



WMO-CGMS Virtual Laboratory  
for Education and Training in Satellite Meteorology

## **ACTIVITY REPORT**

Period: September 2012 to December 2013  
Satellite Operator/Agency: EUMETSAT

**GENERAL INFORMATION ABOUT THE SUPPORT OFFERED TO VLAB CENTRE(S) OF EXCELLENCE (CoE) AND THE DEVELOPMENT OF VLAB TRAINING ACTIVITIES**

**1) Which VLab CoE(s) is(are) supported by this Satellite Operator/Agency?**

Morocco, Niger, Kenya, South Africa, Oman

**2) What were the major achievements in supporting VLab CoE(s) during this reporting period?**

Implementation of the online course with Niger and Kenya, implementation of a marine course with South Africa, and new RFGs from Morocco and Oman.

**3) What were the main difficulties in supporting VLab CoE(s) during this reporting period?**

Understanding the user needs and designing courses based on need.

**4) Is any kind of Learning Management System (e.g. Moodle, Blackboard, etc) used by this Satellite Operator/Agency to conduce training activities? If so, can it be shared with the CoEs you support?**

Moodle, Yes it is shared. Oman use their own Moodle.

**5) Is any kind of Online Conferencing System (e.g. Saba Centra, Blackboard Collaborate, GoToWebinar, etc) used by this Satellite Operator/Agency to conduce training activities? If so, can it be shared with the CoEs you support?**

Saba – yes it is shared and used extensively.

**6) Can you suggest ways for the VLab (including CoEs, Supporting Satellite Agencies, Partner Programmes, WMO Space Programme, VLab Co-chairs and TSO) to provide better support to the training activities of this Satellite Operator/Agency?**

**7) Does this Satellite Operator/Agency has a website dedicated to explain its involvement and support to VLab (as indicated in the document “Expectations from Satellite Operators)? If so, please provide URL.**

Yes

<http://www.eumetsat.int/website/home/Data/Training/VirtualLaboratory/index.html?lang=EN>

**8) Do you maintain regular contact with the other VLab Supporting Satellite Operators/Agencies to discuss data access and format issues as well as training needs to improve the use of satellite data and products? Can you suggest ways of improving this contact?**

Data and formats are discussed through wider organisational collaboration. Some discussion at CGMS, no other discussion on coordinated support to Africa and Middle East. Marine coordinated with NOAA. Training is part of NOAA-EUMETSAT agreement/

**9) Please use the table below to list any training materials you may have developed over this reporting period:**

Title of training material	Type of resource (e.g. text book, video, recorded presentation, Moodle course, webcast, PowerPoint slides)	Availability of resource (e.g. open educational resource <sup>1</sup> , institutional use only)	Submitted to ESRC (Yes/No)
ASMET materials	Modules	Open	Available in COMET
Dust - Africa	Simulation	Open	Email EUM
Fog – Middle East	Simulation	Open	Soon on website
Modules – EUMeTrain		Open	On website
Image and training resources	Case studies / images / lecture slides	Open	On website

**10) Is this Satellite Operator/Agency working closely together with the supported CoE(s) in VLab training activities? Can you suggest ways to improve this collaboration?**

Yes – undertaking an evaluation / impact survey to guide development. Moving the ownership of the course from EUMTSAT owned to more partnership.

**11) Please use this space for additional remarks you may wish to make relating to the delivery of training by the Satellite Operator/Agency and the sponsored CoE(s).**

We are aligning our processes with the WMO guidelines on training and the outcomes of our courses with WMO-1083 and the competencies as they are published.

<sup>1</sup> Please also indicate if the Creative Commons License was applied to the resource.



**12) The next page presents a table containing all training events entered by this Satellite Operator/Agency in the VLab Online Calendar of Events during this reporting period. Please complete the table with information about the number of trainees and Country of origin of trainees that attended the events. If additional events had been conducted as part of your VLab activities, that for some reason were not submitted to the Online Calendar of Events, please add them to the table.**

Date	Title	Location	WMO region	Host	Type	Language	Number of trainees	Country of origin of trainees
2012/09/17 - 2012/09/19	RGB Workshop	Seeheim-Jugenheim, Germany	Global	WMO-EUMETSAT	Classroom	English	30	Australia Austria Brazil China Germany India Japan Kenya Korea Morocco Niger Portugal South Africa Switzerland USA
2012/02/11 - 2012/02/22	EUMETSAT Satellite Application Course (ESAC-ME-VIII)	Muscat, Oman	I Africa	EUMETSAT - Sultan Qaboos University	Classroom	English	19	Bahrain Egypt Iraq Kuwait Jordan Morocco Oman Qatar Saudi Arabia United Arab Emirates Yemen
2012/03/27 - 2012/03/30	Convection Working Group Workshop 2012	Prague, Czech Republic	VI Europe	EUMETSAT - Czech Hydrometeorological Institute	Classroom	English	53	Austria Bulgaria Brazil Czech Republic Croatia Finland Germany Hungary Israel Italy

								Japan Korea Poland Slovakia Slovenia South Africa Spain Switzerland Turkey Ukraine USA
2012/04/02 - 2012/04/06	RFG III Workshop (Groupe Focal Regional de l'Afrique de l'Ouest)	Niamey, Niger	I Africa	EUMETSAT - EAMAC	Classroom	French	11	Bénin Burkina Faso Côte d'Ivoire Mali Mauritanie Niger Senegal Togo
2012/04/23 - 2012/04/27	2nd Satellite Application Course for Southern Africa Pretoria	Pretoria, South Africa	I Africa	EUMETSAT - SAWS	Classroom	English	11	Angola Dem. Rep. Congo Malawi Mauritius Mozambique Namibia Seychelles Swaziland Tanzania Zambia Zimbabwe
2012/05/07 - 2012/05/11	NOMEK 2012	Copenhagen , Denmark	VI Europe	EUMETSAT - The Danish Meteorological Institute (DMI)	Classroom	English	25	Denmark Estonia Finland Iceland Latvia

								Lithuania Norway Sweden
2012/05/14 - 2012/05/19	Storm Top Features as Observed from Satellite Imagery Training Workshop	Istanbul, Turkey	VI Europe	EUMETSAT - Aristotle University of Thessaloniki and The Turkish State Meteorological Service (TSMS)	Classroom	English	22	Azerbaijan Bosnia and Herzegovina Bulgaria Croatia Greece Jordan Macedonia Qatar Turkey
2012/06/03 - 2012/06/28	EUMETSAT- ESSL- Testbed 2012	Wiener Neustadt, Austria	VI Europe	EUMETSAT - ESSL Research and Training Centre in Wiener Neustadt	Classroom	English	10	Bulgaria Czech Rep. Latvia Lithuania Serbia Slovakia Slovenia
2012/06/11 - 2012/06/19	International Summer School on Applications with the Newest Multi- spectral Environmental Satellites 2012	Bracciano, Italy	VI Europe	EUMETSAT	Classroom	English	22	Brazil Czech Rep. Finland Germany Greece Hungary Italy Kenya Latvia Lithuania Russian Federation Serbia South Africa Turkey

2012/08/06 - 2012/08/17	EUMETSAT Satellite Application Course (ESAC-X-E)	Nairobi, Kenya	I Africa	EUMETSAT - Kenya Meteorological Department (KMD)	Classroom	English	23	Egypt Gambia Kenya Lesotho Madagascar Mauritius Mozambique Namibia Nigeria Rwanda Seychelles Sudan Tanzania Togo Uganda Zambia Zimbabwe
2012/10/08 - 2012/10/12	Sixth Meeting of the Virtual Laboratory Management Group VLMG-6	Sao Jose dos Campos, Brazil	III South America	VLab Centre of Excellence in Brazil	Classroom	English	4?	Kenya Morocco Niger South Africa
2012/10/15 - 2012/10/26	IX Curso Iberoamericano de Meteorología Satelital	Santo Domingo, Rep. Dominicana	III South America	EUMETSAT - AEMET	Classroom	Spanish	20	Bolivia Brasil Colombia Costa Rica Cuba Ecuador El Salvador Guatemala Honduras México Nicaragua Panamá Paraguay Perú



								República Dominicana Venezuela
2012/11/05 - 2012/11/09	Atmospheric Mineral Dust Training Course	Barcelona, Spain	VI Europe	EUMETSAT - AEMET	Classroom	English	19	Argentina Gambia Germany Korea Morocco Niger Spain Tunisia
2012/11/05 - 2012/11/09	Baltic Course	Darmstadt, Germany	VI Europe	EUMETSAT	Classroom	English	7	Estonia Latvia Lithuania
2012/11/19 - 2012/11/30	ESAC-X-F 2012	Niamey, Niger	I Africa	EUMETSAT - EAMAC	Classroom	French	22	Algeria Burkina Faso Burundi Cameroon Cape Verde Central African Republic Congo Côte D'Ivoire Gabon Guinea Guinea-Bissau Mali Mauritania Morocco Rwanda Senegal Tunisia

2012/11/19 - 2012/11/23	Cours sur l' utilisation des produits satellitaires aux applications agrometeorologiques	Niamey, Niger	I Africa	EUMETSAT - WMO	Classroom	French	12	Benin Burkina Faso Cape Verde Côte d' Ivoire Guinea Bissau Guinea Conakry Mali Mauritania Niger Senegal Togo Tchad
2012/12/03 - 2012/12/07	ASMET 6 Meeting	Darmstadt, Germany	VI Europe	EUMETSAT	Classroom	English	7	Kenya Niger South Africa USA
2013/02/09- 2013/02/21	EUMETSAT Satellite Application Course (ESAC-ME-IX)	Muscat, Oman	I Africa	EUMETSAT - Sultan Qaboos Universitiy	Classroom	English	22	Bahrain Egypt Iraq Jordan Lebanon Oman Qatar Saudi Arabia United Arab Emirates Yemen
2013/02/04 - 2013/02/08	EUMETSAT Precipitation Week 2013	Online	VI Europe	EUMETSAT	Event Week	English	8	France Israel Italy South Africa Spain USA
2013/03/18 - 2013/03/22	3rd Salgee Course	Ericeira, Portugal	VI Europe	EUMETSAT	Classroom	English	13	Armenia Belgium

								Bulgaria Italy Spain Turkey Ukraine United Kingdom USA
2013/04/15 - 2013/04/19	NOMEK 2013	Vilnius, Lithuania	VI Europe	LHMT	Classroom	English	12	Denmark Estonia Finland Iceland Latvia Norway Sweden
2013/04/01 - 2013/04/06	Using Sat Products In Met & Ocean	Kalliningrad, Russian Federation	VI Europe	EUMETSAT - Center of Hydrometeorologic al Service (Uzhydromet)	Classroom	English	2	Uzbekistan
2013/05/07 - 2013/05/07	Satellite Direct Readout - EPS Metop - instruments, products and service	Online	VI Europe	EUMETSAT	Online	English	13	Argentina Barbados Brazil Central African Republic El Salvador Finland France Germany Guyana Indonesia Ireland Niger Oman Russian Federation Trinidad and Tobago UK

								USA
2013/05/08 - 2013/05/08	Satellite Direct Readout - EPS Direct Readout and Processing Tools	Online	VI Europe	EUMETSAT	Online	English	12	Argentina Barbados Brazil Ethiopia Finland Germany Ireland Niger Oman Russia Trinidad and Tobago UK USA
2013/05/20 - 2013/05/24	Training Course for Satellite Meteorology	Casablanca, Morocco	I Africa	EUMETSAT - (Direction de la Meteorologie nationale du Maroc (DMN))	Classroom	French	8	Burkina Faso Guinea Ivory Coast Mali Mauritainie Niger Tunisia
2013/06/03 - 2013/06/07	European Conferences on Severe Storms (ECSS)	Helsinki, Finland	VI Europe	EUMETSAT - (Scandic Marina Congress Center)	Classroom	English	7	Croatia Czech Rep. Hungary Serbia Slovakia Slovenia
2013/06/10 - 2013/06/14	The use of satellite products for agrometeorological applications	Accra, Ghana	I Africa	EUMETSAT - The Ghana Meteorological Agency	Classroom	English	2	Tanzania Uganda
2013/06/10 - 2013/06/18	International School on Applications with the Newest Multi-spectral	Bracciano, Italy	VI Europe	EUMETSAT	Classroom	English	13	Croatia Estonia Hungary

	Environmental Satellites 2013							Latvia Lithuania Oman Serbia Slovakia Spain Turkey Ukraine
2013/06/17 - 2013/06/21	EUMETCal Radar Course	Langen, Germany	VI Europe	EUMETSAT - DWD	Classroom	English	3	Latvia Lithuania Romania
2013/06/24 - 2013/06/28	ASMET 7 Meeting	Nairobi, Kenya	I Africa	EUMETSAT - Kenya Meteorological Department (KMD)	Classroom	English	5	Niger South Africa USA
2013/06/20 - 2013/07/26	EUMETSAT- ESSL- Testbed 2013	Wiener Neustadt, Austria	VI Europe	EUMETSAT - ESSL Research and Training Centre in Wiener Neustadt	Classroom	English	13	Czech Rep. Estonia Hungary Latvia Lithuania Portugal Slovakia Slovenia Spain USA
2013/07/01 - 2013/07/05	EUMETSAT Satellite Application Course (ESAC-XI-E)	Nairobi, Kenya	I Africa	EUMETSAT - Kenya Meteorological Department (KMD)	Classroom	English	14	Cape Verde Egypt Ethiopia Gambia Ghana Liberia Malawi Mauritius Mozambique Sierra Leone

								South Africa Sudan Zambia Zimbabwe
2013/09/16 - 2013/09/27	CURSO ' APLICACIONES SATELITALES A LA METEOROLOGIA DE LATITUDES MEDIAS	Montevideo, Uruguay	III South America	EUMETSAT - DNM	Classroom	Spanish	19	Argentina Bolivia Brazil Chile Paraguay Peru Uruguay
2013/09/30 - 2013/10/04	Training Workshop on the use of satellite data and products in studying and forecasting extreme weather events	Thessaloniki, Greece	VI Europe	EUMETSAT - Aristotle University of Thessaloniki	Classroom	English	14	Bosnia and Herzegovina Bulgaria Croatia Cyprus Egypt Greece Macedonia Romania Serbia Turkey Zimbabwe
2013/10/07 - 2013/10/11	EUMETSAT / CM SAF Training Workshop on "The Use of Satellite Data for Climate Applications in high latitudes"	Helsinki, Finland	VI Europe	EUMETSAT - Finnish Meteorolog ical Institute	Classroom	English	16	Croatia Egypt Estonia Germany Hungary Italy Latvia Lithuania Poland Portugal Russian Federation Spain Ukraine

2013/10/07 - 2013/10/11	SADCA End User Training	Ankara, Turkey	VI Europe	EUMETSAT - Turkish Met Service	Classroom	English	12	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
2013/10/21 - 2013/10/23	Workshop on Satellite Products in Support of Environmental Applications	Esporles, Mallorca	VI Europe	EUMETSAT - Institut Mediterrani d'Estudis	Classroom	English	41	France Germany Portugal Spain
2013/11/05 - 2013/11/07	UZALMET	Antalya, Turkey	VI Europe	EUMETSAT - Turkish Met Service	Classroom	English	34	Turkey
2013/11/25 - 2013/11/29	ESAC-XI-F	Niamey, Niger	I Africa	EUMETSAT - EAMAC	Classroom	French	16	Algeria Benin Burkina Faso Burundi Cape Verde Comoros Ivory Coast Guinea Guinea-Bissau Mali Mauritania Rwanda Togo Tunisia
2013/12/02 - 2013/12/06	3rd MSG Satellite Application Course	Pretoria, South Africa	I Africa	EUMETSAT - SAWS	Classroom	English	13	Congo Czech Rep. Lesotho Madagascar Malawi Mauritius Mozambique Namibia Seychelles

								Swaziland Tanzania Zambia Zimbabwe
2013/12/09 - 2013/12/13	Marine Ocean Course	Pretoria, South Africa	I Africa	EUMETSAT - NOAA	Classroom	English	6	Kenya Morocco Mauritius Niger Seychelles Tanzania
2013/12/08 - 2013/12/16	Dust Course	Muscat, Oman	I Africa	EUMETSAT - (Sultan Qaboos Universitiy)	Classroom	English	33	Bahrain Egypt Iran Iraq Nigeria Oman Qatar Saudi Arabia Sudan United Arab Emirates
2014/02/03 - 2014/02/07	Weather Simulator for Instruction and Assesment	Langen, Germany	VI Europe	EUMETSAT - DWD BTZ	Classroom	English	21	Argentina Austria Bulgaria Denmark Finland Iceland Italy Latvia Netherlands Norway Poland Portugal Romania Slovakia Sweden



								Switzerland
2014/02/10 - 2014/02/12	Practical use of EUMETSAT data 2014	Riga, Latvia	VI Europe	EUMETSAT - LEGMA	Classroom	English	27	Belarus Estonia Latvia Lithuania Poland Russian Federation
2014/02/16 - 2014/02/27	EUMETSAT Satellite Application Course (ESAC-ME-X)	Muscat, Oman	I Africa	EUMETSAT - (Sultan Qaboos University)	Classroom	English	26	Bahrain Egypt Jordan Lebanon Oman Saudi Arabia United Arab Emirates Yemen
2014/03/17 - 2014/03/21	DAWBEE Satellite Nowcasting Applications Workshop	Darmstadt, Germany	VI Europe	EUMETSAT	Classroom	English	24	Azerbaijan Armenia Albania Belarus Bosnia and Herzegovina Croatia Georgia Kosovo Macedonia Moldova Montenegro Serbia Ukraine
2014/04/07 - 2014/04/11	Convection Working Group Workshop 2014	Zagreb, Croatia	VI Europe	EUMETSAT	Classroom	English	43	Austria Brazil China Croatia Czech rep. Germany

								Hungary Israel Italy Japan Poland Slovakia Slovenia South Korea Spain Switzerland Taiwan Ukraine USA
2014/05/05 - 2014/05/09	Cours sur l'utilisation des produits satellitaires aux applications agro météorologiques	Ouagadougou, Burkina Faso	I Africa	EUMETSAT	Classroom	French	38	Benin Burkina Faso Cameroon Chad Côte d'Ivoire Guinea Guinea Bissau Italy Mali Mauritania Niger Senegal Togo
2014/05/19 - 2014/05/23	NOMEK 2014	Reykjavik, Iceland	VI Europe	EUMETSAT - Reykjavik University	Classroom	English	26	Denmark Estonia Finland Iceland Ireland Latvia Lithuania Norway Sweden

2014/06/10 - 2014/06/18	International Summer School on Applications with the Newest Multi- spectral Environmental Satellites 2014	Bracciano, Italy	VI Europe	EUMETSAT	Classroom	English	16	Belgium Czech Republic Estonia Germany Hungary Kenya Italy Latvia Romania Turkey Ukraine
2014/06/23 - 2014/07/04	ASMET 8 Meeting	Darmstadt, Germany	VI Europe	EUMETSAT	Classroom	English	11	Kenya Morocco Niger South Africa USA
2014/06/01 - 2014/06/27	EUMETSAT- ESSL- Testbed 2014	Wiener Neustadt, Austria	VI Europe	EUMETSAT - ESSL Research and Training Centre in Wiener Neustadt	Classroom	English	5	Croatia Estonia Latvia Lithuania Romania
2012/09/13 - 2012/09/13	ePort Weather Briefing	Online	VI Europe	EUMeTrain	RFG session	English		
2012/10/18 - 2012/10/18	ePort Weather Briefing	Online	VI Europe	EUMeTrain	RFG session	English		
2012/11/05 - 2012/11/09	Polar Satellites Week	Online	VI Europe	EUMeTrain	RFG session	English		
2012/11/27 - 2012/11/27	ePort Weather Briefing	Online	VI Europe	EUMeTrain	RFG session	English		
2012/12/18 - 2012/12/18	ePort Weather Briefing	Online	VI Europe	EUMeTrain	RFG session	English		
2013/01/24 - 2013/01/24	ePort Weather Briefing	Online	VI Europe	EUMeTrain	RFG session	English		
2013/02/19 -	ePort Weather Briefing	Online	VI	EUMeTrain	RFG session	English		



2013/02/19			Europe					
2013/03/19 - 2013/03/19	ePort Weather Briefing	Online	VI Europe	EUMeTrain	RFG session	English		
2013/04/18 - 2013/04/18	ePort Weather Briefing	Online	VI Europe	EUMeTrain	RFG session	English		
2013/05/20 - 2013/05/24	World Wide Weather Briefing - Event Week 2013	Online	VI Europe	Online	Event Week	English		
2013/06/13 - 2013/06/13	ePort Weather Briefing 09 UTC	Online	VI Europe	EUMeTrain	RFG session	English		
2013/07/11 - 2013/07/11	ePort Weather Briefing 09 UTC	Online	VI Europe	EUMeTrain	RFG session	English		
2013/08/08 - 2013/08/08	ePort Weather Briefing 09 UTC	Online	VI Europe	EUMeTrain	RFG session	English		
2013/10/21 - 2013/10/21	ePort Weather Briefing 09 UTC	Online	VI Europe	EUMeTrain	RFG session	English		
2013/10/28 - 2013/11/29	Marine Forecasting Course	Online	VI Europe	IPMA	Online course	English		
2013/11/14 - 2013/11/14	ePort Weather Briefing 09 UTC	Online	VI Europe	EUMeTrain	RFG session	English		
2013/11/18 - 2013/11/22	NoWCasting SAF - Event Week 2013	Online	VI Europe	Online	Event week	English		
2013/12/17 - 2013/12/17	ePort Weather Briefing 10 UTC	Online	VI Europe	EUMeTrain	RFG session	English		