

Land Training Course Wuhan University, P.R.China [13-18 October 2008]



ESA-MOST Dragon 2 Programme

2nd Advanced Training Course in Land Remote Sensing

Day 1: Monday 13 October

08:30-09:00	Registration		
Opening session			
9:00-9:30	Introduction and opening		Officials
	Wuhan University		Prof. Zhou Chuangbing
	LIESMARS		Prof. Li Diren
	NRSCC		Prof. Li Zengyuan
	ESA		Mr. Yves-Louis Desnos
	Award the guest Prof's certification for European lecturers by LIESMARS		Prof. Li Diren Prof. Gong Jianya
09:30-10:00	Coffee break and group picture		
10:00-10:30	Overview of the training		Prof. Mingsheng Liao
10:30-11:15	ESA EO missions for land remote sensing	D1L1	Mr. Yves-Louis Desnos
11:15-12:00	Chinese EO missions for land remote sensing	D1L2a	Prof. Li Xingchao
11:45-12:15	Chinese Instrument data access	D2L2b	Prof. Li Xingchao
12:15-13:30	Lunch		
Overview of relevant EO instruments and data exploitation			
13:30-14:30	Optical range:		
	MERIS and PROBA-CHRIS	D1L3a	Prof. Wout Verhoef
	Beijing-1, CBERS and HJ1A	D1L3b	Prof. Li Xingchao
14:30-15:00	Thermal range:		
	(A)ATSR	D1L4a	Prof. Bob Su
	CBERS, HJ-1B, FY	D1L4b	Prof. Li Xingchao
15:00-15:30	Coffee break		
15:30-16:30	Microwave 1:		
	(A)SAR and ALOS-PALSAR	D1L5a	Dr. Yves-Louis Desnos
16:30-17:15	Microwave 2:		
	SMOS-MIRAS and (A)SCAT	D1L6	Prof. Bob Su
18:30-20:00	Social event (all participants)		

Day 2: Tuesday 14 October



EO data access and Dragon 2 land projects

8:30-9:00	ESA and TPM instrument data access	D2L1	<i>Dr. Andy Zmuda</i>
9:00-09:30	Registration demo: identification and retrieval of data for later practical sessions-EOLI SA, rolling archive	D2L2	<i>Dr. Herve Yesou</i>
09:30-10:15	Practical on EOLI-SA	D2P1	<i>Dr. Herve Yesou</i>
10:00-10:30	<i>Coffee break</i>		
10:30-12:00	Review of Dragon 2 Land Projects (10mn each): 5314 Forests 5317 Urban 5319 Croplands 5344 POLINSAR 5264 Floods 5297 Terrain motion 5341 Drought	D2L3 D2L3a D2L3b D2L3c D2L3d D2L3e D2L3f D2L3g	 <i>Dr. Thuy Le Toan</i> <i>Prof. Ban Yifang</i> <i>Dr. Thuy Le Toan</i> <i>Prof. Eric Poittier</i> <i>Dr. Herve Yesou</i> <i>Prof. Fabio Rocca</i> <i>Prof. Bob Su</i>
12:00-13:30	<i>Lunch</i>		

Basics theory (split session, SAR)

	<i>(SAR students-Optical/Thermal basics)</i>	<i>(Optical students-SAR basics)</i>	
13:30-14:30	D2L4a Radiative transfer basics <i>Prof. Wout Verhoef</i>	D2L4b Introduction to SAR remote sensing <i>Dr. Thuy Le Toan</i>	
14:30-15:30	D2L5a Atmospheric corrections and parameter retrieval <i>Prof. Wout Verhoef</i>	D2L5b Introduction to InSAR <i>Prof. Fabio Rocca</i>	
15:30-16:00	<i>Coffee break</i>		
16:00-17:00	D2L6a Surface Energy Balance Basics <i>Prof Bob Su</i>	D2L6b Polarimetry Basics <i>Prof. Eric Pottier</i>	

Day 3: Wednesday 15 October 2008

Advanced theory (split session)

	<i>(SAR students-Advanced SAR)</i>	<i>(Optical students - Advanced Optical/Thermal)</i>	
8:30-10:00	D3L1a Advanced interferometry <i>Prof. Fabio Rocca</i>	D3L1b Radiative transfer and retrievals <i>Prof. Wout Verhoef</i>	
10:00-10:30	<i>Coffee break</i>		
10:30-12:00	D3L2a Advanced Polarimetry	D3L2b Surface Energy Balance System <i>Prof. Bob Su</i>	

	Prof. Eric Pottier		
12:00-13:30	Lunch		
Introduction to software tools			
13:30-14:30	BEAM	D3P1	Dr. Andy Zmuda
14:30-15:30	NEST	D3P2	Dr. Andy Zmuda
15:30-16:00	Coffee break		
16:00-17:30	POLSARPRO	D3P3	Prof. Eric Pottier
17:30-18:30	Optional advanced POLSARPRO	D3P4	Prof. Eric Pottier

Day 4: Thursday 16 October

Land resources lectures			
8:30-9:30	Land Use Land Cover, Urban expansion	D4L1	Prof. Yifang Ban
9:30-10:30	Agricultural applications	D4L2	Dr. Thuy Le Toan
10:30-11:00	Coffee break		
11:00-12:00	Forest monitoring	D4L3	Dr. Thuy Le Toan
12:00-13:30	Lunch		
Land resources practicals			
13:30-15:30	Rice monitoring practicals	D4P1	Dr. Thuy Le Toan
15:30-16:00	Coffee break		
16:00-17:30	Change detection practicals	D4P2	Prof. Yifang Ban
17:30-19:00	Optional - Forest tomography with POLSARPRO	D4P3	Prof. Eric Pottier

Day 5: Friday 17 October

Terrain motion			
8:30-9:30	Lecture - Terrain motion applications	D5L1a	Prof. Fabio Rocca
9:30-10:30	Lecture - Terrain motion, SAR processing and information extraction(part 1)	D5L1b	Dr. Daniele Perissin
10:30-11:00	Coffee break		
11:00-12:00	Lecture - Terrain motion, SAR processing and information extraction(part 2)	D5L1b(cont.)	Dr. Daniele Perissin
12:00-13:30	Lunch		
Flood monitoring			
13:30-14:30	Lecture - Flood monitoring (Yesou)	D5L2	Dr. Herve Yesou
14:30-15:30	Practicals-Flood monitoring (part 1)	D5P1a	Dr. Herve Yesou
15:30-16:00	Coffee break		
16:00-18:00	Practicals-Flood monitoring (part 2)	D5P1b	Dr. Herve Yesou

Day 6: Saturday 18 October

Water resources			
8:30-9:30	Lecture-Water resource applications	D6L1	<i>Prof. Bob Su</i>
9:30-10:30	Practicals-water resources (part 1)	D6P1a	<i>Prof. Bob Su</i>
10:30-11:00	<i>Coffee break</i>		
11:00-12:00	Practicals-water resources (part 2)	D6P1b	<i>Prof. Bob Su</i>
12:00-13:30	<i>Lunch</i>		
<i>Closing session</i>			
13:30-14:00	Training course summary (ESA-LIESMARS)		
14:00-15:00	Closing words-Certificates		