

Supplementary Information

Supplementary Tables – Correlations between Coral records (Rodrigues coral composite, Totor, Cabri) SST anomaly reconstructions and grid-SST products (ERSSTv3b/4, HadISST, HadSST3, HadMAT1, HadNMAT2; see citations in main text). All correlations for detrended data computed at knmi climate explorer with 95% Confidence intervals (CI) computed with a Monte Carlo (van Oldenborgh and Burgers, 2005). Lag= 0, corr= correlation coefficient; p= p-value; no= number of observations.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.280	0.0290	61	0.07... 0.48
Feb-Jan	0	0.271	0.0349	61	0.08... 0.48
Mar-Feb	0	0.251	0.0509	61	0.08... 0.45
Apr-Mar	0	0.266	0.0385	61	0.13... 0.47
May-Apr	0	0.279	0.0292	61	0.13... 0.47
Jun-May	0	0.282	0.0276	61	0.13... 0.47
Jul-Jun	0	0.279	0.0296	61	0.12... 0.45
Aug-Jul	0	0.274	0.0328	61	0.10... 0.45
Sep-Aug	0	0.250	0.0518	61	0.07... 0.45
Oct-Sep	0	0.234	0.0715	60	0.04... 0.42
Nov-Oct	0	0.235	0.0709	60	0.04... 0.42
Dec-Nov	0	0.259	0.0455	60	0.06... 0.45

Supplementary Table 1 - Rodrigues ERSSTv3b with Rodrigues coral composite SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.424	0.0007	60	0.23... 0.58
Feb-Jan	0	0.401	0.0015	60	0.21... 0.58
Mar-Feb	0	0.362	0.0045	60	0.17... 0.55
Apr-Mar	0	0.354	0.0055	60	0.17... 0.53
May-Apr	0	0.366	0.0040	60	0.19... 0.53
Jun-May	0	0.369	0.0037	60	0.19... 0.54
Jul-Jun	0	0.357	0.0051	60	0.16... 0.52
Aug-Jul	0	0.365	0.0038	61	0.17... 0.54
Sep-Aug	0	0.377	0.0028	61	0.19... 0.54
Oct-Sep	0	0.382	0.0026	60	0.23... 0.56
Nov-Oct	0	0.393	0.0019	60	0.23... 0.56
Dec-Nov	0	0.426	0.0007	60	0.26... 0.58

Supplementary Table 2 - Rodrigues ERSSTv3b with Cabri SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.032	0.8054	60	-0.20... 0.28
Feb-Jan	0	0.046	0.7284	60	-0.19... 0.30
Mar-Feb	0	0.058	0.6599	60	-0.18... 0.31
Apr-Mar	0	0.087	0.5065	60	-0.15... 0.33
May-Apr	0	0.096	0.4676	60	-0.13... 0.33
Jun-May	0	0.087	0.5078	60	-0.16... 0.31
Jul-Jun	0	0.090	0.4949	60	-0.14... 0.31
Aug-Jul	0	0.082	0.5355	60	-0.15... 0.29
Sep-Aug	0	0.046	0.7282	60	-0.21... 0.25
Oct-Sep	0	-0.010	0.9379	59	-0.25... 0.23
Nov-Oct	0	-0.007	0.9583	59	-0.25... 0.23
Dec-Nov	0	0.006	0.9651	59	-0.23... 0.25

Supplementary Table 3 - Rodrigues ERSSTv3b with Totor SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.393	0.0017	61	0.19... 0.55
Feb-Jan	0	0.390	0.0019	61	0.22... 0.56
Mar-Feb	0	0.362	0.0041	61	0.21... 0.53
Apr-Mar	0	0.368	0.0036	61	0.23... 0.53
May-Apr	0	0.368	0.0036	61	0.22... 0.52
Jun-May	0	0.348	0.0062	61	0.20... 0.52
Jul-Jun	0	0.319	0.0130	61	0.14... 0.49
Aug-Jul	0	0.297	0.0201	61	0.11... 0.46
Sep-Aug	0	0.274	0.0328	61	0.08... 0.47
Oct-Sep	0	0.280	0.0305	60	0.08... 0.46
Nov-Oct	0	0.294	0.0224	60	0.09... 0.47
Dec-Nov	0	0.331	0.0098	60	0.13... 0.49

Supplementary Table 4 - Rodrigues ERSSTv4 with Rodrigues coral composite SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.487	0.0001	60	0.31... 0.64
Feb-Jan	0	0.474	0.0001	60	0.29... 0.63
Mar-Feb	0	0.440	0.0004	60	0.27... 0.60
Apr-Mar	0	0.433	0.0005	60	0.26... 0.61
May-Apr	0	0.434	0.0005	60	0.24... 0.60
Jun-May	0	0.414	0.0011	60	0.22... 0.59
Jul-Jun	0	0.392	0.0022	60	0.18... 0.58
Aug-Jul	0	0.394	0.0017	61	0.19... 0.58
Sep-Aug	0	0.401	0.0014	61	0.21... 0.56
Oct-Sep	0	0.419	0.0009	60	0.28... 0.60
Nov-Oct	0	0.437	0.0005	60	0.27... 0.62
Dec-Nov	0	0.478	0.0001	60	0.32... 0.6

Supplementary Table 5 - Rodrigues ERSSTv4 with Cabri SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.074	0.5744	60	-0.14... 0.30
Feb-Jan	0	0.096	0.4673	60	-0.13... 0.34
Mar-Feb	0	0.093	0.4787	60	-0.14... 0.32
Apr-Mar	0	0.113	0.3900	60	-0.10... 0.32
May-Apr	0	0.121	0.3575	60	-0.10... 0.33
Jun-May	0	0.116	0.3761	60	-0.10... 0.33
Jul-Jun	0	0.100	0.4539	60	-0.12... 0.30
Aug-Jul	0	0.084	0.5251	60	-0.18... 0.30
Sep-Aug	0	0.053	0.6891	60	-0.22... 0.26
Oct-Sep	0	0.015	0.9106	59	-0.23... 0.26
Nov-Oct	0	0.032	0.8120	59	-0.21... 0.26
Dec-Nov	0	0.052	0.6961	59	-0.20... 0.28

Supplementary Table 6 - Rodrigues ERSSTv4 with Totor SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.400	0.0022	56	0.24... 0.59
Feb-Jan	0	0.389	0.0030	56	0.22... 0.57
Mar-Feb	0	0.370	0.0050	56	0.24... 0.56
Apr-Mar	0	0.370	0.0050	56	0.24... 0.55
May-Apr	0	0.384	0.0035	56	0.25... 0.59
Jun-May	0	0.392	0.0028	56	0.25... 0.60
Jul-Jun	0	0.395	0.0026	56	0.22... 0.58
Aug-Jul	0	0.385	0.0034	56	0.19... 0.57
Sep-Aug	0	0.351	0.0079	56	0.16... 0.55
Oct-Sep	0	0.355	0.0079	55	0.17... 0.56
Nov-Oct	0	0.379	0.0043	55	0.20... 0.55
Dec-Nov	0	0.403	0.0023	55	0.24... 0.58

Supplementary Table 7 - Rodrigues HadISST with Rodrigues coral composite SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.536	0.0000	60	0.35... 0.67
Feb-Jan	0	0.515	0.0000	60	0.32... 0.65
Mar-Feb	0	0.482	0.0001	60	0.31... 0.64
Apr-Mar	0	0.458	0.0002	60	0.28... 0.63
May-Apr	0	0.456	0.0002	60	0.28... 0.62
Jun-May	0	0.454	0.0003	60	0.28... 0.61
Jul-Jun	0	0.458	0.0002	60	0.29... 0.62
Aug-Jul	0	0.461	0.0002	61	0.26... 0.62
Sep-Aug	0	0.457	0.0002	61	0.26... 0.62
Oct-Sep	0	0.476	0.0001	60	0.31... 0.64
Nov-Oct	0	0.513	0.0000	60	0.34... 0.66
Dec-Nov	0	0.544	0.0000	60	0.38... 0.69

Supplementary Table 8 - Rodrigues HadISST with Cabri SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.119	0.3652	60	-0.09... 0.33
Feb-Jan	0	0.120	0.3623	60	-0.09... 0.35
Mar-Feb	0	0.125	0.3396	60	-0.11... 0.36
Apr-Mar	0	0.145	0.2678	60	-0.08... 0.38
May-Apr	0	0.159	0.2240	60	-0.08... 0.38
Jun-May	0	0.157	0.2311	60	-0.08... 0.39
Jul-Jun	0	0.143	0.2755	60	-0.07... 0.37
Aug-Jul	0	0.124	0.3447	60	-0.09... 0.36
Sep-Aug	0	0.089	0.4987	60	-0.14... 0.33
Oct-Sep	0	0.086	0.5162	59	-0.14... 0.31
Nov-Oct	0	0.097	0.4634	59	-0.11... 0.33
Dec-Nov	0	0.100	0.4533	59	-0.11... 0.31

Supplementary Table 9 - Rodrigues HadISST with Totor SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.459	0.0004	55	0.23... 0.63
Feb-Jan	0	0.438	0.0008	55	0.20... 0.62
Mar-Feb	0	0.425	0.0011	56	0.21... 0.61
Apr-Mar	0	0.396	0.0026	56	0.19... 0.58
May-Apr	0	0.409	0.0018	56	0.23... 0.60
Jun-May	0	0.420	0.0013	56	0.26... 0.60
Jul-Jun	0	0.408	0.0018	56	0.23... 0.58
Aug-Jul	0	0.376	0.0043	56	0.16... 0.57
Sep-Aug	0	0.349	0.0084	56	0.14... 0.56
Oct-Sep	0	0.342	0.0107	55	0.10... 0.56
Nov-Oct	0	0.389	0.0034	55	0.14... 0.58
Dec-Nov	0	0.409	0.0019	55	0.18... 0.58

Supplementary Table 10 - Rodrigues HadSST3 with Rodrigues coral composite SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.441	0.0008	55	0.23... 0.64
Feb-Jan	0	0.411	0.0018	55	0.19... 0.60
Mar-Feb	0	0.396	0.0025	56	0.16... 0.61
Apr-Mar	0	0.377	0.0042	56	0.13... 0.59
May-Apr	0	0.379	0.0040	56	0.16... 0.61
Jun-May	0	0.391	0.0029	56	0.17... 0.60
Jul-Jun	0	0.377	0.0042	56	0.14... 0.60
Aug-Jul	0	0.372	0.0048	56	0.11... 0.60
Sep-Aug	0	0.392	0.0028	56	0.15... 0.61
Oct-Sep	0	0.407	0.0020	55	0.19... 0.65
Nov-Oct	0	0.425	0.0012	55	0.24... 0.64
Dec-Nov	0	0.430	0.0010	55	0.25... 0.63

Supplementary Table 11 - Rodrigues HadSST3 with Cabri SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.240	0.0800	54	-0.01... 0.47
Feb-Jan	0	0.239	0.0821	54	-0.01... 0.49
Mar-Feb	0	0.248	0.0683	55	0.01... 0.50
Apr-Mar	0	0.225	0.0983	55	-0.04... 0.47
May-Apr	0	0.235	0.0837	55	-0.03... 0.48
Jun-May	0	0.239	0.0790	55	-0.01... 0.48
Jul-Jun	0	0.232	0.0882	55	-0.06... 0.46
Aug-Jul	0	0.199	0.1444	55	-0.10... 0.46
Sep-Aug	0	0.154	0.2631	55	-0.14... 0.41
Oct-Sep	0	0.107	0.4420	54	-0.20... 0.40
Nov-Oct	0	0.159	0.2523	54	-0.11... 0.42
Dec-Nov	0	0.176	0.2040	54	-0.09... 0.42

Supplementary Table 12 - Rodrigues HadSST3 with Totor SST (detrend) for annual averages 1945-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.514	0.0000	66	0.33... 0.65
Feb-Jan	0	0.421	0.0004	66	0.20... 0.60
Mar-Feb	0	0.474	0.0001	67	0.24... 0.67
Apr-Mar	0	0.425	0.0004	66	0.19... 0.61
May-Apr	0	0.454	0.0001	66	0.28... 0.63
Jun-May	0	0.465	0.0001	66	0.31... 0.61
Jul-Jun	0	0.440	0.0002	66	0.26... 0.58
Aug-Jul	0	0.430	0.0002	68	0.24... 0.59
Sep-Aug	0	0.386	0.0011	68	0.19... 0.57
Oct-Sep	0	0.354	0.0033	67	0.11... 0.56
Nov-Oct	0	0.392	0.0010	67	0.19... 0.57
Dec-Nov	0	0.430	0.0003	67	0.24... 0.57

Supplementary Table 13 - Rodrigues HadSST3 with Rodrigues coral composite SST (detrend) for annual averages, all years with data in HadSST3.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.240	0.0540	65	0.04... 0.43
Feb-Jan	0	0.181	0.1496	65	-0.04... 0.40
Mar-Feb	0	0.249	0.0436	66	0.01... 0.47
Apr-Mar	0	0.196	0.1186	65	-0.04... 0.43
May-Apr	0	0.208	0.0968	65	-0.01... 0.42
Jun-May	0	0.206	0.0993	65	0.00... 0.38
Jul-Jun	0	0.192	0.1249	65	-0.01... 0.37
Aug-Jul	0	0.190	0.1244	67	-0.02... 0.37
Sep-Aug	0	0.144	0.2436	67	-0.10... 0.34
Oct-Sep	0	0.086	0.4941	66	-0.13... 0.29
Nov-Oct	0	0.122	0.3273	66	-0.07... 0.33
Dec-Nov	0	0.151	0.2259	66	-0.05... 0.35

Supplementary Table 14 - Rodrigues HadSST3 with Totor SST (detrend) for annual averages all years with data in HadSST3.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.554	0.0000	52	0.36... 0.71
Feb-Jan	0	0.532	0.0001	52	0.33... 0.70
Mar-Feb	0	0.501	0.0002	51	0.28... 0.68
Apr-Mar	0	0.490	0.0003	51	0.28... 0.67
May-Apr	0	0.486	0.0003	51	0.32... 0.66
Jun-May	0	0.482	0.0003	51	0.31... 0.66
Jul-Jun	0	0.478	0.0004	51	0.30... 0.65
Aug-Jul	0	0.458	0.0007	51	0.26... 0.64
Sep-Aug	0	0.451	0.0009	51	0.24... 0.64
Oct-Sep	0	0.481	0.0004	51	0.28... 0.67
Nov-Oct	0	0.514	0.0001	51	0.32... 0.68
Dec-Nov	0	0.542	0.0000	51	0.35... 0.69

Supplementary Table 15 - Rodrigues HadMAT1 with Rodrigues coral composite SST (detrend) for annual averages 1945-2001.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.557	0.0000	56	0.40... 0.70
Feb-Jan	0	0.534	0.0000	56	0.37... 0.69
Mar-Feb	0	0.501	0.0001	55	0.31... 0.65
Apr-Mar	0	0.479	0.0002	55	0.31... 0.66
May-Apr	0	0.474	0.0003	55	0.29... 0.63
Jun-May	0	0.479	0.0002	55	0.32... 0.64
Jul-Jun	0	0.483	0.0002	55	0.34... 0.64
Aug-Jul	0	0.470	0.0003	56	0.30... 0.64
Sep-Aug	0	0.488	0.0001	56	0.33... 0.65
Oct-Sep	0	0.528	0.0000	56	0.39... 0.69
Nov-Oct	0	0.528	0.0000	56	0.37... 0.68
Dec-Nov	0	0.549	0.0000	56	0.40... 0.70

Supplementary Table 16 - Rodrigues HadMAT1 with Cabri SST (detrend) for annual averages 1945-2001.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.299	0.0237	57	0.05... 0.52
Feb-Jan	0	0.290	0.0284	57	0.02... 0.52
Mar-Feb	0	0.270	0.0446	56	0.00... 0.55
Apr-Mar	0	0.255	0.0581	56	-0.01... 0.52
May-Apr	0	0.246	0.0676	56	-0.01... 0.50
Jun-May	0	0.248	0.0656	56	0.03... 0.50
Jul-Jun	0	0.254	0.0592	56	0.02... 0.51
Aug-Jul	0	0.224	0.0974	56	-0.04... 0.47
Sep-Aug	0	0.196	0.1480	56	-0.05... 0.44
Oct-Sep	0	0.203	0.1336	56	-0.04... 0.43
Nov-Oct	0	0.242	0.0726	56	-0.02... 0.48
Dec-Nov	0	0.254	0.0590	56	0.00... 0.47

Supplementary Table 17 - Rodrigues HadMAT1 with Totor SST (detrend) for annual averages 1945-2001.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.651	0.0000	45	0.50... 0.77
Feb-Jan	0	0.626	0.0000	45	0.48... 0.77
Mar-Feb	0	0.609	0.0000	45	0.48... 0.74
Apr-Mar	0	0.586	0.0000	46	0.46... 0.72
May-Apr	0	0.611	0.0000	46	0.49... 0.75
Jun-May	0	0.635	0.0000	46	0.52... 0.77
Jul-Jun	0	0.654	0.0000	47	0.51... 0.77
Aug-Jul	0	0.650	0.0000	47	0.50... 0.77
Sep-Aug	0	0.580	0.0000	47	0.37... 0.76
Oct-Sep	0	0.590	0.0000	46	0.39... 0.72
Nov-Oct	0	0.605	0.0000	46	0.42... 0.74
Dec-Nov	0	0.624	0.0000	45	0.44... 0.76

Supplementary Table 18 - Rodrigues AT station with Rodrigues coral composite SST (trend) for annual averages 1951-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.715	0.0000	45	0.56... 0.83
Feb-Jan	0	0.693	0.0000	45	0.55... 0.81
Mar-Feb	0	0.672	0.0000	45	0.51... 0.80
Apr-Mar	0	0.649	0.0000	46	0.49... 0.78
May-Apr	0	0.659	0.0000	46	0.48... 0.79
Jun-May	0	0.679	0.0000	46	0.50... 0.81
Jul-Jun	0	0.663	0.0000	47	0.48... 0.80
Aug-Jul	0	0.668	0.0000	47	0.49... 0.82
Sep-Aug	0	0.638	0.0000	47	0.43... 0.80
Oct-Sep	0	0.664	0.0000	46	0.46... 0.81
Nov-Oct	0	0.669	0.0000	46	0.49... 0.80
Dec-Nov	0	0.701	0.0000	45	0.53... 0.82

Supplementary Table 19 - Rodrigues AT station with Cabri SST (trend) for annual averages 1951-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.146	0.3431	44	-0.04... 0.36
Feb-Jan	0	0.179	0.2449	44	-0.03... 0.36
Mar-Feb	0	0.206	0.1787	44	0.01... 0.41
Apr-Mar	0	0.291	0.0521	45	0.06... 0.52
May-Apr	0	0.317	0.0337	45	0.07... 0.56
Jun-May	0	0.306	0.0408	45	0.09... 0.53
Jul-Jun	0	0.306	0.0385	46	0.06... 0.53
Aug-Jul	0	0.293	0.0479	46	0.03... 0.51
Sep-Aug	0	0.148	0.3247	46	-0.14... 0.47
Oct-Sep	0	0.107	0.4860	45	-0.17... 0.37
Nov-Oct	0	0.130	0.3954	45	-0.13... 0.40
Dec-Nov	0	0.099	0.5239	44	-0.14... 0.33

Supplementary Table 20 - Rodrigues AT station with Totor SST (trend) for annual averages 1951-2005.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.516	0.0001	54	0.35... 0.68
Feb-Jan	0	0.467	0.0004	54	0.28... 0.65
Mar-Feb	0	0.434	0.0009	55	0.27... 0.62
Apr-Mar	0	0.387	0.0035	55	0.25... 0.59
May-Apr	0	0.379	0.0043	55	0.25... 0.57
Jun-May	0	0.389	0.0033	55	0.27... 0.56
Jul-Jun	0	0.407	0.0021	55	0.25... 0.58
Aug-Jul	0	0.455	0.0005	55	0.26... 0.64
Sep-Aug	0	0.438	0.0008	55	0.22... 0.63
Oct-Sep	0	0.466	0.0004	54	0.25... 0.65
Nov-Oct	0	0.479	0.0002	54	0.27... 0.66
Dec-Nov	0	0.512	0.0001	54	0.33... 0.67

Supplementary Table 21 - Rodrigues HadNMAT2 with Rodrigues coral composite SST (detrend) for annual averages 1945-2006.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.450	0.0006	54	0.23... 0.63
Feb-Jan	0	0.401	0.0026	54	0.19... 0.60
Mar-Feb	0	0.388	0.0034	55	0.17... 0.58
Apr-Mar	0	0.347	0.0094	55	0.15... 0.56
May-Apr	0	0.347	0.0095	55	0.14... 0.55
Jun-May	0	0.355	0.0079	55	0.15... 0.56
Jul-Jun	0	0.365	0.0062	55	0.14... 0.57
Aug-Jul	0	0.418	0.0015	55	0.20... 0.63
Sep-Aug	0	0.442	0.0007	55	0.23... 0.63
Oct-Sep	0	0.480	0.0002	54	0.28... 0.69
Nov-Oct	0	0.477	0.0003	54	0.27... 0.68
Dec-Nov	0	0.485	0.0002	54	0.28... 0.67

Supplementary Table 22 - Rodrigues HadNMAT2 with Cabri SST (detrend) for annual averages 1945-2006.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.346	0.0111	53	0.11... 0.54
Feb-Jan	0	0.320	0.0197	53	0.07... 0.54
Mar-Feb	0	0.295	0.0306	54	0.05... 0.52
Apr-Mar	0	0.270	0.0481	54	0.03... 0.50
May-Apr	0	0.254	0.0638	54	0.03... 0.47
Jun-May	0	0.248	0.0703	54	0.00... 0.44
Jul-Jun	0	0.252	0.0661	54	0.00... 0.46
Aug-Jul	0	0.269	0.0489	54	-0.02... 0.50
Sep-Aug	0	0.232	0.0916	54	-0.03... 0.47
Oct-Sep	0	0.221	0.1119	53	-0.04... 0.47
Nov-Oct	0	0.264	0.0561	53	0.01... 0.50
Dec-Nov	0	0.313	0.0223	53	0.08... 0.53

Supplementary Table 23 - Rodrigues HadNMAT2 with Totor SST (detrend) for annual averages 1945-2006.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.304	0.0145	64	0.09... 0.51
Feb-Jan	0	0.268	0.0334	63	0.02... 0.48
Mar-Feb	0	0.281	0.0254	63	0.07... 0.50
Apr-Mar	0	0.262	0.0382	63	0.06... 0.46
May-Apr	0	0.250	0.0481	63	0.02... 0.44
Jun-May	0	0.234	0.0648	63	0.03... 0.43
Jul-Jun	0	0.222	0.0805	63	0.03... 0.40
Aug-Jul	0	0.191	0.1313	64	-0.06... 0.40
Sep-Aug	0	0.167	0.1863	64	-0.07... 0.37
Oct-Sep	0	0.157	0.2146	64	-0.08... 0.38
Nov-Oct	0	0.196	0.1213	64	-0.05... 0.45
Dec-Nov	0	0.245	0.0492	65	0.02... 0.46

Supplementary Table 24 - Rodrigues HadNMAT2 with Totor SST (detrend) for annual averages, all years with data.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.298	0.0285	54	0.06... 0.54
Feb-Jan	0	0.263	0.0546	54	0.00... 0.50
Mar-Feb	0	0.272	0.0464	54	0.02... 0.49
Apr-Mar	0	0.311	0.0221	54	0.07... 0.53
May-Apr	0	0.348	0.0098	54	0.13... 0.55
Jun-May	0	0.371	0.0057	54	0.15... 0.57
Jul-Jun	0	0.400	0.0027	54	0.20... 0.62
Aug-Jul	0	0.432	0.0011	54	0.25... 0.65
Sep-Aug	0	0.425	0.0014	54	0.22... 0.65
Oct-Sep	0	0.410	0.0030	54	0.17... 0.64
Nov-Oct	0	0.427	0.0019	53	0.15... 0.65
Dec-Nov	0	0.379	0.0060	53	0.12... 0.62

Supplementary Table 25 - Cabri SST (detrend) correlation with the PDO index (Mantua et al., 1997) for annual averages 1950-2006.

months	lag	corr	p	no	95% CI
Jan-Dec	0	0.265	0.0595	54	0.04... 0.49
Feb-Jan	0	0.263	0.0551	54	0.02... 0.47
Mar-Feb	0	0.276	0.0434	54	0.06... 0.46
Apr-Mar	0	0.307	0.0241	54	0.10... 0.49
May-Apr	0	0.338	0.0124	54	0.15... 0.50
Jun-May	0	0.355	0.0085	54	0.17... 0.52
Jul-Jun	0	0.361	0.0074	54	0.14... 0.57
Aug-Jul	0	0.361	0.0072	54	0.12... 0.57
Sep-Aug	0	0.327	0.0159	54	0.09... 0.54
Oct-Sep	0	0.311	0.0219	54	0.07... 0.53
Nov-Oct	0	0.304	0.0345	53	0.02... 0.53
Dec-Nov	0	0.301	0.0399	53	0.05... 0.51

Supplementary Table 26 – Rodrigues coral composite SST (detrend) correlation with the PDO index (Mantua et al., 1997) for annual averages 1950-2006.