



ESA- MOST Dragon 3 Cooperation

Advanced Training Course in Ocean Remote Sensing

21-26 October 2013, The Chinese University of Hong Kong, Hong Kong

Programme

Day 1 - Monday 21 October 2013

OPENING SESSION

Venue: Cho Yiu Hall, G/F, University Administration Building, CUHK

08:45 - 09:15	Registration		
	Official Welcome (Chaired By Hui Lin)		
09:15 - 09:45	- CUHK - NRSCC - ESA		<i>Tung Fung Songmei Zhang Yves-Louis Desnos</i>
09:45 - 10:00	Overview of the Training Course: Practical aspects, organisation and logistics		<i>Andy Zmuda</i>
10:00 - 10:30	Photo call & break		
10:30 - 11:30	Present and future Chinese satellite missions & applications for ocean remote sensing	D1L1	<i>Junmin Meng</i>
11:30 - 12:30	Present and future ESA satellite missions & applications for ocean remote sensing	D1L2	<i>Yves-Louis Desnos</i>
12:30 - 14:00	Lunch Time		
Retrieval of Sea Surface Salinity (SSS)			
<i>Venue: Rm 103 & 105, Pi Ch'iu Building, CUHK</i>			
14:00 - 14:45	Sea Surface Salinity from MERIS data	D1L3	<i>Tingwei Cui</i>
14:45 - 15:00	Sea Surface Salinity from SMOS data	D1L4	<i>Nicolas Reul</i>
15:00 - 15:30	Break <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
15:30 - 16:45	PRACTICAL – Intro. to BEAM & Sea Surface Salinity from MERIS	D1P1	<i>Ana Ruescas with Tingwei Cui</i>
16:45 - 18:00	PRACTICAL – Sea Surface Salinity from SMOS	D1P2	<i>Ana Ruescas with Nicolas Reul</i>
18:05	Assembly at the school bus stop outside Pi Ch'iu Building <i>(Shuttle bus will be provided to The Star Seafood Floating Restaurant)</i>		
18:30 - 20:30	Welcome Dinner <i>Venue: Star Seafood Floating Restaurant (明星海鮮舫) Address: No. 55-57 Tai Chung Kiu Road, Shatin, HK (新界沙田大涌橋路 55-57 號) (Tel: 26353788)</i>		
20:30	Assembly outside The Star Seafood Floating Restaurant <i>(Shuttle bus will be provided to University Guest House and Hyatt Regency HK Shatin)</i>		



Day 2 - Tuesday 22 October 2013

Geophysical Parameters from Radar Altimeters

Venue: Rm 103 & 105, Pi Ch'iu Building, CUHK

08:30 - 09:30	Principles of radar altimetry	D2L1	<i>Helen Snaith</i>
09:30 - 10:30	Altimeter data processing	D2L2	<i>Helen Snaith</i>
10:30 - 11:00	Break <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
11:00 - 12:30	BRAT basics: example of SSH computation from along-track altimetric data	D2P1	<i>Caroline Maheu</i>
12:30 - 14:00	Lunch Time		
14:00 - 14:45	Altimetry and oceanography	D2L3	<i>Helen Snaith</i>
14:45 - 15:30	Applications of altimetry in Chinese seas	D2L4	<i>Junmin Meng</i>
15:30 - 16:00	Break <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
16:00 - 18:00	BRAT mapping and statistical functions (high-level gridded altimetric data) I Demonstration of Cryosat-2 data processing	D2P2	<i>Caroline Maheu</i>
18:30 - 20:00	Poster Session (refreshments available) <i>Venue: 3/F, Fok Ying Tung Remote Sensing Science Building, CUHK</i>		



Day 3 – Wednesday 23 October 2013

Ocean Colour & Retrievals

Venue: Rm 103 & 105, Pi Ch'iu Building, CUHK

08:30 - 09:15	Introduction into Ocean Colour remote sensing using MERIS	D3L1	<i>David Doxaran</i>
09:15 - 10:30	Atmospheric Correction and Coastal Water Algorithms in China Seas	D3L2	<i>Fang Shen</i>
10:30 - 11:00	Break <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
11:00 - 12:30	Practical 1: BEAM Toolbox principles & MERIS data	D3P1	<i>Ana Ruescas David Doxaran & Fang Shen</i>
12:30 - 14:00	Lunch Time		
14:00 - 14:45	The Use of MERIS & TPM Data for Ocean Colour Applications in Chinese Coastal Areas	D3L3	<i>Danling Tang</i>
14:45 - 15:30	Practical 2: Exercises with BEAM using MERIS data	D3P2	<i>Ana Ruescas David Doxaran Fang Shen</i>
15:30 - 16:00	Break <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
16:00 - 18:00	Practical 2 (continue)	D3P2	<i>Ana Ruescas David Doxaran Fang Shen</i>



Day 4 – Thursday 24 October 2013

Geophysical parameters from SARs

Venue: Rm 103 & 105, Pi Ch'iu Building, CUHK

08:30 - 09:30	SAR Instrument Principles, Imaging Mechanisms and Processing	D4L1	<i>Johnny Johannessen</i>
09:30 - 10:30	Introduction: Using SAR for Ocean Applications	D4L2	<i>Werner Alpers</i>
10:30 - 11:00	<i>Break</i> <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
11:00 - 12:30	Practical 1: SAR Processing and Analyses Tools	D4P1	<i>Fabrice Collard, Junmin Meng & Jingsong Yang</i>
12:30 - 14:00	<i>Lunch Time</i>		
14:00 - 14:45	SAR Advanced Theory and Doppler	D4L3	<i>Fabrice Collard & Johnny Johannessen</i>
14:45 - 15:30	SAR Applications in the China Seas	D4L4	<i>Jingsong Yang & Junmin Meng</i>
15:30 - 16:00	<i>Break</i> <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
16:00 - 18:00	Practical 2: Tools applied to SAR images for the China Seas	D4P2	<i>Fabrice Collard, Junmin Meng & Johnny Johannessen</i>



Day 5 – Friday 25 October 2013

Sea Surface Temperature (SST)

Venue: Rm 103 & 105, Pi Ch'iu Building, CUHK

08:30 - 09:30	Measuring SST from Space	D5L1	<i>Gary Corlett</i>
09:30 - 10:30	SST Observations of Large-Scale Ocean processes	D5L2	<i>Jiayi Pan</i>
10:30 - 11:00	Break <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
11:00 - 12:30	AATSR Practical 1 - The AATSR Global Analyser	D5P1	<i>Gary Corlett</i>
12:30 - 14:00	Lunch Time		
14:00 - 15:30	AATSR Practical 2: Bilko - an Introduction to SST image Analysis	D5P2	<i>Gary Corlett</i>
15:30 - 16:00	Break <i>Venue: Function Room, 2/F, East Wing of The Art Museum, CUHK</i>		
16:00 - 17:00	AATSR Practical 2: Bilko – Continued	D5P2	<i>Gary Corlett</i>
17:05	Assembly at the school bus stop outside Pi Ch'iu Building <i>(Shuttle bus will be provided to The Serenade Chinese Restaurant)</i>		
17:45 - 19:45	Farewell Dinner <i>Venue: Serenade Chinese Restaurant (映月樓)</i> <i>2/F, Hong Kong Cultural Centre, Restaurant Block, Tsim Sha Tsui, Kowloon</i> <i>(九龍尖沙咀香港文化中心餐廳大樓2樓)</i> <i>(Tel: 2722 0932)</i>		
19:45-20:15	Short Walk enjoying the night view of Victoria Harbour		
20:15	Assembly at the main entrance of SOGO Department Store <i>(Shuttle bus will be provided to University Guest House and Hyatt Regency HK Shatin)</i>		



Day 6 - Saturday 26 October 2013

Models, Data Assimilation & Climate Variables

Venue: Cho Yiu Hall, G/F, University Administration Building, CUHK

09:00 - 09:45	Observations, Models and Environmental Prediction in China Seas	D6L1	<i>Fang Shen</i>
09:45 - 10:45	Synergy Between Optical, Infrared and Microwave Sensors for Ocean Remote Sensing Applications	D6L2	<i>Fabrice Collard & Johnny Johannessen</i>
10:45 - 11:15	Break		
11:15 - 11:45	The Marine Component of ESA's Ocean Climate Change Initiative	D6L3	<i>Johnny Johannessen</i>
11:45 - 12:30	Training Course Summary Awards for Best Poster Papers Presentation of Certificates Closing	Plenary	<i>Andy Zmuda NRSCC, CUHK, ESA Lecturers Hui Lin</i>