

# MALAYSIAN METEOROLOGICAL DEPARTMENT MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION



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# **El Niño Phenomenon: Impacts to the Malaysian Weather and the Current Conditions**

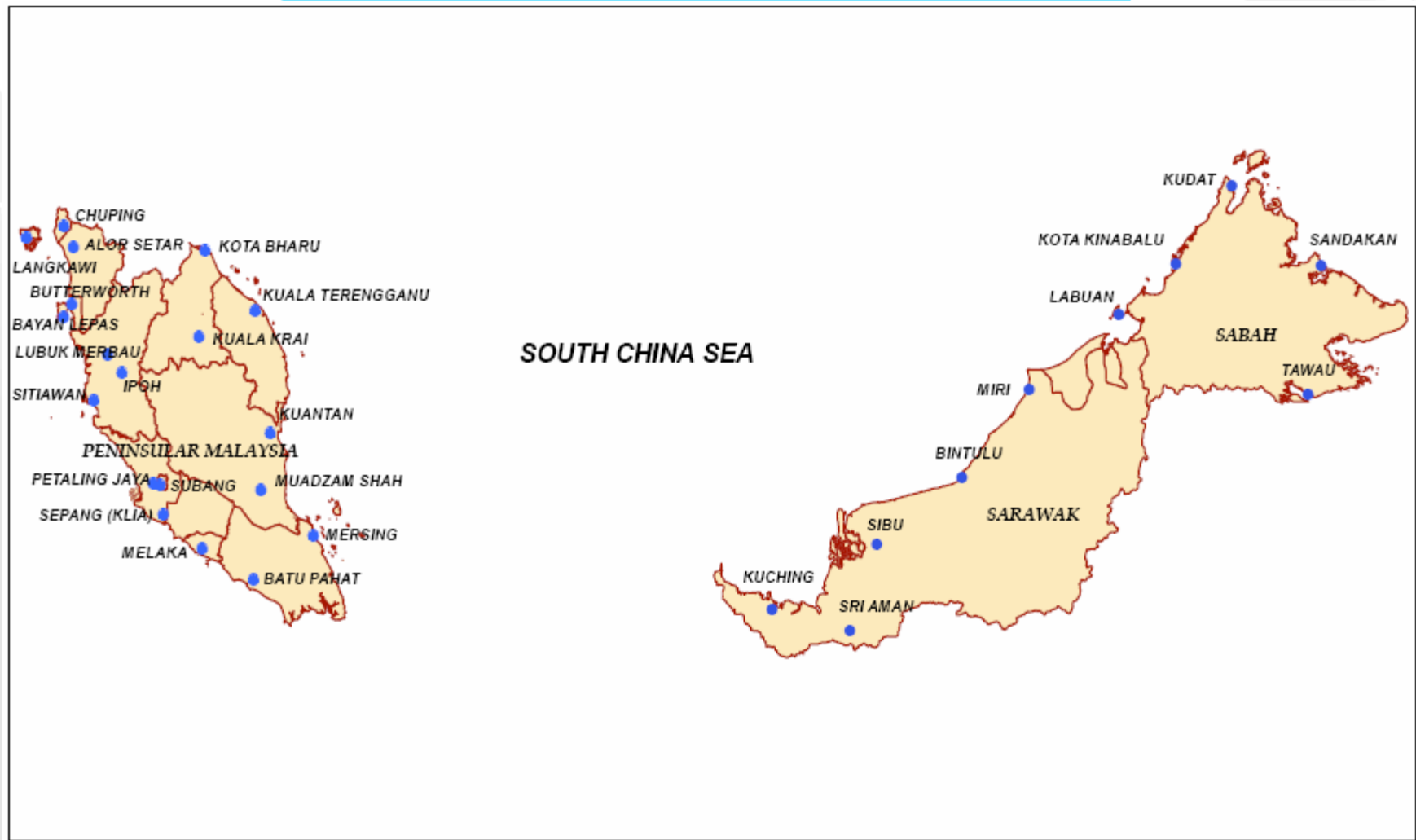
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Working Group Meeting  
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12 – 15 July 2009

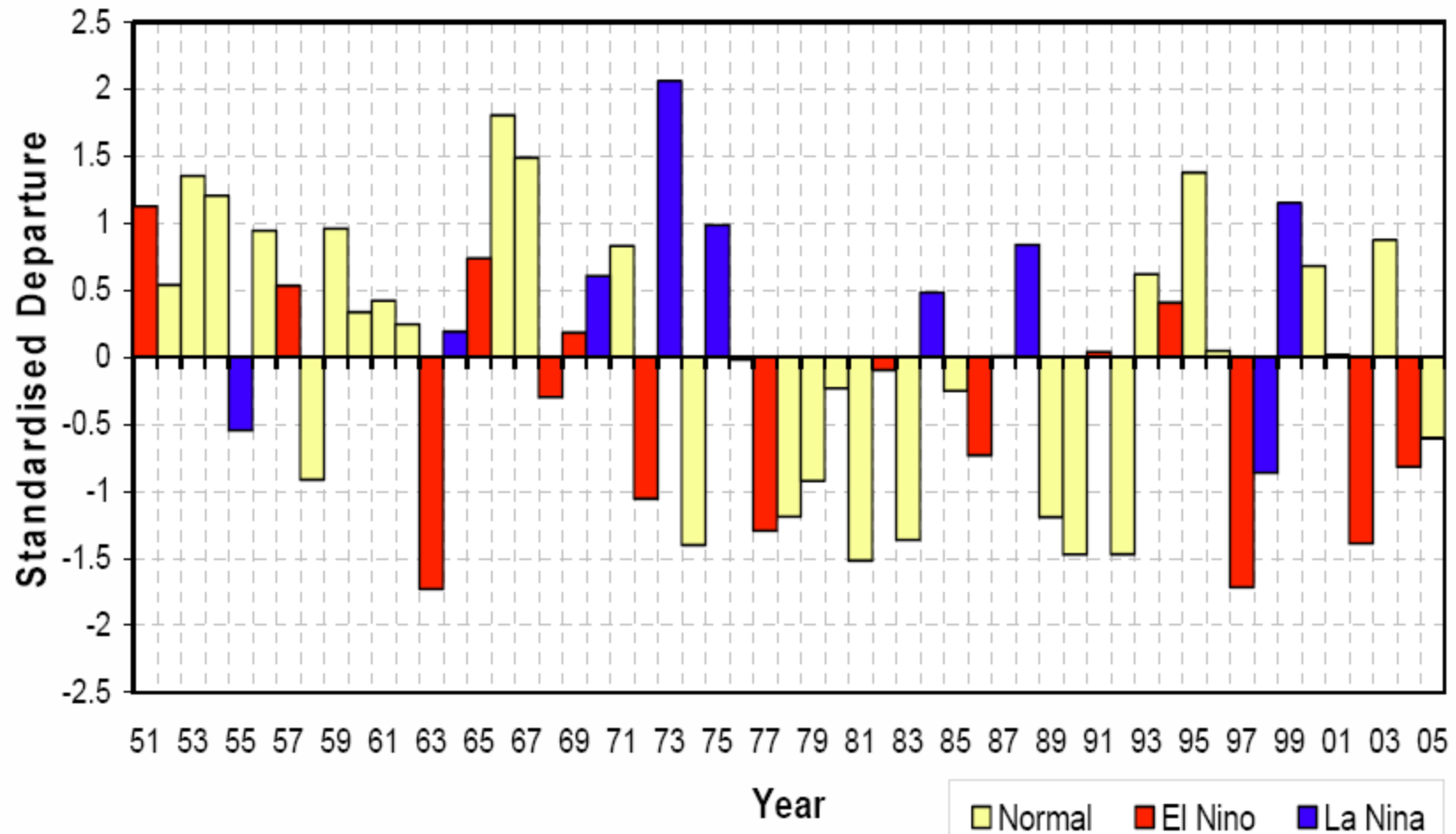
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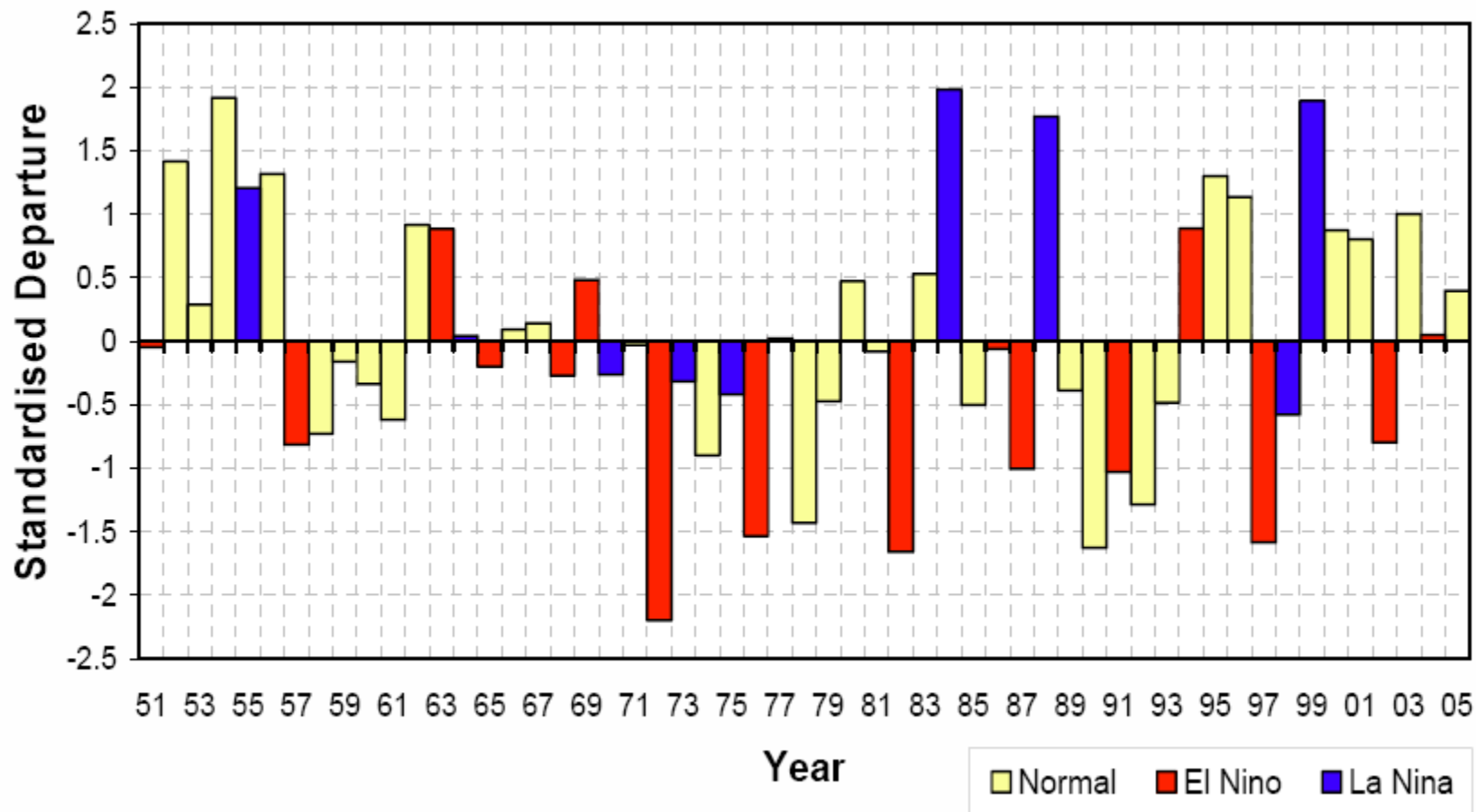
# INTRODUCTION



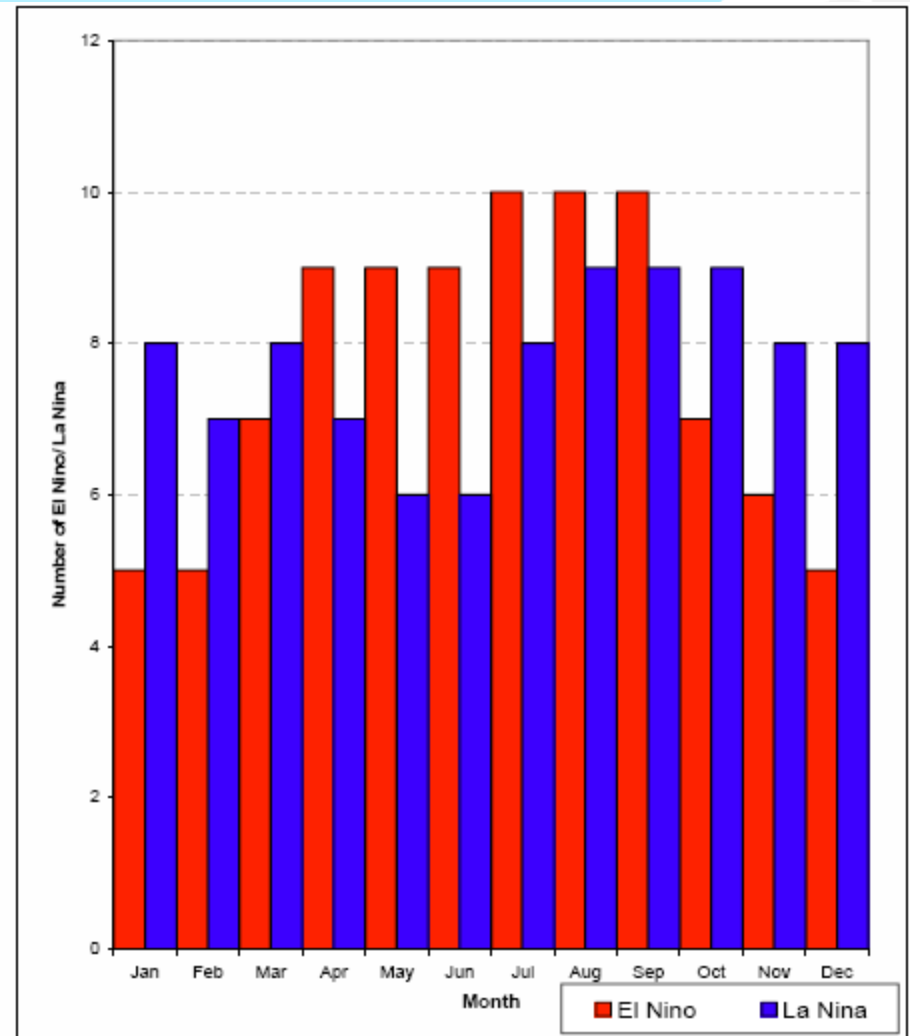
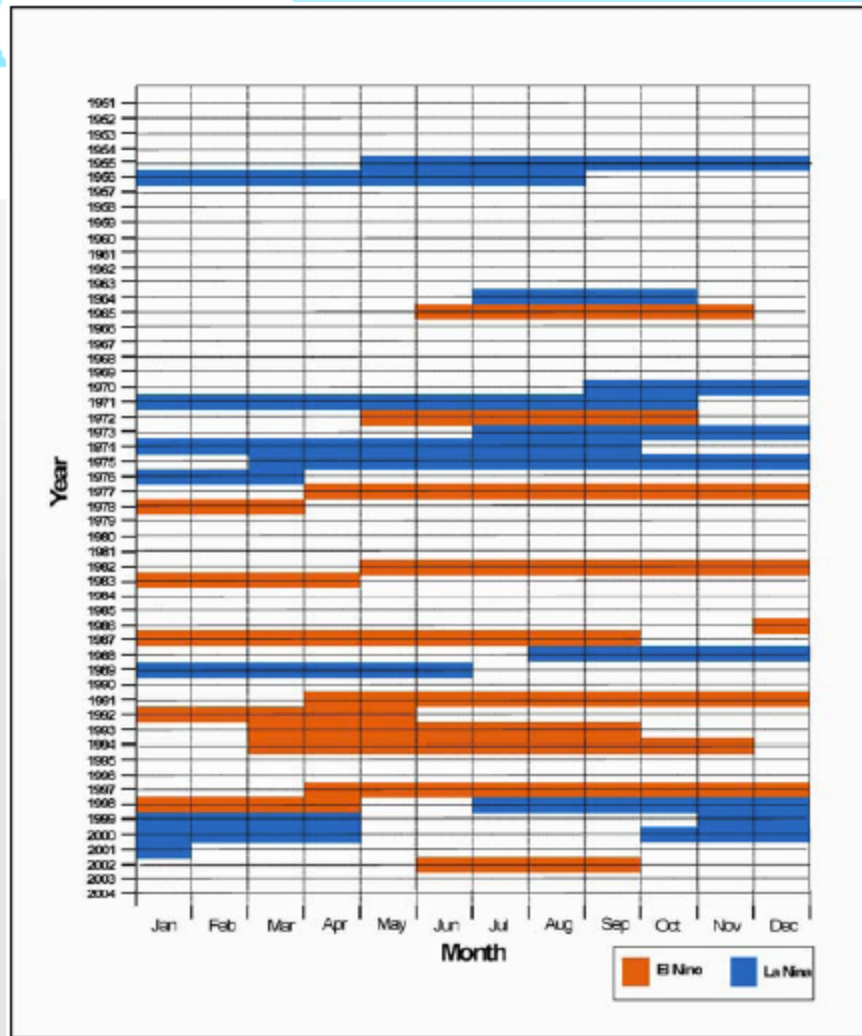
**Locations of the 29 Selected Principal Stations in Malaysia**



## Standardized Annual Rainfall Anomaly for Peninsular Malaysia

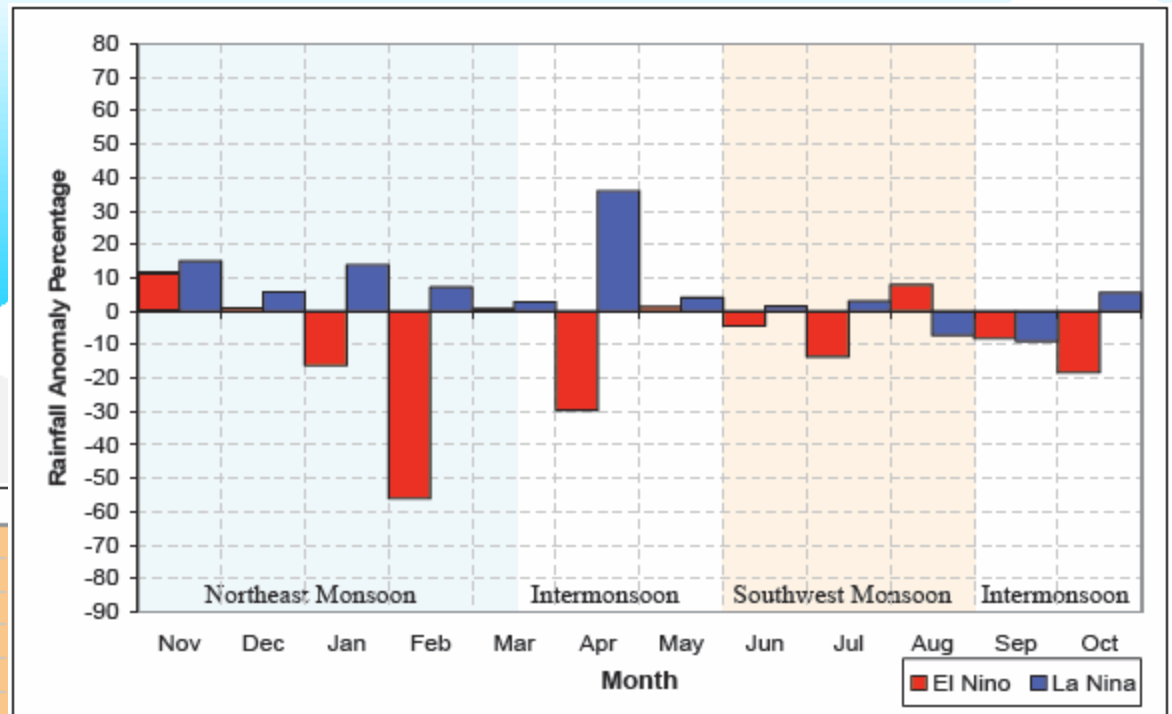
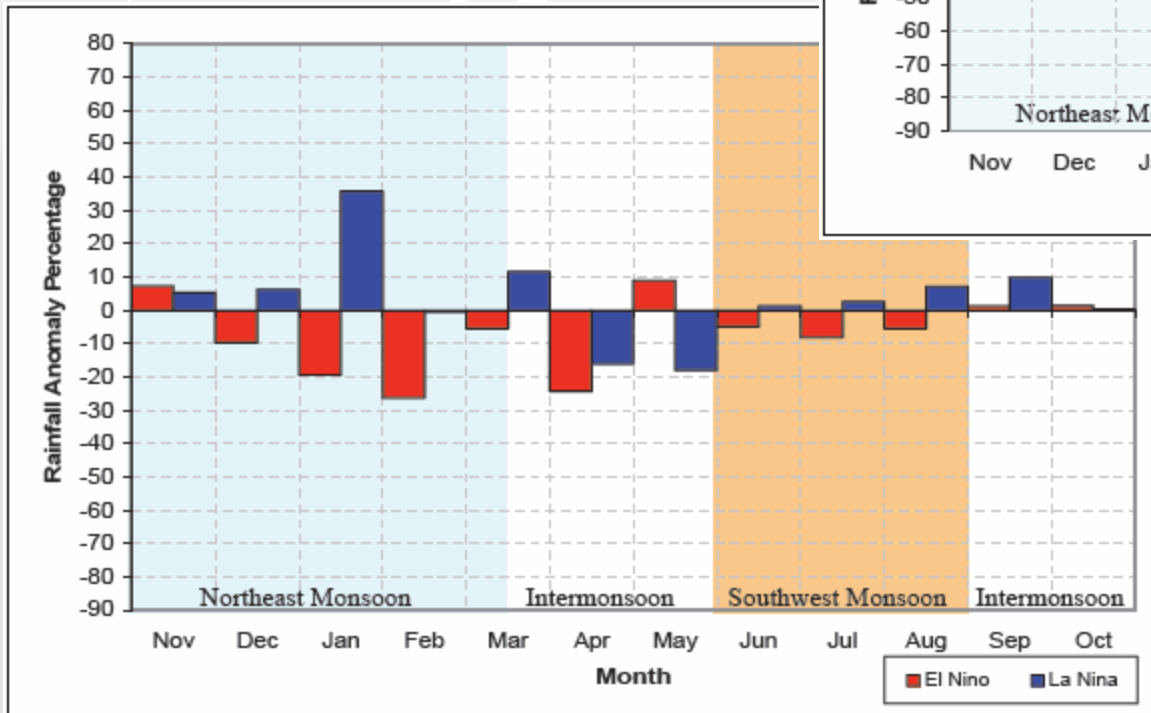


## Standardized Annual Rainfall Anomaly for Sarawak and Sabah

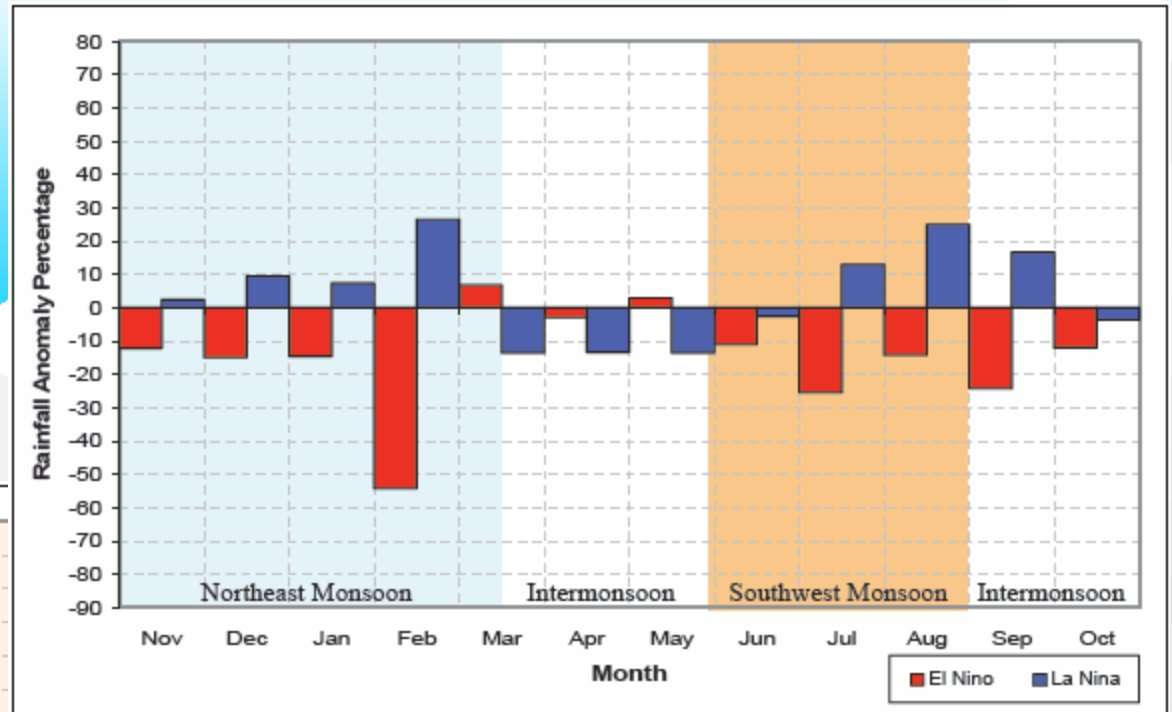
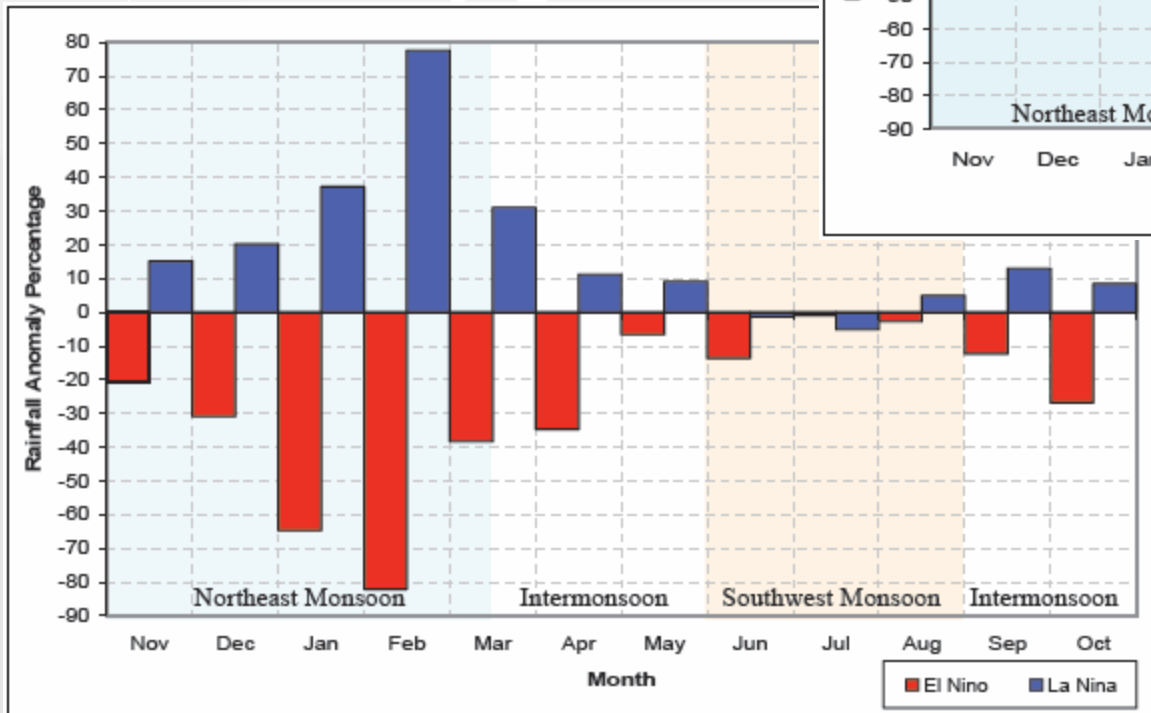


**Periods (left) and Monthly Count (right) of the El Niño and La Niña events from 1951 to 2004**

# **IMPACTS OF EL NIÑO TO MALAYSIAN WEATHER**



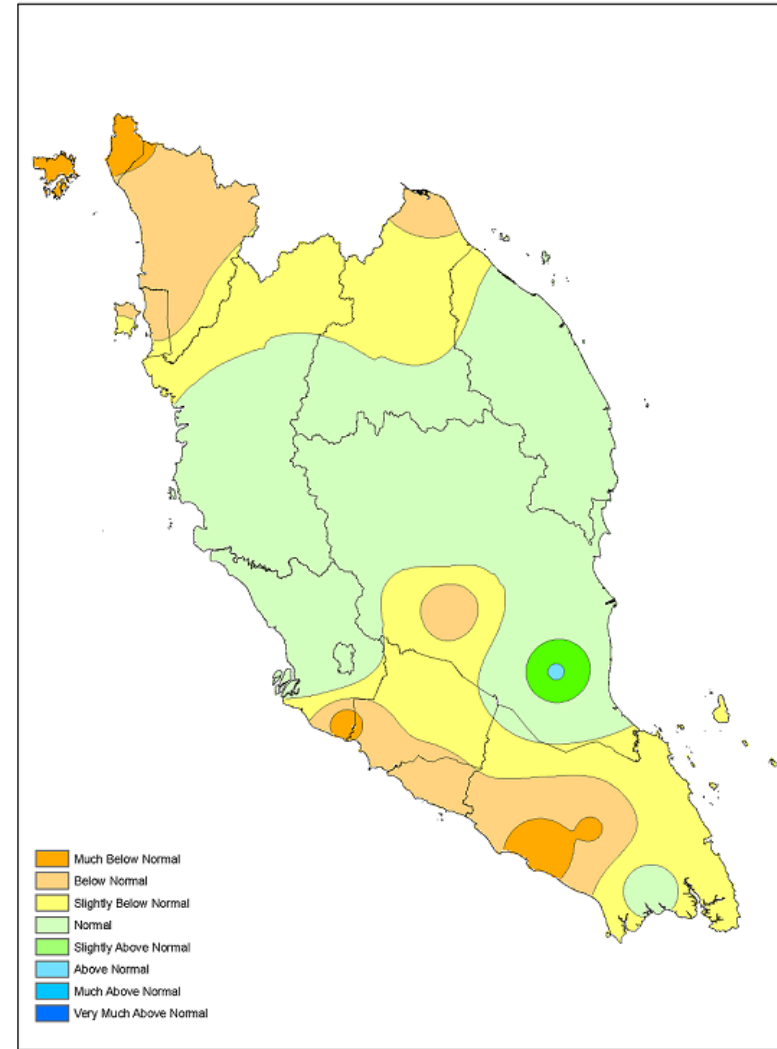
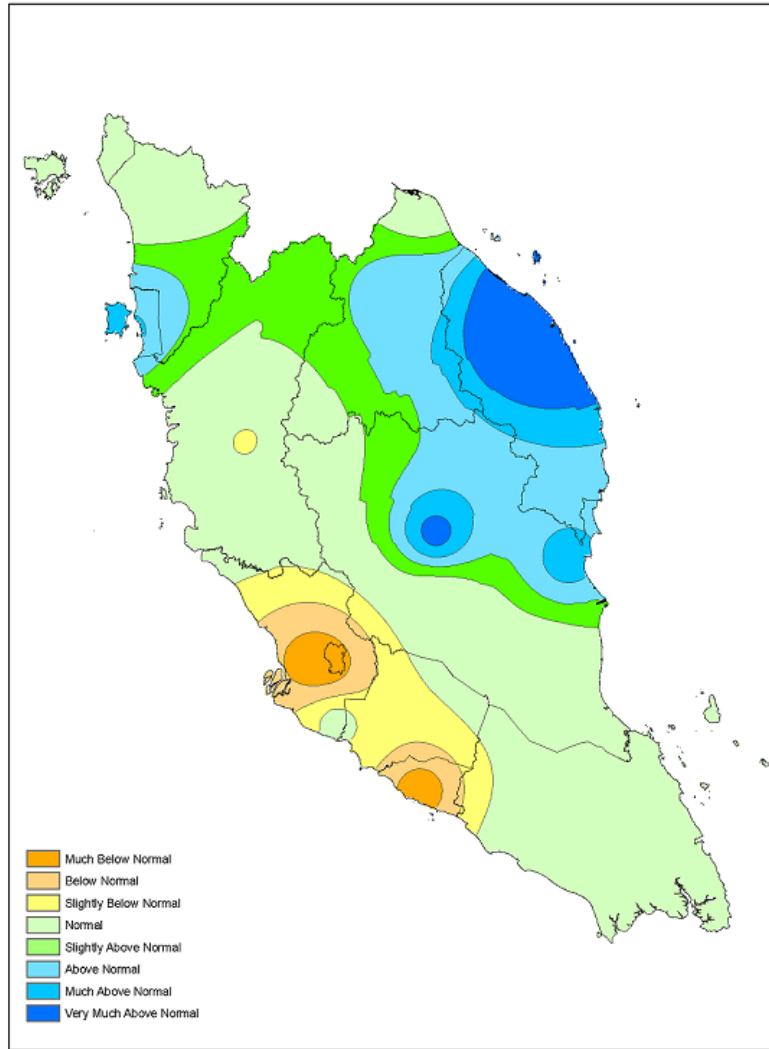
**Monthly Rainfall Anomaly (%) over West Coast (left) and East Coast (right) of Peninsular Malaysia during El Niño and La Niña Events**



**Monthly Rainfall Anomaly (%) over Sabah (left) and Sarawak (right) during El Niño and La Niña Events**

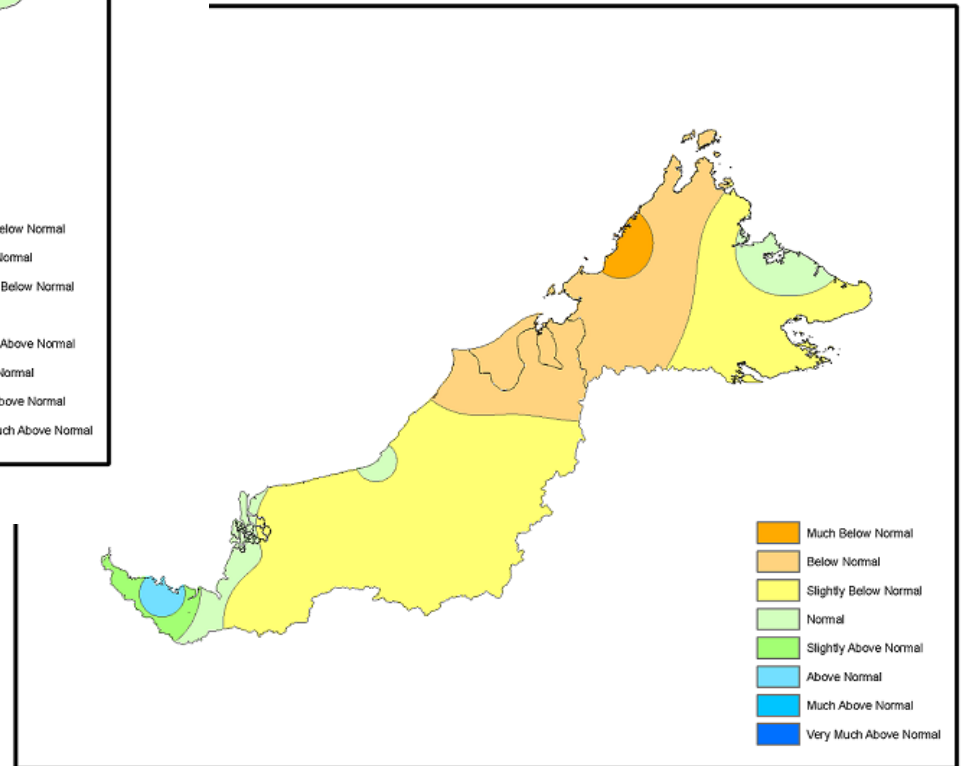
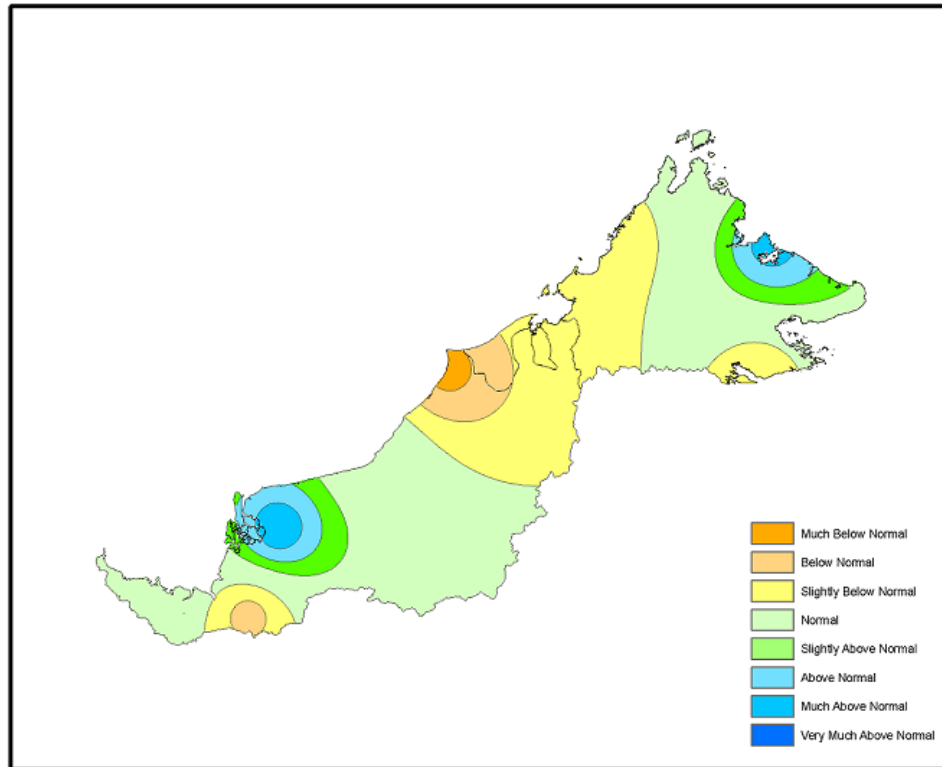
# CURRENT CONDITIONS

# Peninsular Malaysia

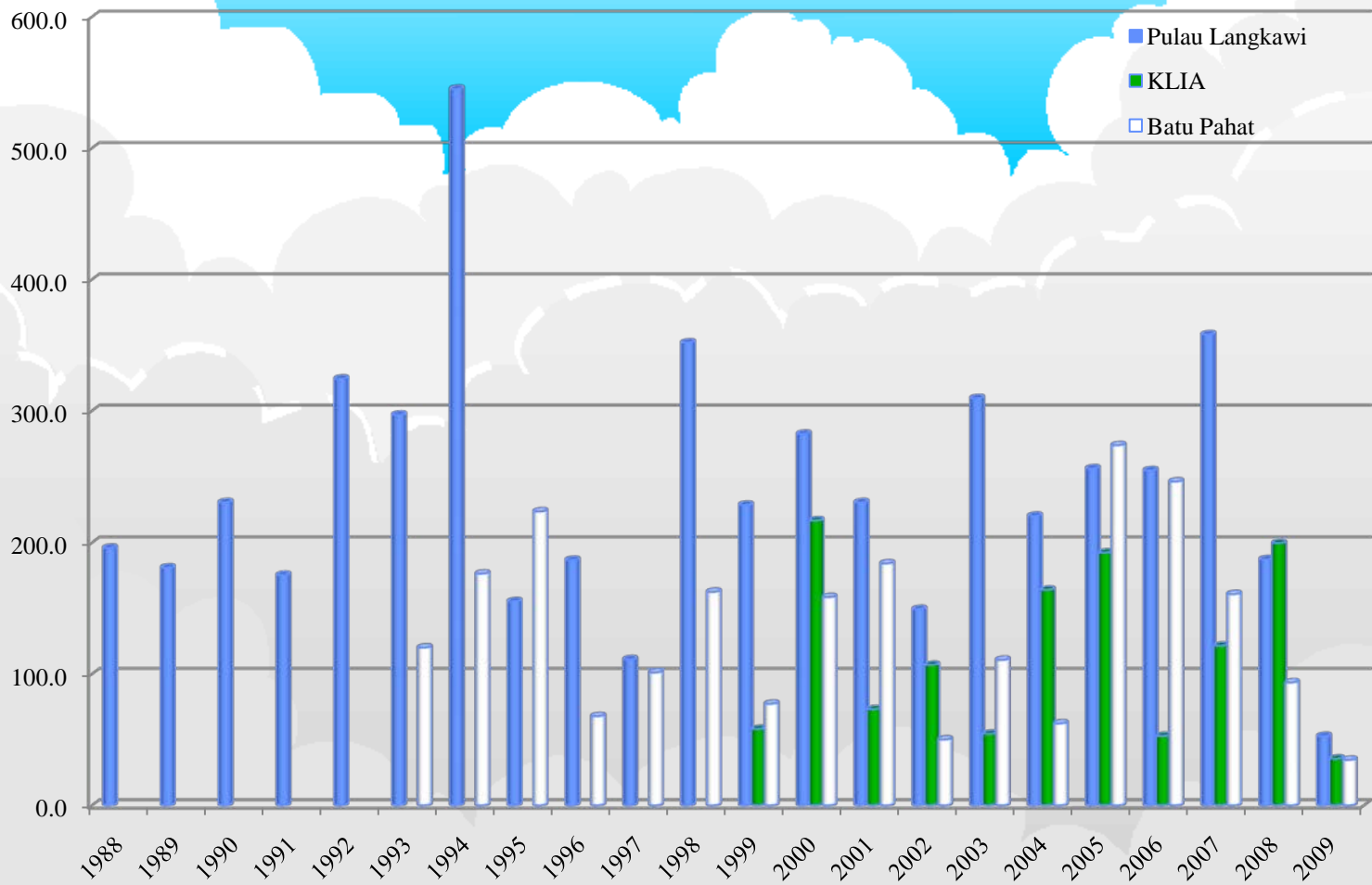


Monthly Rainfall Anomaly for May (left) and June (right)

# Sarawak and Sabah



Monthly Rainfall Anomaly for May (left) and June (right)



**Monthly Rainfall (mm) for June**

Station Name	Accumulated Rainfall (mm) until 00 UTC 10/07/2009	Mean Monthly Rainfall (mm)	Highest Monthly Rainfall (mm)	Lowest Monthly Rainfall (mm)
Pulau Langkawi	18.6	258.2	593.4	104.2
Chuping	5.2	169.5	392.8	60
Alor Star	25	195.5	511.5	66.5
Butterworth	87	168.3	472.9	31.3
Bayan Lepas	82	198	380.2	30.5
Lubuk Merbau	23.2	114	178.1	19.2
Ipoh	159.2	160.1	425.6	37.7
Cameron Highlands	100.6	224.1	289	50.2
Sitiawan	44.2	100.1	253.5	0.8
Subang	14	132.4	381.8	29
HQPJ	80.6	152	386.3	20.9
Sepang (KLIA)	12.2	162.1	251.8	138.8
Melaka	42.2	185.7	471.7	50.3
Batu Pahat	26.6	148.4	333.6	28.3
Kluang	10	140.4	266.9	55.6
Senai	62.8	183.6	331.3	16.6
Kota Bharu	51	151.4	346.3	45
Kuala Krai	124	142.2	261	52.1
Kuala Terengganu	0.8	111.6	312.4	19.4
Batu Embun	57.2	130.9	261.5	15.7
Kuantan	43	153.3	403.6	12.9
Temerloh	115	115.8	295.1	22.7
Muadzam Shah	5.6	124.5	262.8	14.9
Mersing	47.4	165.7	380	68.5
Kuching	82.4	195.5	445.5	27.4
Sri Aman	67.6	190.4	372	85.4
Sibu	86.2	173.6	384.5	23.9
Bintulu	49.2	246.3	612.7	26.4
Miri	74	188.5	562.6	11.2
Labuan	56.6	295.4	679.1	80.6
Kota Kinabalu	39.4	270.2	716.9	46.4
Kudat	96.8	102.6	237.7	11.6
Sandakan	170.2	191.9	564	54.5
Tawau	35	194.7	415.8	54.9

## Accumulated Rainfall (mm): 1 – 10 July 2009

# Conclusion

- **Almost the entire country received less rainfalls during June 2009 compared to May.**
- **Drier than normal weather condition is an early sign of a developing El Niño phenomenon.**
- **Record low monthly rainfall amounts received in three stations in June 2009 further support the possible development of the El Niño event.**

I thank you for your attention