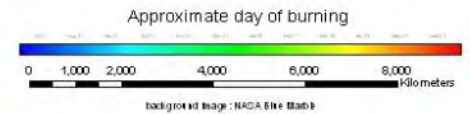
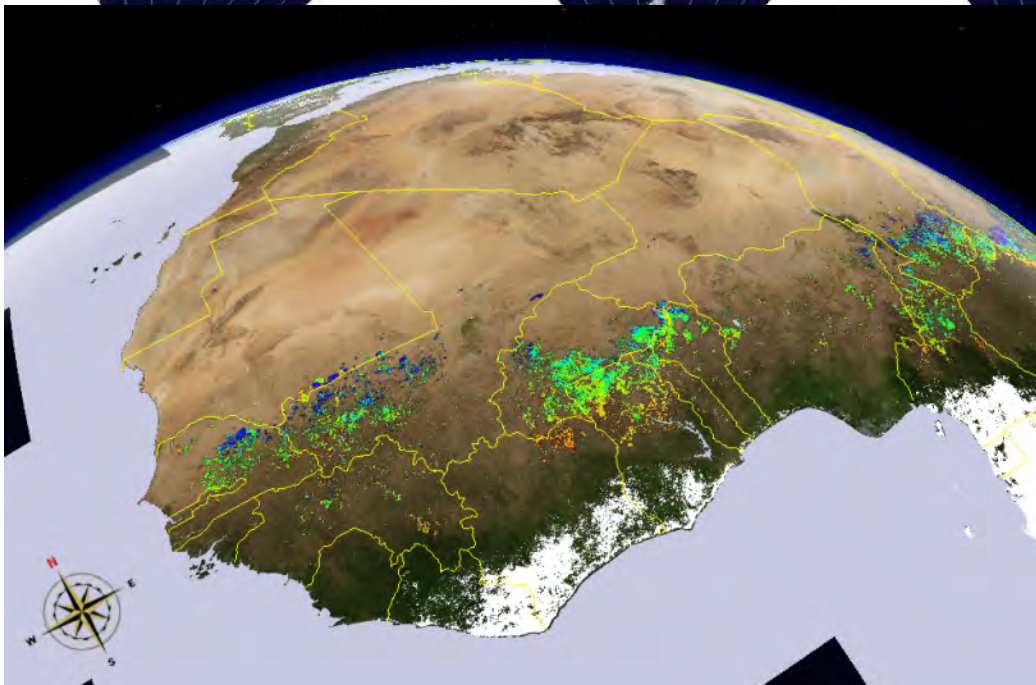
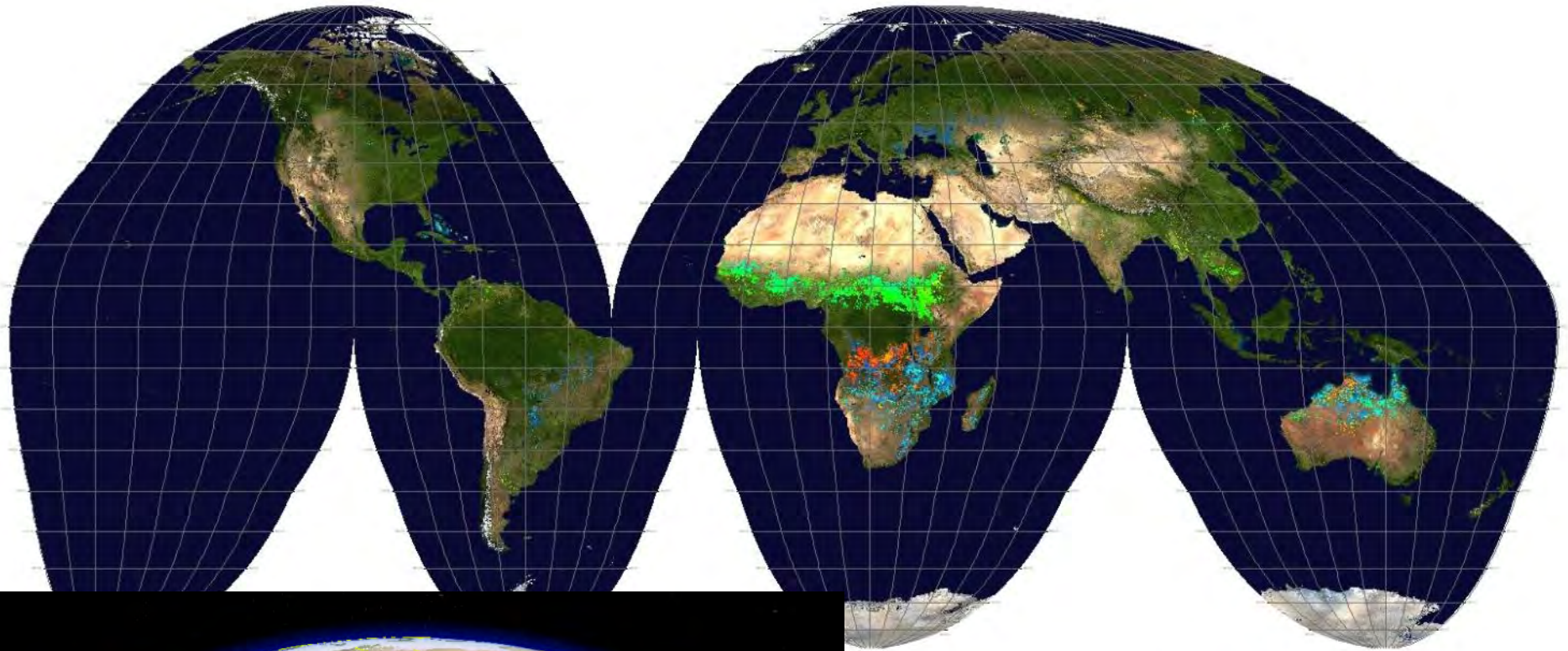


# MODIS global burned area product: Status and future developments

Luigi Boschetti, David Roy,  
Chris Justice, Steve Stehman and  
Louis Giglio



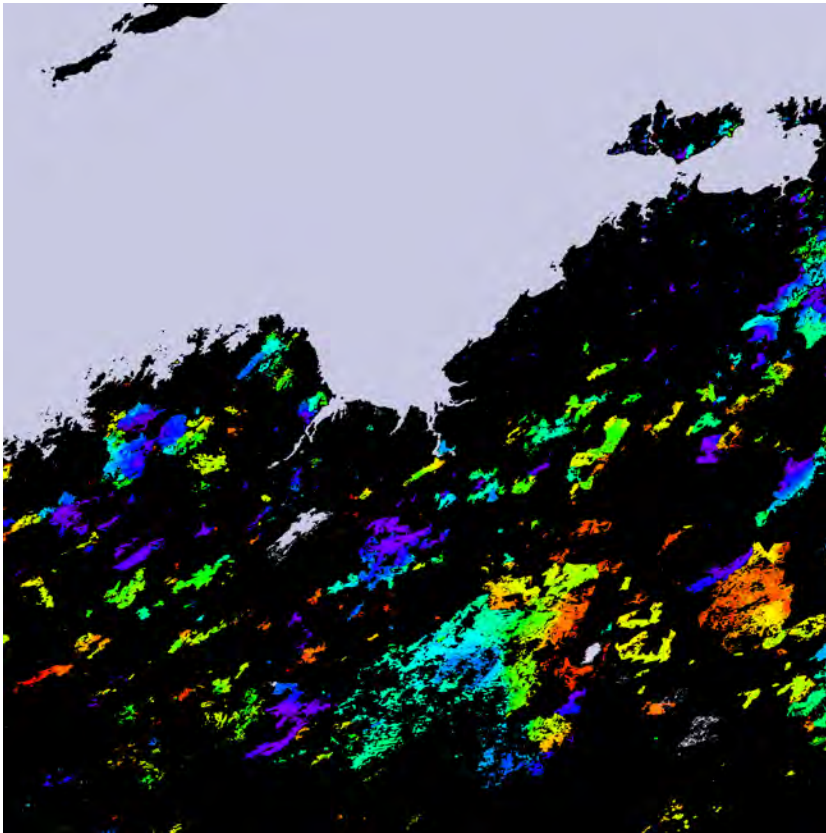
- Current version is C5
- first global run of the product
  - run on purpose with conservative thresholds

# Collection 5.1

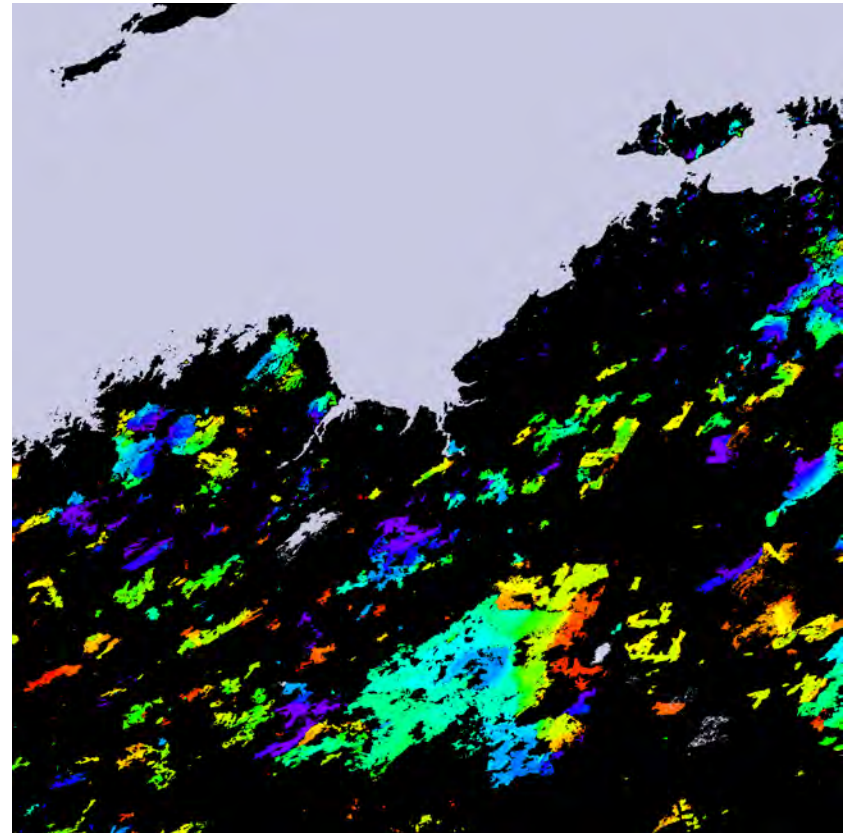
- First reprocessing of the product, using C5 inputs
- Reprocessing complete, planned to replace C5 as soon as QA is completed
- Addresses known issues which caused omission errors in savannah and forest environment, through minor changes to the algorithm (mostly changes in thresholds and spectral tests):
  - Known issue solved in the handling of thermal data
  - Band 6 is no longer used
- Makes use of the C5.1 500m MCD12Q1 (yearly product), instead of the static C4 1km MOD12Q1 used in C5. The use of MCD12Q1 is mostly limited to the identification of agricultural areas.
- Burning in Agricultural areas remains unreliable, partially due to the lack of independent data for calibration and validation
  - Agricultural detections are assigned a special QA code (5), and users are advised about the unreliability
- Change in output structure, replacing two bit-packed SDSs with four regular SDSs. The space savings due to the use of bit-packed SDSs are negligible after the introduction of internal compression, and they are far outweighed by the ease of access for the users.

# Examples of Improvements

**C5 – 2004275, h30v11**

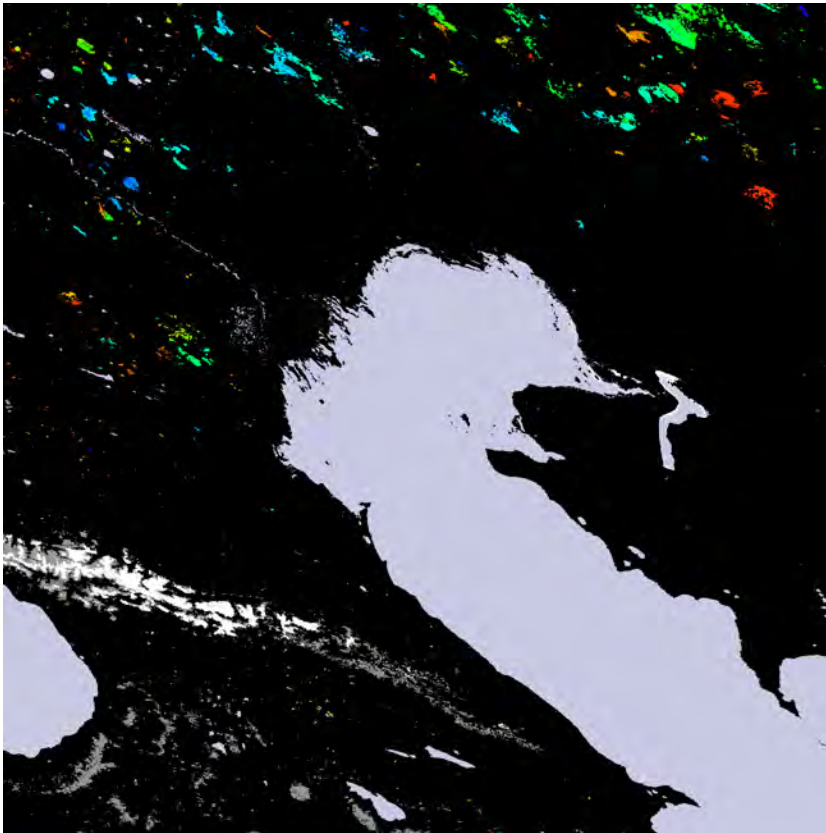


**C51**

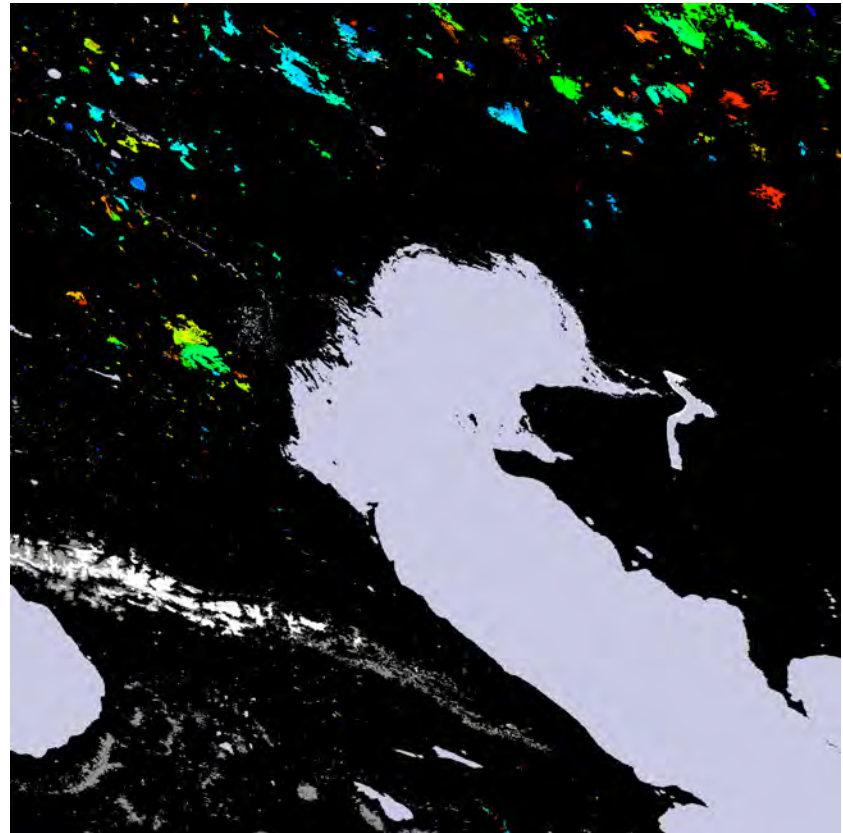


# Examples of Improvements

**C5 – 2006152, h21v04**



**C51**

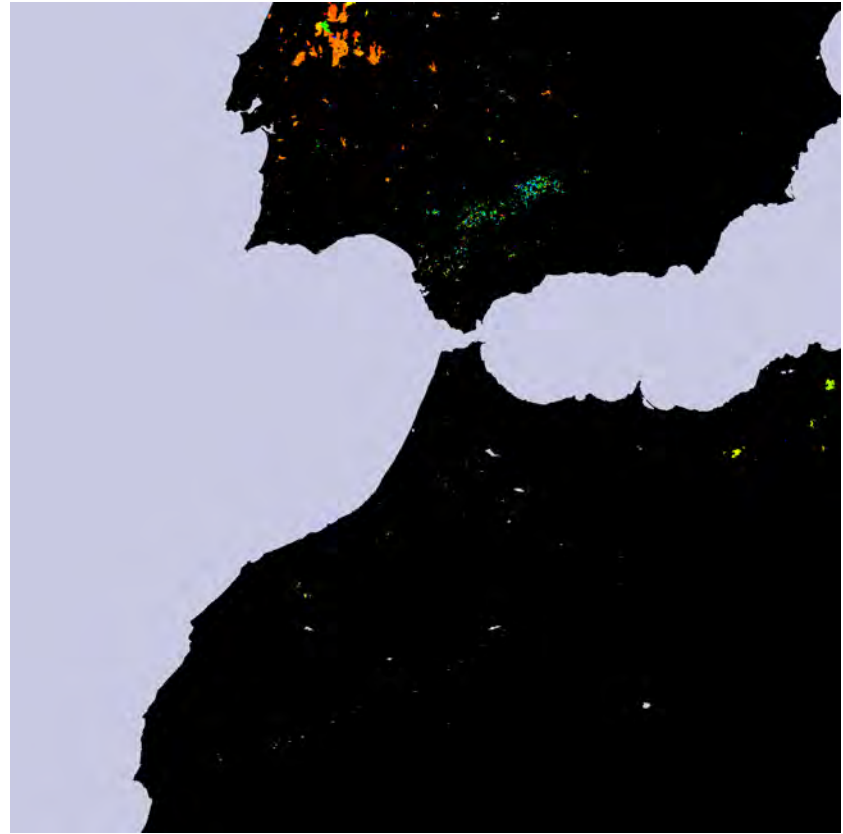


# Examples of Improvements

**C5 – 2003182, h17v05**



**C51**



# Collection 6 plans

- Significant changes to the algorithm, with a major redesign of the approach
- Integration of the BRDF based product (MCD45) and the direct broadcast product (MCD64):
  - The two approaches have complementary characteristics, and the two outputs will be integrated
  - Expected reduction of the no-data areas
  - Use of active fire information (used for the generation of MCD64)
- Prototype to be delivered by early summer
- Production to start in early Fall