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 IOVVST 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?