

# Outlines of IndOOS Review White Paper

## 1. Science Drivers

- 1.1. Effect of Indian Ocean on monsoon and monsoon onset (H. Annamalai, C. Ummenhofer)
- 1.2. Oxygen variability and change, oxygen minimum zones (J. Wiggert)
- 1.3. Upwelling, coastal/open ocean interactions, and ecosystems (Y. Masumoto, Weidong Yu)
- 1.4. Extreme events (cyclones, marine heat waves) (M. Lengaigne, M. Feng)
- 1.5. Intra-seasonal air-sea coupling (MJO, monsoon ISO, eddies) (T. Shinoda)
- 1.6. Interannual variability and its predictability: IOD, IOBM, subtropical IOD, Ningalo Nino (T. Tozuka)
- 1.7. Basin-scale heat and freshwater flux variability (L. Beal)
- 1.8. Carbon cycle, acidification, and eco/biological impacts (R. Hood)
- 1.9. Oceanic fluxes: Boundary currents and Indonesian Throughflow (M. Feng, D. Susanto, H. Phillips)
- 1.10. Decadal variability and predictability (J. Vialard)
- 1.11. Anthropogenic climate change (R. Mathew Koll)
- 1.12. Ocean productivity variability, predictability, & change (P. Strutton)
- 1.13. Hydrological cycle (C. Ummenhofer)
- 1.14. Regional sea-level variability and change (W. Han)

## 2. Operational Drivers

- 2.1. Improvement of seasonal prediction (H. Hendon, J-J.Luo)
- 2.2. Improvement of surface fluxes (Lisan Yu)
- 2.3. Improvement of ocean reanalyses (Tony Lee)

## 3. IndOOS Components and New Technologies

- 3.1. Past, present & future satellites in support of IndOOS (T.Lee)
- 3.2. Argo, including Deep & Bio Argo outlook (M. Ravichandran & N. Hardman-Mountford)
- 3.3. RAMA (M. McPhaden)
- 3.4. Surface drifters (R. Lumpkin)
- 3.5. XBT lines (M. Feng)
- 3.6. Tide gauges (U. Alakkat)
- 3.7. New technologies (C.Lee & M. Andres)
- 3.8. GoSHIP (B. Sloyan)
- 3.9. Sustained boundary arrays (L. Beal, M. Feng, B. Sloyan)