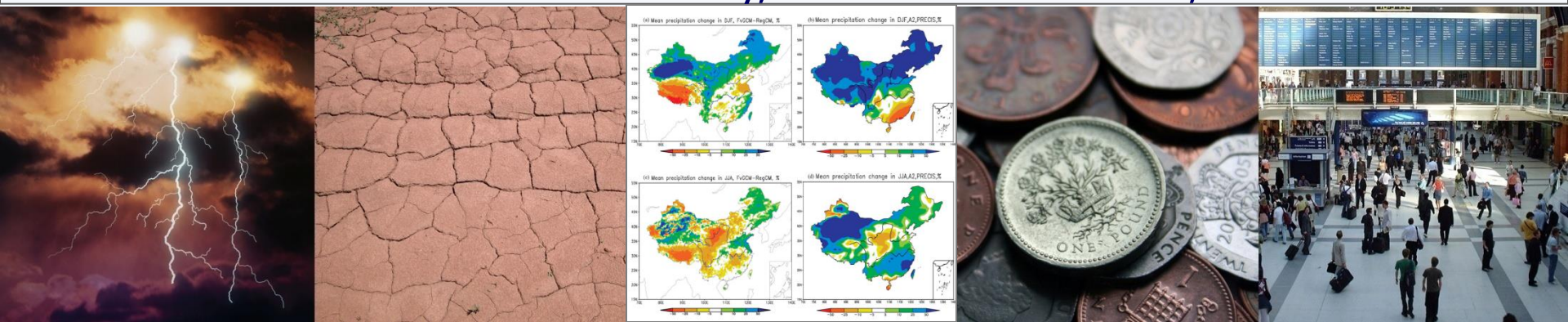


The First Session of East Asian Winter Climate Outlook Forum
—The 1st EASCOF

Climate Characteristics and Major Climate Event over China for 2013

Monday, 05th November 2013, Ulaanbaatar



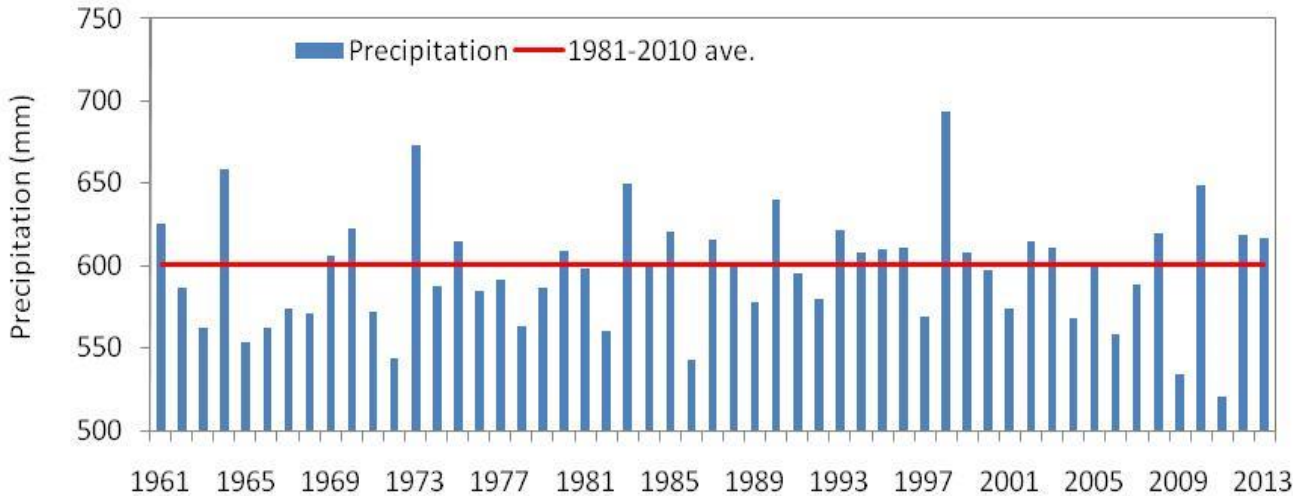
Hongmei Xu
National Climate Center, CMA



The precipitation over China is similar as normal, while northern China is more and the southern China is less than normal

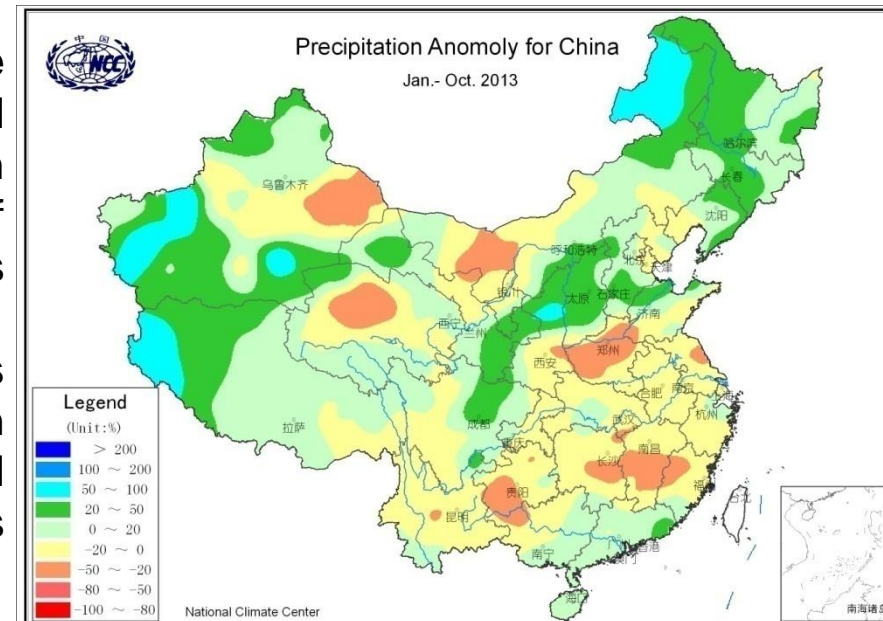
January to October 2013

The precipitation over China is 617.2 mm and similar as the same period of normal (600.6mm)

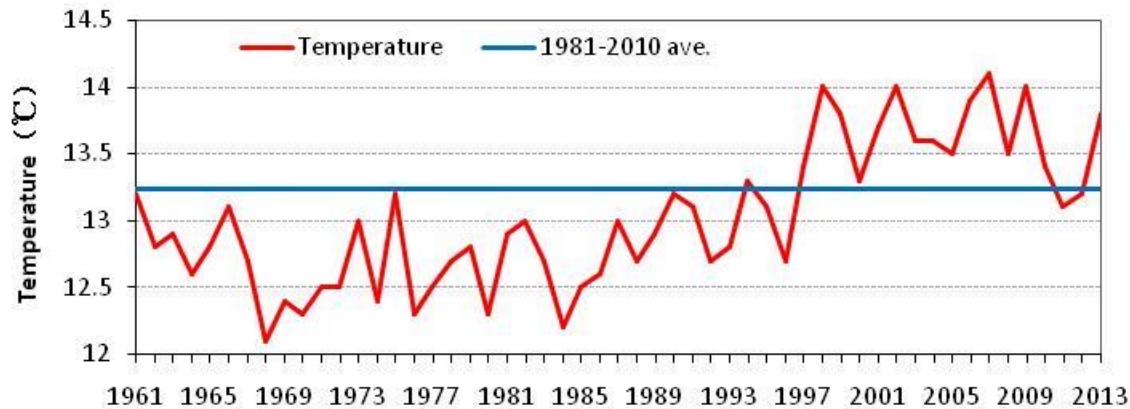


The precipitation in the northern China is more than normal. The precipitation in middle and northwest of northeastern China, middle of northern China, west of northwestern China and north of Shanxi province, northeast of Inner Mongolia is 20%- 80% more than normal.

The precipitation in the southern China is less than normal. The precipitation is most part of Henan province, middle of Jiangxi and Hunan, and southwest of Guizhou province is 20%- 50% less than normal.

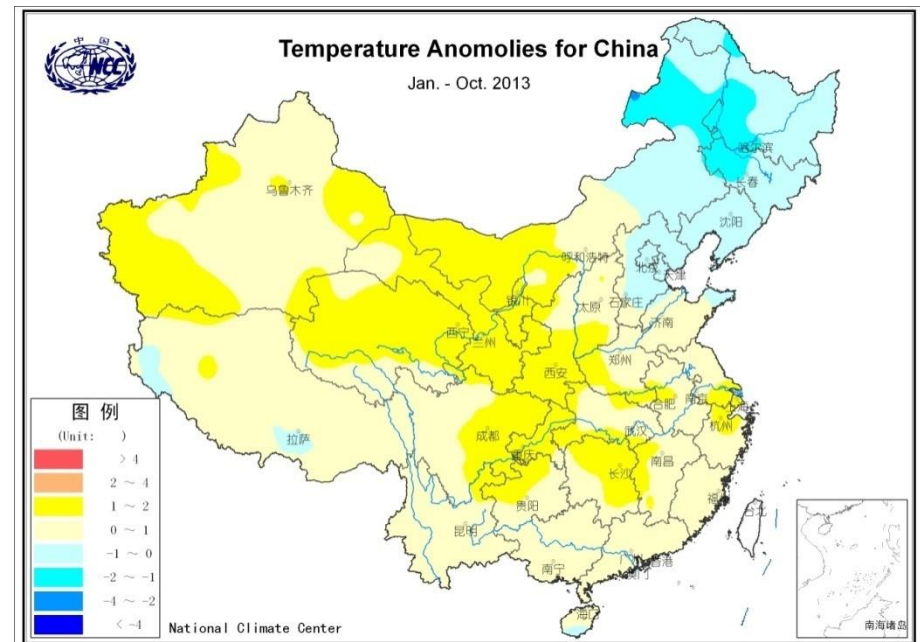


The mean temperature over China is general warmer than normal, but lower in northern China



The mean temperature over China is 13.8°C, which is 0.6°C warmer than the climatic normal.

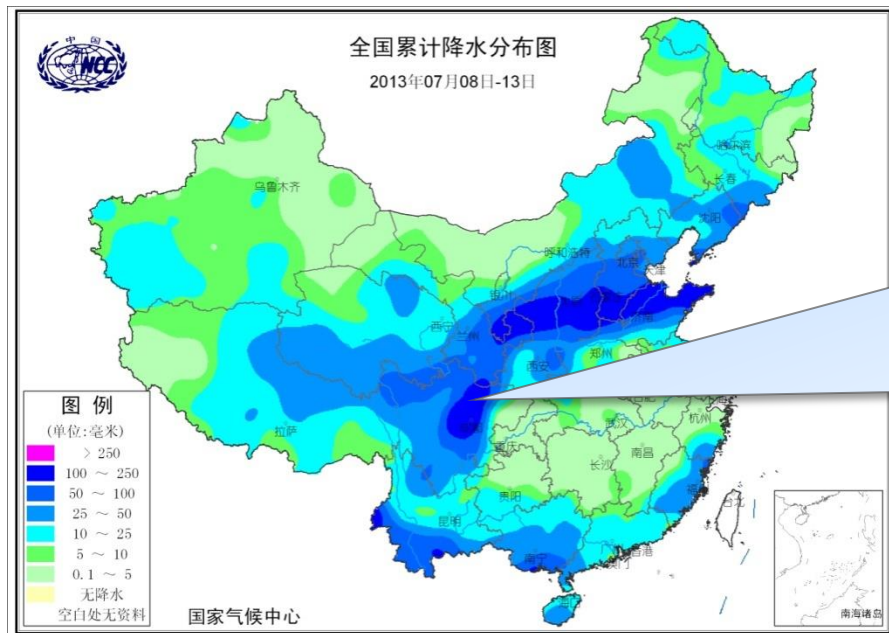
The spatial distribution indicates that the mean temperature in most of China is warmer or similar with normal, except of the mean temperature in northern China is about 0.8°C lower than normal



Major Climate Events

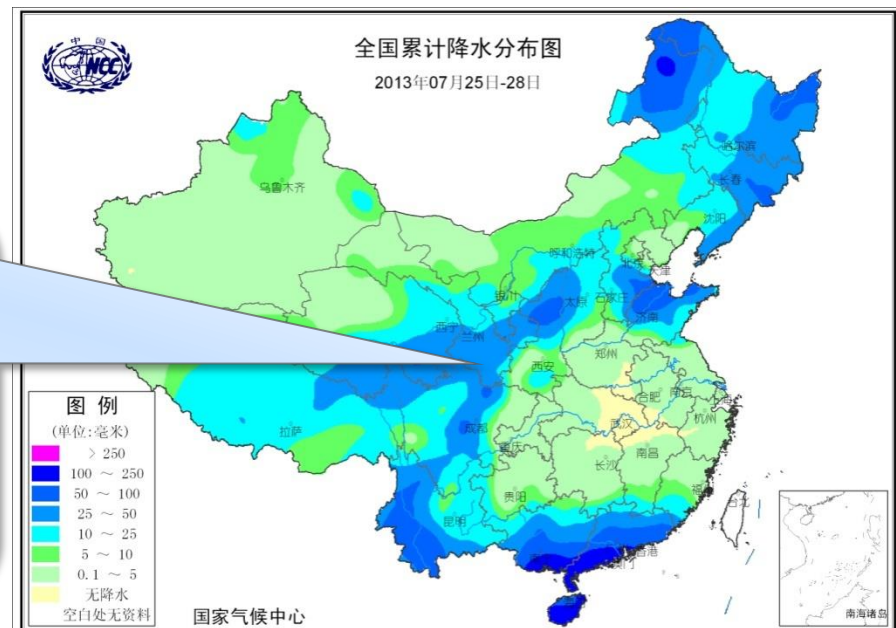
- Regional rainstorm processes are concentrated, which caused serious floods and induced geological disasters in Sichuan, Gansu, Shanxi and Heilongjiang in summer
- The formation and landfall tropical cyclones are more than normal, with strong intensity and most landfall position in southern China
- Continued, intensive and frequent fog and haze in the middle and eastern China caused severe negative effects
- The most extensive and intensive extreme high temperatures since 1951 occurred in Southern China in summer
- The periodic meteorological droughts are frequent in 2013
- Northeastern China experience regional and periodic cold-rainy weather in spring, which caused negative impact on spring sowing

Regional rainstorm processes are concentrated, which caused serious floods and induced geological disasters in Sichuan, Gansu, Shanxi and Heilongjiang in summer

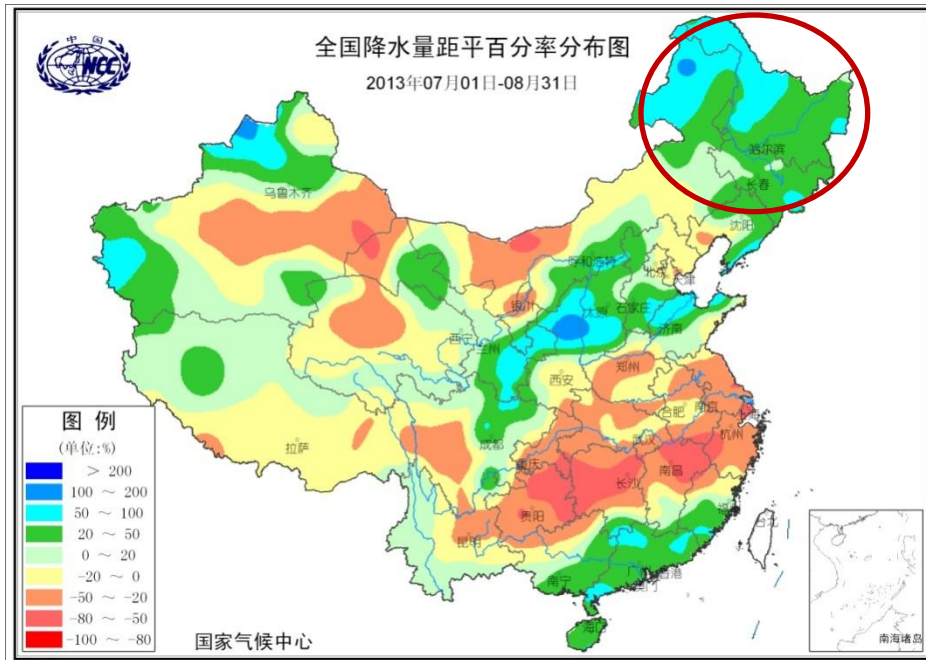


In early and middle July, the extreme rainfall attacked Sichuan Basin, east of Northwestern China, south of North China. The continued intensive rainfall caused local severe flooding, geological disasters.

In late of July, continued intensive rainfall attacked northwest China, Shanxi, Gansu, Ningxia province experienced flooding, storm, and , geological disasters.



Regional rainstorm processes are concentrated, which caused serious floods and induced geological disasters in Sichuan, Gansu, Shanxi and Heilongjiang in summer

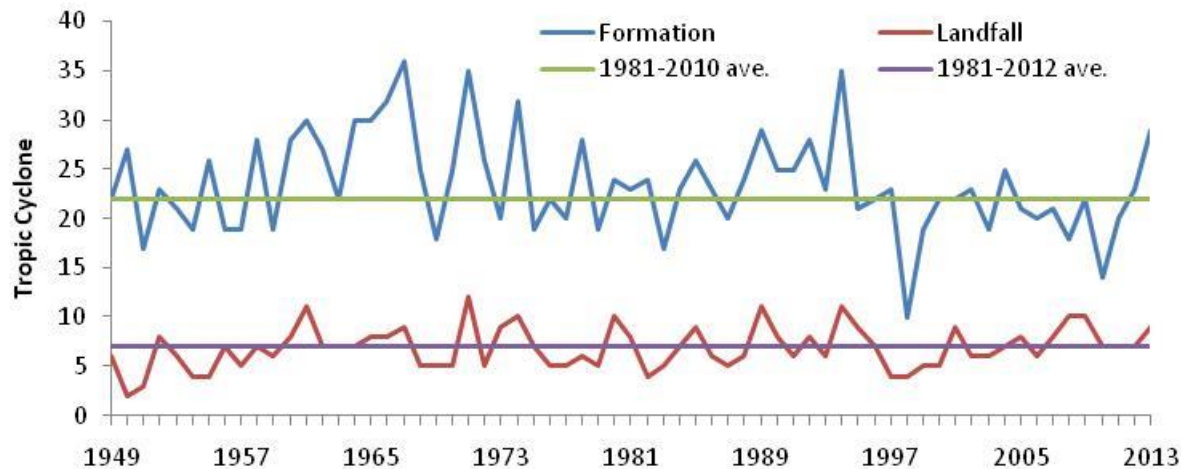


Village was flooded in Suibin county, Heilongjiang province)

- The precipitation in July and August is 397.7mm in Songhuajiang River, which is about 37% more than normal, and rank the third highest since 1951 over the same period. The precipitation is Nenjiang River is 326mm, which is about 35% more than normal, and rank the first highest since 1999 over the same period. The general wetter caused flooding in main branch of these rivers.

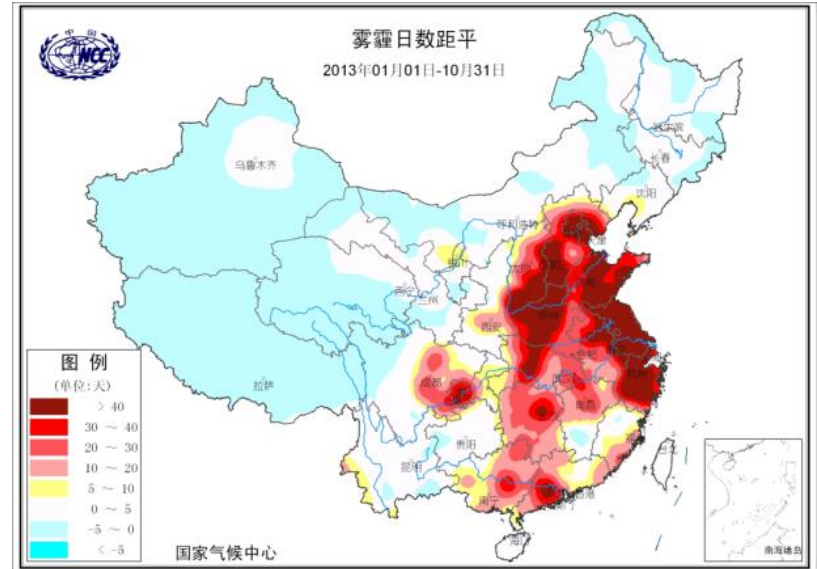
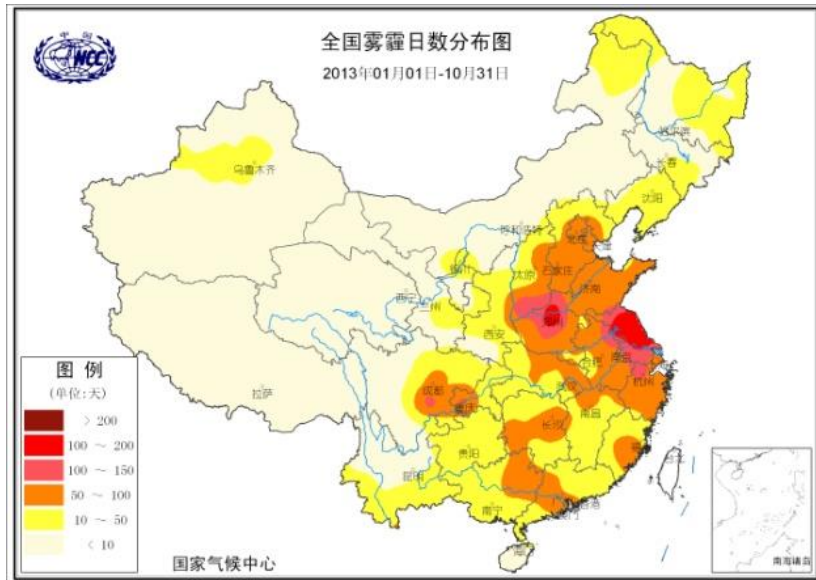
The formation and landfall tropical cyclones are more than normal, with strong intensity and most landfall position in southern China

Since 1961, the average formation tropical cyclones in the northwest Pacific and the South China sea are 27, with average landfalls are 7.



- Jan. to Oct. 2013, there are 29 tropic cyclones formed, with 4 more than normal, among those 9 landed in the mainland, with 2 more than normal.
- These tropical cyclones caused 102 deaths and direct economic losses of 1047.5 billion RMB
- “Typhoon Usagi” is the strongest typhoon landed on the east of Guangdong province in recent 40 years.

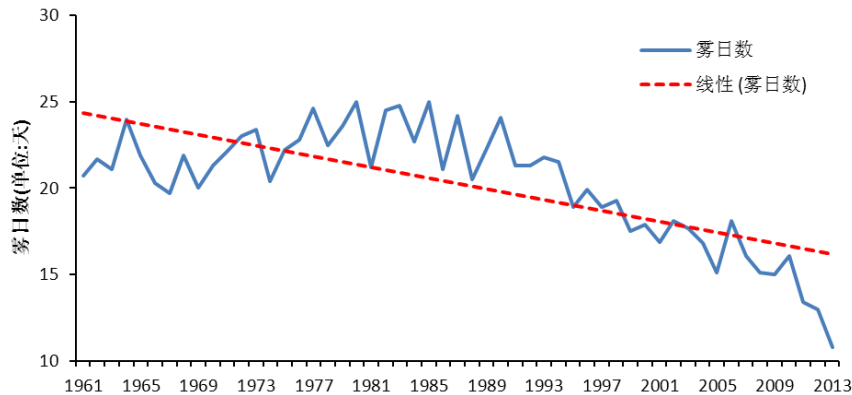
Continued, intensive and frequent fog and haze in the middle eastern China caused severe negative effects



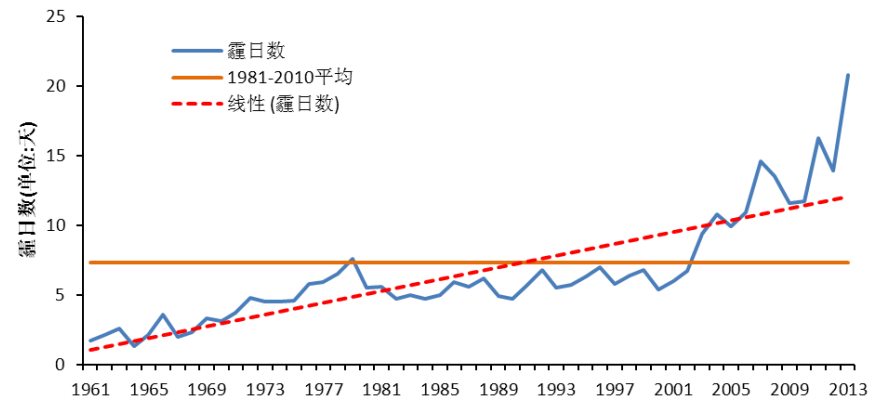
The total days and anomalies of fog and haze in China during 1st Jan and 31st Oct, 2013

There are 25~ 100 days of fog and haze in middle China, with 10 days more than normal for most parts, and 40 days more than normal for south Hebei province, Beijing, southeast Shanxi, Shandong, Henan, Jiangsu and Zhejiang et al.

Continued, intensive and frequent fog and haze in the middle eastern China caused severe negative effects

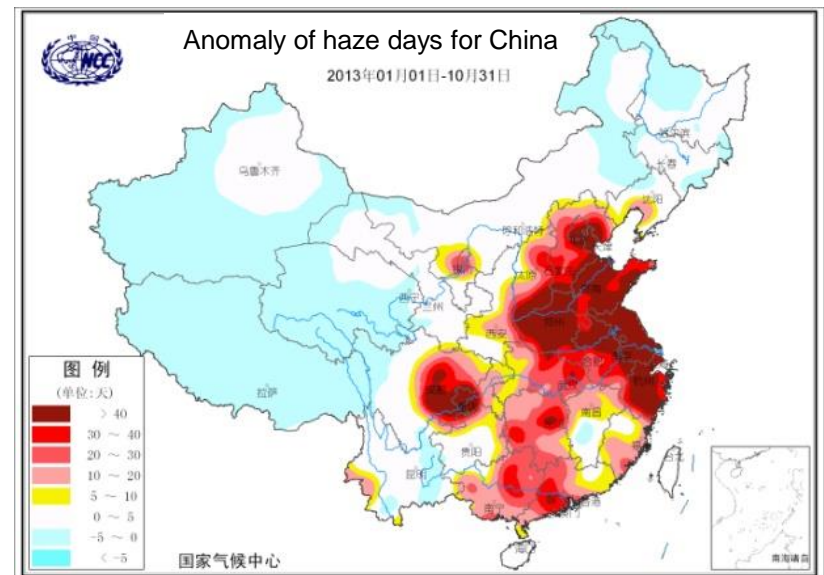


Annual fog days for 1961-2013

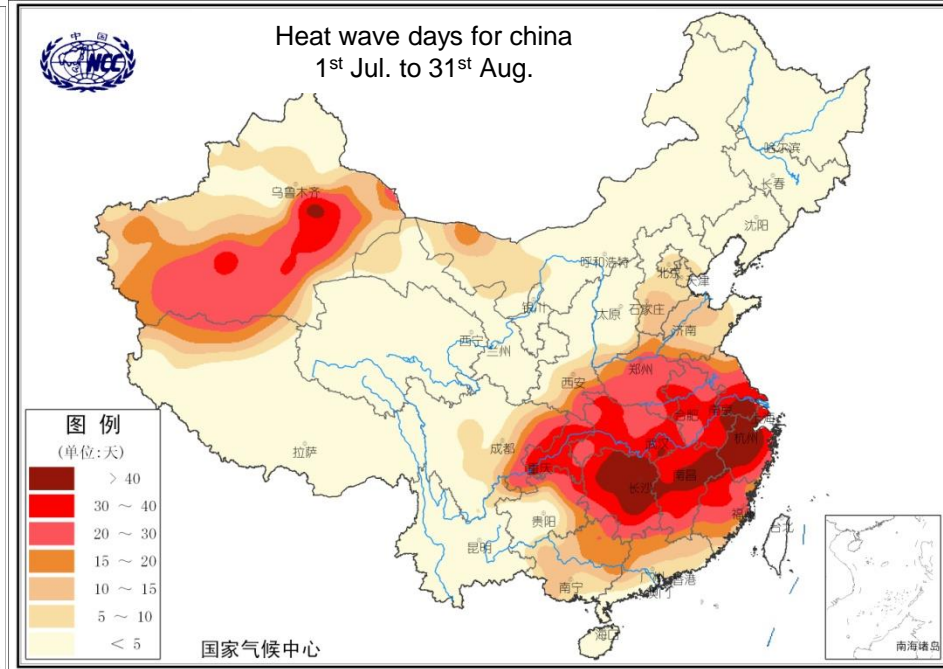
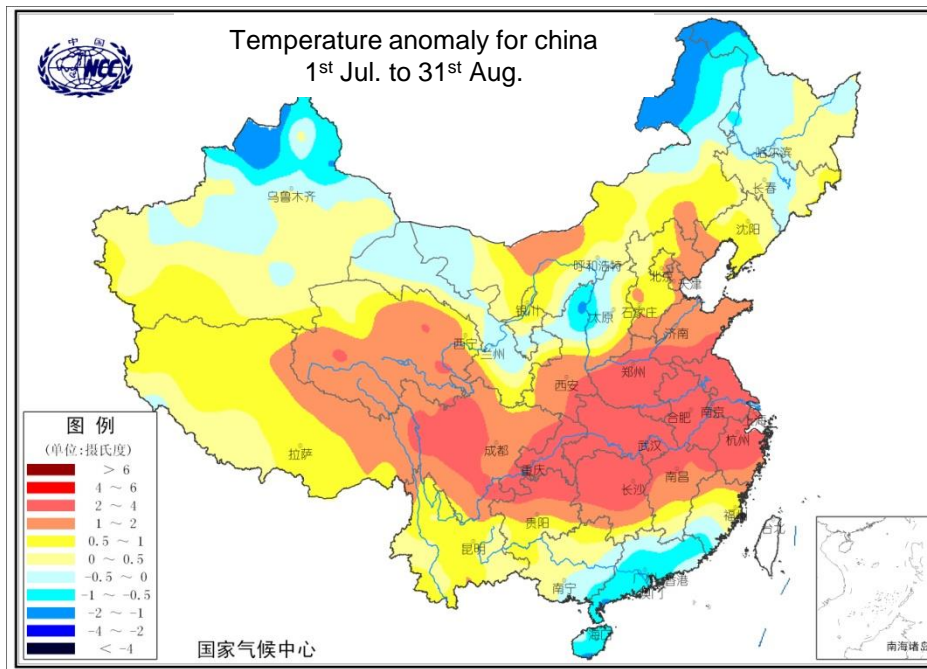


Annual haze days for 1961-2013

- Fog days are decrease while haze days increased.
- The mean fog days is 10.8 days, and obvious lower than normal, but the haze days are 20.8 days, and substantial more than normal
- Haze days in middle eastern China are obvious more than normal

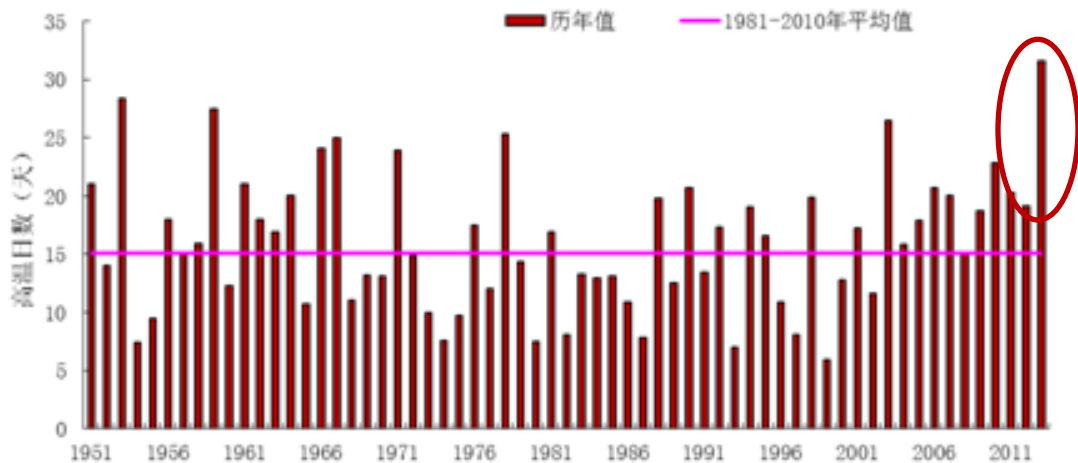


The most extensive and intensive extreme high temperatures since 1951 occurred in Southern China in summer

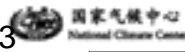


- During July and August, there are extensive and intensive extreme high temperatures occurred in southern China

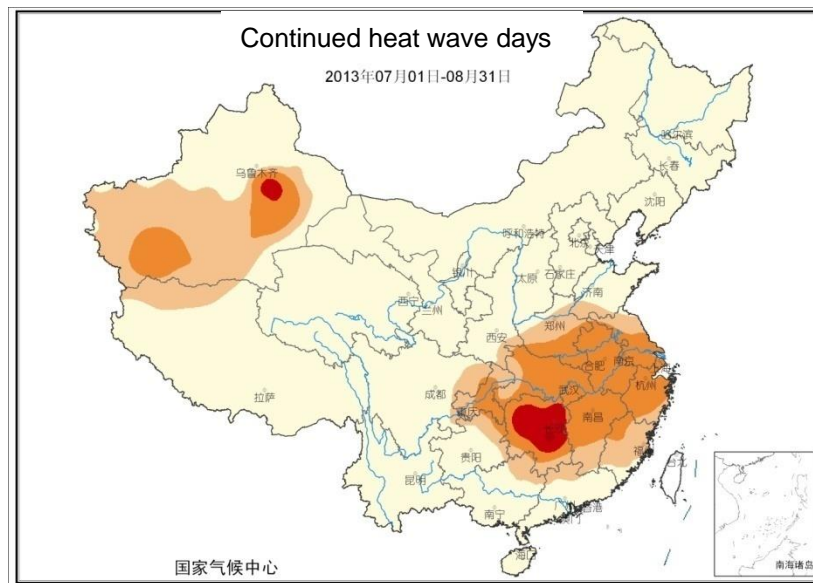
The most extensive and intensive extreme high temperatures since 1951 occurred in Southern China in summer



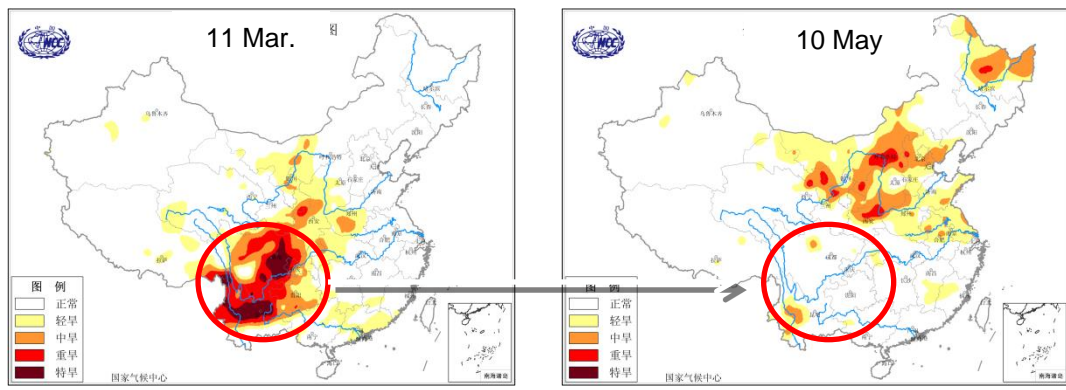
- The heat waves days are 31.6 days, and obvious more than normal (15 days) , which is the most since 1951, and covered almost 19 province, with 8 provinces more severe

Heat waves days for 8 province(cities) for 1961-2013 

- The continued heat wave days are generally 10-20 days in southern China, among which, the middle and north of Hunan are more than 30 days. There are 10 climate station recorded the longest continued heat wave days are more than 40 days.

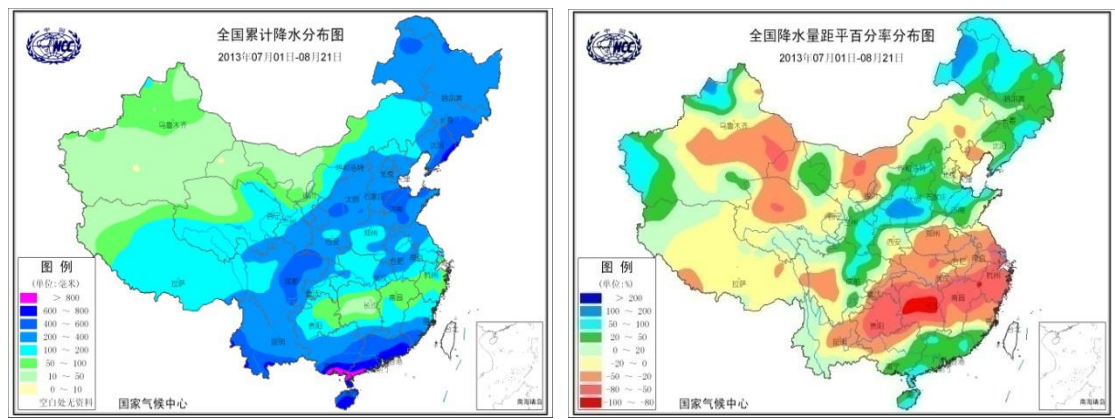


The periodic meteorological droughts are frequent in 2013



Winter-spring consecutive droughts in Southwest China
 During early Oct, 2012 – Mar 2013, the precipitation in southwest China is continued less than normal, which caused intensive meteorological drought in this area. The drought were moderated till early May.

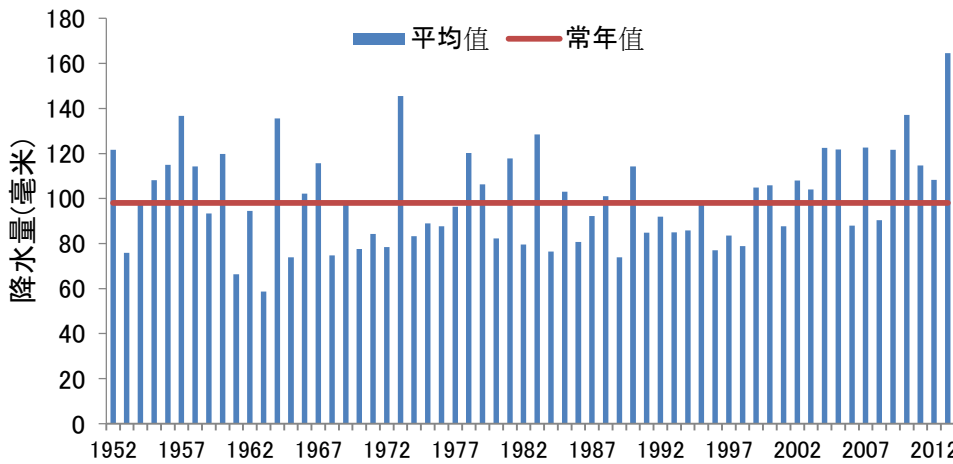
Meteorological drought monitoring for 11 Mar and 10 May (based on MCI index)



Summer droughts in the south of Yangtze River and Guizhou
 The mean precipitation is about 135 mm for south China, and 52% less than normal, which is the lowest precipitation and the longest no rainfall days(39 days, 9 days more than normal) since 1951. At the same time the temperature is continued warmer than normal. The less rainfall joined with high temperature caused the drought in the south of Yangtze River and Guizhou

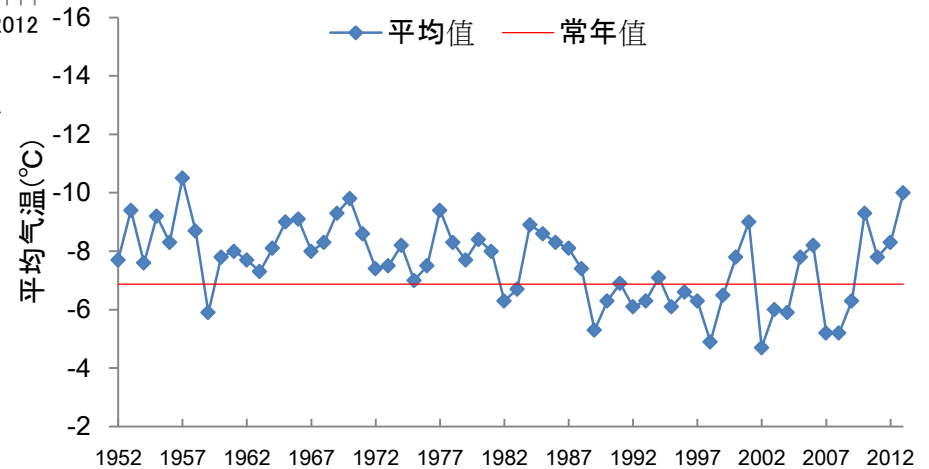
Precipitation and anomaly for 1st Jul- 21st Aug

Northeastern China experience regional and periodic cold-rainy weather in spring, which caused negative impact on spring sowing



Precipitation for Oct. 2012 to Apr. 2013 in North east China

The temperature was continued less than normal for Dec. 2012 to Apr. 2013, with the mean temperature was -10.0°C , and 3.1°C lower than normal, which is the coldest since 1958



Temperature for Dec. 2012 to Apr. 2013 in North east China

There are much of snow and rainfall weather processes occurred from Oct. 2012 to Apr. 2013 in North east China, with the precipitation was about 164.6 mm, and 66% more than normal, which is the most since 1952

Unusually persistent cold rain weather lead to late in the soil thaw, over soil moisture in agricultural areas in Northeastern China. Some plots appear spring floods, crops sowing generally delayed

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Thanks for your attention!

