

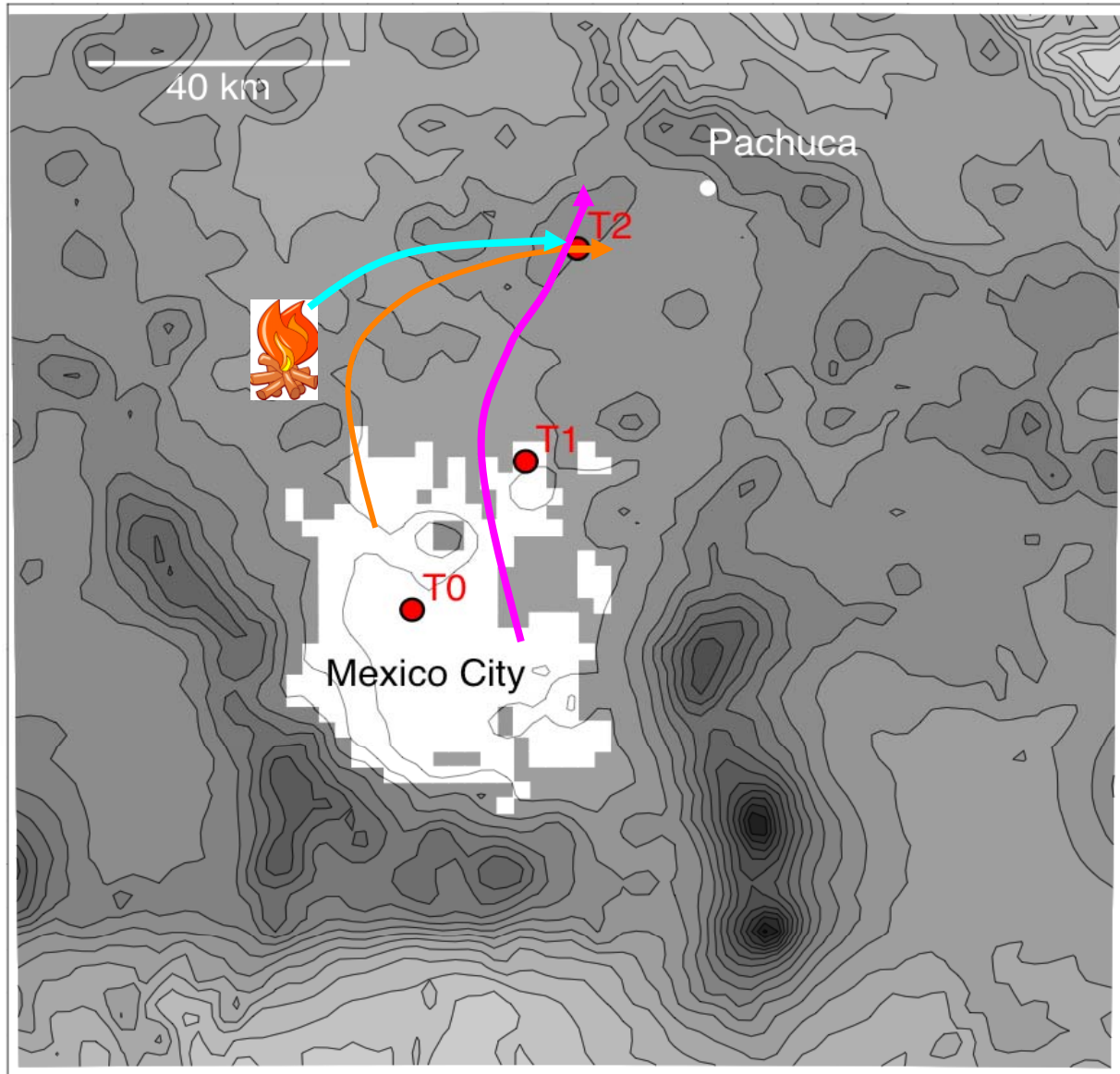
¿ Does the **specific absorption** of
“black carbon” (BC) change as an
aerosol **ages** ?

Part of “**The T1-T2 experiment**”
of the MILAGRO campaign

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with help from many others ... **Lupita Paredes-
Miranda & Pat Arnott, ...**

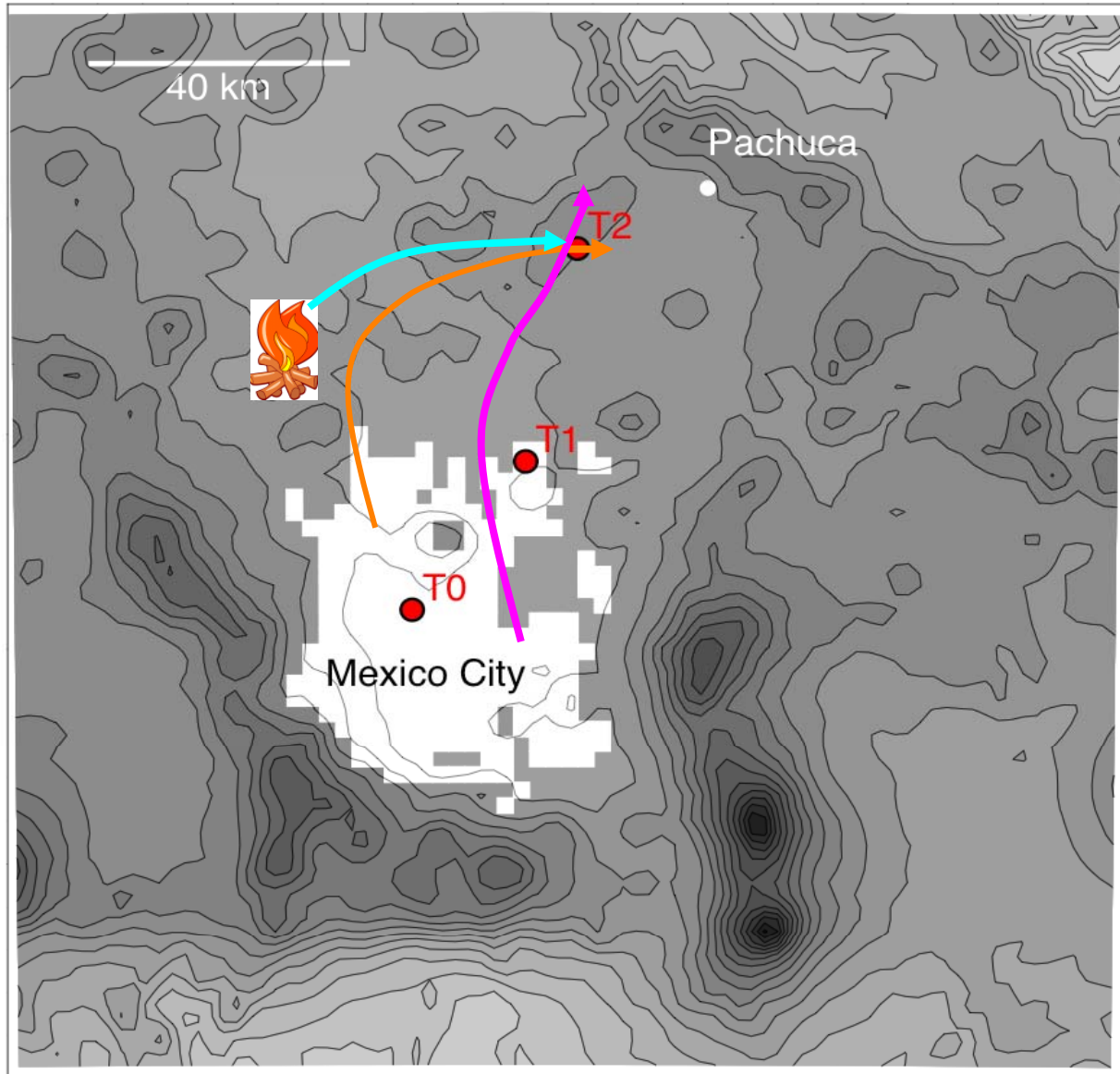
¿ How does an aerosol age as it moves from T1 to T2 ?



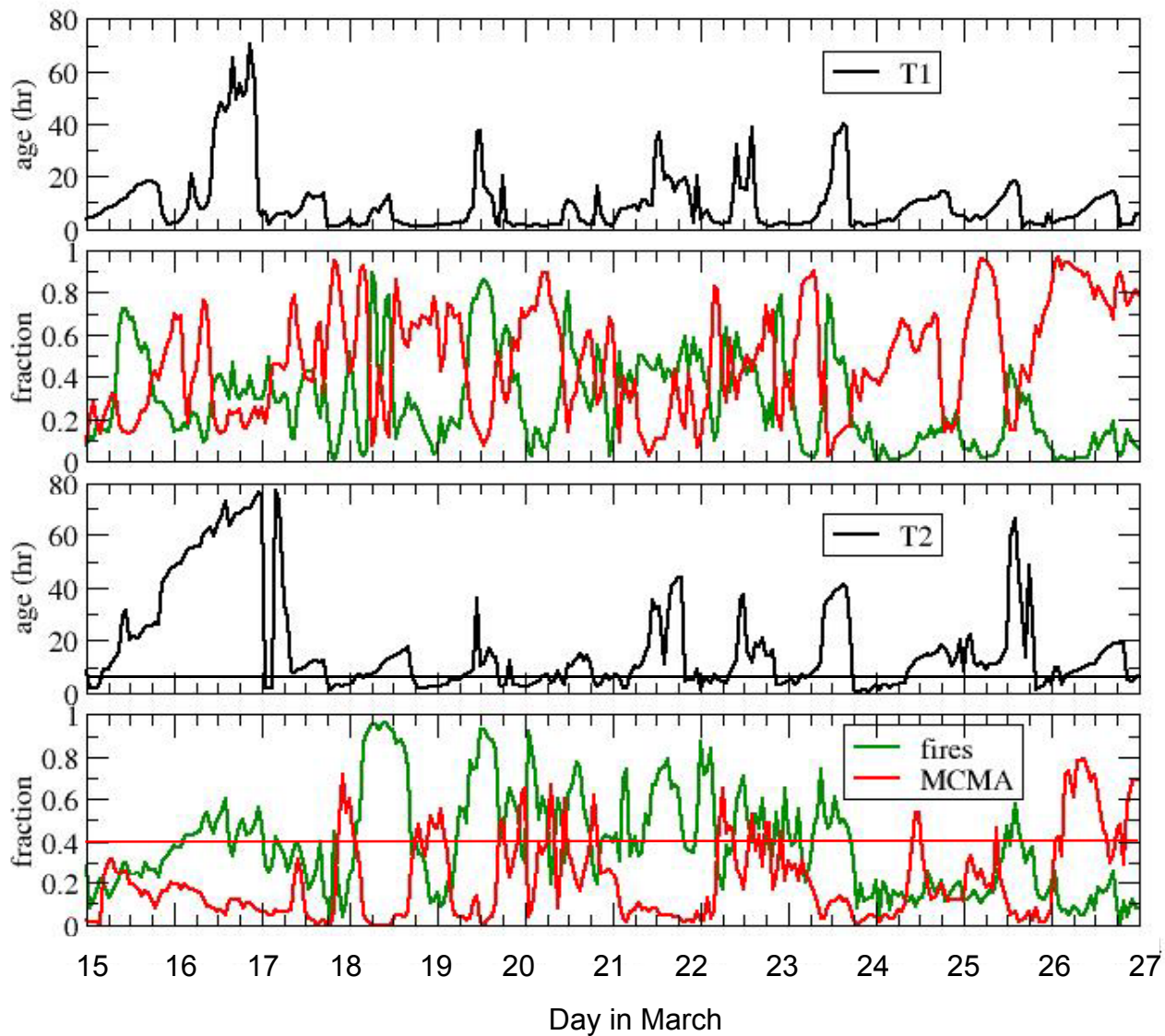
Key Measurements for Black Carbon Specific Absorption: (Mass Absorption Cross Section MAC)

- Photoacoustic measurement of absorption (👉 Muchas gracias, Lupita y Pat - estamos muy contentos.) Absorption coefficient, α , 1/m
- OC/EC - “thermal” measurement of black carbon mass concentration, m , g/m³
- MAC = α/m (units: m²/g)



Looking for cases of direct transport between T1 and T2 without contamination



¡¡BE CONFUSED!! Use regional-scale modeling to help find suitable cases: (1) direct T1-T2 transport and (2) little biomass burning



Specific absorption (m²/g, 550 nm)
¡Look at **transport** period!

median specific absorption (m ² /g)	T1	T2
all periods	8.9	8.7
 direct transport periods only	8.8	 9.5

Conclusions

- Very complicated problem, but...
- Statistically significant evidence that BC specific absorption increases with aerosol age
- y Muchas Gracias