INFLUENCE OF BIOMASS COMBUSTION ON AIR QUALITY IN TWO PRE-ALPINE TOWNS WITH DIFFERENT GEOGRAPHICAL SETTINGS

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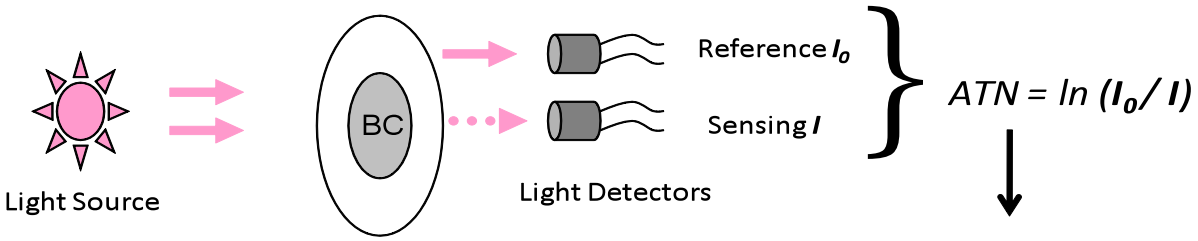
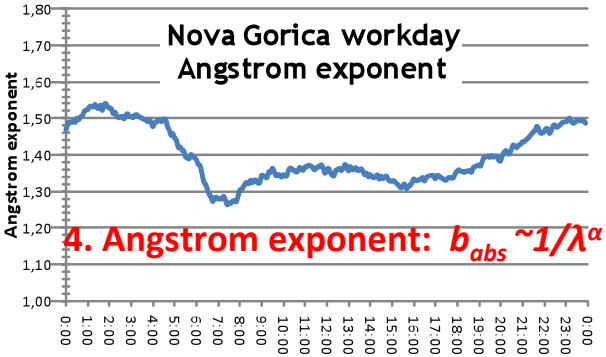
1. Aethalometer principle

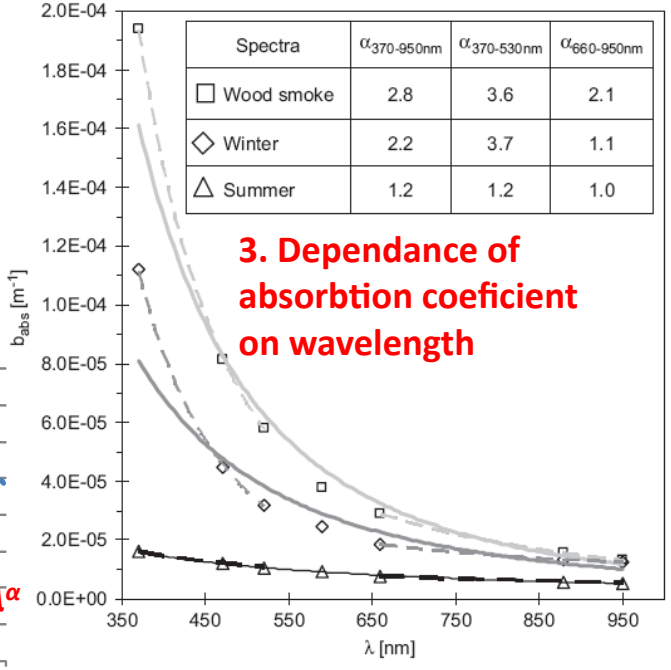


2. absorbtion coeficient $b_{abs} \sim \Delta ATN$

Black carbon (BC) and carbonaceous matter (CM) was apportioned to combustion of fossil fuels (ff) and wood (wb) using the Aethalometer model: first absorption is apportioned to sources, the model is calibrated on 24h scale, ff and wb contributions to CM are determined from the Aethalometer measurements.



4. Angstrom exponent: $b_{abs} \sim 1/\lambda^{\alpha}$



3. Dependance of absorbtion coeficient on wavelength

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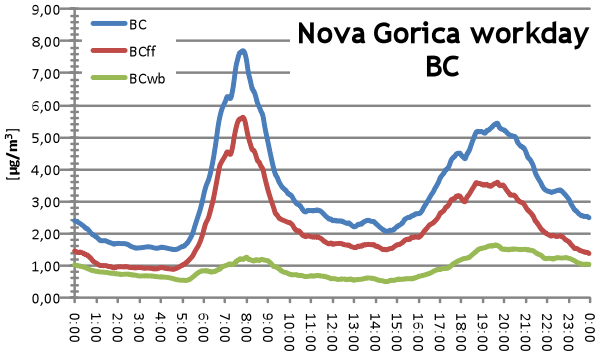
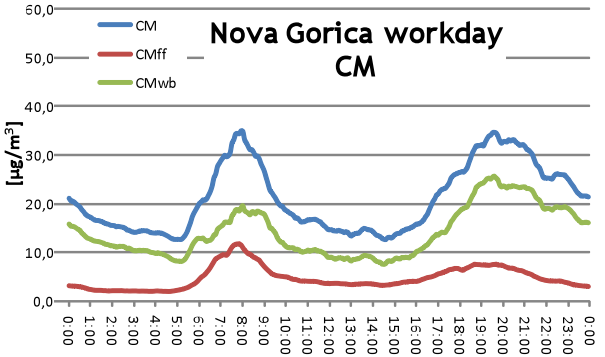
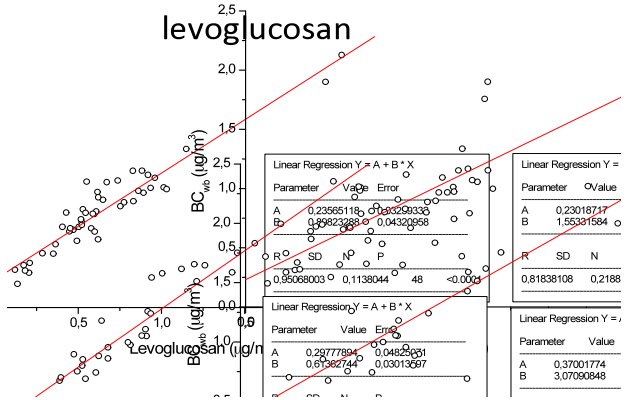
5. Results







In Nova Gorica wood smoke exceeds diesel exhaust contributions to CM.

The correlation between BC and often used wood burning marker