

The 50-day forecast of low frequency rainfall in the lower reaches of the Yangtze River valley October to November 2020

(Scientific Research Achievements for Reference Only)

Jiangsu Institute of Meteorological Sciences
Nanjing Joint Institute for Atmospheric Sciences

Weather and Climate Laboratory

October 10, 2020

Forecast of 20- to 30- day Low Frequency Rainfall Component for October to November 2020 in the Lower Reaches of the Yangtze River Valley (LYRV)

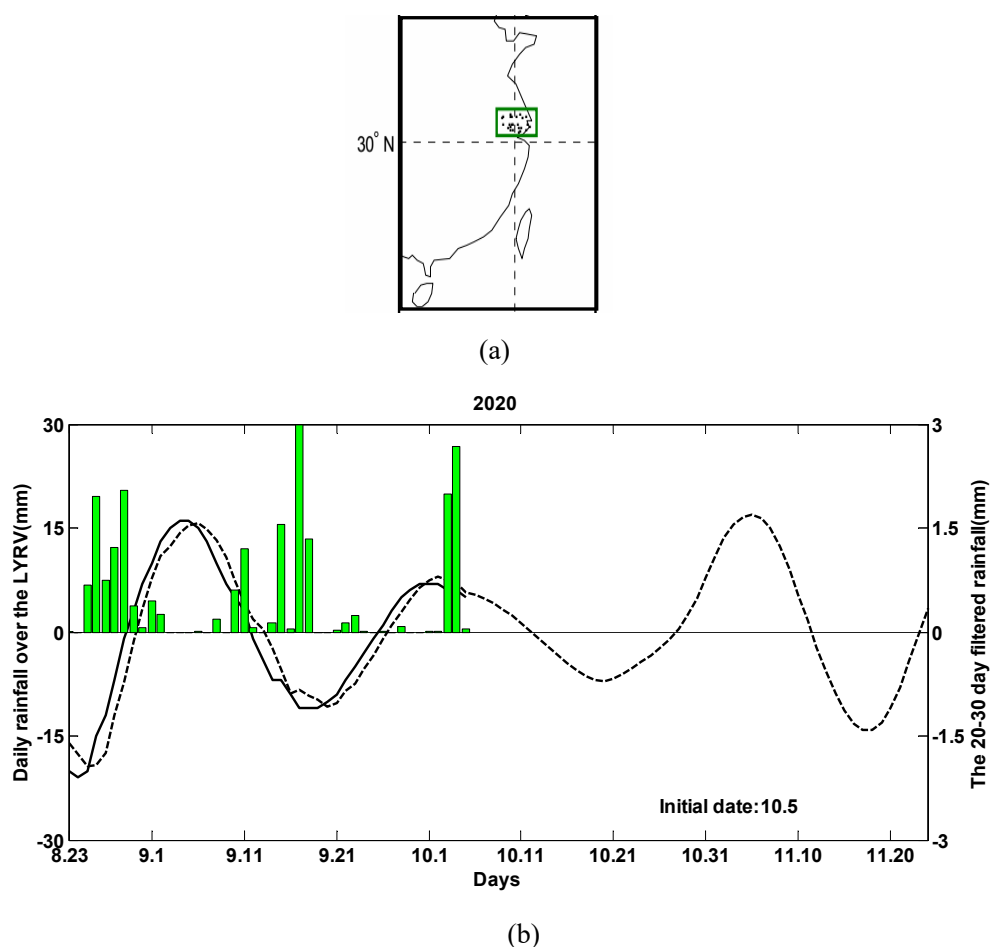


Figure 1. (b) Changes (solid line) and Forecast (dotted line) of 20- to 30-day Low Frequency Rainfall Component in 25 Stations(a). The column diagram is the day-by-day rainfall; unit: mm; initial date: October 5, 2020

It is predicted that the 20- to 30-day oscillation in the coming 50 days (October 6, 2020 to November 24, 2020) tends to be normal and strong, which is good for the apparent precipitation process in the Lower Reaches of the Yangtze River Valley (LYRV). From October 29, 2020 to November 12, 2020, the low frequency rainfall component is in the positive phase, which means that there will be a lot of rainfall, and even heavier in some areas. It will be in the negative phase from October 12 to 28 and November 13 to 23, 2020, during which there will be less rainfall and the cloudy weather will dominate. [Based on the MLR Model Forecast of 20- to 30-day Low Frequency Rainfall Component, and at the 850hPa in the global with the first four principal components of low-frequency meridional wind of PC1-PC4 to build the real-time

MLR, initial date: October 5, 2020; solid line: forecast of 20- to 30-day low frequency rainfall component in the Lower Reaches of the Yangtze River Valley (LYRV); dotted line: fitting and forecast].