

Satellite Air Quality Monitoring in Southern Africa and Beyond
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The presentation will report on both current and previous applications and experiments relating to satellite based air quality monitoring. The status quo of satellite based air quality monitoring in Southern Africa (including veld fires and smoke transport, particulate pollution plume tracking) will be reported upon and initiatives afoot to demonstrate the feasibility of developing a satellite based Air Quality and Compliance Monitoring system using remote sensing data from locally received satellites SumbandileSat (South African satellite to be launched soon) and other.

Details of the proposed South Africa Air Quality and Compliance Monitoring system which will fuse processed satellite data with ground based air quality measurements (which will allow the generation of air quality maps, air quality forecasting and input of background air quality for dispersion models) will be presented. The desirability of the provision of future SA satellites with sensors amenable to air quality measurement and atmospheric chemistry research will be commented on.