



## CCI and Related Initiatives -2



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**stse**

# CCI Data Access



- ESA CCI website but need long term solution
- Project web sites – different solutions at present need for common interface
- Community databases (GLIMS, GHRSSST)
- Note ECV Datasets typically 200TB
- Various solutions to store data (cloud vs central)
- Portal requirements - not just a web site
- Interoperate with ESGF as a services layer
- Visualisation
- User registration

# CCI Tool Box (1)



- Users: Modellers, EO Teams, General ECV data
- Data to users and software from users to the data
- Convert: Format, Transform (units, binning, mapping, common preproc)
- Combine information
- Uncertainties exploitation and propagation - *careful don't provide tools that need scientific insight!*
- Have to deal with different types of uncertainties (correlated synoptic/large scale, uncorrelated etc)
- Coverage uncertainty

# CCI Tool Box (2)



## Tools to support validation

- Satellite and model comparisons
- Matchup databases (e.g. SST)
- ECV interoperability (e.g. compare cloud masks from different ECVs- OC vs Cloud)
- Calvalus tool one example of embedding processors
- Include Maturity Matrices?

# Maturity Matrix Core-Climax



- Data set description (like Obs4MIPS)
- System Maturity matrix
- User Application matrix
- CCI comments taken on board by CORE-CLIMAX project
- Need to define way forward for CCI
  - “*It will be forced on us by Copernicus*”
  - “*Care needed in how it is used to score CDRs*”

# ECV Inventory



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- GCOS established this, CEOs responded
- ECV oriented actions from CEOs to establish inventory
- CEOs WGClimate established and now joint with CGMS
- CEOs database about to be completed and second survey initiated

# Links to Support To Science Element

- Novel multi-mission concepts
- Novel algorithms
  - (GOCE atmospheric density, mass balance, magnetosphere)
  - SMOS sea-ice thickness up to 50cm, sea surface winds, frozen soil.
  - 17 years of wetland methane emissions
  - Grounded ice vs floating ice in Alaska
- Meeting between CCI and STSE projects on how to combine these activities
- Next generation of scientists (around 15 post docs)

The logo for the Science To Support Element (STSE) project, consisting of the lowercase letters 'stse' in a bold, black, sans-serif font, enclosed within a thin black rectangular border.