

Forecast of Severe Temperature Drop Process for the Period from September 26 to October 25, 2019 in the Lower Reaches of the Yangtze River Valley (LYRV)

(Scientific Research Achievements for Reference Only)

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I. Forecast of 15-25d Low Frequency Component of Temperature Drop in the Lower Reaches of the Yangtze River Valley in 2019 (LYRV)

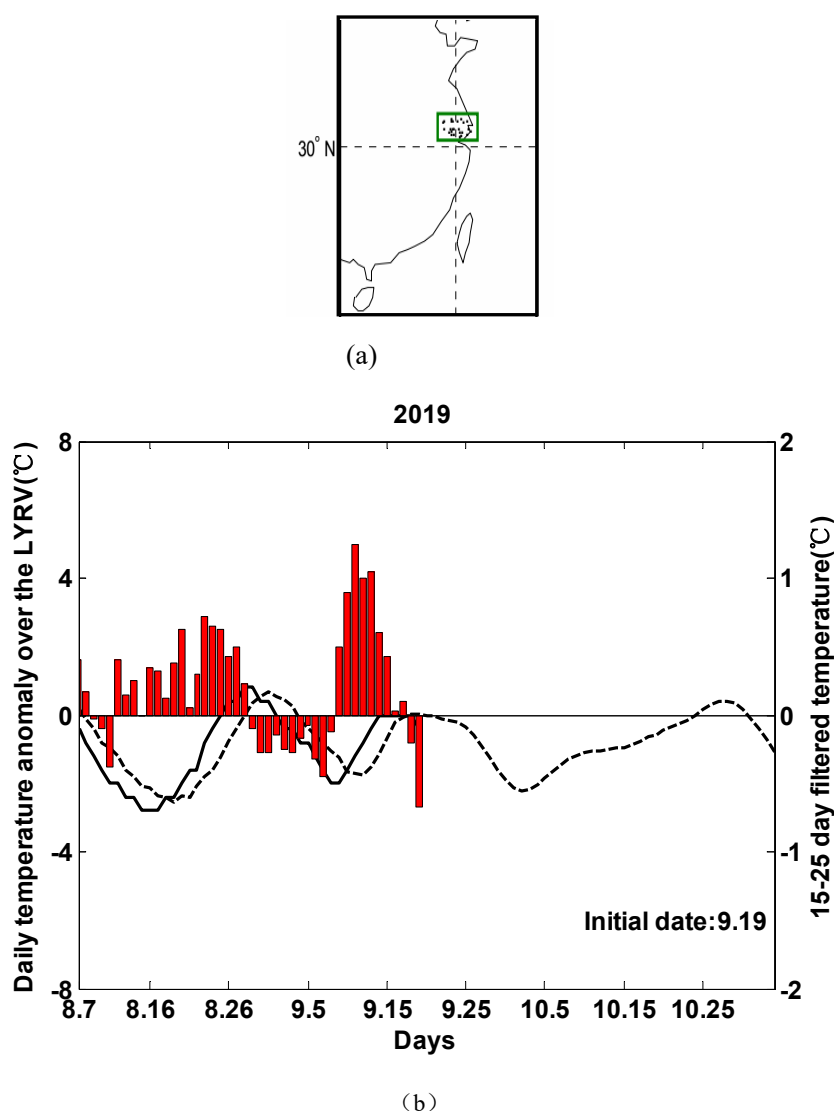


Figure 1. (a) Changes (solid line) and Forecast (dotted line) of 15-25d Low-Frequency Temperature Drop in the Lower Reaches of the Yangtze River Valley (LYRV) (b) The column diagram is the day-by-day temperature departure; unit: mm; initial date: September 19, 2019

It is predicted that the 15- to 25-day oscillation in the next 30 days (September 26 to October 25, 2019) tends to be normal and strong. The low frequency temperature component from September 28 to October 15, 2019 will be in the significant negative phase. The period from the end of late September to the earlier stage of the mid-month of October will be dominated by the moderately strong temperature-fall as there will be frequent cold air activities during this period. [Based on

the MLR Model Forecast of 15-25d Low Frequency Component of Rainfall (at the intensity of pressure of 850hPa in East Asian region with the principal component of low-frequency temperature of PC1-PC7), initial date: September 19, 2019; solid line: forecast of 15-25d low-frequency component of temperature in the Lower Reaches of the Yangtze River Valley (LYRV); dotted line: fitting and forecast].

II. Forecast of Severe Temperature Drop Process

It is predicted that the temperature will be low from **September 28 to October 15**, during which there will be a strong cold air activity in the Lower Reaches of the Yangtze River Valley (LYRV) on **September 28-30** and **October 5-7**, respectively.