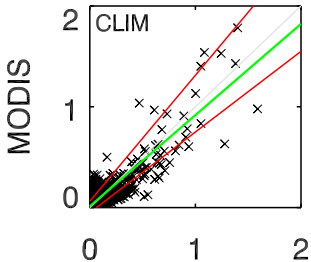
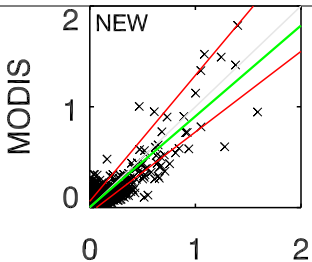
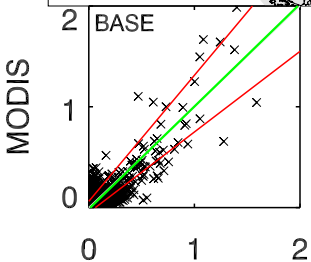
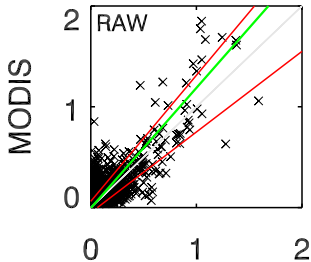
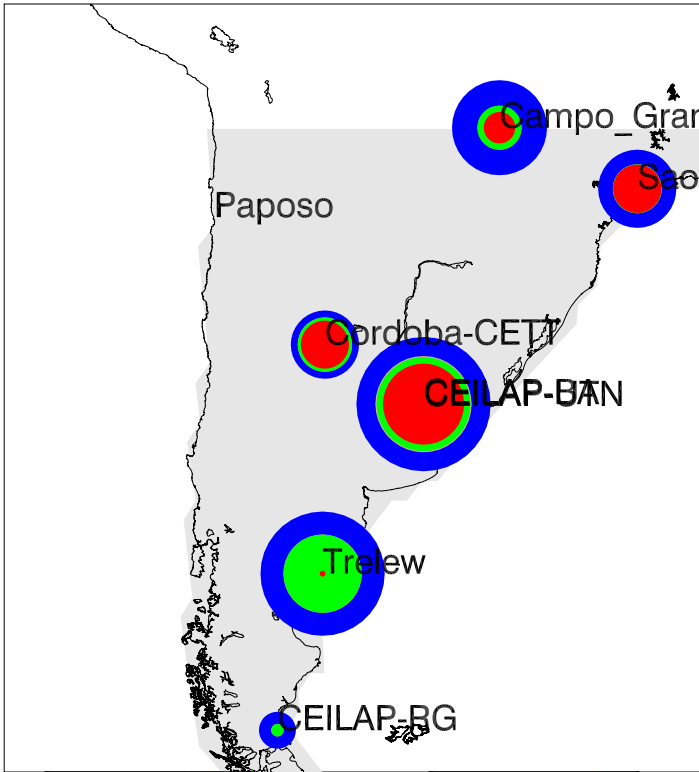


A 32.50S 64.50W S. South America

AERONET AOD: N= 2766 $\overline{\tau}$ =0.10 eta=0.52

MODIS τ

- RAW
- BASE
- NEW
- STRONG



Which		MODIS AOD			MODIS-AERONET			Regression	
		Mean	>0.2	>1.0	Mean Bias	RMSE	% -/in/+ Tolerance	Slope	r ²
RAW	(N= 2612)	0.125	0.17	0.01	0.016	0.114	13/62/24	1.014	0.50
BASE	(N= 1629)	0.099	0.10	0.01	-0.013	0.097	17/66/16	0.874	0.60
NEW	(N= 1620)	0.106	0.08	0.00	-0.006	0.082	10/75/13	0.817	0.60
CLIM	(N= 1602)	0.115	0.09	0.00	0.002	0.083	9/74/16	0.817	0.61
AERONET AOD > 0.2									
RAW	(N= 315)	0.348	0.58	0.06	-0.046	0.197	35/54/10	0.935	0.59
BASE	(N= 205)	0.284	0.41	0.04	-0.103	0.189	54/40/ 4	0.841	0.55
NEW	(N= 205)	0.281	0.43	0.03	-0.106	0.173	51/45/ 2	0.799	0.58
CLIM	(N= 205)	0.288	0.46	0.03	-0.098	0.168	49/46/ 3	0.795	0.60

Which	Noise	vs τ_A		vs τ_M		Est.@	Est.@	Est.@	Est.@	Est.@
	Floor	Diagnostic		Prognostic		0.1	0.2	0.4	0.6	1.0
RAW	0.098	0.04 +	0.22 τ	0.09 +	0.23 τ	0.11	0.14	0.18	0.23	0.32
BASE	0.075	0.05 +	0.25 τ	0.10 +	0.16 τ	0.12	0.14	0.17	0.20	0.27
NEW	0.059	0.05 +	0.22 τ	0.05 +	0.27 τ	0.07	0.10	0.16	0.21	0.32
CLIM	0.061	0.04 +	0.23 τ	0.06 +	0.22 τ	0.08	0.10	0.15	0.19	0.28