



SMOS SMAP Synergisms

- Facts
 - Baseline schedule → SMOS Aquarius SMAP
 - Should have an overlap period between these 3 missions
 - Most of the science has many common points
 - Most of the challenges are similar
 - US representatives associated to SMOS team since the early days





Science → same problems

- Research work
 - No equivalent data exist (...yet)
- Algorithms
 - Retrievals surface, root zone SM, vegetation Water content, dis-aggregation
 - Joint use of the two data sets (ground, simulations, sat)
- Issues
 - RFI, sun glint, sky map
- Possibilities
 - Simulate SMAP L band data





Cal-Val

- Same site requirements
- Common approaches
- Pooling of measurements into a common data base (so called match-ups)
- Use same match ups
- Cold sky calibration
- Same long term monitoring targets
- Sensor intercalibration
- Test beds





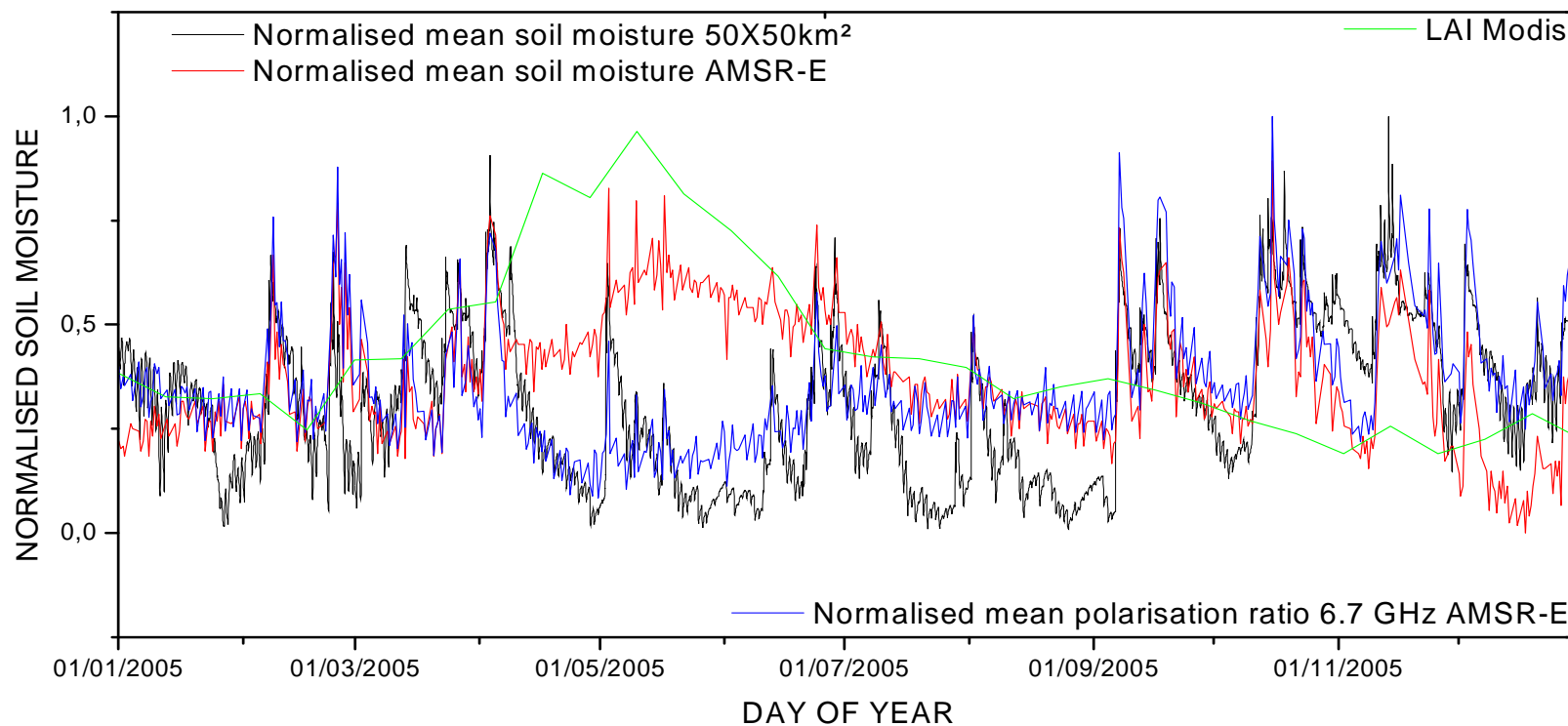
Mechanisms

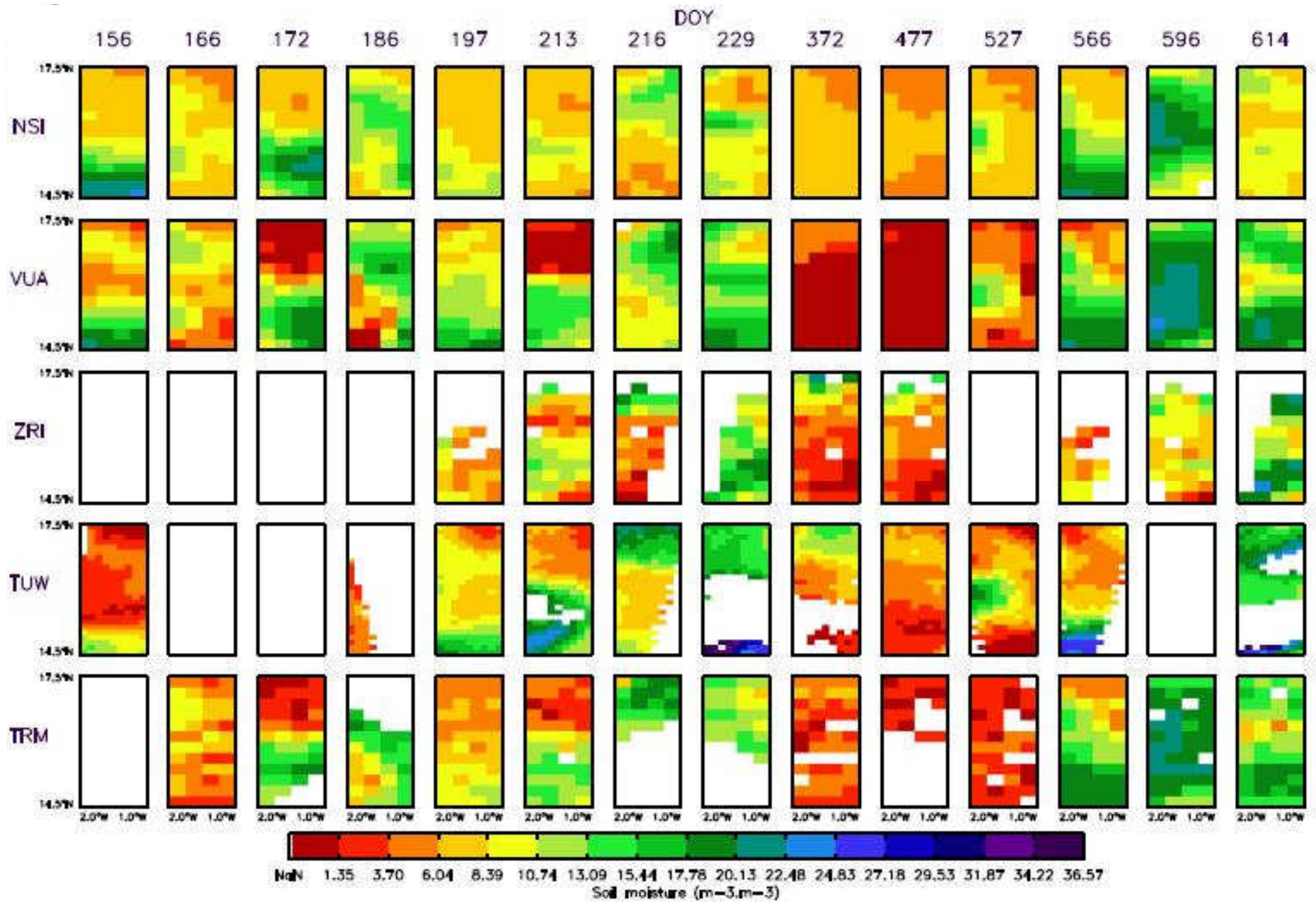
- Joint science teams
- Joint field experiments
- Interactions at the project level
- Commonly managed “reference site” or pooling of them all into one
- Direct access to “other “ mission data set in the ground segment
- Common level 4 products for multiple sensor algorithm
- Provide simulated data?





Comparison with AMSR-E



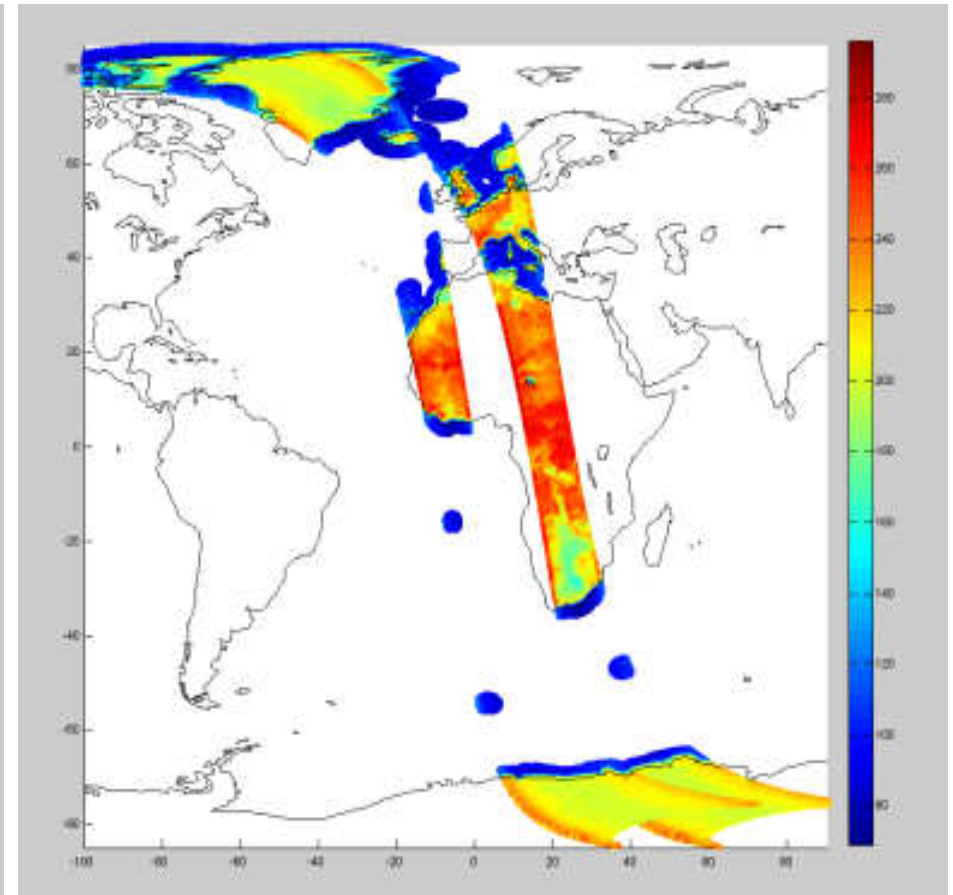
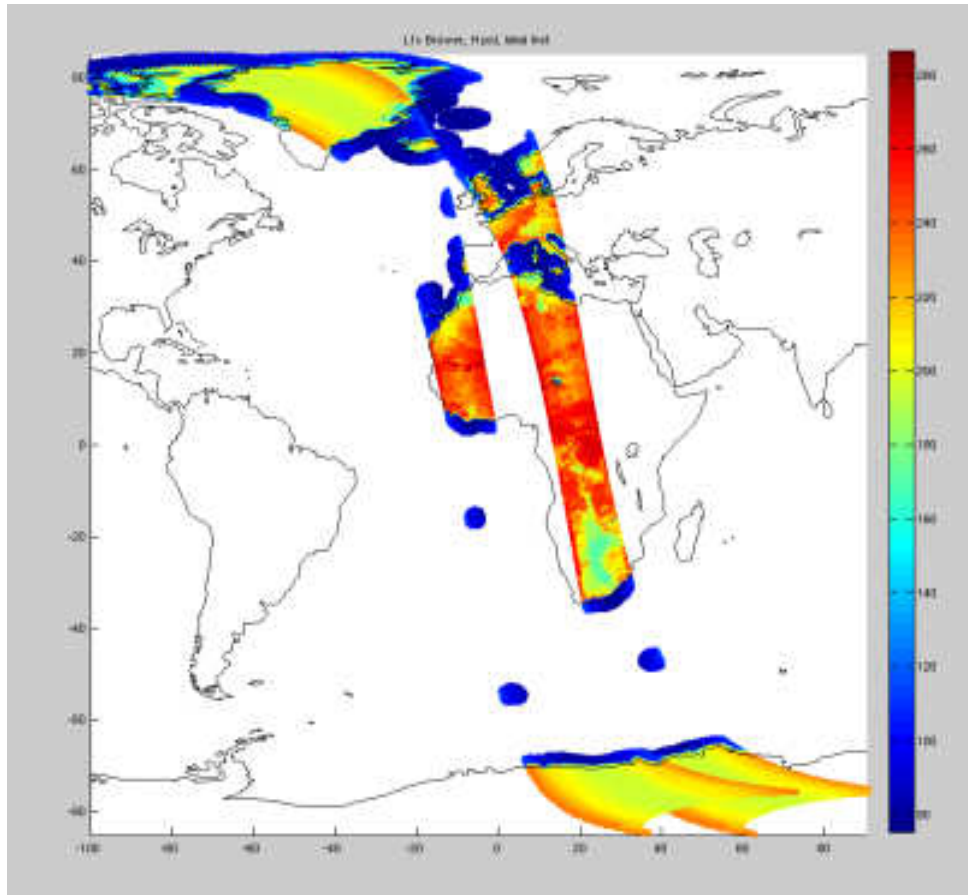




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Simulations – L1C



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SMAP Workshop Oxnard June 09





Hence

- Both low level and high level interactions
- Oil for the system (\$ - €)
- US funded by NASA for SMOS and European by ESA for SMAP
- SMAP teams on SMOS sites and vice versa
- Optimise resources (site distribution and characteristics, common standards)
- Common work on algo
- What SMOS data do you want?

