Supplementary Materials

Interannual Variability of Air Temperature over Myanmar: The Influence of ENSO and IOD

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Table S1. Detailed information on the meteorological stations.

Station	ID	Latitude (°N)	Longitude (°E)	Elevation (m)
Bago	48093	17°20'	96°30'	15
Bhamo	48019	24°16'	97°12'	111
Bilin	48102	17°13'	97°14'	61
Dawei	48108	14°06'	98°13'	16
Hinthada	48087	17°40'	95°25'	26
Hkamti	48004	26°00'	95°42'	146
Homalin	48010	24°9'	94°9'	131
Hpa-an	48099	16°45'	97°40'	9
Hsipaw	48040	22°36'	97°18'	436
Kaba-aye	48097	16°54'	96°10'	20
Kalaywa	48025	23°12'	94°18'	109
Katha	48018	24°10'	96°20'	113
Kawthoung	48112	09°58'	98°35'	46
Kengtung	48060	21°18'	99°37'	827
Kyaukpyu	48071	19°25'	93°33'	5
Lashio	48035	22°56'	97°45'	747
Loikaw	48075	19°41'	97°13'	895
Magway	48065	20°07'	94°53'	52
Mandalay	48042	21°59'	96°06'	74
Mawlaik	48020	23°38'	94°25'	114
Mawlamyine	48103	16°30'	97°37'	21
Meiktila	48053	20°50'	95°50'	214
Mindat	48045	21°23'	93°57'	1391
Minbu	48064	20°10'	94°53'	51
Mingaladon	48096	16°54'	96°11'	28
Monywa	48037	22°06'	95°08'	81
Myeik	48110	12°26'	98°36'	36
Myitkyina	48008	25°22'	97°24'	145
NyaungU	48048	21°12'	94°55'	61
Pathein	48094	16°46'	94°46'	9
Pinlaung	48068	20°03'	96°46'	1463
Putao	48001	27°20'	97°25'	409
Pyay	48077	18°48'	95°13'	58
Pyinmana	48074	19°43'	96°13'	101
Shwebo	48033	22°35'	95°43'	106

Shwegyin	48089	17°55'	96°52'	12
Sittwe	48062	20°08'	92°53'	4
Taunggyi	48057	20°47'	97°03'	1436
Taungoo	48078	18°55'	96°28'	47
Thandwe	48080	18°28'	94°21'	9
Thaton	48098	16°55'	97°22'	9
Yay	48107	15°15'	97°52'	3

Table S2. Maximum and minimum monthly air temperature anomalies relative to the normal values averaged over 1981–2010.

Months	**Maximum (°C)**	**Minimum (°C)**
Jan	–0.2	0.1
Feb	–0.3	0.0
Mar	0.9	0.2
Apr	–0.2	0.2
May	0.0	0.1
Jun	0.0	0.1
Jul	–0.1	0.1
Aug	–0.1	0.1
Sep	0.0	0.2
Oct	–0.1	0.2
Nov	–0.1	0.3
Dec	–0.2	0.3

Table S3. Warm and cold years based on the detrended time series of seasonal air temperature over Myanmar.

	Summer (March–April)		**Rainy (May–October)**		**Winter (November–February)**	
	Warm years	**Cold years**	**Warm years**	**Cold years**	**Warm years**	**Cold years**
	1973	**1986**	**1972**	**1975**	**1993**	**1989**
	1979	**1996**	**1978**	**1976**	**1998**	**1992**
	1983	**2000**	**1981**	**1980**	**2001**	**2011**
	1991	**2011**	**1983**	**1984**		
	1998		**1997**	**1996**		
	2001		**1998**	**1999**		
Total years	6	4	6	6	3	3

Table S4. Annual mean temperature showing the long-term mean (1971–2013), the mean values before the change in 1994, and the mean values after the change (1995–2013). Temperature difference means the difference between the mean values (after change minus before change); the observed change in 1994.

Time period	**Temperature (°C)**	**Temperature Difference (°C)**
Long-term (1971–2013)	25.6	
Before change (1971–1993)	25.2	
After change (1995–2013)	25.9	**0.7**

Table S5. Correlation coefficient of seasonal air temperature with DMI and SOI.

Index	**Correlation coefficient**		
	Summer	**Rainy**	**Winter**
DMI-West	0.5	0.6	0.6
DMI-East	0.4	0.4	0.4
SOI	0.1	0.1	0.2

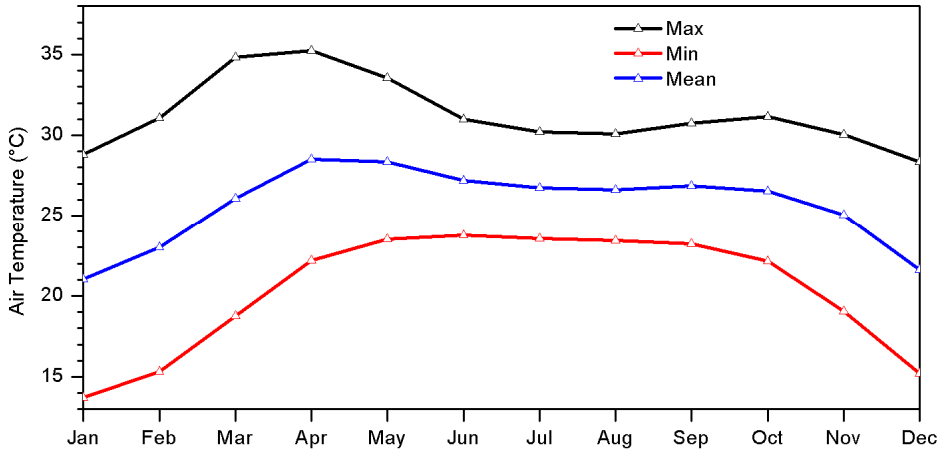

Figure S1. Annual cycle of maximum, minimum, and mean air temperature over Myanmar during 1971–2013.

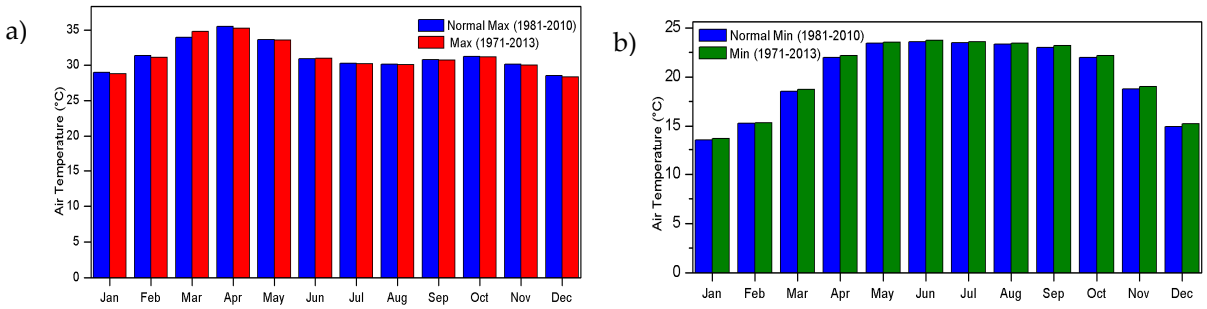

Figure S2. Monthly air temperature in 1971–2013 with respect to normal (maximum and minimum) air temperature (in °C) (1981–2010): (**a**) maximum and (**b**) minimum.

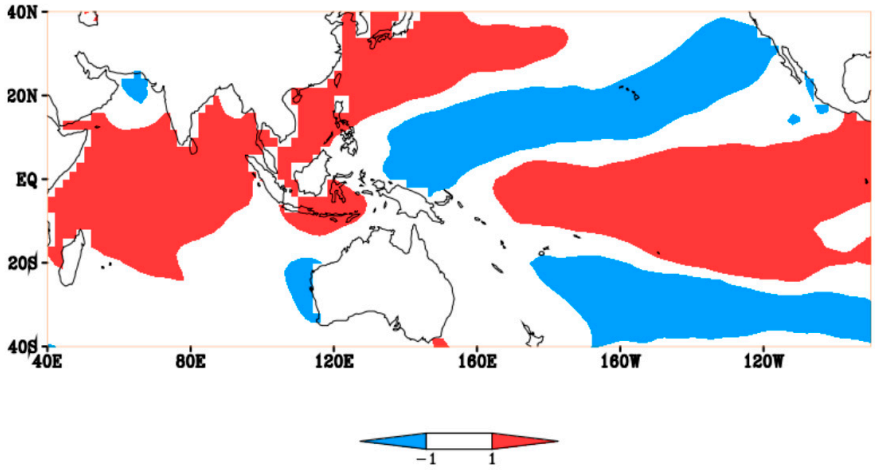

Figure S3. The difference between warm and cold years for summer SST anomaly.

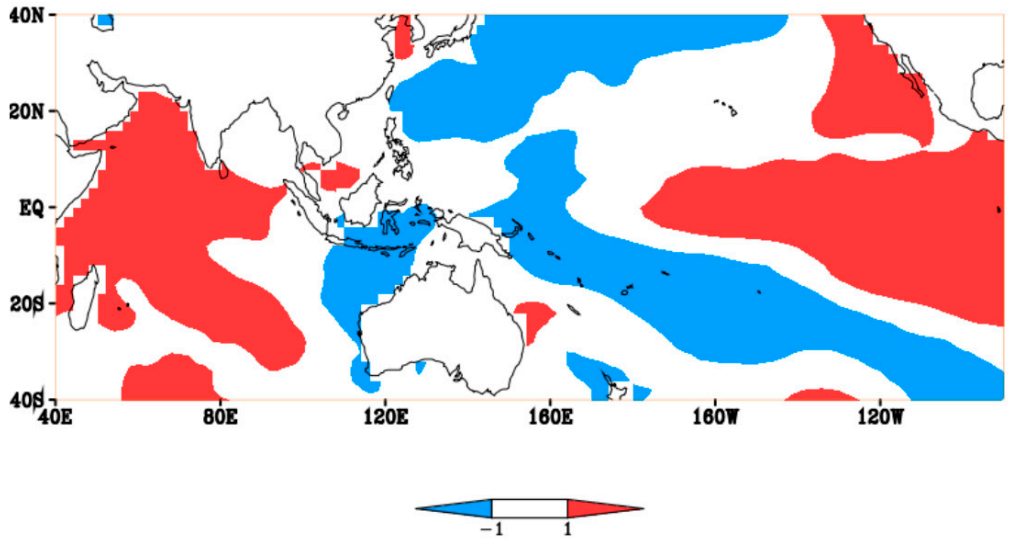

Figure S4. The difference between warm and cold years for rainy season SST anomaly in the study area.

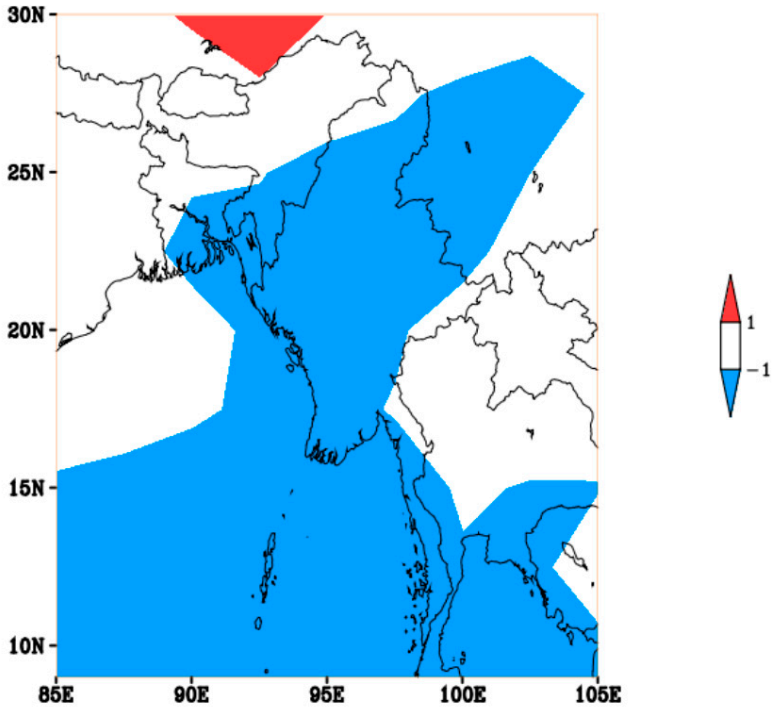

Figure S5. The difference between warm and cold years in terms of summer relative humidity anomaly.

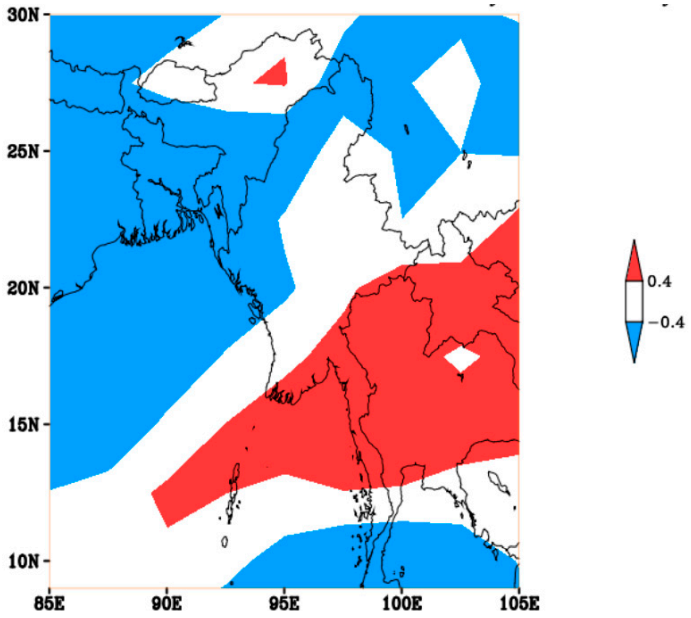

Figure S6. The difference between warm and cold years for rainy season relative humidity anomaly over Myanmar.

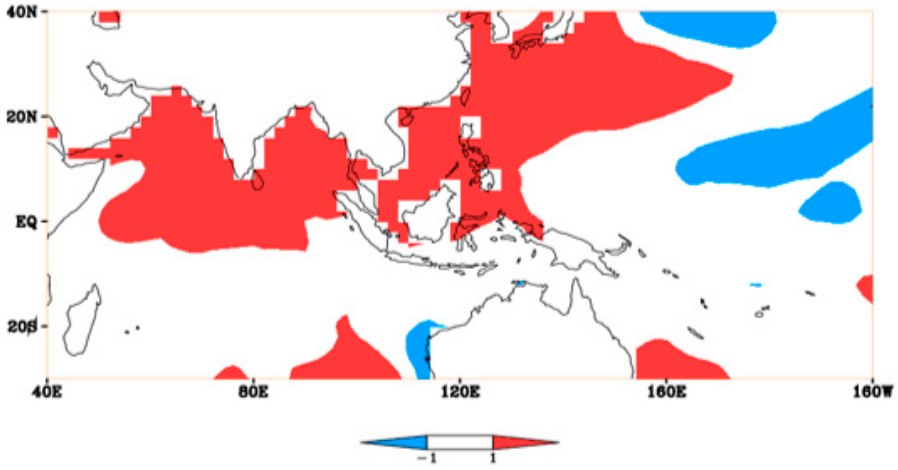

Figure S7. The difference between warm and cold years for the winter SST anomaly of the study area.

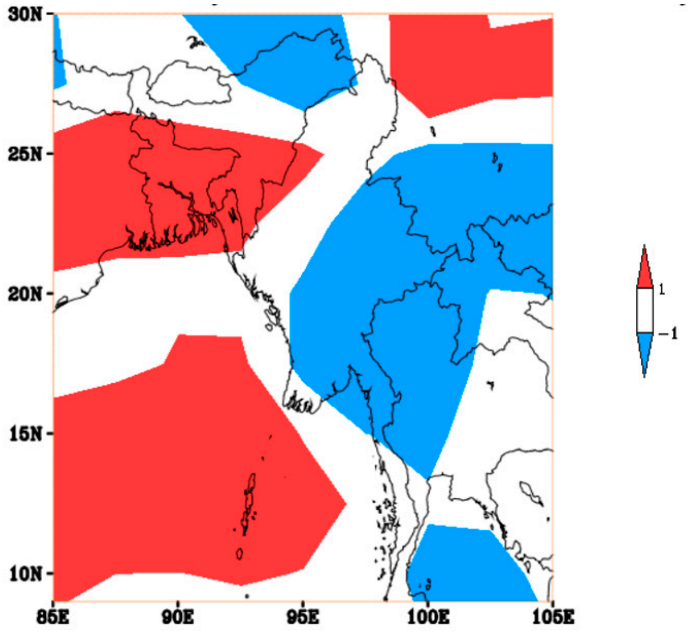

Figure S8. The difference between warm and cold years for the winter relative humidity anomaly.

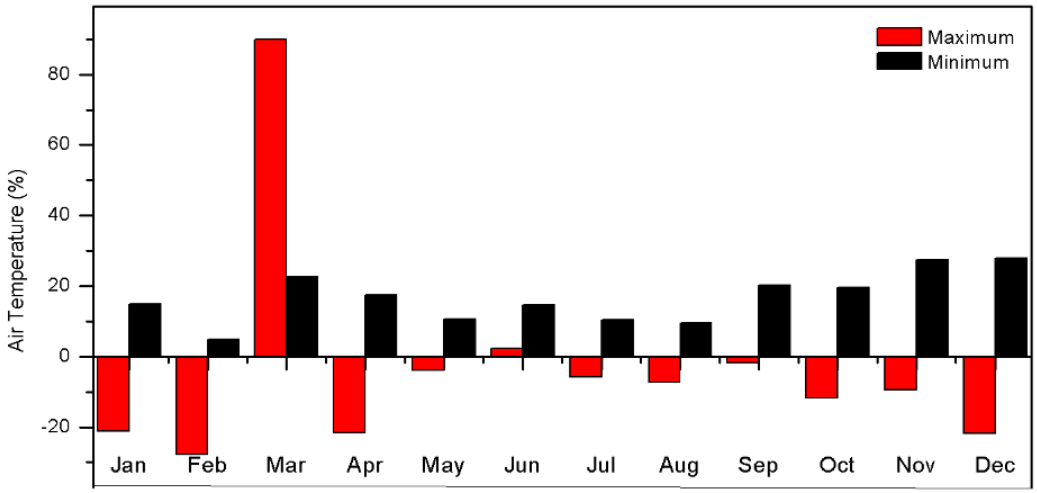

Figure S9. Departure of maximum and minimum air temperature change with respect to normal air temperature (1981–2010) (%).