

Fig. S1. Fingerprint of annual anomalies of the meteorological, soil water, and carbon exchange measurements compared to the averaged values shown in Fig. 1 and 2 of the main text. For each day of the year air temperature (T_{air}), incoming global radiation (R_g), vapour pressure deficit (VPD), soil water potential (SWP), and gross primary productivity (GPP) are plotted in function of time of the day.

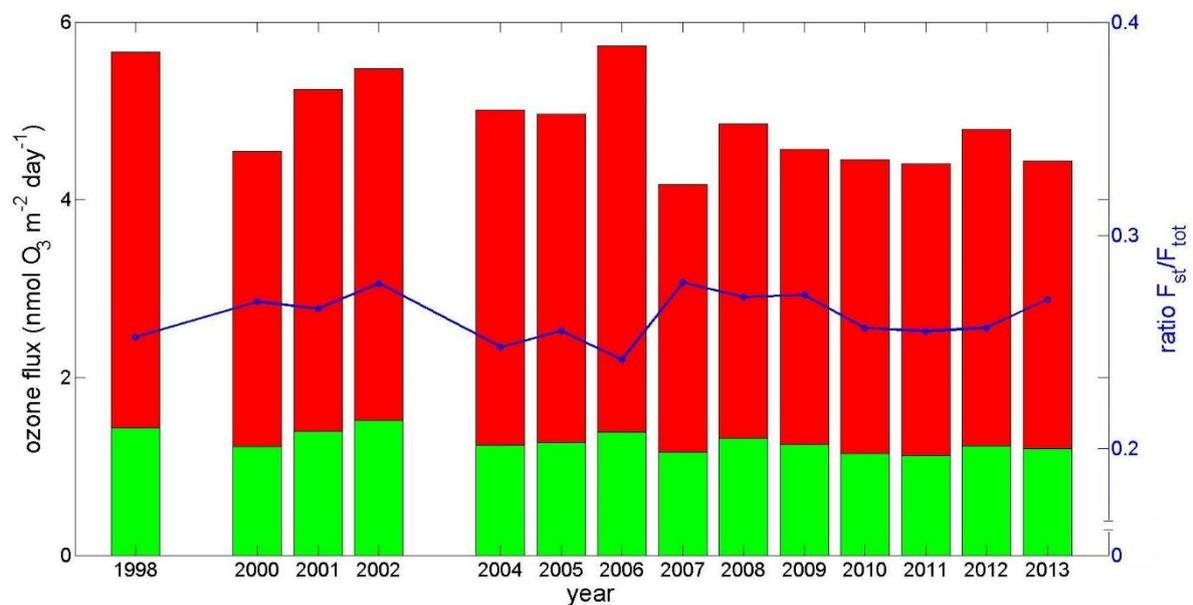
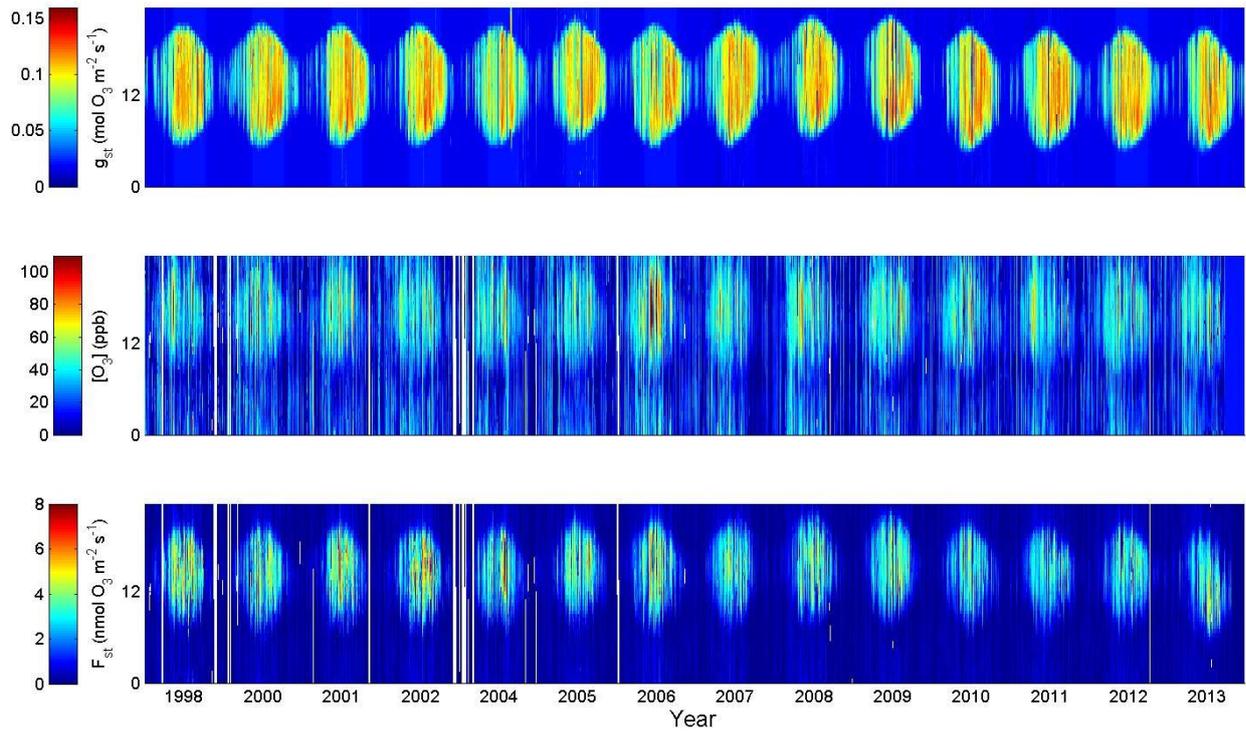


Fig. S2. Average daily O₃ flux during the growing season and ratio of stomatal versus total ozone flux (F_{st}/F_{tot}) for each year. The height of the bars represents the average total O₃ flux. The green part of the bar is the stomatal O₃ flux, whereas the red part is the non-stomatal O₃ flux. The ratio F_{st}/F_{tot} is represented by the blue line.



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Fig. S3. Fingerprints of stomatal conductance (g_{st}), ozone mixing ratio ($[\text{O}_3]$), and stomatal O_3 uptake (F_{st}). Day of year is plotted on the x-axis and hour of day on the y-axis.

Fig. S4. (a, b, c) The measured growing season GPP as function of total stomatal O₃ flux (F_{st}), AOT40, and POD₁.

15 PLA = projected leaf area. (d, e, f, g) Time series of measured growing season GPP, F_{st}, AOT40, and POD₁.

