**FIGURE 1**

Temporal variations of OC (filter sampling) and uncorrected OC (Sunset Field Instrument)

**FIGURE 2**

Correlation between OC (filter sampling) and OC (Sunset Field Instrument)

\[
y = 1.01x + 3.03 \\
R^2 = 0.76 \\
n=34
\]
**FIGURE 3**

Temporal variations of ions (reconstructed from light scattering coeff.) and ions (filter sampling). $[\text{ions}]=(\text{NH}_4)_2\text{SO}_4+(\text{NH}_4)\text{NO}_3$

![Graph showing temporal variations of ions](image)

**FIGURE 4**

Correlation between ions (reconstructed from light scattering coeff.) and ions (filter sampling). $[\text{ions}]=(\text{NH}_4)_2\text{SO}_4+(\text{NH}_4)\text{NO}_3$

![Graph showing correlation](image)
**Figure 5**: Temporal variations of ions (reconstructed from light scattering coeff.) and ions (Ammonium nitrate and Ammonium Sulfate) derived from the manual filter sampling.
**FIGURE 6**

![Graph](image)

**Figure 6:** Temporal variations of PM2.5 (TEOM-FDMS) at Paris (LHVP) and St Jean. Time shifted by +3h for St Jean station.

**FIGURE 7**

![Graph](image)

**Figure 7:** Correlation between the 2 previous dataset. Time shifted by +3h for St Jean station.
Figure 8: Scatter plot of PM2.5, ions, and carbonaceous matter (EC+POM) for model and experimental results. The outlier peak of EC (25/06) have been discarded.
Figure 9: Temporal variations of SOA and POA experimentally determined by the EC-tracer method

Figure 9: Scatter plot of POA versus SOA (EC-tracer method). Obtained from the 2 datasets displayed in Figure 9
**Figure 11:** Temporal variations of OC and BC (Sunset Field Instrument) for the periods with continental air masses (A) and marine air masses (B). Temporal variations of ions (Ammonium Sulfate + Ammonium Nitrate) calculated experimentally and relative humidity for the periods with continental air masses (C) and marine air masses (D).