

Variação Interanual do Balanço de Gases de Efeito Estufa na Bacia Amazônica e seus controles em um mundo sob aquecimento e mudanças climáticas

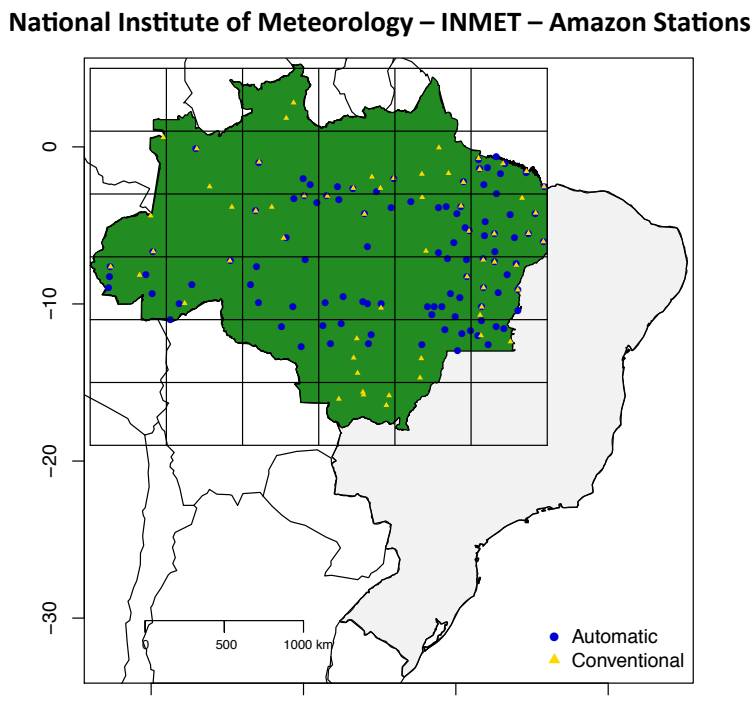
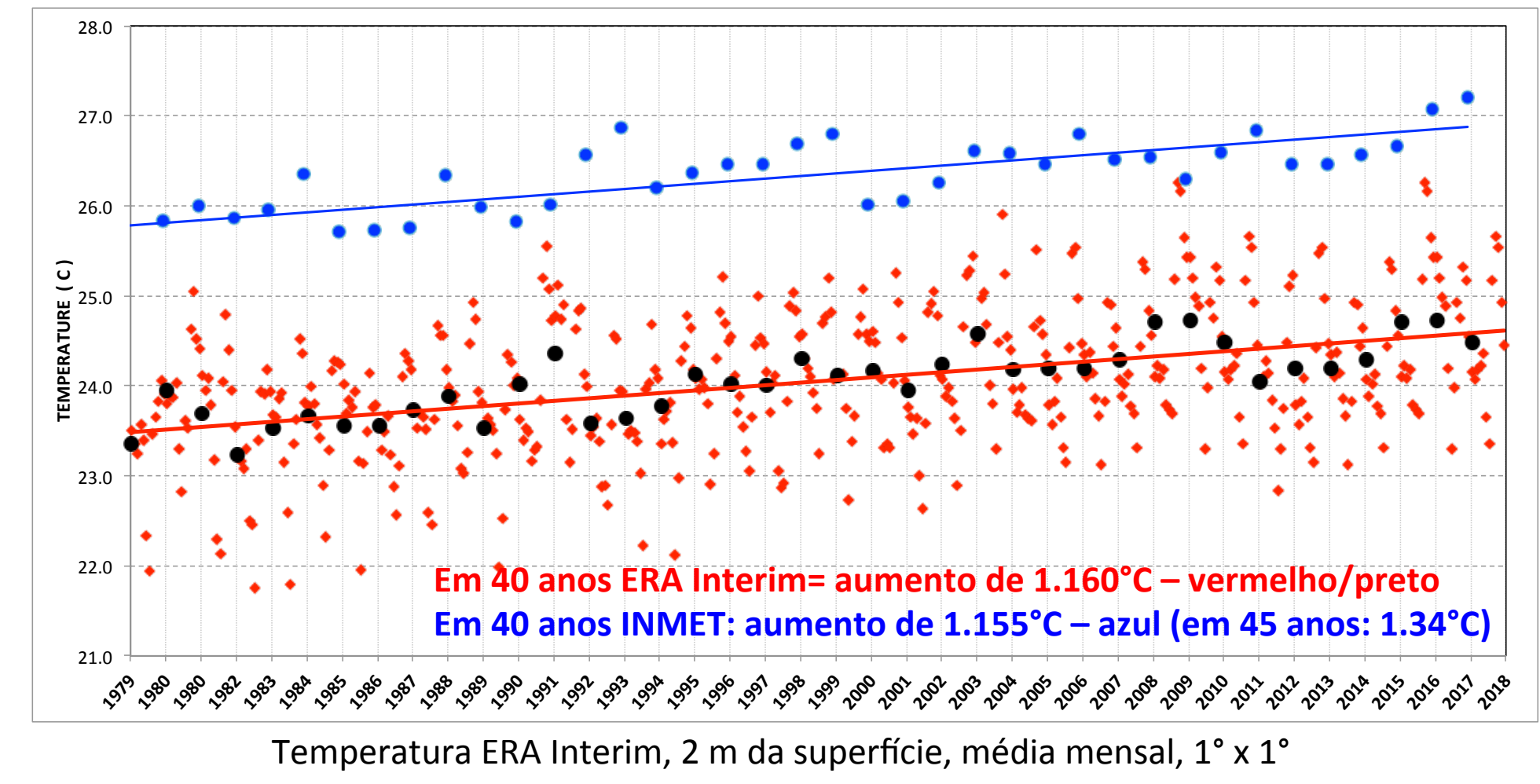
CARBAM - Estudo de Longo termo do Balanço do Carbono da Amazônia

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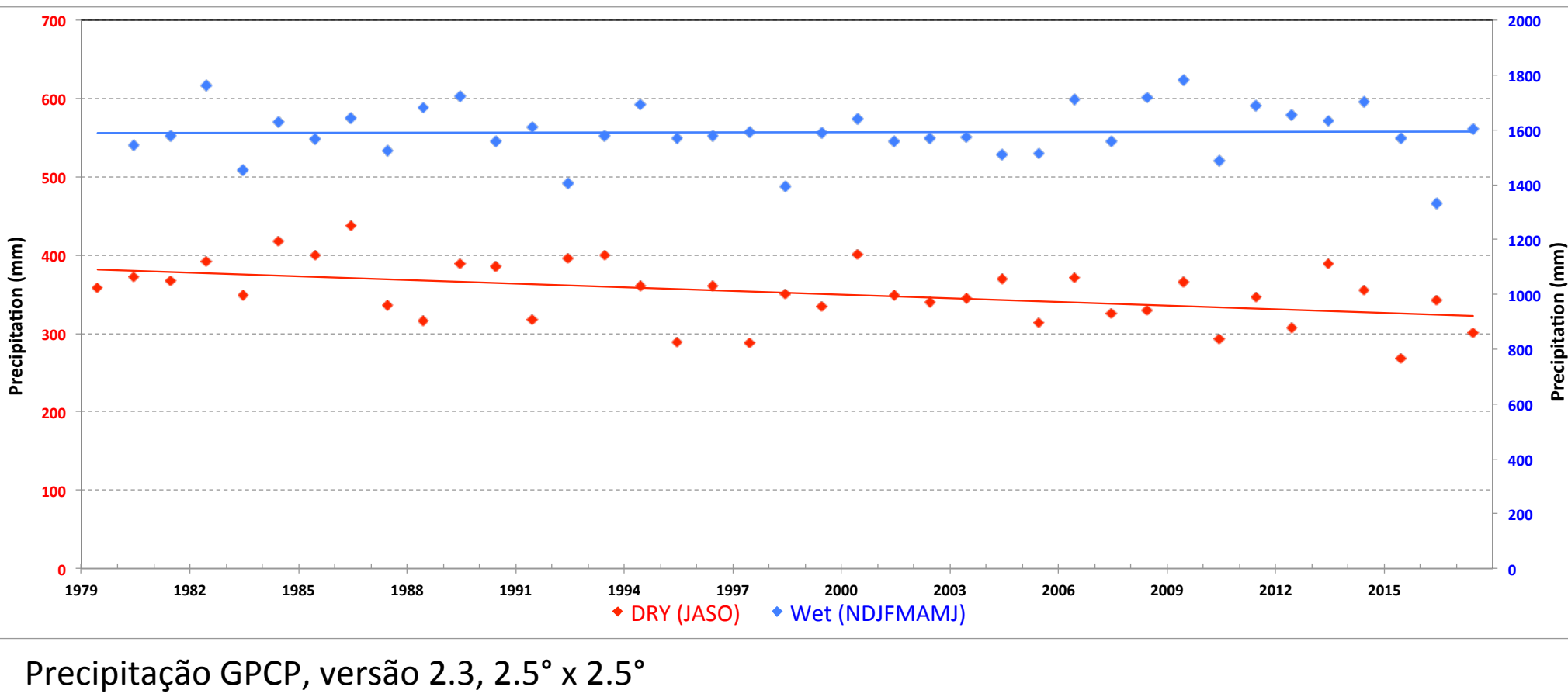
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Ao longo dos últimos 40-50 anos a Amazônia vem sofrendo muitas alterações devido ao desmatamento, queima da biomassa, mudança do uso da terra, expansão urbana, malha viária, construção de hidrelétricas, exploração de mineração, petróleo e gás, etc. Esta alteração na Floresta Amazônica vem promovendo o aumento da temperatura nesta região acima do esperado e intensificação da estação seca. Estas alterações, além das alterações climáticas vem causando impacto no Balanço de Carbono da Bacia Amazônica.

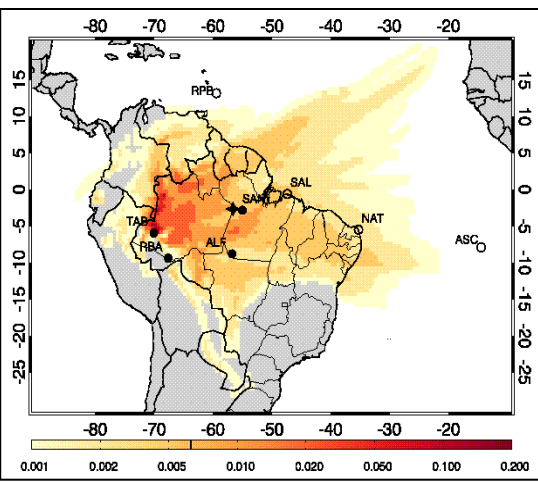
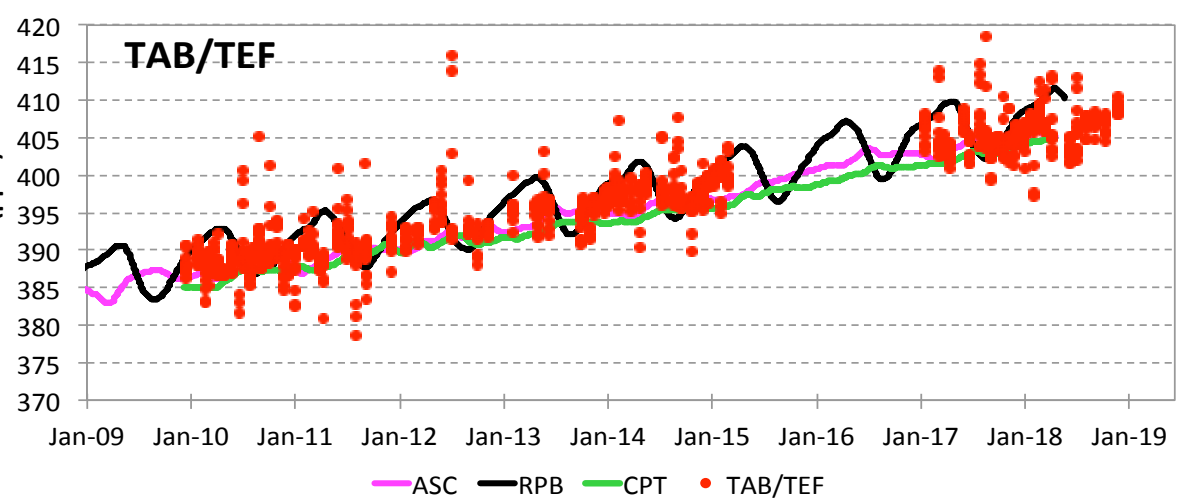
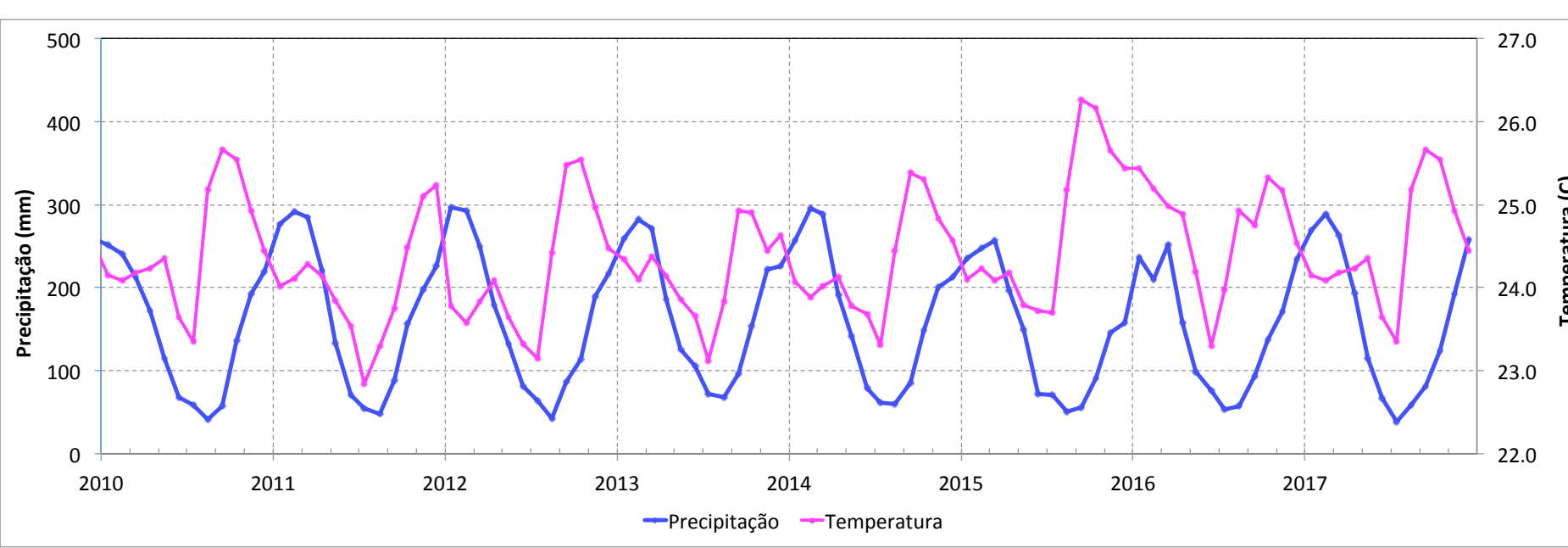
Série Temporal da Temperatura anual e mensal na Bacia Amazônica



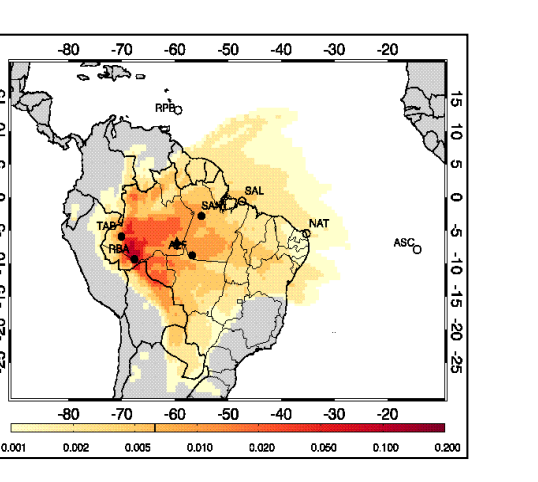
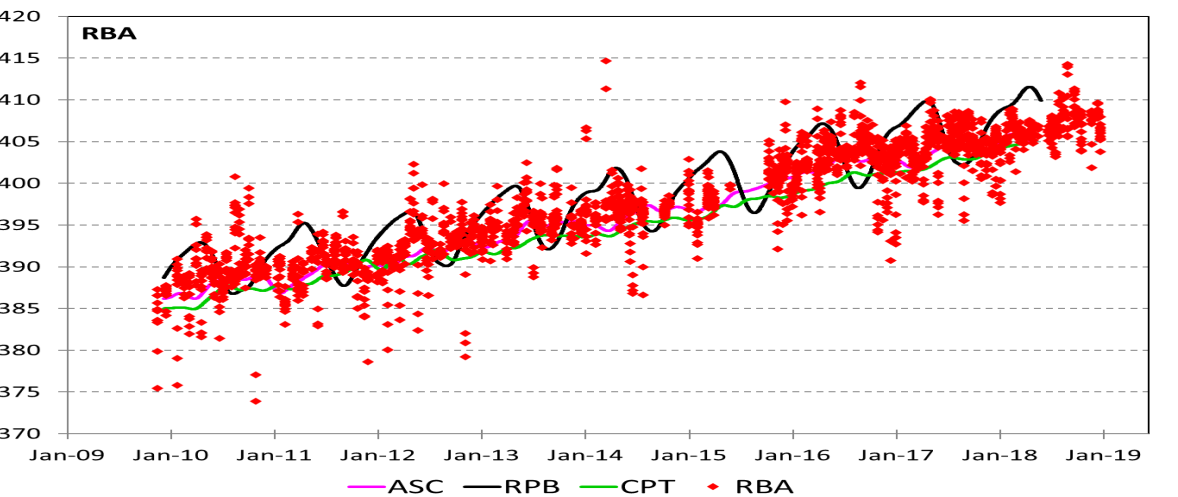
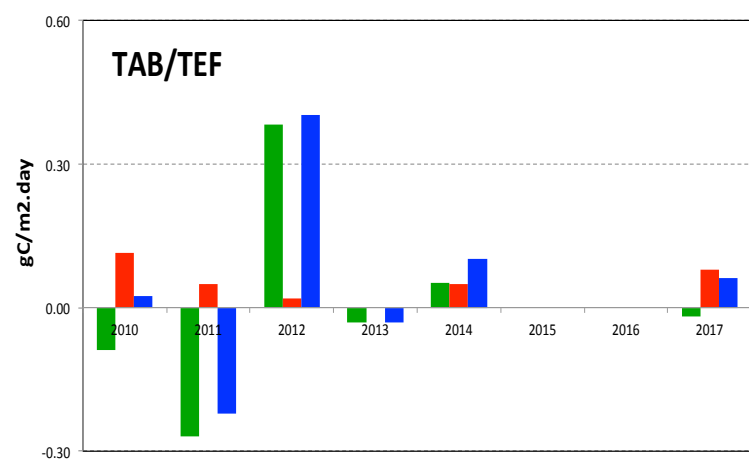
Série Temporal da Precipitação anual na Bacia Amazônica



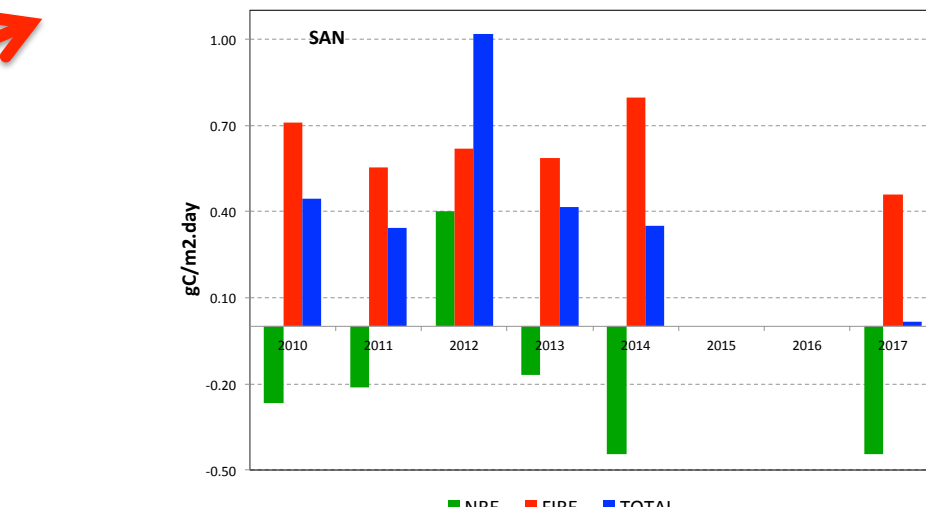
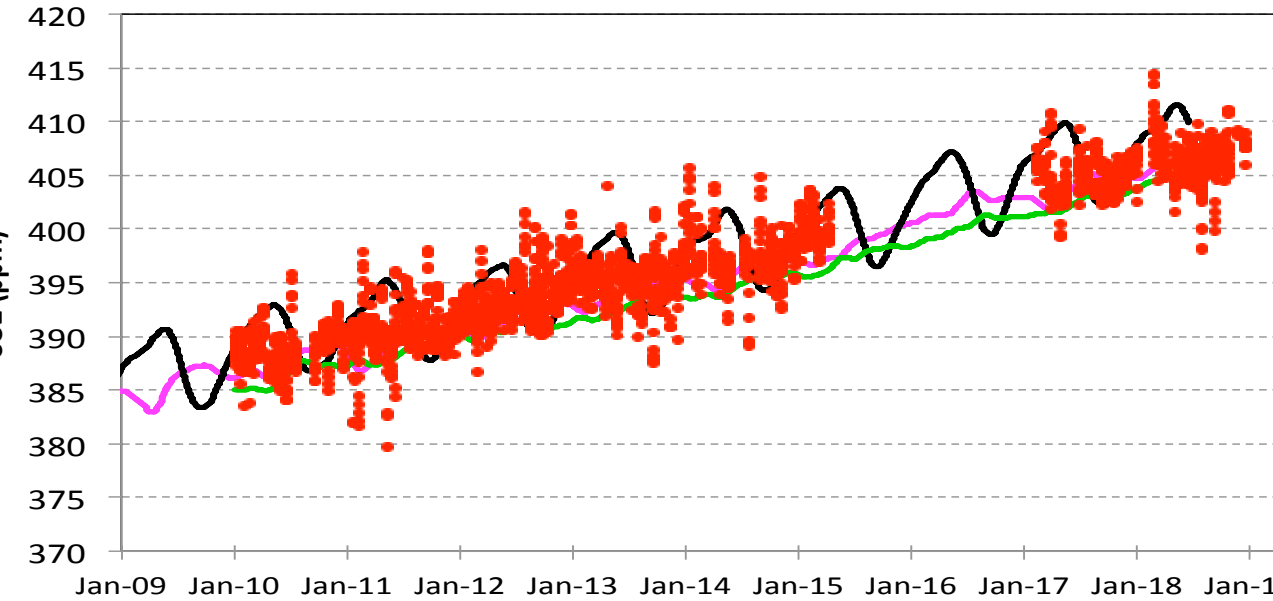
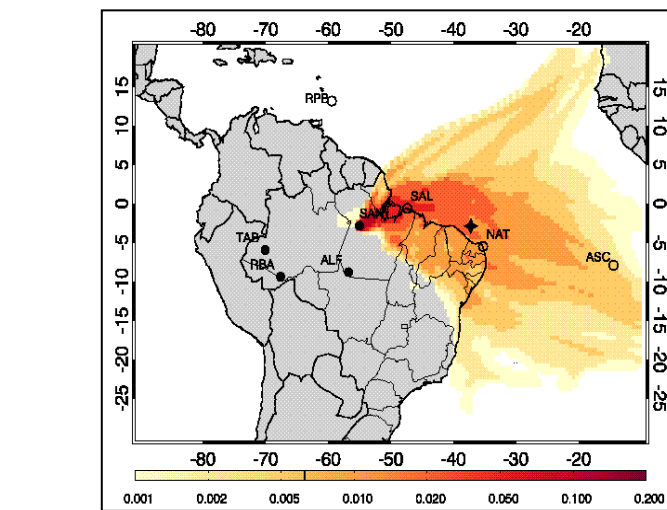
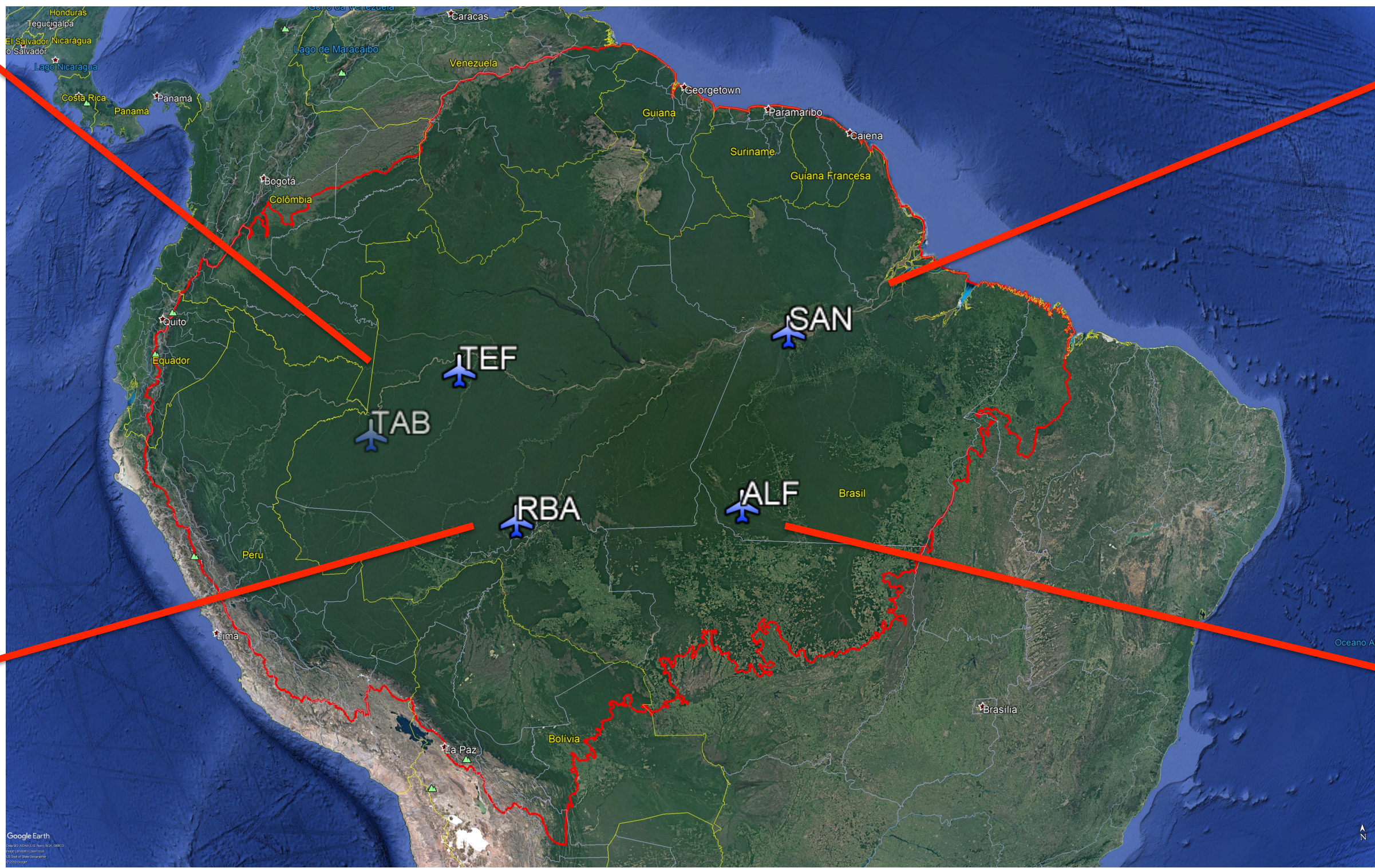
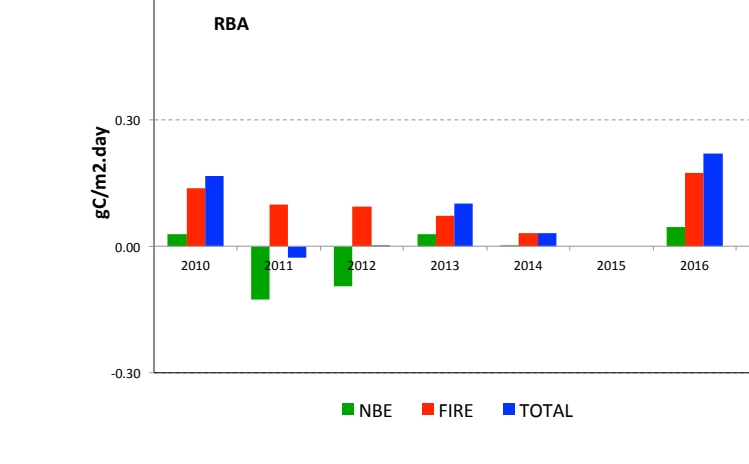
Séries Temporal da Precipitação e Temperatura na Bacia Amazônica



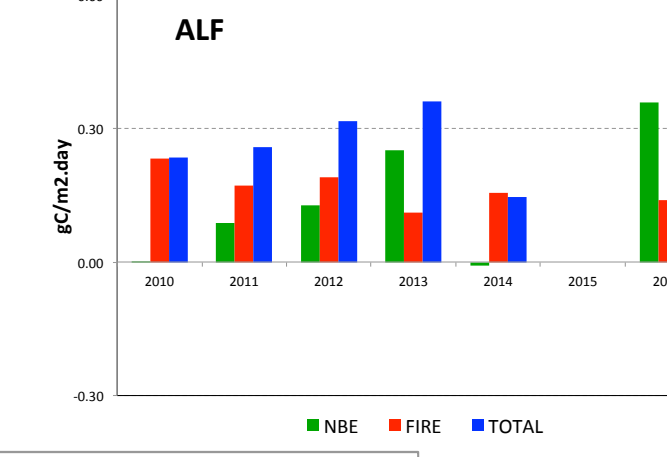
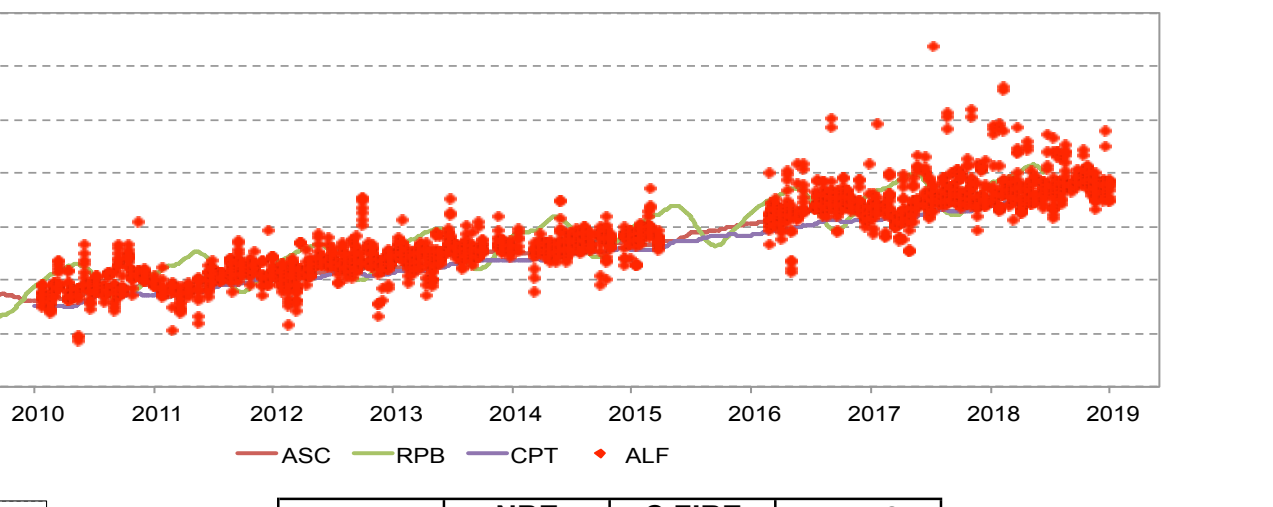
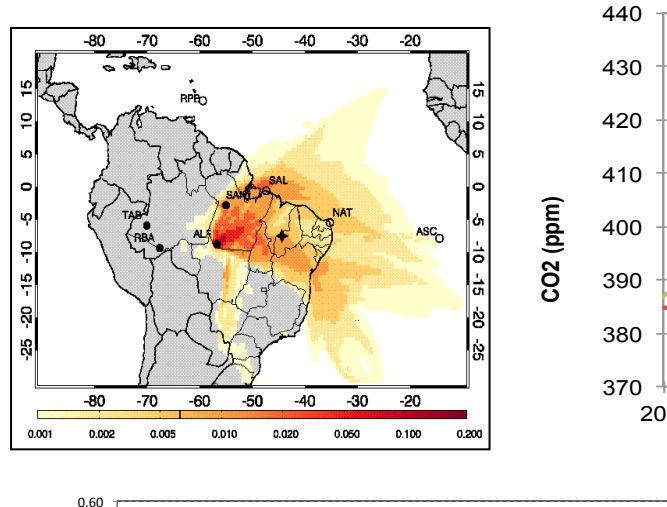
	NBE	C FIRE	Flux C
TAB/TEF	gC/m2/day	gC/m2/day	Total
2010	-0.09	0.11	0.02
2011	-0.27	0.05	-0.22
2012	0.38	0.02	0.40
2013	-0.03	0.00	-0.03
2014	0.05	0.05	0.10
2015			
2016	-0.02	0.08	0.06
2017			
Mean	0.00	0.05	0.06



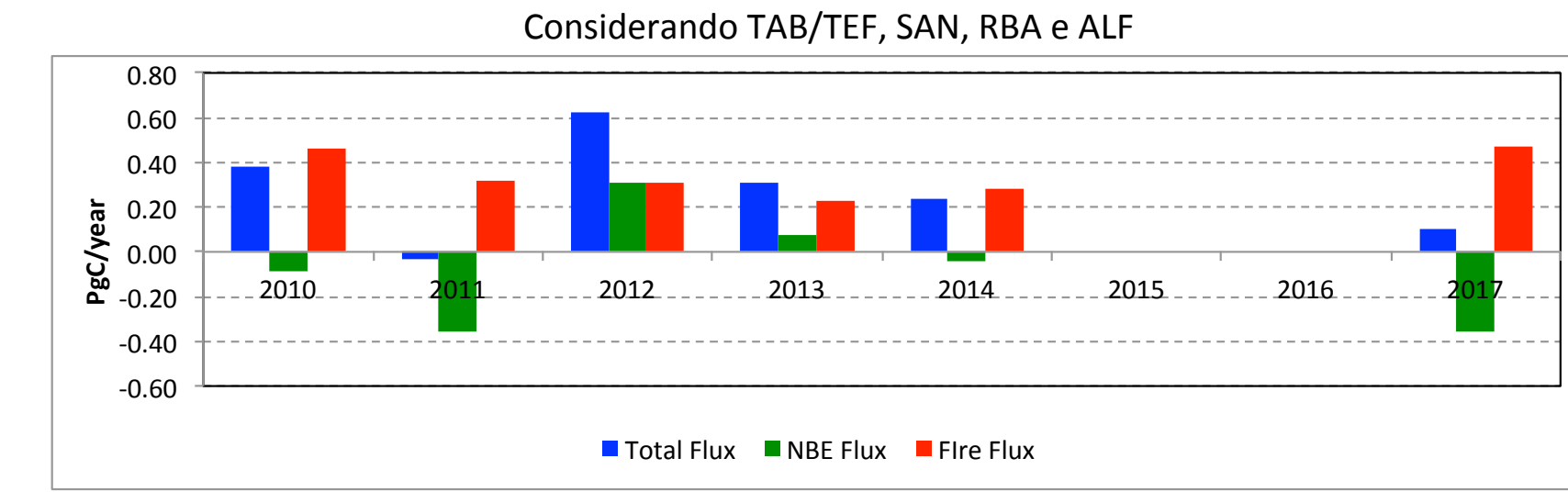
	NBE	C FIRE	Flux C
RBA	gC/m2/day	gC/m2/day	Total
2010	0.03	0.14	0.17
2011	-0.13	0.10	-0.03
2012	-0.09	0.09	0.00
2013	0.03	0.07	0.10
2014	0.00	0.03	0.03
2015			
2016	0.05	0.17	0.22
2017	-0.29	0.19	-0.10
Média	-0.06	0.11	0.06



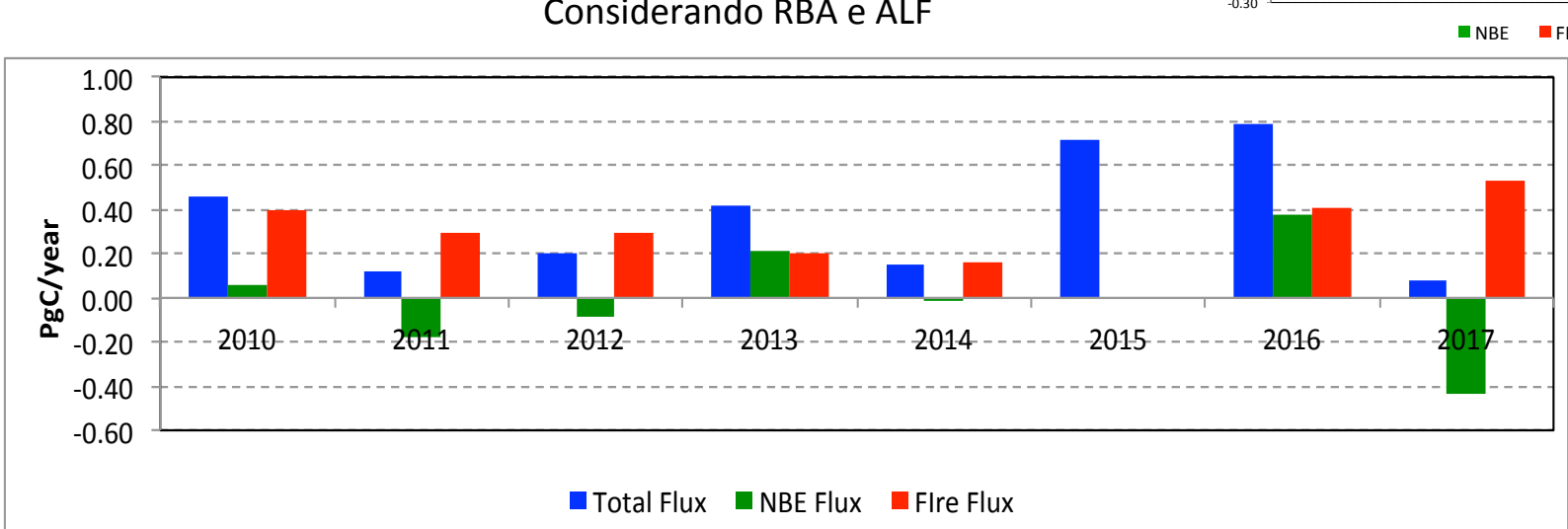
	Bio	C FIRE	Flux C
SAN	gC/m2/day	gC/m2/day	Total
2010	-0.27	0.71	0.44
2011	-0.21	0.85	0.64
2012	0.40	0.62	1.02
2013	-0.17	0.59	0.42
2014	-0.45	0.79	0.35
2015			
2016	-0.44	0.46	0.02
2017			
Média	-0.19	0.62	0.43



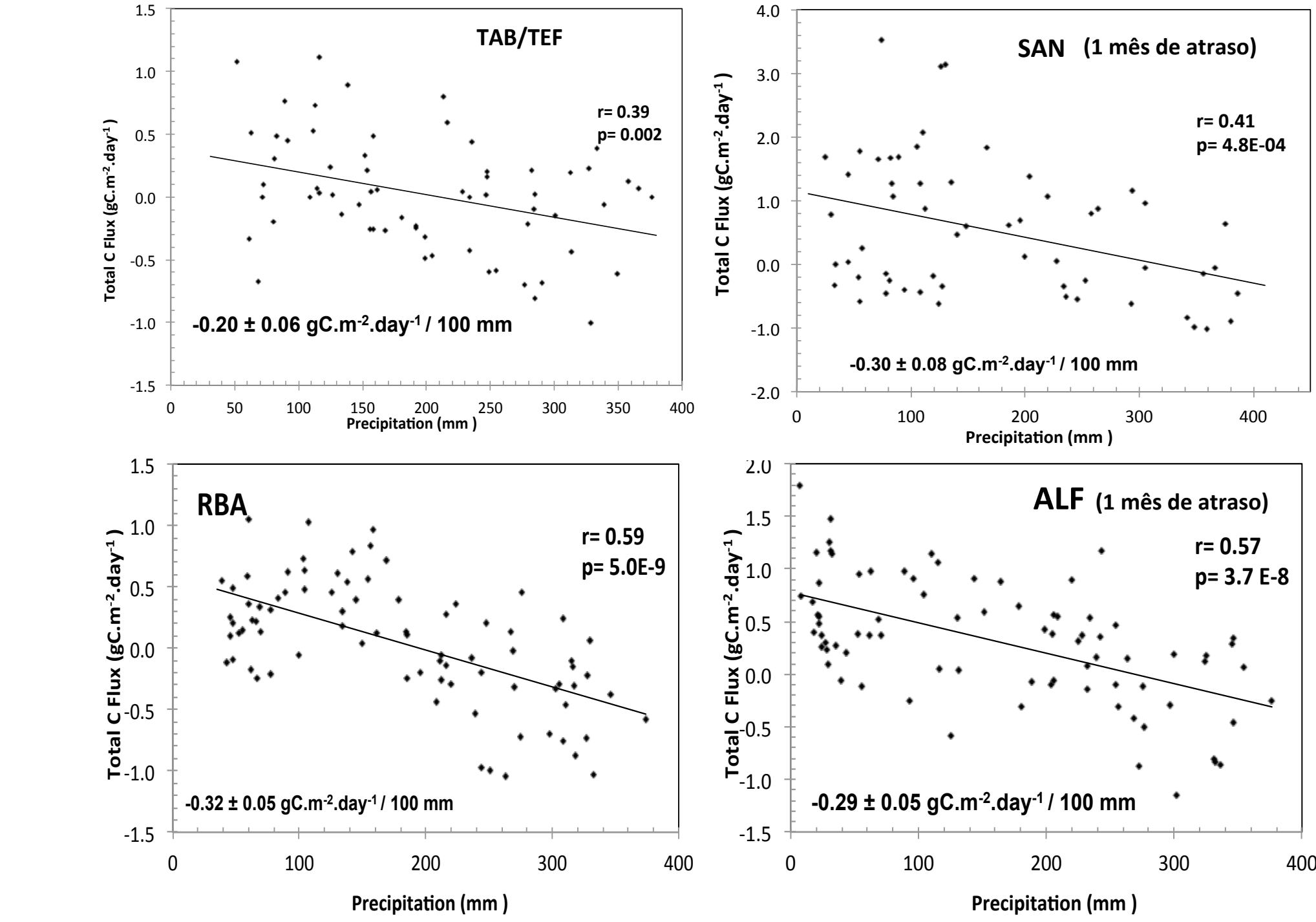
	NBE	C FIRE	Flux C
ALF	gC/m2/day	gC/m2/day	Total
2010	0.00	0.23	0.23
2011	0.09	0.17	0.26
2012	0.13	0.19	0.32
2013	0.28	0.11	0.36
2014	-0.01	0.15	0.15
2015			
2016	0.38	0.14	0.50
2017	0.14	0.27	0.40
Média	0.14	0.18	0.32



	2010	2011	2012	2013	2014	2015	2016	2017	Mean	STDev
PgC/ano										
Total	0.38	-0.04	0.62	0.31	0.23			0.10	0.27	0.23
NBE	-0.08	-0.35	0.31	0.08	-0.04			-0.36	-0.07	0.26
Fire	0.46	0.32	0.31	0.23	0.28			0.47	0.34	0.10

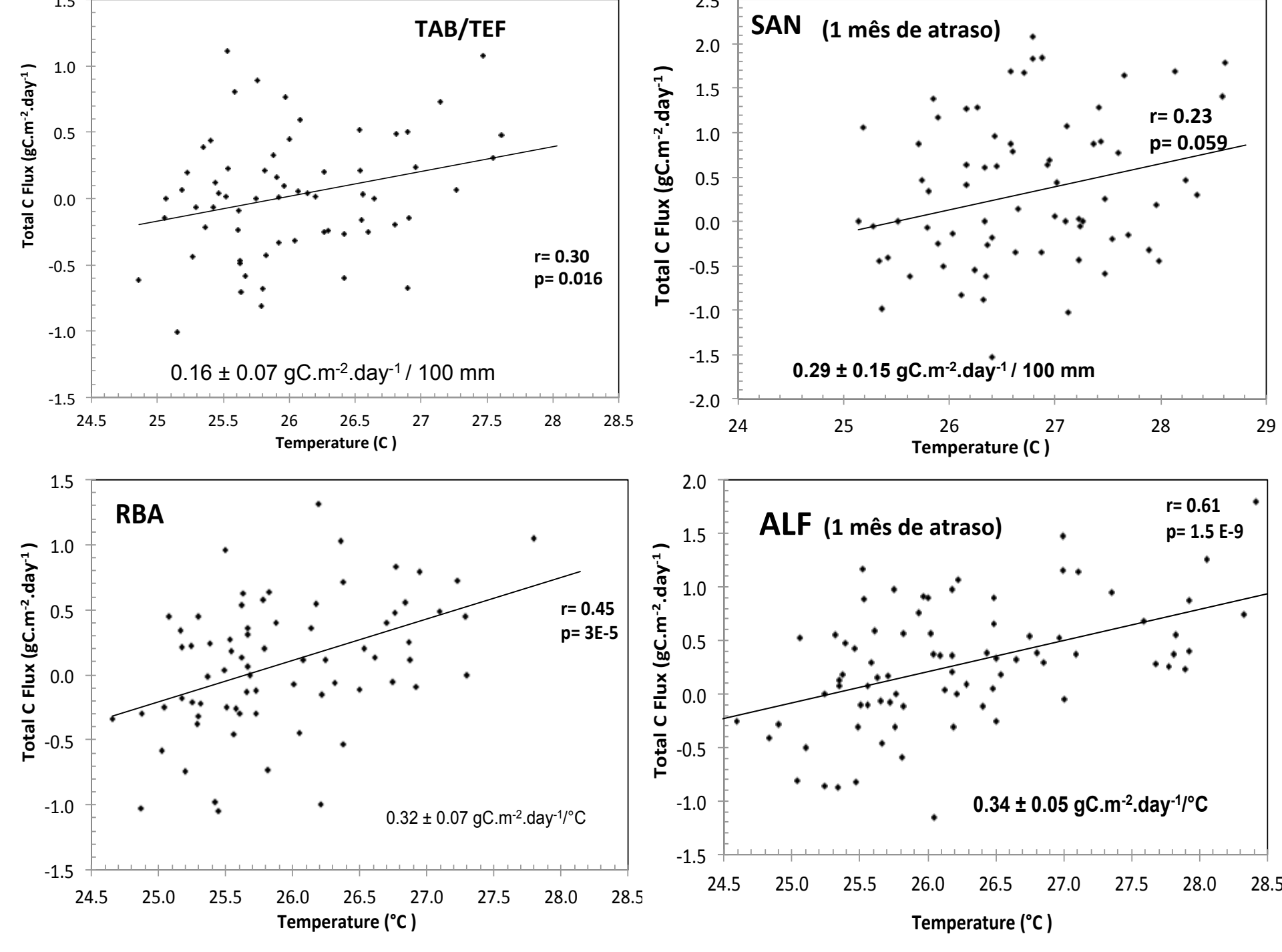


	2010	2011	2012	2013	2014	2015	2016	2017	Mean	STDev
PgC/ano										
Total	0.46	0.12	0.21	0.42	0.15		0.79	0.08	0.32	0.25
NBE	0.05	-0.17	-0.09	0.22	0.00		0.38	-0.43	-0.01	0.26
Fire	0.40	0.29	0.30	0.21	0.16		0.41	0.53	0.33	0.13



	gC/m2.day	gC/m2.day	gC/m2.day	gC/m2.day
	RBA	TAB/TEF	ALF	SAN
Temperatura (Total C Flux)	0.17	-0.04	0.23	-0.30
std	0.07	0.10	0.07	0.21
r	0.60	0.40	0.64	0.44
p	1.19E-08	5.98E-03	2.42E-09	9.38E-04
Precipitacao (100mm)	-0.23	-0.26	-0.12	-0.47
std	0.05	0.10	0.06	0.19
r	0.60	0.40	0.64	0.44
p	1.19E-08	5.98E-03	2.42E-09	9.38E-04

	40 ANOS ATRÁS	ATUAL (2010-2017)	DAQUI A 20 ANOS
FLUXO TOTAL DE C (PgC/ano)	-0.3	0.3 ± 0.2	0.7
TEMPERATURA	23.5	24.5	25.2
PRECIPITAÇÃO	1970	1948	1894



ACKNOWLEDGEMENTS