

climate change initiative

→ CLIMATE MODELLING USER GROUP

LAND SURFACE BREAKOUT

LAI – LC – LST – SM ... + subproducts?

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~ 20 PARTICIPANTS



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- LAI + FAPAR
- Started in March 2022
- First dataset in March 2023 : global, 1 km, 2019
- One generic algo for all LC types
- Incremental approach by adding sensors
- Involve SIF
- Below-canopy snow detection
- By-products: soil reflectance, chlorophyll



LC



- Two global scale products : ongoing extension to +2021+2022
 - 300 m, V1.1.1 C3S and 300 m, 14 PFTs 29 years
 - 4 forest types
 - 4 shrub types
 - Natural herbaceous
 - Croplands (LC distinction between irrigated/rainfed), C3/C4 from LSCE
 - Wetlands
 - Urban
 - Bare soil
 - Water, Snow and ice





- 1995-2020
- AQUA_MODIS_L3C_0.05 (more reliable), TERRA_MODIS_L3C_0.05, already available
- GEO product: every 3 h, already produced and validated, 4-5 km over Europe, shorter period than MODIS
 - Sensor-specific products + a merged product (3 GEOs + IR LEOs)



SM



- Current version 7 till 2021
- Year 2022 covered by version 8
- Efforts are being made to describe the seasonal product uncertainty

