

Supplementary Material of “Regional precipitation variability in East Asia related to climate and environmental factors during 1979-2012”

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1. The data sources of the supplementary figures

The 500-hPa geopotential height data used in this study is from the Global reanalysis data sets provided by National Centers for Environmental Prediction/ National Center for Atmospheric Research (NCEP/NCAR) for the period 1979 – 2012.

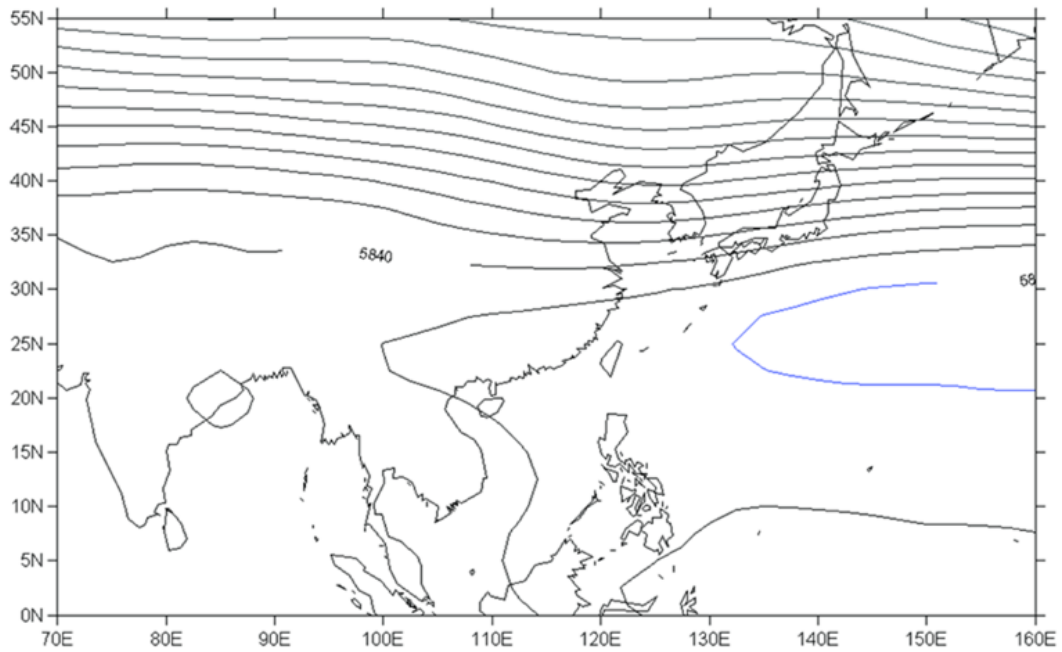
2. The supplementary figure legends:

Supplementary Figure S1 —500-hPa geopotential height field over our study areas in rainy season. (a) 500-hPa geopotential height (1979 – 1993 average) (pa); (b) same as (a) but for 1994 -2012 average; The blue line indicates the westernmost 588-dagpm contours of the 500 hPa geo-potential height field over western Pacific in rainy season has turned from approximately 134° E during 1979-1993 to 132° E during 1994-2012, which indicates that the Northwest Pacific Summer Monsoon is weakening. The maps in the figure were created by G.T. using Matlab 2011b.

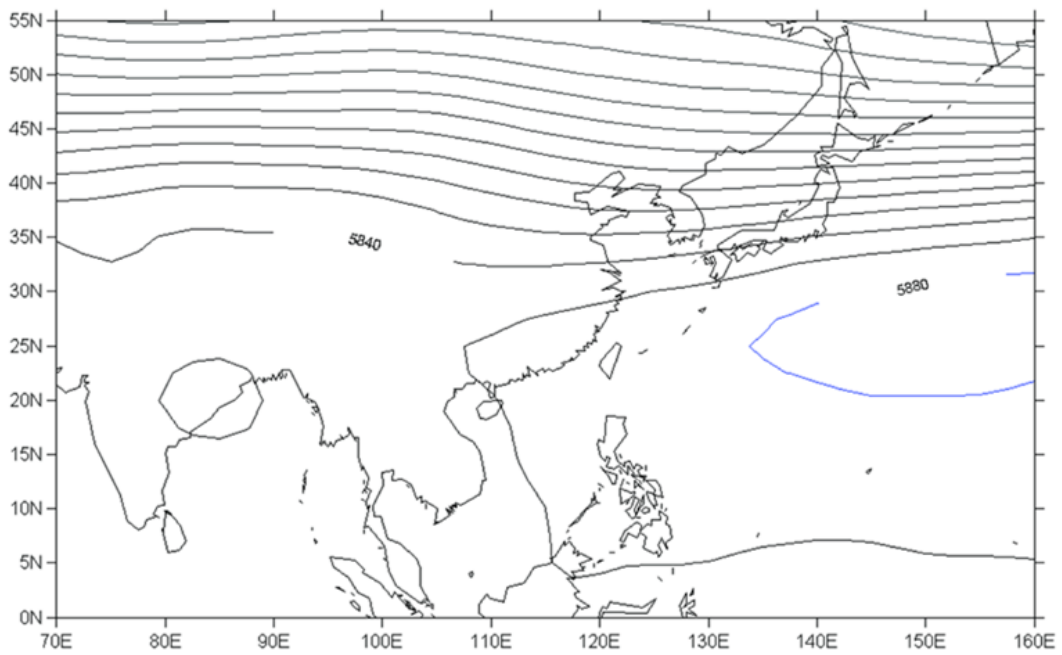
Supplementary Figure S2 —500-hPa geopotential height field over our study areas in dry season. (a) 500-hPa geopotential height (1979 – 1993 average) (pa); (b) same as (a) but for 1998 -2012 average; There is a new occur of the 588-dagpm contours of the 500 hPa geo-potential height field over western Pacific in our study regions for the dry season, the phenomenon can possibly indicate that the precipitation of the subtropical high influencing areas may change. The maps in the figure were created by G.T. using Matlab 2011b.

Supplementary Figure S1

(a) 500-hPa geopotential height field during 1979 -1993

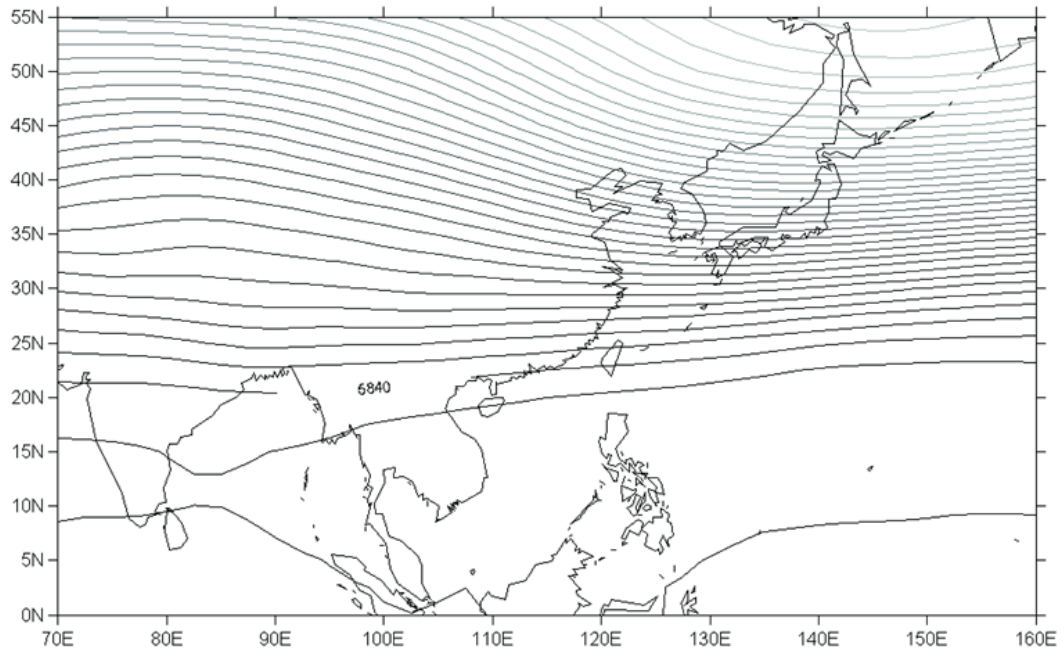


(b) 500-hPa geopotential height field during 1998 - 2012



Supplementary Figure S2

(a) 500-hPa geopotential height field during 1979-1993



(b) 500-hPa geopotential height field during 1998-2012

