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近52年太阳活动与江淮梅雨异常关系分析(PDF)

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Title: Analysis of relationship between solar activities and abnormality of plum rains in Changjiang-Huaihe River Valley in recent 52 years

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摘要: 我国涝灾主要集中在江淮地区,其中6-7月的旱涝,大部分是由梅雨异常引起的。为了研究梅雨的影响因子,利用1954-2005年太阳黑子、江淮地区33站梅雨期降水资料,分析了太阳活动对江淮地区梅雨的影响。研究表明,梅雨量趋势系数的最大值中心位于杭州地区,而太阳活动与杭州地区的梅雨基本上没有关系。太阳活动对江淮地区梅雨量、梅雨强度的影响具有地域性。太阳活动与梅雨量的相关关系由北向南,依次呈现为负相关性、正相关性和负相关性,太阳活动强的年份,江淮地区北部和南部梅雨量偏少,江淮中部梅雨量偏多;太阳活动与梅雨强度的相关关系由北向南,依次呈现正相关性、负相关性,太阳活动强的年份,江淮地区北部梅雨强度较强,江淮南部梅雨强度较弱。合成分析结果表明:太阳活动谷年江淮地区普遍偏涝。

Abstract: Floods in China mainly occur in the region of Changjiang-Huaihe River Valley. Floods and droughts in June and July are mostly caused by abnormality of plum rains. To study the influence factors of plum rains, the impact of solar activities on plum rains in the region was analyzed based on the data of sunspots and precipitation in the Changjing-Huaihe river region during the plum rains period from 1954 to 2005. The results show that, the maximum trend-coefficient of the precipitation of plum rains is located in Hangzhou area, where solar activities has little impact on plum rains. Impact of solar activities on the precipitation and the intensity of plum rains shows obvious regional characteristics in the Changjiang-Huaihe River region. From north to south of the Changjiang-Huaihe River region, the correlations between solar activity and the precipitation of plum rains are

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negative, positive, and negative, respectively. In anomalous strong solar activity years, precipitation is less in the north and south and more in the middle of the region; while from north to south, the correlations between the solar activity and the intensity of plum rains are positive and negative, i.e., generally speaking, in anomalous strong solar activity years, the intensity of plum rains is stronger than normal in the north and weaker than normal in the south of the region. Composite analysis results show that, in low solar activity years, the Changjiang-Huaihe River region is prone to have floods.

参考文献/REFERENCES

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