specific calibrations, workplan (calibrations, HD, ...)
	J.C. Poisson (CLS)	FIRST ESTIMATION OF THE ALTIKA SEA STATE BIAS AT CROSSOVERS USING 4 CYCLES OF WAVE HEIGHT MEASUREMENTS AND WIND MODEL
	B. Picard (CLS)	FIRST YEAR OF THE MICROWAVE RADIOMETER ABOARD SARAL/ALTIKA: RETRIEVAL STRATEGIES AND PERFORMANCES

**17:30 – Adjourn**

**DAY-2: 23 April 2014: WEDNESDAY****Session VI: Retrieval and Range Corrections 9:30 – 11:15 hrs****Co-Chair: Dr. Raj Kumar (SAC, India) and G. Quartly (PML)**

	Sharad Chander (SAC)	AltiKa Geophysical Parameter Retrieval algorithms
	N. Steunou (CNES)	SARAL Ka band sigma0 analysis over different surfaces
	R.M. Gairola (SAC)	Geophysical model function for wind speed retrieval from SARAL AltiKa: A sensitivity study
	Graham Quartly (UK)	An initial look at Individual Echoes from AltiKa
	JC. Poisson (CLS)	IMPACT OF CLOUD AND RAIN EVENTS ON SARAL/ALTIKA MEASUREMENTS

**11:15 – 11:30 hrs: Tea/coffee Break****Session VIII: Coastal Altimetry 11:30-13:15hrs****Co-Chair: Dr. M. Ravichandran(INCOIS, India) and L. Testut (LEGOS)**

	J. Verron (LEGI)	Sea surface height variability observed by Ku and Ka-band altimeter data in the NW Mediterranean Sea
	L. Carrere	FES 2014, a new tidal model on the global ocean
	G. Valladeau (CLS)	On the use of the PEACHI prototype to improve Ka-band altimeter data along coastal areas
	L. Testut (LEGOS)	Improving tidal corrections for altimetric data along the west coast of India using a regional tidal model
	Aditya Chaudhary (SAC)	Towards suitable retracking strategy for deriving geophysical parameters from AltiKa for the Indian Coasts
	M. Salim (NRSC)	Assessment of AltiKa along track sea level observations and tidal correction over the coastal oceans around India

**Lunch 13:15 – 14:00**

**Session IX: Mesoscale Variability#1 14:00 – 15:15 hrs****Co-Chair: D. Sengupta(IISc, India) and Dr J. Verron (LEGI/CNRS France)**

	P. Thibaut (CLS)	Short wavelength correlated errors on low resolution mode altimetry
	L. Carrere (CLS)	Saral/AltiKa contribution to Ssalto/DUACS merged products
	Subhprakash Dey (CORAL)	Study of Physical Properties of the Upper Surface of Bay of Bengal during Contrasting Monsoon Perio
	Rashmi Sharma (SAC)	Mesoscale variability using AltiKa in the Bay of Bengal with Emphasis on Cyclone Phailin
	Danish Hussain (SAC)	Understanding the Upper Ocean Thermal Structure using AltiKa SSHA

**Poster Session and Tea/Coffee 15:15-16:30****Session X: Mesoscale Variability #2 16:30 – 17:30 hrs****Co-Chair: Dr. P.K. Pal (SAC, India) and J. Lambin (CNES)**

	Muhammad Shafeeque (CUSAT)	A study of SSHA variability in Southern Eastern Arabian Sea based on AltiKa data
	H.U. Solanki (SAC)	Integrative Analysis of AltiKa-SSHA, MODIS-SST and OCM Chlorophyll Signatures for Fisheries Applications
	Suneet Dwivedi (All. Univ.)	Demonstrating the Quality of High-Resolution Ocean Circulation Model in the Bay of Bengal Region against the SARAL AltiKa mission
	I Suresh (India) (NIO)	Sea Level Intraseasonal Variability in the Northern Indian Ocean Waveguide

**17:30 hrs: Adjourn**

**DAY-3: 24 April 2014: WEDNESDAY****Session XI: Data Assimilation & Ocean variability studies 9:30 – 11:00 hrs:****Co-Chair: Dr. SK Basu (SAC, India) J. Richman (Navy)**

	G. Gnanaseelan (IITM)	Interannual variability of Kelvin and Rossby waves in the Tropical Indian Ocean, their impacts on Tropical Cyclones
	P. Sreenivas (IITM)	Role of Altimetry Data Assimilation in the Coupled Forecasting System NCEP-GFS on Monsoon Forecast
	James G. Richman (USA)	Contrasting AltiKa and Jason-2 altimeter performance in using the NRL altimeter monitoring system (ALPS)
	Smitha Ratheesh (SAC)	Impact of AltiKa Data Assimilative Ocean Prediction System
	Anitha Gera (NCMRWF)	Use of AltiKa data for study of Indian Ocean Variability and Ocean Initialisation
	Abhisekh Chakraborty (SAC)	Impact of Assimilating AltiKa and other Altimeter's SSHA on simulations of OGCM

**11:00 – 11:30 hrs: Tea/coffee Break****Session XII: Inland Waters, Gravity 11.30 – 13.00hrs****Co-Chair: Dr. Prakash Chauhan (India) and Dr. S. Calmant (IRD, France)**

	S. Calmant (IRD)	SARAL/AltiKa : a masterpiece for the monitoring of the World's rivers
	K.M. Sreejith (SAC)	Preliminary Assessment of Along Track Resolution Capabilities of AltiKa for deriving Marine Geoid & Gravity
	S. Ghose (IIRS)	Waveform Parameter Extraction and Modeling of AltiKa for Indian Inland and Coastal Waters
	Praveen Gupta (SAC)	Development of Methodology for Waveforms Selection & Processing for Water Level Retrieval Over the Braided Brahmaputra River
	S. Rajesh (WIHG)	Geodynamic Evolution of the Indian Plate through High Resolution Geoid/Gravity from AltiKa Data

**Lunch 13:00 -14:00**

**Session XIII: Polar ice 14:00 – 15:30hrs****Co-Chair: Manab (India) and D. Blumstein (CNES/LEGOS, France)**

	P. Thibaut (CLS)	Ku/Ka band Observations of Polar Ice sheets
	D. Blumstein (CNES/LEGOS)	Altimetry waveforms inversion over Antarctica
	A. Michel (CNES/CLS/LEGOS)	Saral/AltiKa exploitation for ice sheets survey : promising results and comparisons with former missions
	S. Fleury (LEGOS)	Sea-Ice edges and leads detection in Arctic using SARAL/AltiKa
	S.R. Oza (SAC)	Characterising Polar Ice Surface Features Using SARAL-AltiKa Waveforms
	Megha Maheshwari (SAC)	Estimation of sea ice freeboard from SARAL-AltiKa

**Tea/Coffee 15:30-16:00****16:00-17:30 Concluding Session****17:30 – 18:00 High Tea & Adjourn**

**Poster Papers (Foreign part):**

1	G. Quartly (GB)	Further evaluation of a 2-parameter wind speed algorithm
2	<u>L. Carrere</u>	AltiKa: A Strong Asset for High-Resolution Altimetry Processing
3	S. Calmant	In situ validation and cross-calibration of SARAL/AltiKa measurements over the Ganges-Brahmaputra river basin
4	B. Picard (CLS)	ALONG-TRACK RESOLUTION IMPROVEMENT OF NADIR MICROWAVE RADIOMETERS

## Poster Papers (Indian part):

1	Dhyey Bhatpuria, H.U. Solanki and Prakash Chauhan	SAC/ISRO	Merging of sea surface height derived from SARAL-Altika and Jason 2 altimeter to improve oceanic feature detection
2	D. Ganguly, S. Chander, and Prakash Chauhan	SAC/ISRO	Optimal waveform retracker for inland water bodies: A case study over Ukai Dam/Reservoir
3	U. Mahesh Kumar, S. K. Sasamal, D. Swain, N. Narendra Reddy, And T. Ramanjappa	Sri Krishnadevaraya Univ, Anantapur AP, INDIA	Inter-comparison of SARAL/Altika and Jason-2 Altimeters
4	Shard Chander, Shashank Kumar Mishra and Prakash Chauhan	SAC/ISRO	SARAL radar altimeter measurements over Greenland Ice sheets
5	Sanjay Sharma, Partha Roy	Kohima Science College, Nagaland INDIA	The effect of rain on SARAL/ALTIKA derived sea wave height
6	Shruti Desai, S. Chander, D. Ganguly, Prakash Chauhan, P.D. Lele & M.E. James	Gujarat University, Ahmedabad. INDIA	Waveform classification and variation of atmospheric corrections for SARAL/Altika and Jason 2 over the Brahmaputra River.
7	S K Sasamal And Saurav Bansal	NRSC, Hyderabad, INDIA	Utilisation of high resolution SARAL Altika Geophysical products in selected coastal waters around India
8	D. Ram Rajak, R K Kamaljit Singh, Megha Maheshwari, Jayaprasad P, Sandip R Oza & Raj Kumar	SAC/ISRO	Determination of Sea Ice Extent Using SARAL Altika Data
9	Neeraj Agarwal, Rashmi Sharma, Raj Kumar and Sujit Basu	SAC/ISRO	Towards optimizing the altimeter coverage for simulating mesoscale features in the Bay of Bengal
10	Nilima Rani Chaube, Dr. Manab Chakraborty, Singh B.K., Kumar Santosh	SAC/ISRO	Characterization of Land Cover using Altika in Indian Region
11	Nilima Rani Chaube, Dr. Manab Chakraborty	SAC/ISRO	Detection of Cyclone using SARAL Data



12	Santosh S. Kolte <sup>1</sup> , Sudhakar B. Sharma, Anupam K. Singh	Nirma University, Ahmedabad, INDIA	Applications of SARAL-Altika data with field correlations for river water depth computations for Ganga river in India
13	A. Anand, P. Krishnan, Grinson George, Hareef Baba Shaeb and T. Srinivas Kumar	RRSC (Central),NRSC,IRO, Nagpur, INDIA	Study of relationship between mesoscale oceanographic features and pelagic fisheries of Andaman and Nicobar Islands
14	Suchandra A. Bhowmick, S.K. Basu, M Seemanth and Rajkumar	SAC/ISRO	Impact of Assimilating SARAL/Altika SWH in SWAN Model during Indian Ocean Tropical Cyclone PHAILIN
15	Seemanth M, Prashant Kumar, Aditya Chaudhary, Rashmi Sharma and Rajkumar	SAC/ISRO	Assessing wet tropospheric range correction near the Indian Coast in the context of SARAL/Altika
16	RK Kamaljit, Megha Maheshwari, P. Jayprasad, D. Ram Rajak and Sandip Oza	SAC/ISRO	Inter-comparison of backscattering signatures from OSCAT and SARAL-Altika over the polar regions
17	V.K. Agilan	NIT Warangal, INDIA	Indian inland reservoirs water levels from Ka band SARAL/Altika data
18	Shivani Shah and Puspallata B. Shah	SAC/ISRO	Satellite Orbit Predictor and netCDF data handler for SARAL
19	Utkarsh Tyagi and Puspallata B Shah	SAC/ISRO	GIS based Sea-State Atlas for SARAL-Altimeter Data Visualisation
20	A.K. Varma	SAC/ISRO	Effect of rain on Altika measurements
21	P.G. Remya	INCOIS	Validation of Altika and PISTAC derived wave height