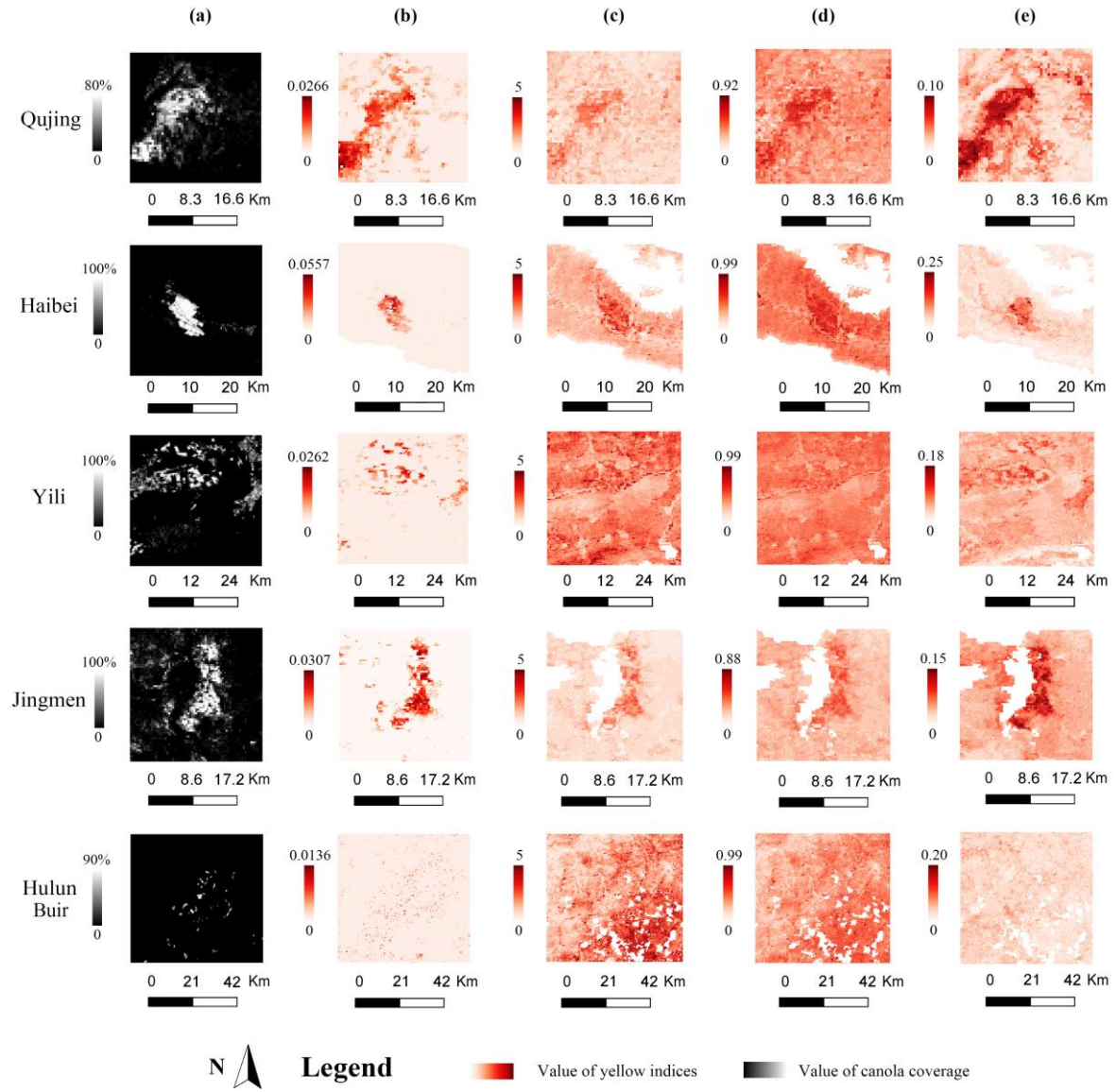**Supplementary Material**

Figure S1. (**a**) Canola coverage map derived from high-resolution imagery in five subareas. Comparisons of the (**b**) EAYI maps, (**c**) RYI maps, (**d**) NDYI maps, (**e**) Ashourloo CI maps.
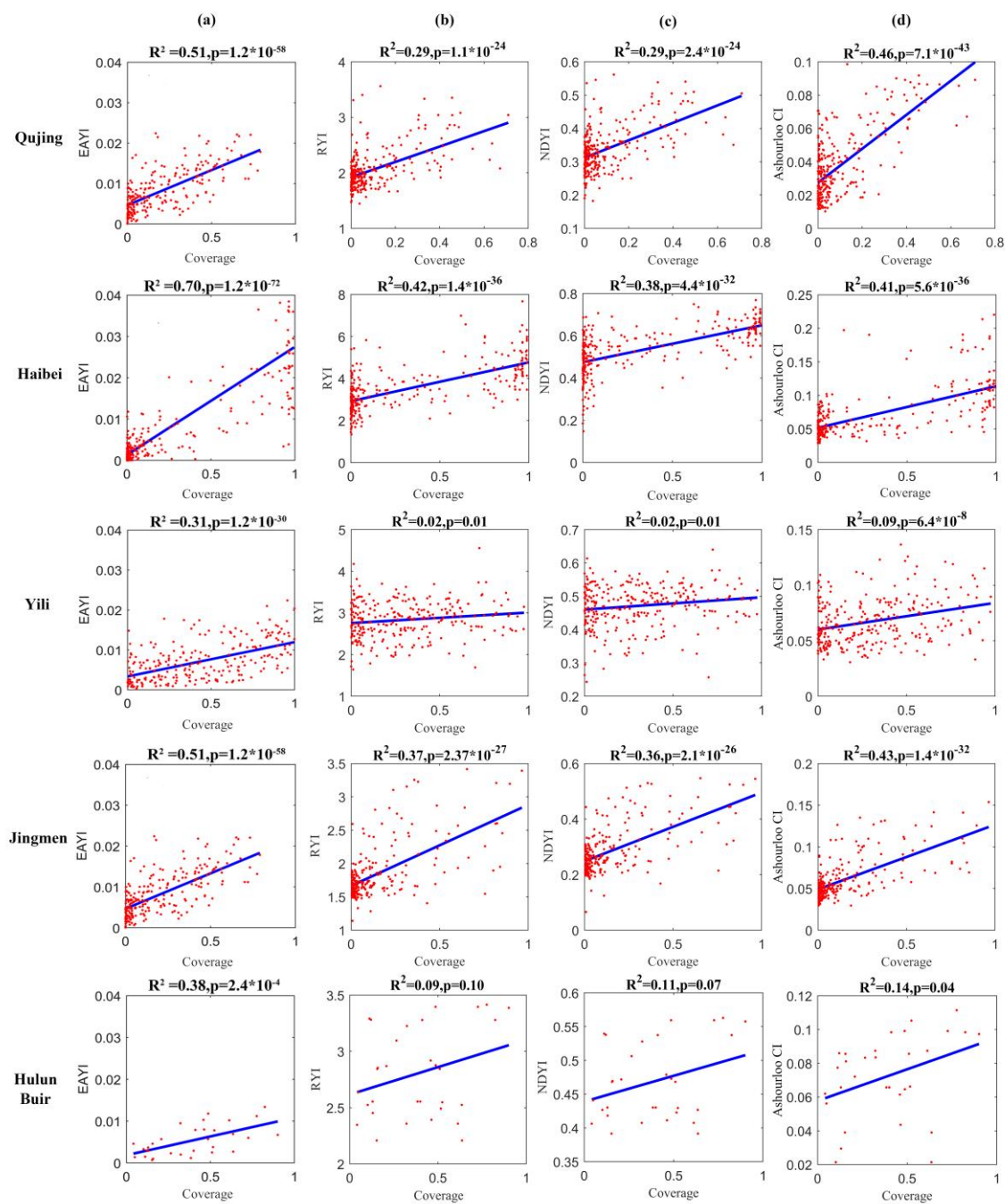
Figure S2. Comparisons of the relationship between four canola indices (**a**) EAYI, (**b**) RYI, (**c**) NDYI, (**d**) Ashourloo CI and coverage derived from high-resolution imagery in five subareas.

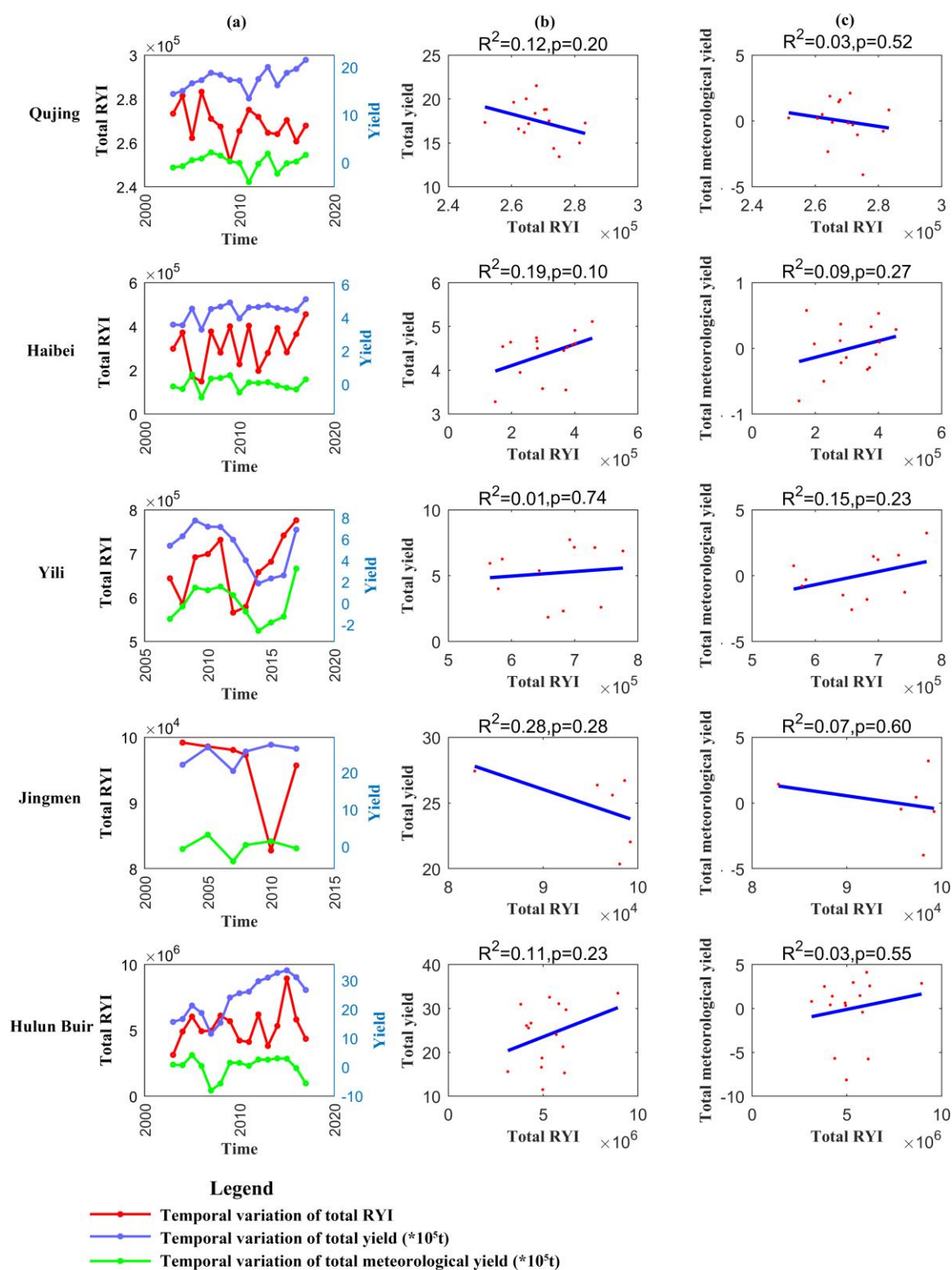**Figure S3.** (**a**) The temporal variation of total RYI, total yield and total meteorological yields in five subareas; (**b**) The relationship between total RYI and total yield in five subareas; (**c**) The relationship between total RYI and meteorological yield in five subareas.
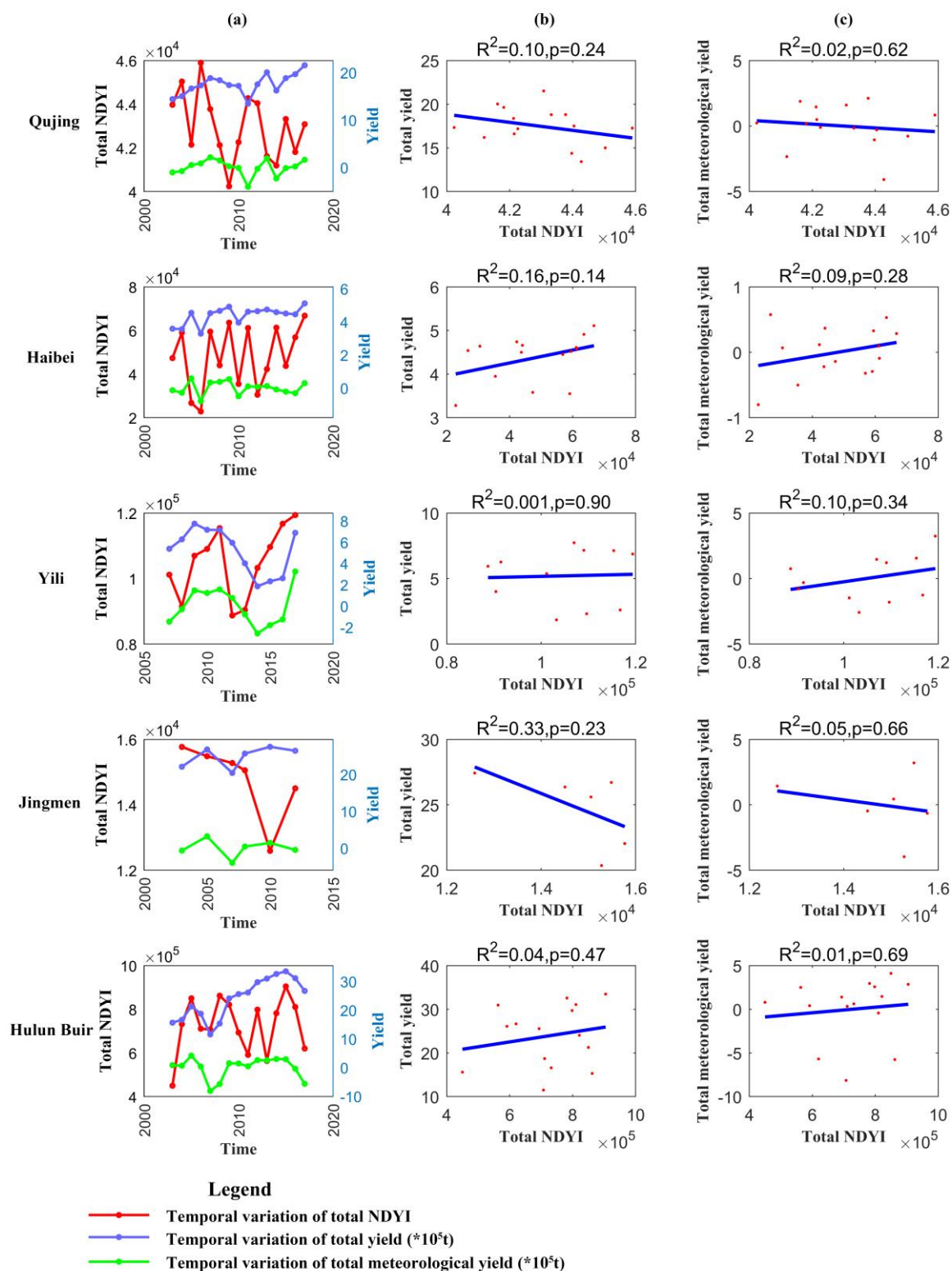
Figure S4. (**a**) The temporal variation of total NDYI, total yield and total meteorological yields in five subareas; (**b**) The relationship between total NDYI and total yields in five subareas; (**c**) The relationship of total NDYI and meteorological yield in five subareas.
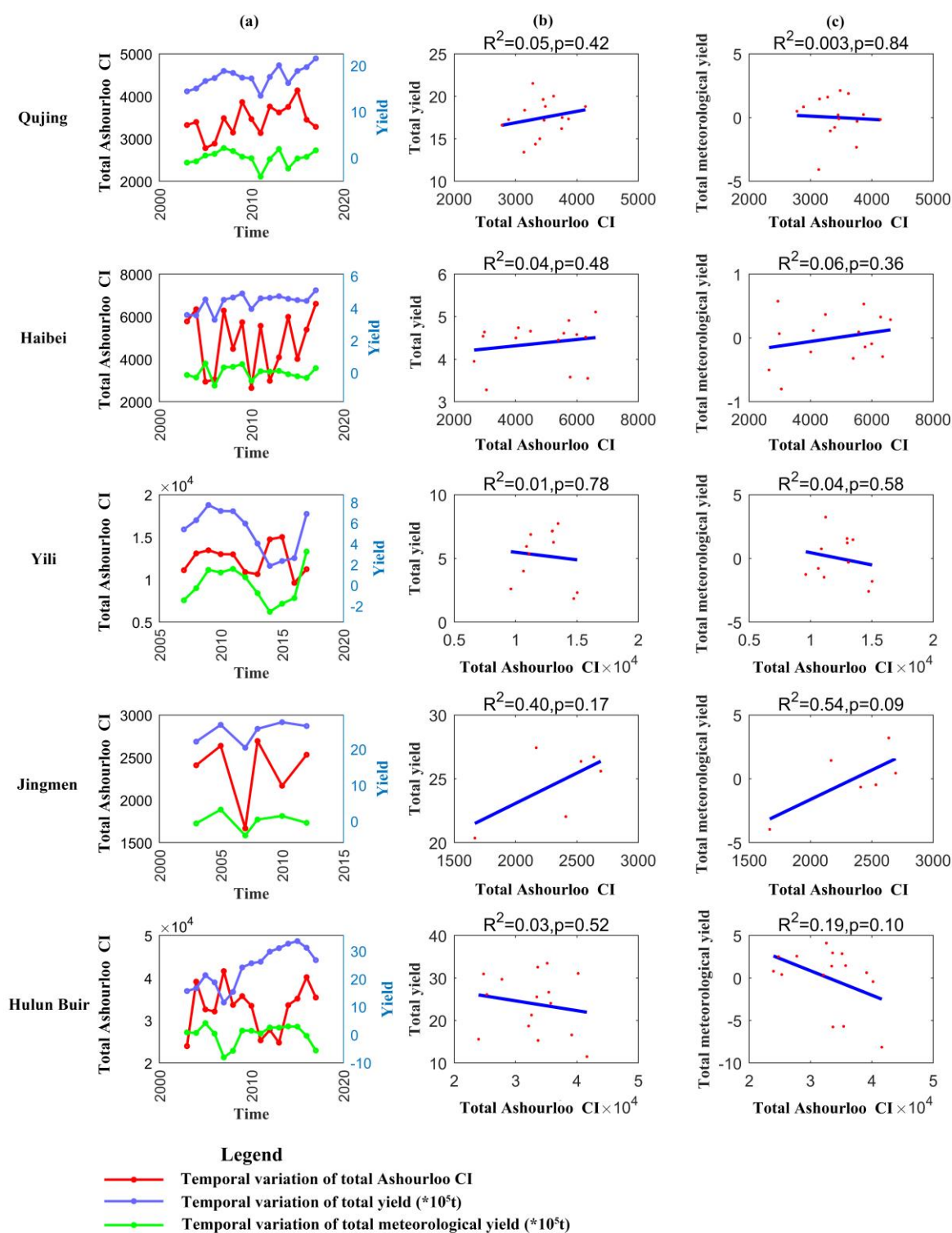
Figure S5. (**a**) The temporal variation of total Ashourloo CI, total yield and total meteorological yields in five subareas; (**b**) The relationship between total Ashourloo CI and total yields in five subareas; (**c**) The relationship of total Ashourloo CI and meteorological yield in five subareas.