



Fire_cci project: Operational and R+D

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Experiences from phase 1

climate change initiative
European Space Agency

- Keep in mind: None of the input sensors was developed for burned area mapping (MERIS, MODIS, AVHRR, S-3).
- Operational:
 - User Requirement Document (47 respondents + literature reviews)
 - Validation methods (sampling design).
- Research:
 - First global MERIS BA product. Algorithm needs further testing.
 - Validation metrics and error sources.



R+D Challenges

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- Achieve GCOS requirements in terms of accuracy and stability.
- Further develop and stabilize MERIS-MODIS 250m algorithms.
- Integrate information from coarse and medium-resolution sensors:
 - MERIS – MODIS
 - S-2, S-1, Landsat-8.
 - Proba V



Small fires characterization

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- Generation of a small fire database over Africa using Sentinel-2 MSI data (L-8 alternative):
 - Complementing with Proba-V 300/100 m resolution.
- High relevance of small fires (<50 ha): 88% of all fires and 27% of all BA.
- Omitted in all global BA products:
 - New release of GFED4s (not yet validated).