

1 Figure captions:

2 **Fig. 1.** Sketch map of the study area based on elevation.

3 **Fig. 2.** Inter-year variations of mean temperature in northwest Shanxi from 1970 to 2015.

4 **Fig. 3.** Trend test of mean temperature in northwest Shanxi during 1970-2015.

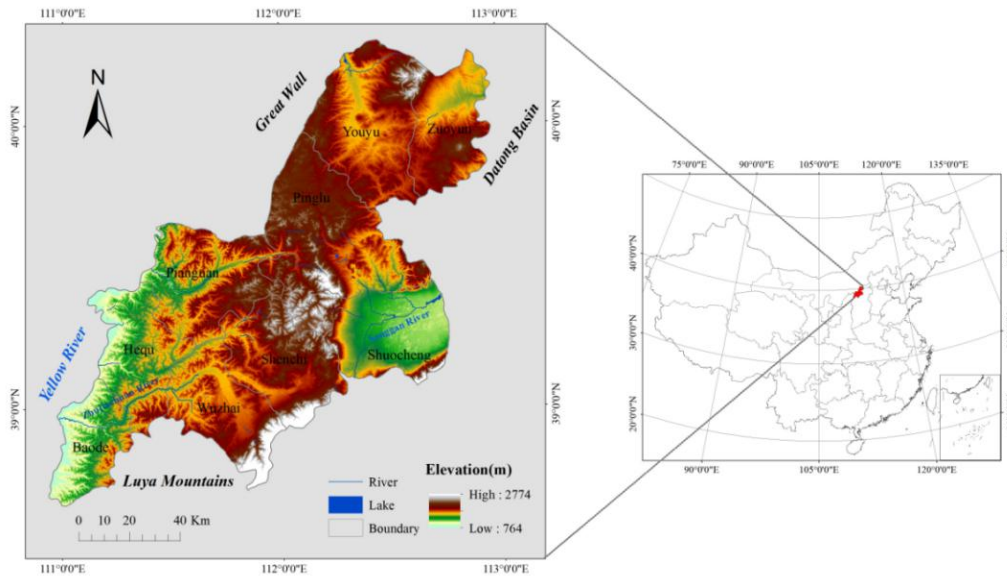
5 **Fig. 4.** Inter-year variations of annual mean precipitation in northwest Shanxi from 1970 to  
6 2015.

7 **Fig. 5.** Trend test of annual mean precipitation in northwest Shanxi during 1970-2015.

8 **Fig. 6.** Fluctuations in ADL relative to the climate in 1970-2015. All data are normalized.

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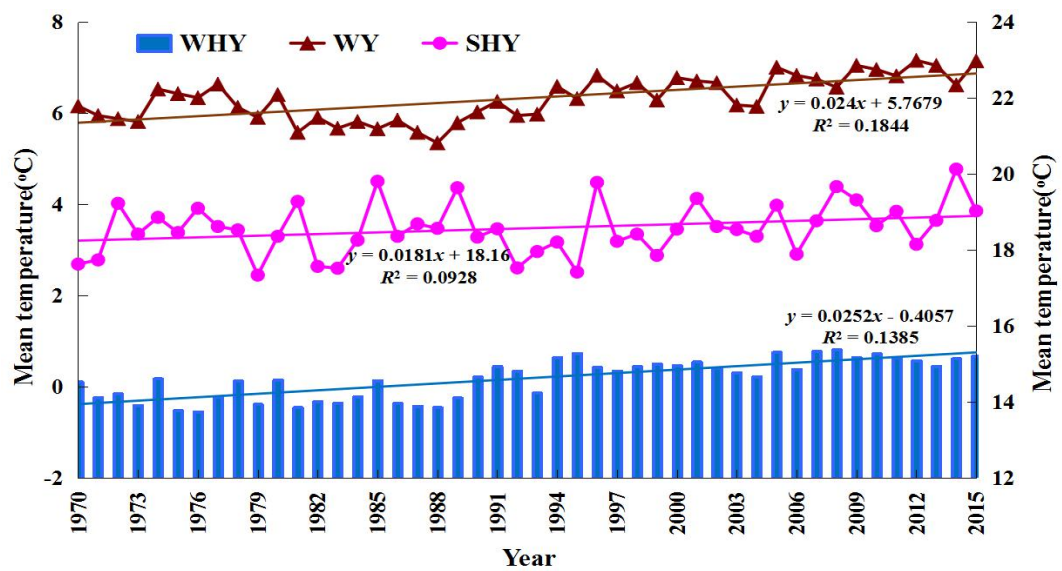
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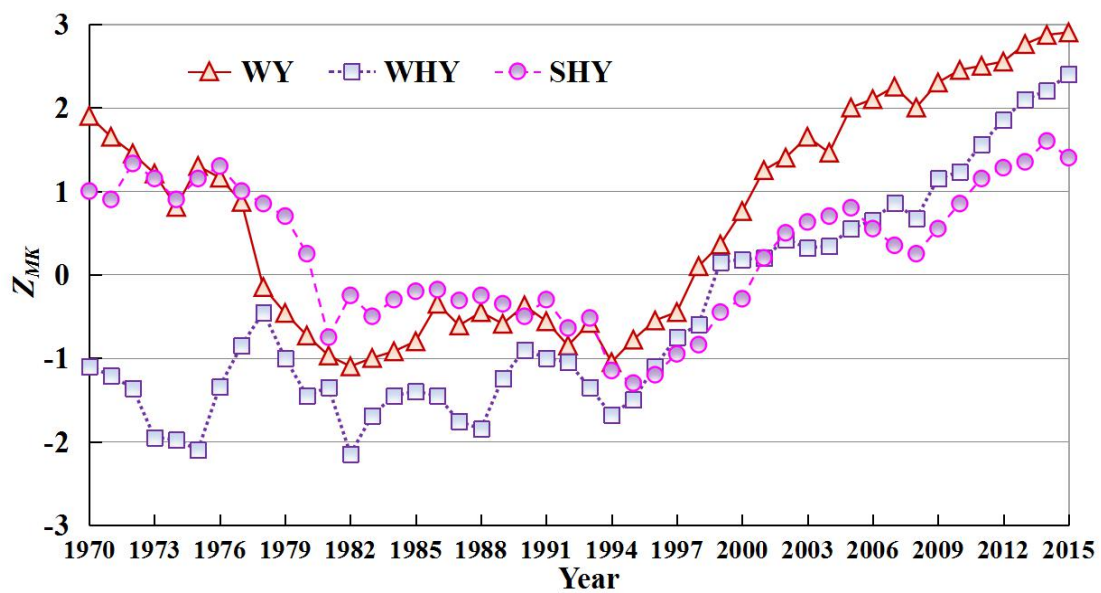
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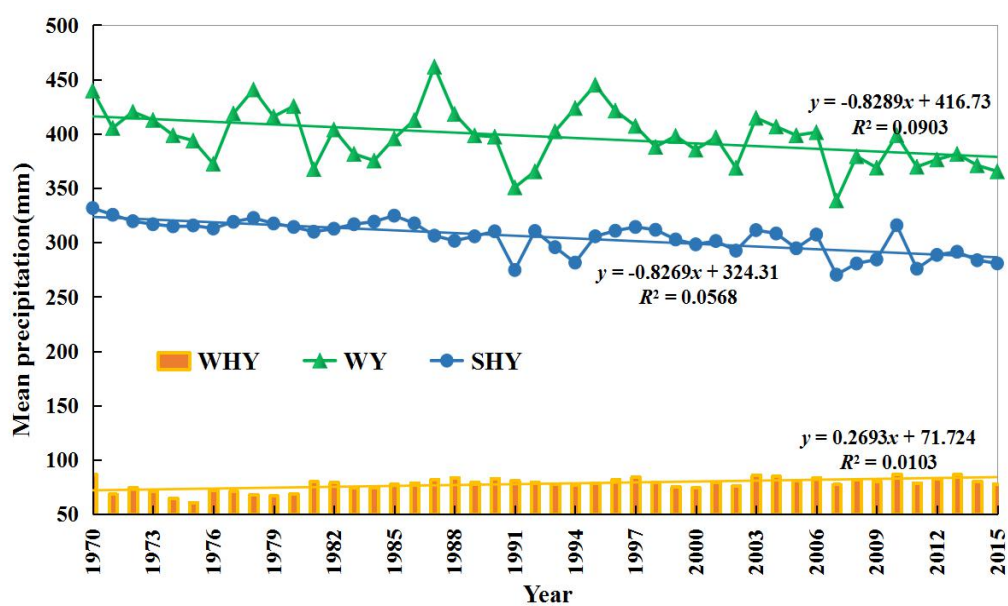
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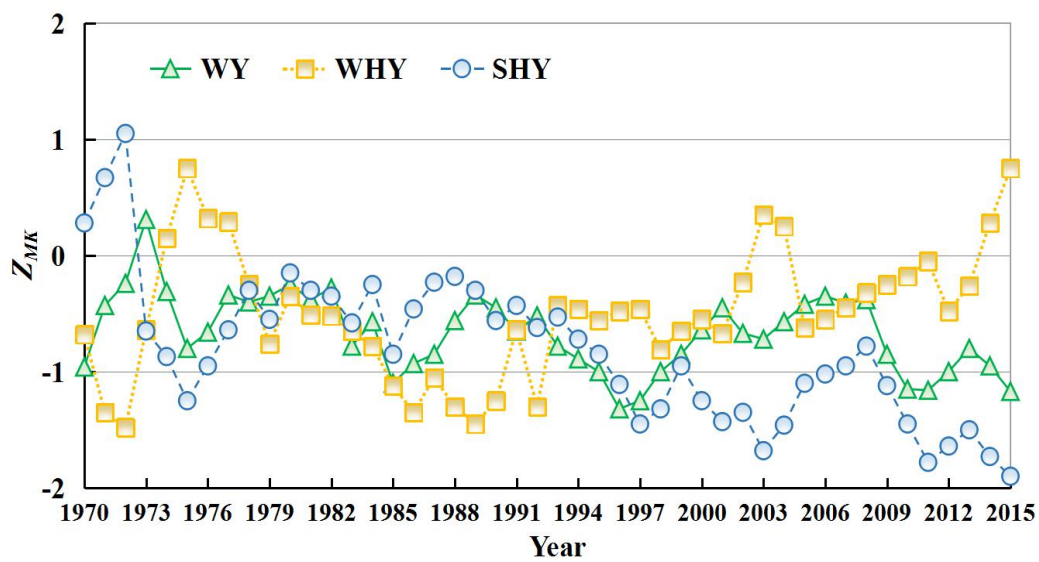
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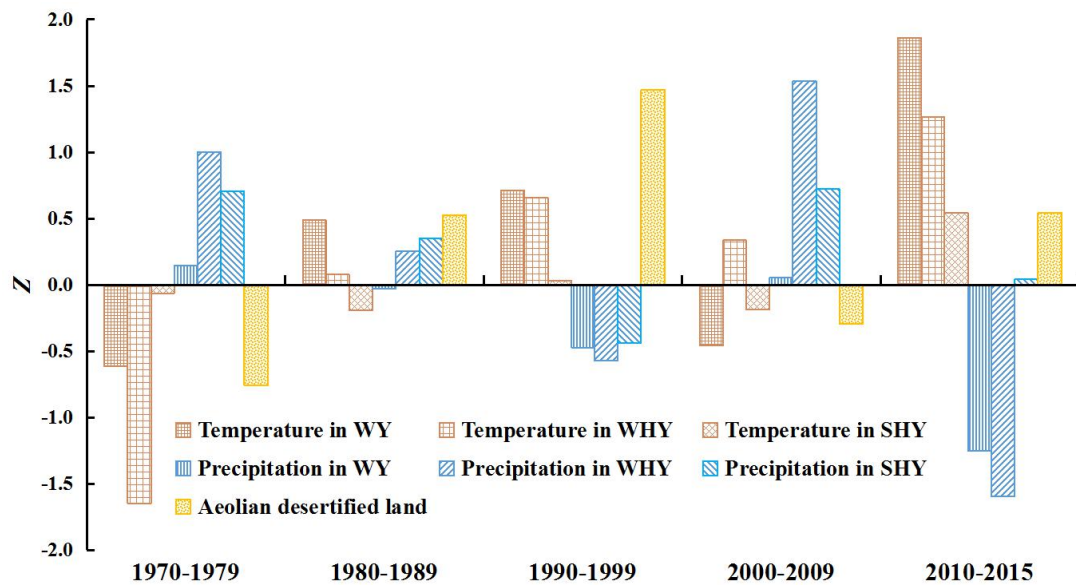
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