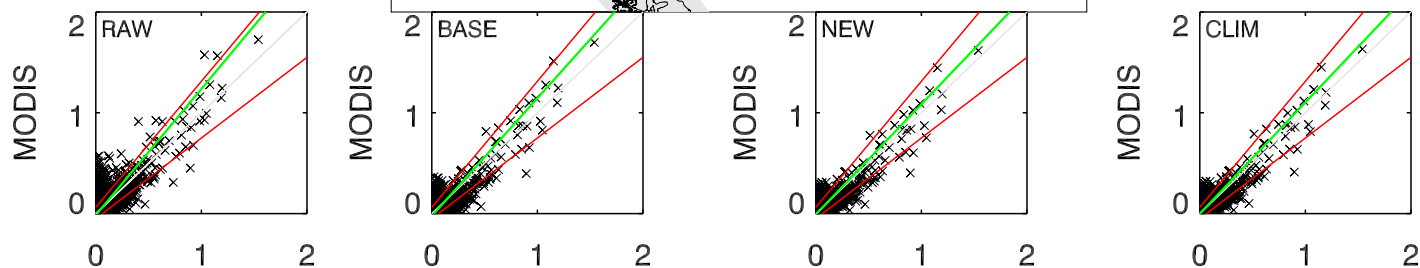
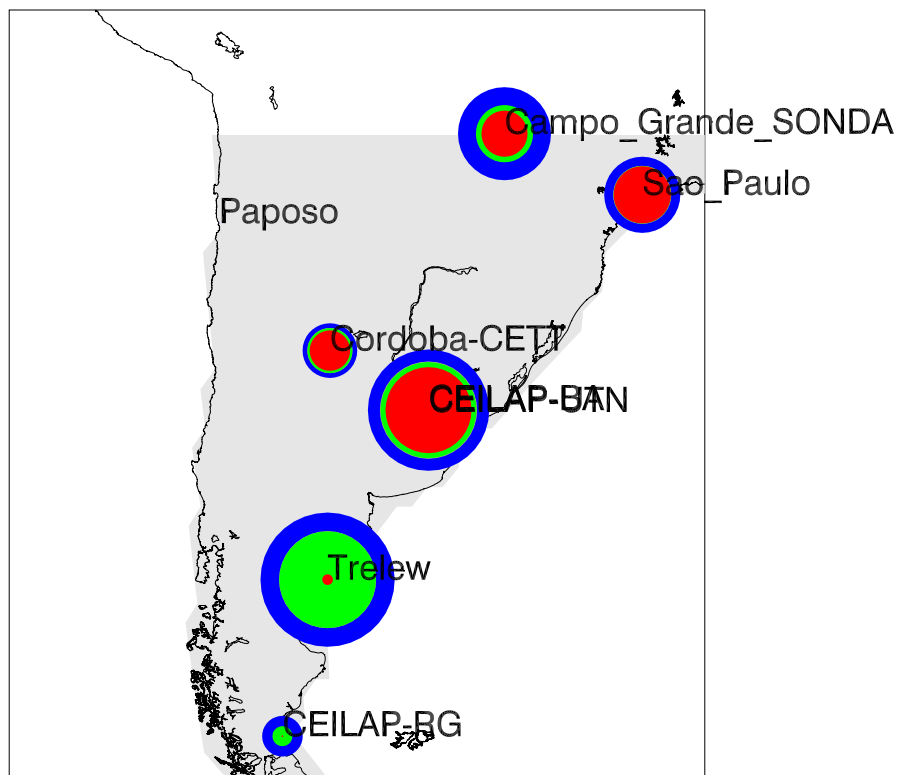


T 32.50S 64.50W S. South America  
AERONET AOD: N= 2766  $\bar{\tau}$ =0.10 eta=0.52

MODIS  $\tau$

x RAW  
x BASE  
x NEW  
x STRONG



Which		AERONET AOD			MODIS-AERONET			Regression	
		Mean	>0.2	>1.0	Mean Bias	RMSE	% -/in/+ Tolerance	Slope	r <sup>2</sup>
RAW	(N= 2766)	0.104	0.13	0.00	0.008	0.104	15/63/20	1.033	0.58
BASE	(N= 1981)	0.092	0.08	0.01	-0.008	0.093	14/68/16	0.945	0.72
NEW	(N= 1981)	0.100	0.08	0.01	0.000	0.077	7/79/12	0.898	0.73
CLIM	(N= 1959)	0.110	0.08	0.01	0.009	0.079	6/77/16	0.929	0.74
AERONET AOD > 0.2									
RAW	(N= 271)	0.343	0.56	0.04	-0.037	0.191	35/56/ 8	0.970	0.72
BASE	(N= 198)	0.325	0.46	0.06	-0.071	0.203	47/47/ 4	0.921	0.78
NEW	(N= 195)	0.335	0.56	0.05	-0.064	0.183	36/58/ 4	0.884	0.79
CLIM	(N= 198)	0.343	0.58	0.05	-0.054	0.180	32/62/ 5	0.912	0.81

Which	Noise	vs $\tau_A$		vs $\tau_M$		Est.@	Est.@	Est.@	Est.@	Est.@
	Floor	Diagnostic		Prognostic		0.1	0.2	0.4	0.6	1.0
RAW	0.089	0.02 +	0.27 $\tau$	0.15 +	0.05 $\tau$	0.15	0.16	0.17	0.18	0.20
BASE	0.071	0.03 +	0.28 $\tau$	0.16 +	-0.03 $\tau$	0.16	0.15	0.15	0.14	0.13
NEW	0.055	-0.02 +	0.38 $\tau$	0.11 +	0.02 $\tau$	0.11	0.11	0.12	0.12	0.13
CLIM	0.058	0.01 +	0.27 $\tau$	0.11 +	0.01 $\tau$	0.11	0.11	0.11	0.12	0.12