N. America

Figure showing twelve scatter plots of Extreme area (km², r value for trend = -0.002) versus JJA blocking area (km²) for different blocking detection methods, each with a linear trend line. Data points are labeled by year.

Top row:
- **tuned DG83p** — hot, r=+0.085 (r value for trend = -0.101)
- **tuned DG83** — hot, r=+0.336 (r value for trend = -0.023)
- **tuned D13** — hot, r=+0.402 (r value for trend = -0.065)
- **D13** — hot, r=+0.246 (r value for trend = -0.158)

Middle row:
- **tuned S06** — hot, r=+0.180 (r value for trend = -0.204)
- **S06** — hot, r=+0.168 (r value for trend = -0.038)
- **tuned M13** — hot, r=+0.279 (r value for trend = +0.098)
- **M13** — hot, r=+0.172 (r value for trend = +0.140)

Bottom row:
- **tuned M17** — hot, r=+0.366 (r value for trend = +0.100)
- **M17** — hot, r=+0.285 (r value for trend = +0.260)

N. America
tuned DG83p
hot, r=+0.352
(r value for trend = +0.228)

tuned DG83
hot, r=+0.711
(r value for trend = +0.092)

tuned D13
hot, r=+0.679
(r value for trend = +0.003)

D13
hot, r=+0.382
(r value for trend = -0.120)

tuned S06
hot, r=+0.515
(r value for trend = -0.132)

S06
hot, r=+0.485
(r value for trend = +0.084)

tuned M13
hot, r=+0.572
(r value for trend = +0.192)

M13
hot, r=+0.507
(r value for trend = +0.143)

tuned M17
hot, r=+0.651
(r value for trend = +0.060)

M17
hot, r=+0.504
(r value for trend = +0.083)

Europe

tuned DG83p
JJA frequency std (%)

tuned DG83
JJA frequency std (%)

tuned D13
JJA frequency std (%)

D13
JJA frequency std (%)

tuned S06
JJA frequency std (%)

S06
JJA frequency std (%)

tuned M13
JJA frequency std (%)

M13
JJA frequency std (%)

tuned M17
JJA frequency std (%)

M17
JJA frequency std (%)

Extreme
JJA frequency std (%)

Correlation between indices: summer chunk

	tuned DG83p	tuned DG83	tuned D13	D13	tuned S06	S06	tuned M13	M13	tuned M17	M17	Extreme
tuned DG83p											
tuned DG83	+0.5										
tuned D13	+0.4	+0.8									
D13	+0.2	+0.7	+0.6					0.08			
tuned S06	+0.2	+0.3	+0.4	+0.4							
S06	+0.1	+0.2	+0.4	+0.3	+0.7						
tuned M13	+0.2	+0.0	+0.2	-0.1	+0.1	+0.2					
M13	+0.2	+0.4	+0.3	+0.2	+0.3	+0.5	+0.5				
tuned M17	+0.3	+0.5	+0.6	+0.4	+0.5	+0.5	+0.3	+0.6			
M17	+0.2	+0.4	+0.5	+0.4	+0.4	+0.4	+0.2	+0.6	+0.7		
Extreme	+0.5	+0.4	+0.6	+0.1	+0.4	+0.4	+0.4	+0.3	+0.4	+0.3	
e^2 with extreme	0.91	0.92	0.78	1.07	0.86	0.91	0.88	0.92	0.86	0.93	

Correlation between indices: summer Indchunk

	tuned DG83p	tuned DG83	tuned D13	D13	tuned S06	S06	tuned M13	M13	tuned M17	M17	Extreme
tuned DG83p				0.93							
tuned DG83	+0.5			0.96		0.90					
tuned D13	+0.6	+0.9		0.96		0.93					
D13	+0.2	+0.7	+0.7		0.07			0.04			
tuned S06	+0.3	+0.5	+0.6	+0.4							
S06	+0.3	+0.5	+0.5	+0.3	+0.8						
tuned M13	+0.2	+0.3	+0.4	+0.0	+0.5	+0.5					
M13	+0.2	+0.5	+0.5	+0.2	+0.6	+0.7	+0.7	0.07			
tuned M17	+0.3	+0.6	+0.6	+0.3	+0.7	+0.6	+0.7	+0.8		0.94	
M17	+0.2	+0.5	+0.5	+0.3	+0.5	+0.6	+0.4	+0.8	+0.8		
Extreme	+0.7	+0.7	+0.7	+0.3	+0.6	+0.5	+0.5	+0.5	+0.6	+0.4	
e^2 with extreme	0.56	0.63	0.55	1.01	0.71	0.86	0.78	0.79	0.67	0.85	

Prob. of column index better than row index: summer Indchunk

	tuned DG83p	tuned DG83	tuned D13	D13	tuned S06	S06	tuned M13	M13	tuned M17	M17
tuned DG83p				←		←				
tuned DG83	0.63			←		←				←
tuned D13	0.49	0.25		←		←	←	←		←
D13	**0.93**	**0.96**	**0.96**		↓		↓	↓	↓	
tuned S06	0.74	0.73	0.81	**0.07**		←				←
S06	**0.88**	**0.90**	**0.93**	0.27	**0.86**				↓	
tuned M13	0.83	0.81	**0.87**	**0.15**	0.70	0.34			↓	
M13	0.80	0.80	**0.85**	**0.13**	0.74	0.34	0.51		↓	
tuned M17	0.68	0.61	0.73	**0.04**	0.32	**0.12**	**0.15**	**0.07**		←
M17	0.83	**0.85**	**0.87**	0.18	**0.84**	0.49	0.66	0.73	**0.94**	

tuned DG83p
JJA Pearson's rho: unweighted
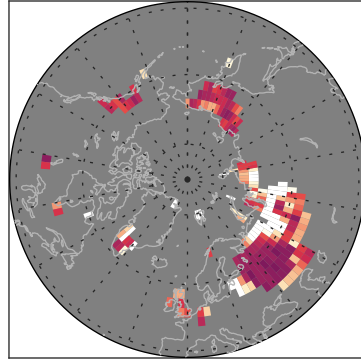
tuned DG83
JJA Pearson's rho: unweighted
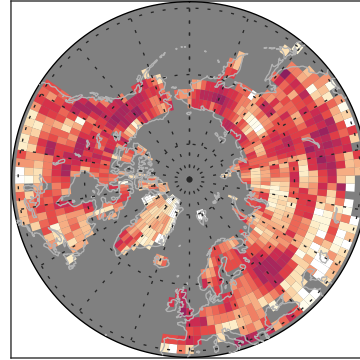
tuned D13
JJA Pearson's rho: unweighted
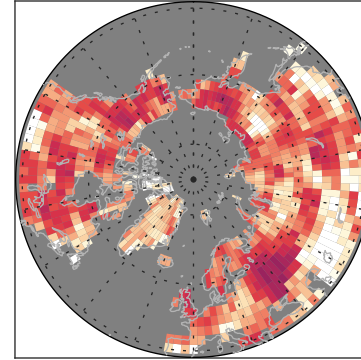
D13
JJA Pearson's rho: unweighted
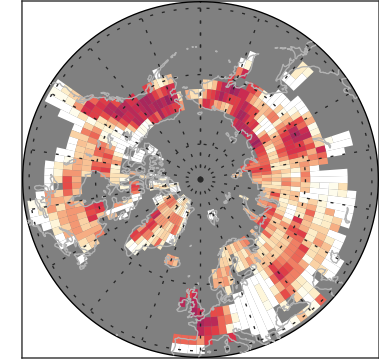
tuned S06
JJA Pearson's rho: unweighted
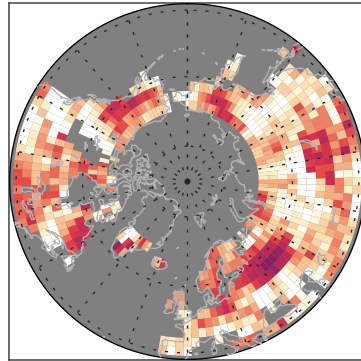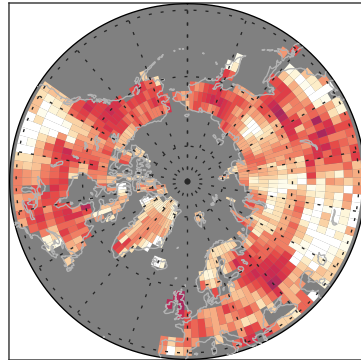
S06
JJA Pearson's rho: unweighted
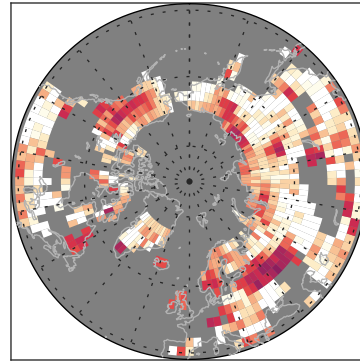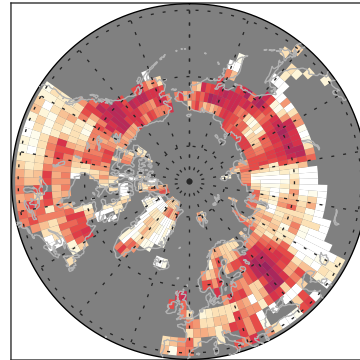
tuned M13
JJA Pearson's rho: unweighted
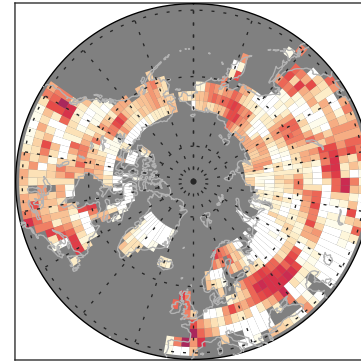
M13
JJA Pearson's rho: unweighted
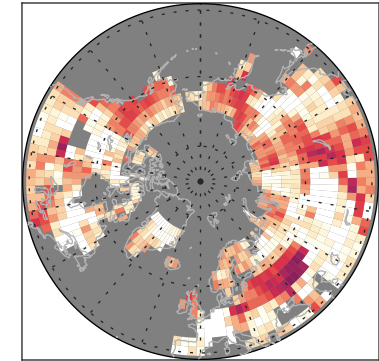
tuned M17
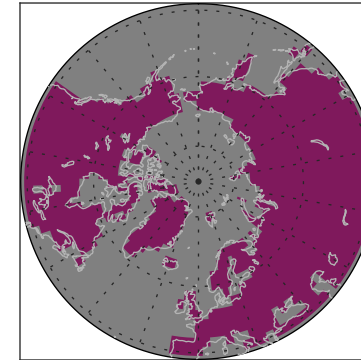JJA Pearson's rho: unweighted

M17
JJA Pearson's rho: unweighted

Extreme
JJA Pearson's rho: unweighted
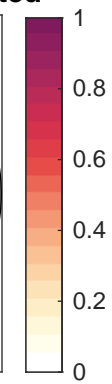
JJA PDF of correlation: unweighted