



smos+
storms


support to science element

ESA Support to Science Element

-SMOS+STORM Evolution – Workshop - AGENDA 15-17 November 2016

ESA Contract Change Notice No. 4000105171/12/I-BG

Customer	ESA/ESRIN
ESA Contract Change Notice No	4000105171/12/I-BG
Document Reference	SMOSpluSTORMEvolution_MoM_PM7-MTR
Version/Rev	1.0

	Function	Name	Signature	Date
Prepared by/Lead Author	Project Manager & Consortium	Nicolas Reul IFREMER, Met Office, Ocean Datalab		31 March 2016
Accepted by	ESA technical Officer	Craig Donlon		

SUMMARY

DAY 1: Measurements	3
DAY 2 : Applications	4
DAY 3 - (09:00)	5

DAY 1: Measurements

Registration **08:30-09:15**

1. Introduction 09:00

Welcome (UKMO) 15'

Welcome (ESA) 15'

2. Setting the Scene

Keynote1: State of the Art for measurement of extreme winds over the ocean (Emmanuel/Powell) 30'

Keynote2: Extreme winds over the ocean in a future world (Adam Scaife?) 30'

COFFEE 10:30-11:00

3. Satellite measurement techniques 1 (6 talks 20' min incl. 5' Q&A)

List of Topics for EO measurement techniques for Sessions 3, 4 and 5

L-Band

C-Band (Polarisation....)

SCAT

SAR (Wind - S1 new results)

Atmospheric Motion Vectors (AMV)

GNSSR

ALT

SAR (Waves, CFOSAT)

Lunch 13:00-14:00

4. Satellite measurement techniques 2 (4 talks 20' min incl. 5' Q&A, ~1 hour discussion)

TBC from above list

15:30-16:00 COFFEE

5. Satellite measurement techniques 3 (2 talks 20' min incl. 5' Q&A, ~1 hour discussion)

TBC from above list

Keynote pre-discussion setting scene: Sensor Physics and the complementarity of ocean surface satellite measurements. (Chapron) 30'

16:50-17:45 Discussion: Challenges and priorities for satellite measurements of extreme ocean winds

Icebreaker and Poster session 1 in the Street 18:00-20:00

Transport back to Exeter Centre.

DAY 2 : Applications

6. Keynote: Setting the scene: Importance and impacts of ocean atmosphere coupling (eg. cyclogenesis and intensification) (TBD) ((30')

7. Applications and Challenges (Core business) 1 (3 talks 20' min incl. 5' Q&A)

Hurricane/extremes Forecasting

Storm surges

Ocean Waves

Polar Lows

White cap coverage?

COFFEE 10:30-11:00

8. Applications and Challenges 2 (Air-sea interaction?) (4 talks 20' min incl. 5' Q&A)

Seasonal/climate (el nino, shift of TC and ETC activity...)

Upper ocean dynamics (currents, mixing, inertial motion, internal waves etc)

Air-sea interaction (heat, gas, momentum Fluxes)

Biogeochemistry in extreme wind forcing (Freshwater/Amazon, Upwelling, blooms in wakes, Impacts before and after an extreme event)

Open Discussion

Lunch 13:00-14:00

9. NWP Applications and Challenges (ETC and TC) (6 talks 20' min incl. 5' Q&A)

1. ECMWF

2. UKMO

3. MEtoe France

4. NCEP/NWS???

5. JMA?

30' Discussion: Challenges to be addressed for better NWP in extremes

15:30-16:00 COFFEE

10. Numerical Ocean Prediction (NOP) Applications and Challenges (4 talks 20' min incl. 5' Q&A)

1. CMEMS

2. ROMS, HYCOM...

3.

4.

Discussion: Challenges to be addressed for better NOP in extremes

17:45 Close

DAY 3 - (09:00)
11. Ground/Aircraft measurements (4 talks 20' min incl. 5' Q&A) Drones SFMR... Dropsones Buoy <i>Discussion: Challenges to validate extreme winds</i>
COFFEE 10:30-11:00 12. Future directions? Orbit phasing...geo vs polar... NDoppler scat.. Coordination....Virtual constellations.... Future missions (TWIST, OSCM..) OSSE for number/phasing/type Blending....
Lunch 13:00-14:00
13: Keynote and Final discussions Aim Final coffee and Close at 15:30