

# Determination of region of influence obtained by aircraft vertical profiles using the density of trajectories from the HYSPLIT model

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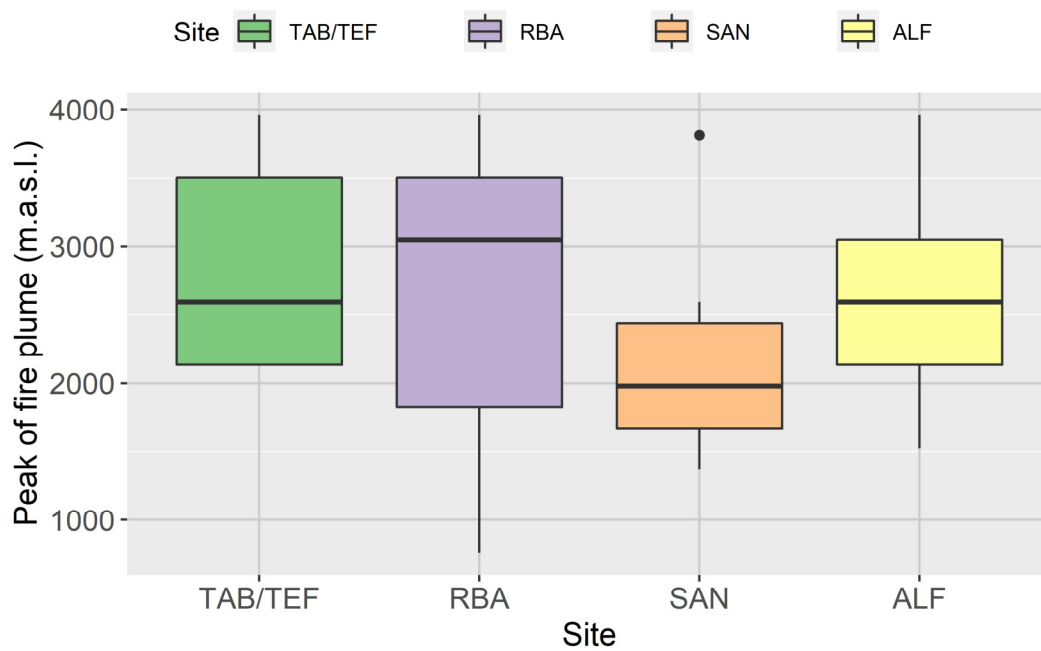
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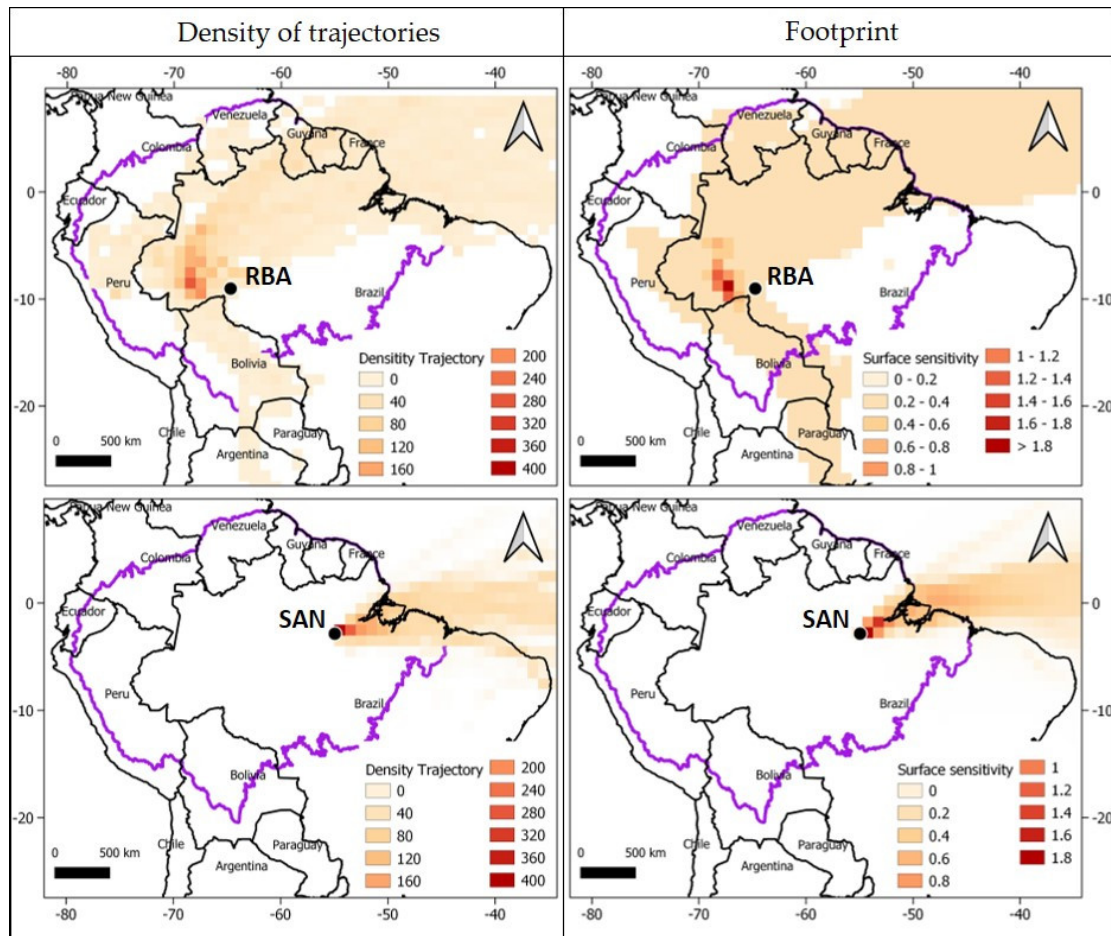
\dagger These authors contributed equally to this work.

**Table S1.** Schedule flight plan by site and altitude. V2 and V3 are the system versions. Study sites are: SAN, RBA, ALF, and TAB/TEF.

Flask	SAN/RBA (v2)		ALF (v3)		TAB/TEF (v3)		RBA (v3)	
	Altitude		Altitude		Altitude		Altitude	
	feet	meters	feet	meters	feet	meters	feet	meters
1	14500	4419	14500	4419	14500	4419	14500	4419
2	13500	4115	13500	4115	13000	3962	13000	3962
3	12500	3810	11500	3505	11500	3505	11500	3505
4	11500	3505	10000	3048	10000	3048	10000	3048
5	10500	3200	8500	2591	8500	2591	8500	2591
6	9500	2895	7000	2133	7000	2133	7000	2133
7	8500	2591	6000	1829	6000	1829	6000	1829
8	7500	2286	5000	1524	5000	1524	5000	1524
9	6500	1981	4000	1219	4000	1219	4000	1219
10	5500	1676	3000	914	3000	914	3000	914
11	4500	1372	2000	610	2000	610	2000	610
12	3500	1067	1500	457	1000	305	1000	305
13	3000	914						
14	2500	762						
15	2000	610						
16	1500	457						



**Figure S1.** Distribution of the peak of fire plume in meter above sea level (m asl) at each study site.



**Figure S2.** Comparison of the spatial distribution of the regions of influence provided by the density of trajectories from the method described in the text (left) and the surface sensitivity provided by FLEXPART footprints (right). Both datasets are on their original scales. In the main text Eqs. (1) - (3) were applied to both of them in order to compare them.