

# Overview Programme

	<b>MONDAY</b> <i>24 OCT. 2011</i>	<b>TUESDAY</b> <i>25 OCT. 2011</i>	<b>WEDNESDAY</b> <i>26 OCT. 2011</i>	<b>THURSDAY</b> <i>27 OCT. 2011</i>	<b>FRIDAY</b> <i>28 OCT. 2011</i>	<b>SATURDAY</b> <i>29 OCT. 2011</i>
	<b>Opening &amp; lectures</b>	<b>RA</b>	<b>MERIS</b>	<b>ASAR</b>	<b>(A)ATSR</b>	<b>Lectures AM &amp; Closing</b>
<b>AM</b>	Registration	RA Lecture	MERIS Lectures	ASAR Lectures	(A)ATSR Lectures	Models, EO & other data assimilation
	Opening session					
	<i>Photo-call &amp; coffee break</i>	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>
	ESA, TPM and Chinese EO missions for ocean RS	RA Practical 1	MERIS Practical 1	ASAR Practical 1	(A)ATSR Practical 1	EO data & climate change
						Course Close
	<i>lunch break</i>	<i>lunch break</i>	<i>lunch break</i>	<i>lunch break</i>	<i>lunch break</i>	<i>lunch break</i>
<b>PM</b>	Dragon 2 projects in Ocean research SAR applications Ocean colour studies	RA Lecture	MERIS Lectures	ASAR Lectures	(A)ATSR Lectures	
	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>	<i>coffee break</i>	
	Access to ESA & TPM EO data Access to Chinese EO data	RA Practical 2	MERIS Practical 2	ASAR Practical 2	(A)ATSR Practical 2	
	<b>Welcome Cocktail</b>	<b>Poster Session</b>			<b>Social Event</b>	

**Day 1 - Monday 24 October:  
AM - Opening Session (Plenary) & EO missions  
PM - Oceanography from Space, Dragon 2 projects SAR & optical applications, access to ESA, TPM & Chinese EO data**

08:30- 09:30	<b>Registration</b>		
	<b>Official Welcome:</b>		
09:30-10:15	- SKLEC / ECNU representative		TBC, ECNU
	- NRSCC representative		TBC, NRSCC
	- ESA representative		Dr. Yves-Louis Desnos
10:15-10:30	<b>Overview of the Training Course: Practical aspects, organisation and logistics</b>		Prof. Zhou Yunxuan Dr. Peter Regner
10:30-11:20	<i>Photo call &amp; break</i>		
11:20-11:55	<b>Present and future Chinese satellite missions for ocean remote sensing</b>		Prof. Pan Delu
11:55-12:30	<b>Present and future ESA satellite missions for ocean remote sensing</b>		Dr. Yves-Louis Desnos
12:30-14:00	<i>Lunch</i>		
14:00-15:00	<b>Oceanography from Space, including ERS, Envisat, SMOS, Cryosat, GOCE</b>		Dr. Paolo Cipollini
15:00-15:30	<b>Dragon projects in Ocean research: SAR applications, Internal and ocean waves, shallow water topography, wind speed &amp; ocean currents</b>		Prof. Werner Alpers
15:30-16:00	<b>Dragon projects in Ocean research: Ocean colour studies</b>		Prof. Pan Delu
16:00-16:30	<i>Break</i>		
16:30-17:00	<b>Access to ESA &amp; TPM EO data</b>		Dr. Andy Zmuda
17:00-17:30	<b>Access to Chinese EO data</b>		CRESDA (TBC)
18:30-20:00	<b>Welcome social event (venue TBD)</b>		

**Day 2 - Tuesday 25 October: Radar Altimetry (RA)**

08:30 - 09:30	<b>Lecture 1 - Principles of radar altimetry</b>	<b>Dr. Paolo Cipollini</b>
09:30 - 10:30	<b>Lecture 2 - Altimeter data processing</b>	<b>Dr. Paolo Cipollini</b>
10:30 - 11:00	<i>Break</i>	
11:00 - 12:30	<b>RA Practical 1: BRAT basics: example of SSH computation from along-track altimetric data</b>	<b>Dr. Vinca Rosmorduc</b>
12:30 - 14:00	<i>Lunch</i>	
14:00 - 14:45	<b>Lecture 3 - Altimetry and oceanography</b>	<b>Dr. Paolo Cipollini</b>
14:45 - 15:30	<b>Lecture 4 - Applications of altimetry in Chinese seas</b>	<b>Prof. Zhang Jie</b>
15:30 - 16:00	<i>Break</i>	
16:00 - 18:00	<b>RA Practical 2: BRAT mapping and statistical functions (high-level gridded altimetric data) I Demonstration of Cryosat data processing.</b>	<b>Dr. Vinca Rosmorduc</b>
18:30 - 21:00	<i>Poster Session</i>	

**Day 3 – Wednesday 26 October: Medium Resolution Imaging Spectrometer (MERIS)**

08:30 - 09:15	<b>Lecture 1 - Introduction into Ocean Colour remote sensing using MERIS</b>	<b>Dr. Roland Doerffer</b>
09:15 - 10:30	<b>Lecture 2 - Atmospheric correction and Coastal Water Algorithms</b>	<b>Dr. Roland Doerffer</b>
10:30 - 11:00	<i>Break</i>	
11:00 - 12:30	<b>Practical 1: MERIS data and BEAM Toolbox principles</b>	<b>Dr. Carsten Brockmann Dr. Roland Doerffer</b>
12:30 - 14:00	<i>Lunch</i>	
14:00 - 14:45	<b>Lecture 3 – The use of MERIS &amp; TPM data for ocean color applications in Chinese coastal areas</b>	<b>Prof. Shen Fang</b>
14:45 – 15:30	<b>Practical 2: Practical exercises with BEAM using MERIS and SMOS data</b>	<b>Dr. Roland Doerffer Supported by Dr. Carsten Brockmann and Prof. Shen Fang</b>
15:30 - 16:00	<i>Break</i>	
16:00 - 18:00	<b>Practical 2 (continue)</b>	<b>Dr. Roland Doerffer Supported by Dr. Carsten Brockmann and Prof. Shen Fang</b>

**Day 4 – Thursday 27 October: Advanced Synthetic Aperture Radar (ASAR)**

08:30-09:30	<b>Lecture 1 - SAR instrument principles, imaging mechanisms and processing</b>	<b>Prof. Johnny A. Johannessen</b>
09:30 - 10:30	<b>Lecture 2 - SAR instrument principles, imaging mechanisms and processing (continue)</b>	<b>Prof. Johnny A. Johannessen</b>
10:30 - 11:00	<i>Break</i>	
11:00 - 12:30	<b>ASAR Practical 1: SAR processing and analyses tools</b>	<b>Dr. Fabrice Collard</b>
12:30 - 14:00	<i>Lunch</i>	
14:00 - 14:45	<b>Lecture 3 - SAR image interpretation and detection capabilities</b>	<b>Prof. Johnny Johannessen</b>
14:45 - 15:30	<b>Lecture 4 – SAR applications in the China Seas</b>	<b>Prof. Meng Junmin</b>
15:30 - 16:00	<i>Break</i>	
16:00 - 18:00	<b>ASAR Practical 2: Tools applied to SAR images for the China Seas</b>	<b>Dr. Fabrice Collard Supported by Profs. Meng Junmin &amp; Johnny A. Johannessen</b>

**Day 5 – Friday 28 October: Advanced Along Track Scanning Radiometer (A)ATSR**

08:30 - 09:30	Lecture 1 - SST Observations of Large-Scale Ocean processes	Dr. Craig Donlon
09:30 - 10:30	Lecture 2 - Measuring SST from Space	Prof. David Llewellyn-Jones
10:30 - 11:00	<i>Break</i>	
11:00 - 12:30	AATSR Practical 1 - The AATSR Global Analyser	Prof. David Llewellyn-Jones
12:30 - 14:00	<i>Lunch</i>	
14:00 - 15:30	AATSR Practical 2: Bilko - an Introduction to SST image Analysis	Dr. Craig Donlon
15:30 - 16:00	<i>Break</i>	
16:00 - 17:00	AATSR Practical 2: Bilko - <i>Continued</i>	Dr. Craig Donlon
18:30 - 20:00	<i>Social Event</i>	

**Day 6 - Saturday 29 October: Models, Data Assimilation & Climate Variables**

09:00 - 09:30	<b>Lecture 1 - Observations, Models and Environmental Prediction</b>	<b>Prof. David Llewellyn-Jones</b>
09:30 - 10:30	<b>Lecture 2 - Synergy between optical, infrared and microwave sensors for ocean remote sensing applications</b>	<b>Prof. Johnny Johannessen</b>
10:30 - 11:00	<i>Break</i>	
11:00 - 11:45	<b>Lecture 3 - The marine component of ESA's Climate Change Initiative Ocean</b>	<b>Dr. Craig Donlon</b>
11:45 - 12:45	<b>Training Course Summary Certificates Closing</b>	<b>Dr. Peter Regner NRSCC, SKLEC, ESA &amp; lecturers Prof. Zhou Yunxuan</b>