Mesoscale and submesoscale posters ... 1

Mesoscale dynamics observed with altimetry

2342 On the permeability of the Malvinas Current, Bodnariuk

2206 Using kinetic energy measurements from altimetry to detect shifts in the positions of fronts in the Southern Ocean Chambers

2220 Influence of Mesoscale Eddies on the Deep Ocean Dynamics over the East Pacific Rise Liang –

2419 Effects of westward mountain-gap wind jets on the Red Sea Eastern Boundary Current and the mesoscale eddy field - Viviane

2444   Salinity advection and Rossby waves in northern Indian Ocean - Xie -

2235 Forcing of mesoscale eddy kinetic energy variability in the southern subtropical Indian Ocean, from satellite altimeter and scatterometer data - Delman –

2216 Diagnosing ocean eddy heat and salt fluxes from satellite altimetry and Argo profile data - Melnichenko

Altimetric wavenumber spectra

2411   Using ADCP data and altimetry to evaluate high-wavenumber variability in the California Current and the tropics – Gille

2207 - Global wavenumber spectra from SARAL/Altika observations – Vergara-

2194 - Spectral signatures of the tropical Pacific dynamics from model and altimetry: A focus on the meso/submesoscale range - Gourdeau

Mesoscale detection, mapping, and reconstruction

2299 - Synergetic use of surface drifters and altimetry to increase resolution and accuracy of maps of sea level anomaly in the Gulf of Mexico – Mulet

2340 - Analog data-driven strategies for the reconstruction of altimeter-derived SSH fields – Fablet

2387 - A new method to detect mesoscale eddies in satellite records – Oliveira

2422 Mesoscale Geostrophic Currents and Optimal SSH Mapping – Dohan

2361 - Upcoming high-resolution regional products of Sea Level Anomaly from Dynamic Interpolation - Ubelmann –

2200 - Rafting behavior of Scopoli's shearwaters: a proxy to describe surface currents in the western Mediterranean Sea? - Sánchez-Román

Mesoscale and submesoscale posters ... 2

Mesoscale SSH and surface current Products & model evaluation

2410 - Evaluating CMEMS forecast model products in the western Mediterranean using altimetry, an eddy tracker, and multiplatform in situ data - Mason – SP

2346 - The DUACS-DT2018 reprocessed sea level time series soon available in CMEMS – BALLAROTTA

2265- mpact of the assimilation of high-frequency data in a regional model with high resolution – Benkiran

2310 - Validation of the GlobCurrent surface current products in Australia – Cancet

2316 - 24 year mesoscale eddy trajectory atlas on AVISO – Delepoulle

2328 - Long-range correlations in altimetric sea level anomaly associated with long-living mesoscale eddies - Roach

Biogeochemisty applications

2219 - Offshore transport of POC in the California Current System due to mesoscale eddies – Amos

2442 - Physical and Biological Implications of Agulhas Eddy Signatures - Baker-Yeboah

Future missions : SWOT & surface currents

2365 - Measuring currents, ice drift, and waves from space: \\ the Sea Surface KInematics Multiscale monitoring (SKIM) concept – Ardhuin

2440 - Characterizing mesoscale eddies in the Bay of Bengal: Relative performance of Nadir versus Swath Altimeter - Agarwal – India

2400 - On the spatial scale resolved by the future SWOT KaRIN measurement over the ocean - Wang –

2264 - Impact of Swot altimetry missions to Ocean analysis and forecast system – Benkiran

2338 - Realistic SSH scenes for preparing SWOT: the NATL60 1/60° North Atlantic Ocean simulations? - Le Sommer

Mesoscale and sub-mesoscale oceanography

As we move to resolving smaller alongtrack spatial scales …

- What have we learned about the mesoscale ocean dynamics from the increased spatial resolution of Saral & SAR altimeters?

- How do we separate small-scale balanced dynamics from internal waves and internal tides in HR alongtrack and SWOT data? Correct for coherent internal tides, flag scales impacted by incoherent tides and IGWs ?

- How should we construct our future gridded HR-SSH products? Statistical interpolation, dynamical interpolation, full data assimilation ?

- Atmospheric forced barotropic (BT) signals < 20 days are corrected with HR DAC – fast BT signals generated by other processes remain aliased in data – problem or opportunity?

- Deeper fronts and eddies give SSH gradients that are not always aligned with surface tracer fields (SST, SSS, ocean colour, currents. Where do they differ? How to deal with this in multi-satellite data analyses.

- The Argo distribution is well-matched for the large-scale circulation. How to get adequate in-situ coverage for small, rapidly moving structures ?