Properties of Aerosol in the North Atlantic Free Troposphere at the Pico Mountain Observatory, Azores

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Key Points:
- The Pico Mountain Observatory is in an ideal location to sample free tropospheric aerosol transported from North America
- BCeq monthly mean anomalies show a decreasing trend over 11 years with a slope of ~0.0015 μg/m³/year

Aerosol Optical Properties - 2012

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Absorption estimated from the BCeq concentration assuming a mass equivalent absorption of 1.6 kT/cm with λ in μm, as that given by Moemöller et al., JGR 1998.

No scattering correction for the aethalometer or truncation angle corrections for the nephelometer were applied. Single scatter albedo (SSA) and hemispherical backscattering fraction calculated only for daily average scattering ≥ 1 Mm⁻¹.

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