

GAW Activities at Empa

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QA/SAC Switzerland and WCC-Empa contribute to WMO's GAW programme – inter alia – with the GAW Station Information System (GAW SIS), auditing and calibration of global GAW sites for the parameters surface ozone, carbon monoxide, methane and nitrous oxide (the latter in collaboration with WCC-N₂O), and active twinning partnerships with the global GAW sites Bukit Koto Tabang (Indonesia), Mt. Kenya (Kenya) and Assekrem (Algeria). This presentation will give an update on the functionalities of GAW SIS and the integration with the GAW World Data Centres; recent activities of WCC-Empa with respect to maintaining the traceability of the global network; and discuss results of our collaboration with selected GAW stations in developing countries.

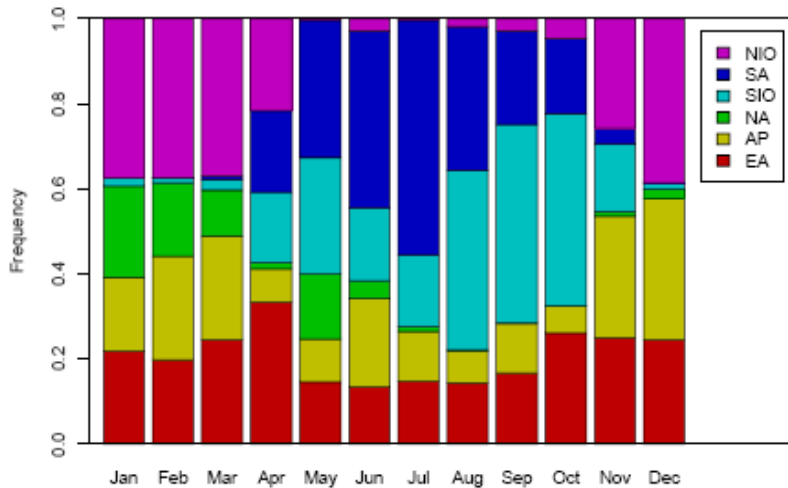


Figure 1. Annual cycle of the relative frequency for different trajectory clusters identified for Mt. Kenya GAW station (MKN), documenting the distinct seasonal pattern of the monsoon flow over the Indian Ocean. NIO: Northern Indian Ocean; SA: Southern Africa; SIO: Southern Indian Ocean; NA: Northern Africa; AP: Arabian Peninsula; EA: Eastern Africa

Figure 2. Time series of surface ozone observed at the global GAW Stations Assekrem (Algeria, 2770 masl), Bukit Koto Tabang (Indonesia, 964 masl), and Mt. Kenya (Kenya, 3678 masl). The different ozone levels and the variation of ozone concentrations reflect the different setting of these sites in terms of geographical location and altitude, as well as different ozone production and destruction regimes.

