

## MODIS Burned Area Product

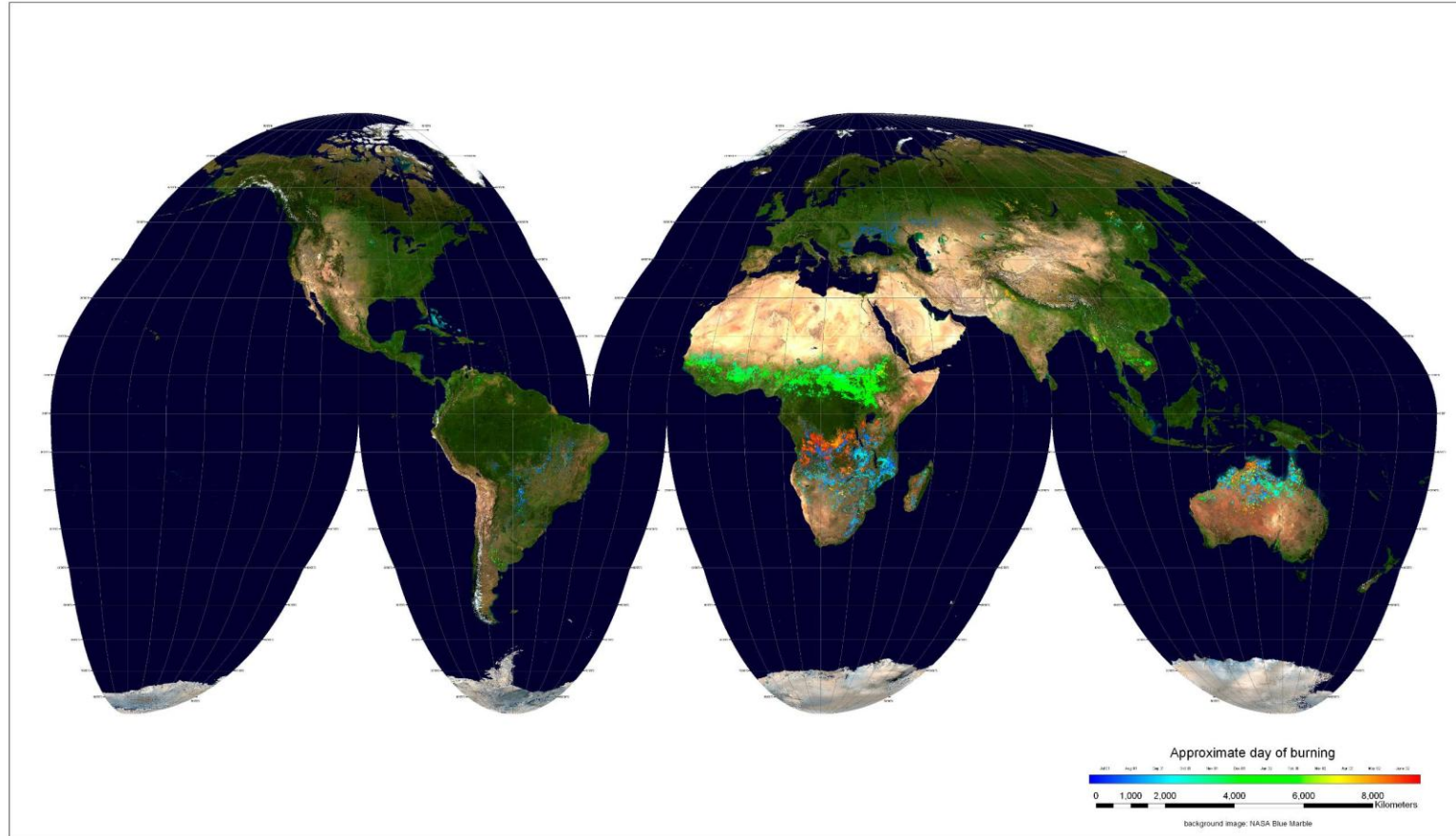
Band 5 [1230-1250 nm] and  
Band 2 [841-876 nm]  
provide the highest burned/unburned  
discrimination

Band 7 [2105-2155 nm] provides little  
discrimination.

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Bands 5, 2 and 6 [1628-1652 nm]  
reflectance decreases immediately, and  
for many days, after burning.

Band 7 reflectance changes relatively  
less (with both positive or negative  
changes observed).



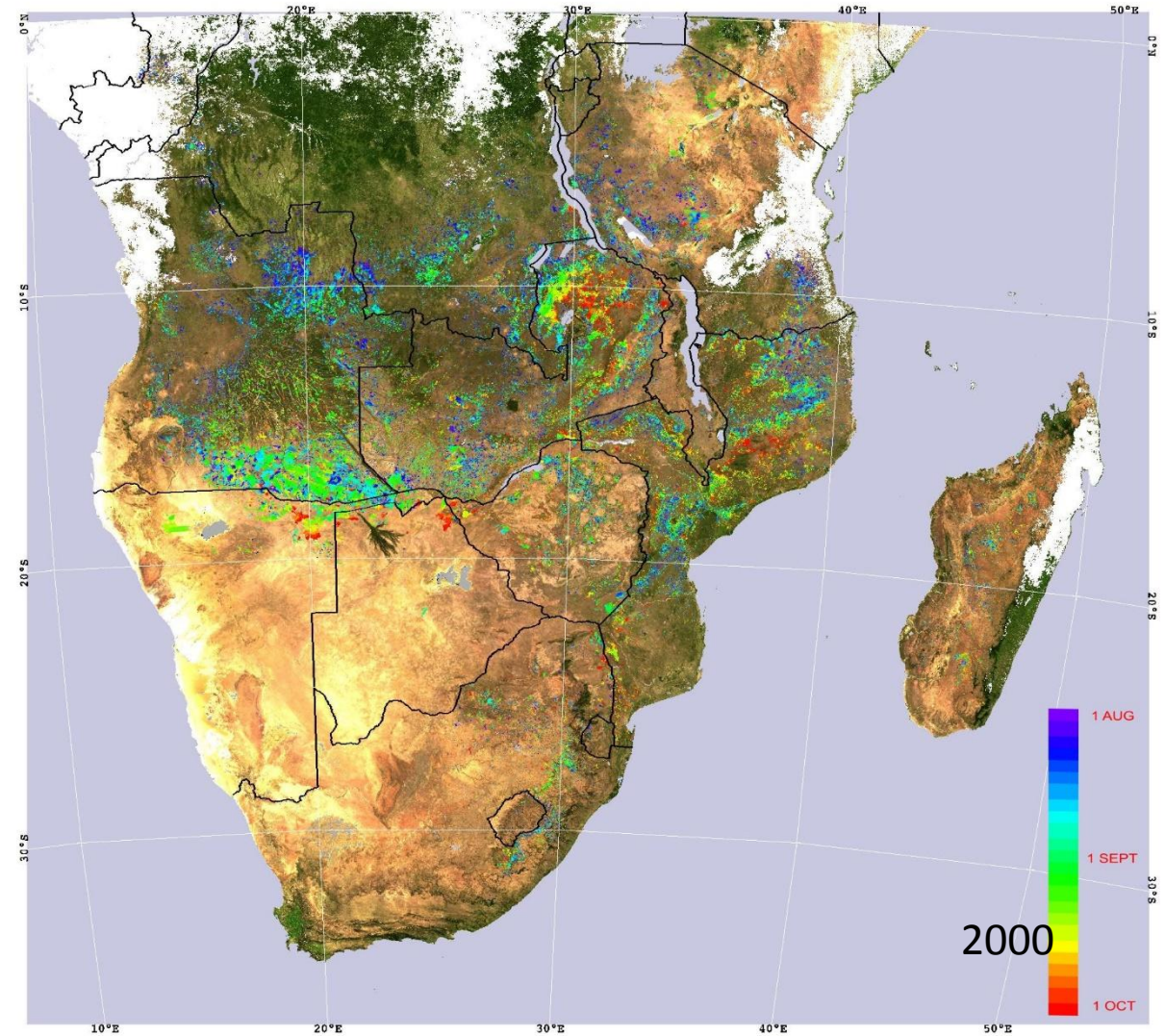
*1 year of MCD45A1 burned areas; the day of burning is represented using a rainbow scale and is overlaid on MODIS surface reflectance to provide geographic context.*

# MCD45A1 (used in previous image)

- The algorithm analyzes daily surface reflectance dynamics from both the Terra and Aqua MODIS-derived inputs to locate rapid changes.
- That information is used to detect the approximate date of burning, and maps only the spatial extent of recent fires.

# Data available

- EOS HDF product
- GeoTIFF File
- Shapefile
- Jpg
- Raw data
- Near real time



Mosaic of the MODIS 500m burned area product using MODIS Collection 4 data for the whole sub-equatorial Africa, overlaid on true color mosaic of MODIS bands 1,4 and 3.

# Modis burned area products in use

- [https://lpdaac.usgs.gov/dataset\\_discovery/modis/modis\\_products\\_table/mcd45a1](https://lpdaac.usgs.gov/dataset_discovery/modis/modis_products_table/mcd45a1)
- <http://modis.gsfc.nasa.gov/data/dataproduct/mod45.php>
- [http://modis.gsfc.nasa.gov/data/atbd/atbd\\_mod14.pdf](http://modis.gsfc.nasa.gov/data/atbd/atbd_mod14.pdf)
- <http://modis-fire.umd.edu/pages/BurnedArea.php>
- [http://reverb.echo.nasa.gov/reverb/#utf8=%E2%9C%93&spatial\\_map=satellite&spatial\\_type=rectangle](http://reverb.echo.nasa.gov/reverb/#utf8=%E2%9C%93&spatial_map=satellite&spatial_type=rectangle)
- <https://earthdata.nasa.gov/earth-observation-data/near-real-time/firms/active-fire-data>

# Recent Modis Problems

2016-03-01T17:40:00Z

Terra MODIS was transitioned to science mode on Feb 24, 2016 (day 055) after being in safe mode since Feb 18, 2016 (day 049). Though the data is currently being acquired and processed at MODAPS and NRT, **users are advised to exercise caution in using the products in any application.** Products from period 055 - 058 might have been severely degraded due to abnormal operating temperature for the **SWIR and LWIR FPA** and hence products may not be usable in any application. Though the focal plane temperatures have reached the stable operating value as of day 060 some products may still have been impacted by the increased noise in some of the detectors in the thermal bands. **Users are requested to exercise caution in using the products until further notice.**