CFOSAT

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First CFOSAT International Science Team Meeting

(The 6th CFOSAT Science Team Workshop)

PROGRAM

Nanjing, 23-25 September 2019

08 :30-09:00 Welcome/Opening Ceremony

1- General information on the CFOSAT mission (20 min per presentation)

Chairpersons: Patrick Castillan, Xiaolong Dong

01	09:00-09:20	An Introduction to CFOSAT	Daniele Hauser, Jianqiang Liu
02	09:20-09:40	CFOSAT orbit state and platform in-orbit performance introduction	Cheng Yan, Lili Wang, Yaohui Huang, Minfeng Bao
03	09:40-10 :00	Summary on the CFOSAT satellite, Chinese ground segment, SCAT/SWIM product and data management policy	Jianqiang Liu, Congrong Sun, Ying Xu, Shuyan Lang
	10 :00-10 :30	Break	
04	10:30-10:50	FROGS (French Ground Segment) Status	Jean-Michel Lachiver
05	10 :50-11:10	SWIM instrument performances	Raquel Rodriguez Suquet

2- SCAT data analysis, wind retrieval and sea ice detection (30min per presentation)

Chairpersons: Xiaolong Dong, Jianqiang Liu (until 15:00), Wenming Lin, Jean-Michel Lachiver (after 15:00)

06	11:10-11:30	SCAT instrument performances	Xiaolong Dong
07	11:30-12:00	CFOSAT NWP Ocean Calibration	Zhen Li , Ad Stoffelen ,Jeroen Verspeek
	12:00-13:30	Lunch Break	
08	13:30-14:00	CFOSAT scatterometer data Level-1 processing and preliminary results	Risheng Yun, Xiaolong Dong, Di Zhu, Shuyan Lang, Jianying Ma, Xingou Xu, Zhisen Wang
09	14:00-14:30	On the quality of CFOSAT scatterometer winds	Wenming Lin, Marcos Portabella, Shuyan Lang, Zhixiong Wang, Yijun He, Xiaolong Dong
10	14:30-15:00	A preliminary assessment of the ocean surface vector winds retrieved by the CFOSAT scatterometer	Xuetong Xie, Chen Kehai, Peng Yihuan, Bao Qingliu
	15:00-15:30	Break	

11	15:30-15:50	Analysis of 12.5km wind product of CFOSAT scatterometer	Qingliu Bao, Shuyan Lang, Wenming Lin, Bo Mu
12	15:50-16:20	Sea surface wind retrieval from the combined scatterometer and altimeter backscatter measurements of the HY-2A satellite	Xiuzhong Li, Wenming Lin, Yijun He
13	16:20-16:50	The New NSCAT-4S Geophysical Model Function for Ku-band Scatterometer wind retrievals	Zhixiong Wang, Ad Stoffelen
14	16:50-17:20	A New Ambiguity Removal Method for CFOSCAT Based on Convolutional Neural Networks	Xingou Xu, Xiaolong Dong

<mark>Tuesday the 24th September</mark>

2- SCAT data analysis, wind retrieval, and sea ice detection (30min per presentation)- continued

Chairpersons: Wenming Lin, Jean-Michel Lachiver

15	08:30-09:00	CFOSAT SCAT activities for NWP in Météo-France	Christophe Payan, Anne-Lise Dhomps, Jean-François Mahfouf
16	09:00-09:30	Bayesian Sea Ice Detection with the CFOSAT Scatterometer	Liling Liu , Xiaolong Dong , Wenming Lin , Shuyan Lang

3) SWIM nadir products, SWIM off-nadir sigma0, rain , sea ice (30min per presentation)

Chairpersons: Daniele Hauser, Jianqiang Liu

17	09:30-10:00	Performance analysis of the different retracking solutions for SWIM nadir echoes	Fanny Piras, Annabelle Ollivier, Maeva Dalila, Cédric Tourain, Jean-Michel Lachiver
	10:00-10:30	Break	
18	10:30-11:00	SWIM sigma0 absolute calibration	Laura Hermozo
19	11:00-11:30	SWIM sigma0 products	Laura Hermozo
20	11 :30-12:00	Rain flags for SWIM on-board CFOSAT: methods and assessment	Bruno Picard, Mathilde Simon, Annabelle Ollivier, Victor Gressani, Jean-Alexis Daguze, Cédric Tourain, Jean–Christophe Posson
	12:00-13:30	Lunch break	

21	13:30-14:00	On the problem of sea ice detection at low incidence angles using microwave radar data	Maria Panfilova, Alexander Shikov, Zoya Andreeva, Roman Volgutov, Vladimir Karaev
22	14:00-14:30	Ku-band microwave scattering of the sea ice in the low-incidence angles	Meijie Liu, Xi Zhang, Jin Wang, Shilei Zhong

4) Validation of the SWIM L1b/L2 products (30min per presentation)

Chairpersons: Lotfi Aouf, Jingsong Yang

23	14:30-15:00	Summary on the SWIM L1b/L2 wave product quality at the end of SWIM verification phase	Daniele Hauser, et al
	15:00-15:30	Break	
24	15:30-16:00	Evaluating wind and wave products from CFOSAT using in situ and modelling	He Wang, Jianhua Zhu, Jianqiang Liu, Yiting Chang, Shuyan Lang
25	16:00-16:30	Comparison between SWIM and MFWAM modeled wave spectra : evaluation from different SWIM beams	Alice Dalphinet, Lotfi Aouf
26	16:30-17:00	SWIM/MFWAM comparison of 2D wave slope spectrum	Dunya Alraddawi, Daniele Hauser, Patricia Schippers, Christophe Dufour

Wednesday the 25th September

3) Validation of the SWIM L1b/L2 products (continued) (30min per presentation)

Chairpersons: Lotfi Aouf, Jingsong Yang

27	08:30-09:00	CFOSAT SWIM Cal/Val in the Southern Ocean	Salman Saeed Khan, Ian Young, Emilio Echevarria, Mark Hemer, Eric Schulz
28	09:00-09:30	The campaign wave observation between CFOSAT and Gaofen-3 SAR	Shao Weizeng, Yuan Xinzhe, Zhao Liangbo
29	09:30-10:00	Systematic CalVal for SWIM: CaSyS, a stable validation diagnosis basis	Annabelle Ollivier, Maeva Dalila, Fanny Piras, Romain Husson, Cédric Tourain, Jean-Michel Lachiver, Daniele Hauser
	10:00-10:30	Break	

4) Additional analysis aimed at improving the SWIM data inversion (30min per presentation)

Chairpersons: Cedric Tourain, X?

30	10:30-11:00	A study of speckle density spectrum based on SWIM data from spectrometer	Yuhang Huang, Ping Chen
31	11:00-11:30	Correlation time of normalized radar cross section from sea surfaces at low incidences	Ping Chen, Daniele Hauser, Yuhang Huang
32	11:30-12:00	Estimation of an empirical model of speckle to correct the wave spectra of SWIM	Patricia Schippers, Daniele Hauser
	12:00-13:30	Lunch break	
33	13 :30-14 :00	Numerical simulations and theoeretical inquiry to help understand SWIM and KuROS measurements	Nouguier F., B. Chapron L. Marié, F. Collard
34	14:00-14:30	Modulation Transfer Function for inverting SWIM data into wave spectra	Daniele Hauser, Patricia Schippers, Lauriane Delaye, Christophe Dufour

5) Wind and wave studies (30min per presentation)

Chairpersons; **Annick Sylvestre-Baron, Yijun He**

35	14:30-15:00	Evaluation of the assimilation of SWIM wave spectra in the wave model MFWAM	Lotfi Aouf, Alice Dalphinet, Daniele Hauser, Chapron Bertrand
36	15:00-15:30	The MAEVA project	Ludivine Oruba, Emmanuel Dormy
37	15:30-16:00	Observation of fetch dependent evolution of wind waves with SWIM measurements	Alexey Mironov, Huimin Li, Frederic Nouguier, Antoine Grouazel, Alexis Mouche, Bertrand Chapron
	16:00-16:30	Break	

6) Discussion- Conclusion 16:30-17:00