

PRESS RELEASE

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INDIA METEOROLOGICAL DEPARTMENT

Forecast for the 2009 Monsoon Onset over Kerala

1. Background

Since 2005, India Meteorological Department (IMD) has been issuing operational forecasts for the monsoon onset over Kerala using statistical techniques. During all the four years (2005 to 2008), the operational forecasts were correct. In 2008, IMD predicted 29th May as the date of monsoon onset over Kerala and the actual monsoon onset took place on 31st May just one day prior to the normal date of monsoon onset, i.e., 1st June. IMD has now prepared the forecast for the 2009 monsoon onset over Kerala.

2. Advance of monsoon over Andaman Sea

The normal date of advance of monsoon over Andaman Sea is 20th May. It is expected that within 2-3 days, monsoon flow will start appearing over Andaman Sea and monsoon is likely to cover the Andaman Sea close to its normal date. Past data suggest absence of any one to one association between the date of monsoon advance over Andaman Sea and the date of monsoon onset over Kerala.

3. Forecast for the 2009 Monsoon Onset over Kerala

For predicting the 2009 monsoon onset over Kerala, IMD used an indigenously developed statistical model, based on the following six predictors:

- i) Minimum Temperature over North-west India
- ii) Pre-monsoon rainfall peak over south Peninsula,
- iii) Outgoing Long wave Radiation (OLR) over south China Sea
- (iv) Lower tropospheric zonal wind over southeast Indian ocean,
- (v) upper tropospheric zonal wind over the east equatorial Indian Ocean and
- (vi) Outgoing Long wave (OLR) over south-west Pacific region.

The statistical forecast model has a model error of ± 4 days. The mean monsoon onset date over Kerala is 1 June.

The onset forecast model suggests that the monsoon onset over Kerala in 2009 is likely to be on 26th May with a model error of ± 4 days.