

Using Earth Observation for Water Quality Monitoring

Workshop Programme

Day 1: Tuesday 13 th October	
13:00	Chair: Emily Sym, Joint Nature Conservation Committee Introduction to workshop
Session	1: Monitoring water quality from space – challenges and opportunities
13:10	Christine Maggs, Joint Nature Conservation Committee Environmental and policy context for water quality monitoring
13:30	Carsten Brockmann, Brockmann Consult Copernicus sensors, data and products
14:10	Questions See 'Information for Attendees' handout for how to ask questions via <u>MeetingPulse</u>
14:30	Break
Session 2: Marine applications	
14:45	Lauren Biermann, Plymouth Marine Laboratory Marine litter and plastic pollution
15:00	Andrey Kurekin, Plymouth Marine Laboratory Oil spill detection using radar satellite imagery
15:15	Mickaël Vasquez, Ifremer and EMODnet Seabed Habitats Using Earth Observation products in seabed habitat mapping
15:30	Questions
15:45	Break
15:55	Keith Cooper, Cefas Monitoring sediment disturbance using Sentinel-2
16:10	Shubha Sathyendranath, Plymouth Marine Laboratory Ocean Colour Climate Change Initiative (OC-CCI) Essential Climate Variable
16:25	Mike Best, Environment Agency Using Sentinel-3 products for detecting eutrophication and harmful algal blooms
16:40	Questions
17:00	Session close

Day 2: Wednesday 14 th October		
13:00	Chair: Paula Lightfoot, Joint Nature Conservation Committee	
	Introduction to second day	
Session 3: Freshwater applications		
13:10	Andrew Tyler, University of Stirling	
	Response of lakes to climate change – the GloboLakes project	
13:25	Evangelos Spyrakos, University of Stirling	
40-40	Using earth observation to monitor cyanobacteria	
13:40	Questions	
13:55	Break	
14:05	Claire Neil, Scottish Environment Protection Agency	
	Monitoring eutrophication using a chlorophyll-a product derived from Sentinel-2	
14:20	Stefan Simis, Plymouth Marine Laboratory	
	Integrating satellite remote sensing and in situ monitoring in Water Framework Directive waterbodies (MONOCLE project)	
14:35	Christopher Merchant, University of Reading	
	Climate Change Initiative Essential Climate Variables for Lakes	
14:50	Questions	
15:05	Break	
Session 4: Future developments		
15:15	Steve Greb, Geo AquaWatch	
	EO for water quality monitoring – the global perspective and future opportunities	
15:30	Tiago Silva, Cefas	
	Benefits of data cubes for water quality monitoring	
15:45	Andrew Tyler, University of Stirling	
	Living Laboratory prototype for Forth Valley – combining EO with Internet of Things and Artificial Intelligence	
16:00	Steve Groom, Plymouth Marine Laboratory	
	CERTO – harmonising water quality products from oceans to freshwater	
16:15	Questions	
16:30	Break	
16:40	Discussion: Innovation through to impact – linking policy priorities to R&D	
	Introduction by Jon Hicks, Defra Earth Observation Centre of Excellence	
17:30	Workshop close	