

# Discussion: New Products and Applications: Pt 1

- Global and Regional Mapping of Diurnal Variations with RapidScat:
  - Wind and Sigma-0 (NRCS)
  - Stress, Curl, Divergence???
  - how to best exploit this unique source of information?
  - best practices/recipes?
  - caution about the s/c semi-diurnal cycle?
- Best practices for NASA Data Quality Working Group
  - Potential for leveraging this initiative to support/lead defining quality/metadata/format standards for scatterometer products.
  - Perhaps we can consider a IOVWST Working Group for Data Standards?
- PO.DAAC will someday plan to abandon FTP in favor of HTTP data distribution protocols.
  - FTP is still a preferred mode of data distribution within the science user community.
  - What are the specific barriers/showstoppers to migrating toward HTTP protocols such as OPeNDAP and THREDDS?
- Gridded products:
  - Preferred methods and applications for Level 3 Scatterometer data?
  - Providing appropriate feature resolutions suitable for the data: 0.25 degree vs. 1 degree in Mike Chin's product.
  - Trade-offs in temporal averaging: 1-day, 3-day, 7-day, etc...
  - Preservation of Level 2 quality flag information. Is this needed?
  - Do we see much value in creating/utilizing L4 multi-platform products such as CCMP?
- High wind speeds:
  - Really important for synoptic and mesoscale applications, but what about impacts to climate studies?
- Coastal products for public use?
  - upwelling indices, storm surge estimates, considerations for WaCM for coastal currents?

# Discussion: New Products and Applications: Pt 2

- Rain Impact upon Wind Retrievals:
  - ASCAT re-processing: shall we include collocated rain-rate data?
  - Extensions of neural-net rain impact corrections to C-band and L-band?
  - Providing the impact of rain splash effects and associated dependencies on polarization as well as Ku, C, and L band retrieval systems.
  - Impacts on surface divergence and vorticity via Mesoscale Convective Systems (MCS)
  - Singularity Exponents providing characterization of wind gradients: divergence and vorticity.
  - How can Singularity Exponents be useful in Tropical Cyclone monitoring?
- White Cap GMF:
  - Potentially very useful in high wind speed regimes.
  - Field campaigns may be needed to gain more confidence in the quality of the white cap coverage in WindSat data.
  - Any additional applications?
- Short time scales: characterizing convection.
- Model function improvements – cross-validation of different model functions and resolution of the C-band, Ku-band reconciliation as first step for truly blended scatterometer products
- High resolution products –what can they reveal that we don't already know?
  - ASCAT at 6.25 km; is quality good enough for operational use?
- New C-band GMF
  - Improvements to CMOD GMF -> CMOD6 (high wind speeds) -> CMOD7 (low wind speeds)
  - U10S (stress) GMF at KNMI to be developed
  - Cross-pol GMF for Moderate Winds. New campaign for high wind speeds?