

# Declaration of Cotonou GHG and Air Quality Monitoring

**16<sup>th</sup> EUMETSAT User Forum in Africa  
HIGHLIGHTS – 11 October 2024**

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Focus on the use of EO data to monitor atmospheric composition and CO<sub>2</sub> emissions.

3 presentations on Air Quality and GHG monitoring

Title	Institution
AU policies for Climate and Air Quality	AUC
EO mission in support to Atmospheric Composition and GHG monitoring	EUMETSAT
Copernicus Atmospheric Monitoring Services CAMS	ECMWF

High Level event on Satellite data for Greenhouse gases and Air Quality monitoring in Africa

-> Signature of the Cotonou Declaration



# Aspects of the Africa Clean Air Program

Goal setting in line with the Agenda 2063 and specific AU strategic frameworks like the CCRDS&AP and International frameworks like SDGs, UNFCCC, Paris Agreement



Framework for comprehensive, continuous and routine air quality assessments

**Pillar 1: Strengthened Air Quality Data Management System at the national and regional levels**

**Pillar 2: Research, development and capacity strengthening**

**Pillar 3: Development and strengthening of air quality policy and legal frameworks in Africa**

**Pillar 4: Promoting and enhancing Information, Education, and Communication to increase public awareness on air quality and health in Africa**

**Pillar 5: Monitoring, Evaluation and Learning Framework for ACAP**



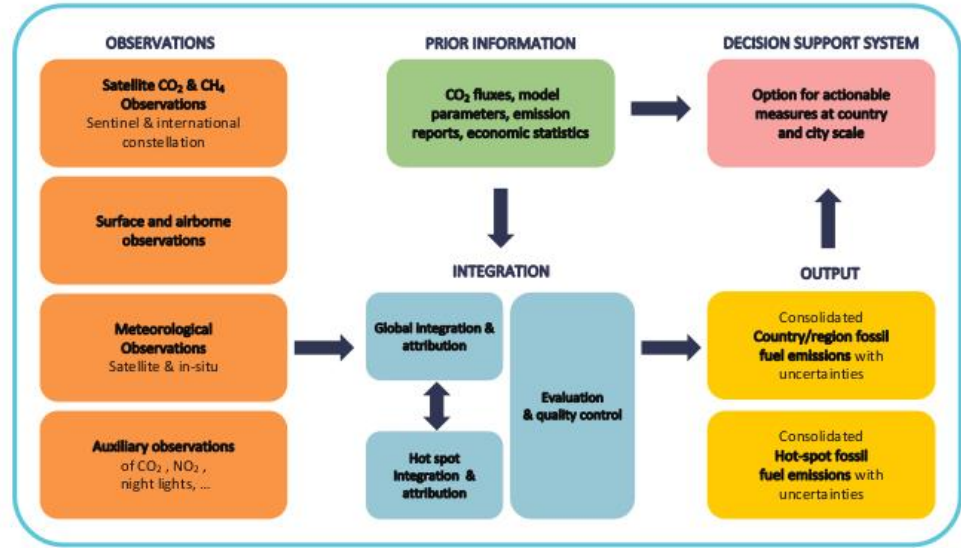
Intended Outcome: Effective and efficient AQM program promoted and sustained across the Continent.



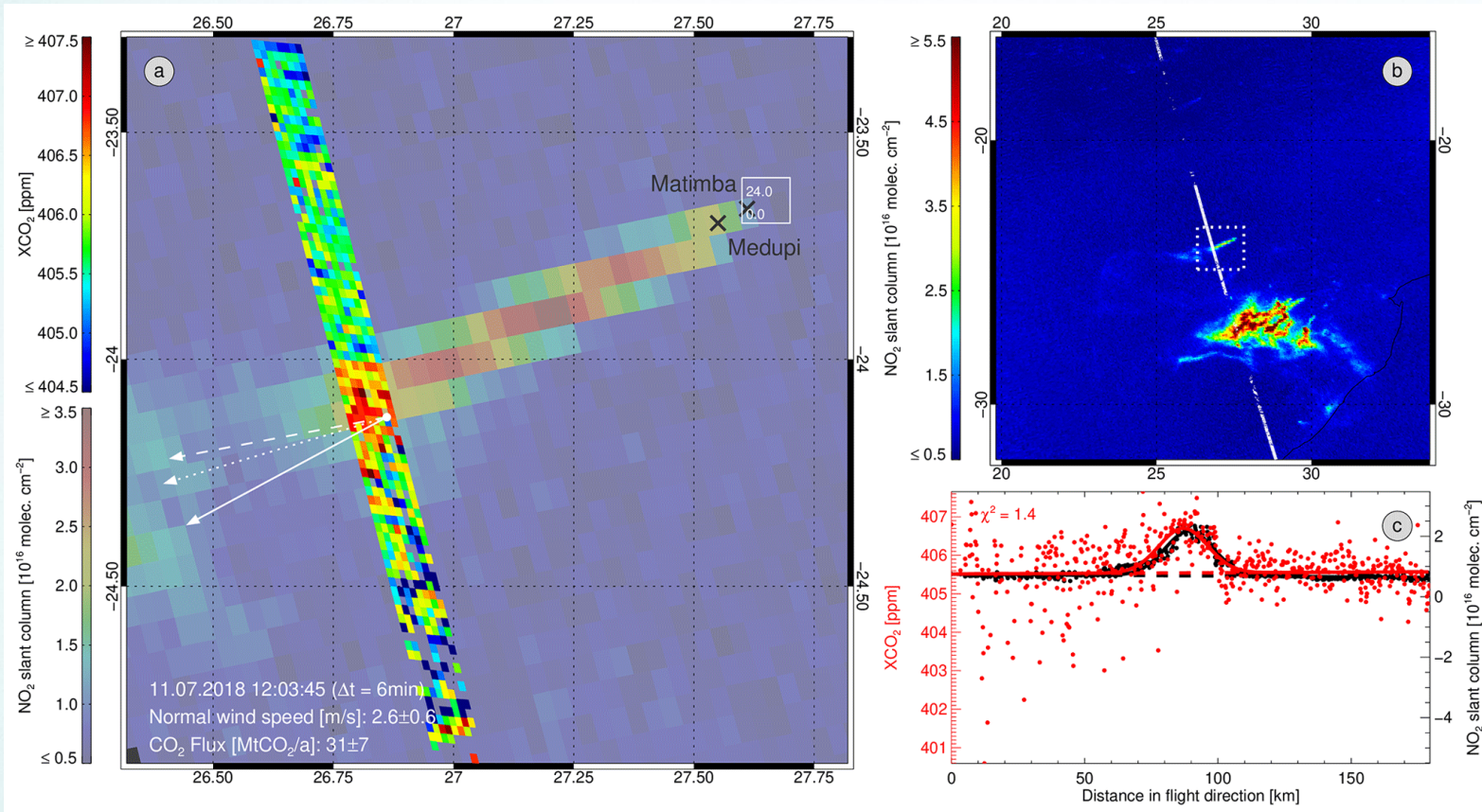
From expert groups through dedicated research funding, to operational services



## CAMS Emissions Monitoring Service



# Example: CO2 monitoring from single point emissions



## Experimental study on Matimba Power Station



Nitrogen Dioxide from TROPOMI data  
 © Copernicus program & CO2 from OC2  
 Credit – Hakkarainen et al. 2020



# Cotonou Declaration on the use Satellite Data for the Monitoring of Greenhouse Gases and Air Quality in Africa

Upcoming generation of satellites to support the monitoring of atmospheric composition (e.g MTG-S, EPS-SG, CO2M)

- Strengthening African capacities in the use of these EO technologies,
- Encourage establishing a network of ground-based stations across Africa to support satellite data access, calibration and validation,
- Engage with International partners (e.g European Union) to support these activities,
- Technical partners (e.g EUMETSAT and ECMWF),
- Establish a roadmap for implementation

