Figure S1. Hourly simulated precipitation for the monsoon season under experimental run E1_R2 for four avalanche sites. Each subplot represents time series of the HAR hourly precipitation, MPS hourly precipitation with 50 ensembles and mean of the ensembles for a time period of June 15th to 30th, July 15th to 31st, and August 1st to 15th.
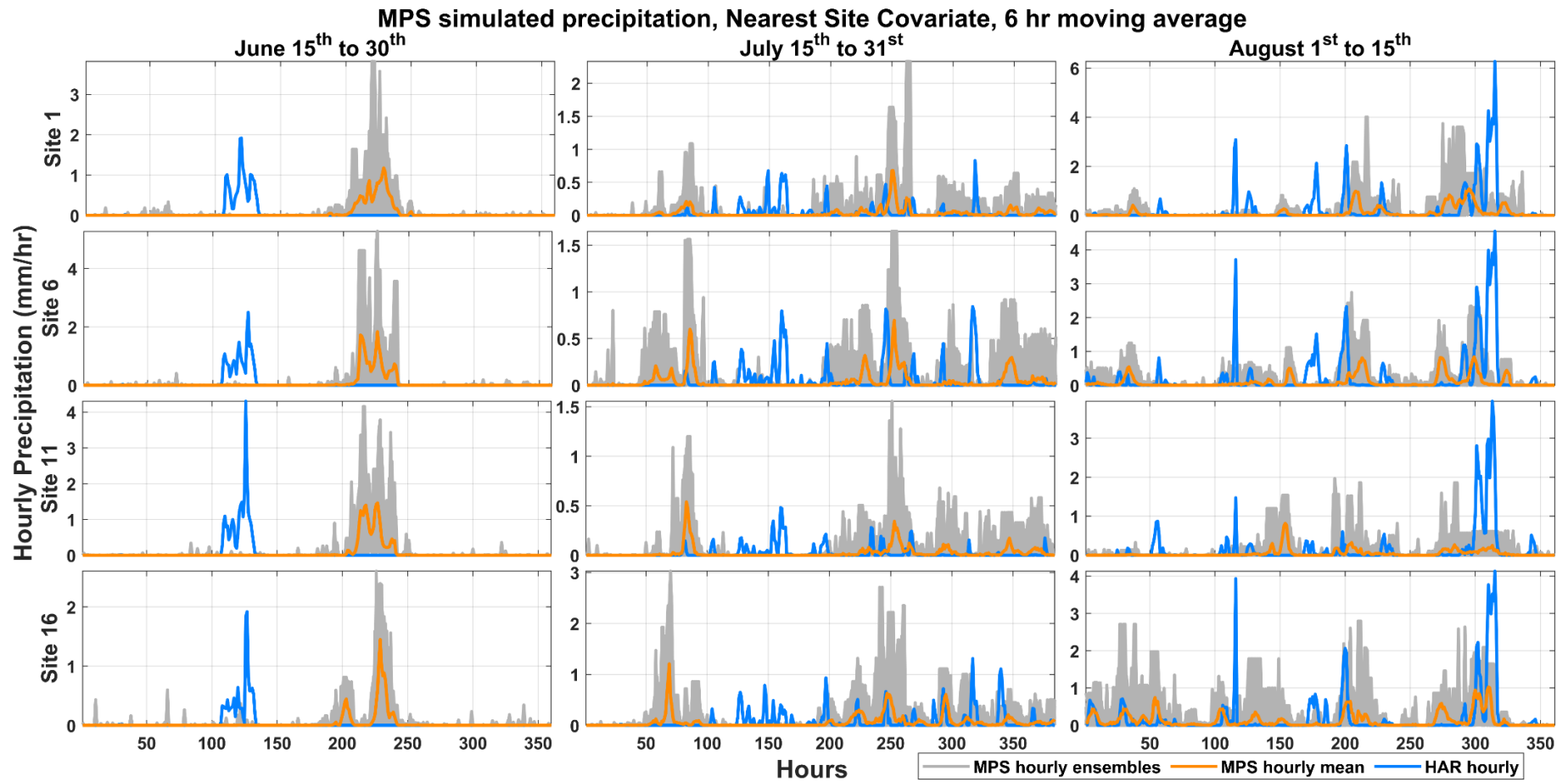
Figure S2. Hourly simulated precipitation for the monsoon season under experimental run E2_R4 for four avalanche sites. Each subplot represents time series of the HAR hourly precipitation, MPS hourly precipitation with 50 ensembles and mean of the ensembles for a time period of June 15th to 30th, July 15th to 31st, and August 1st to 15th.
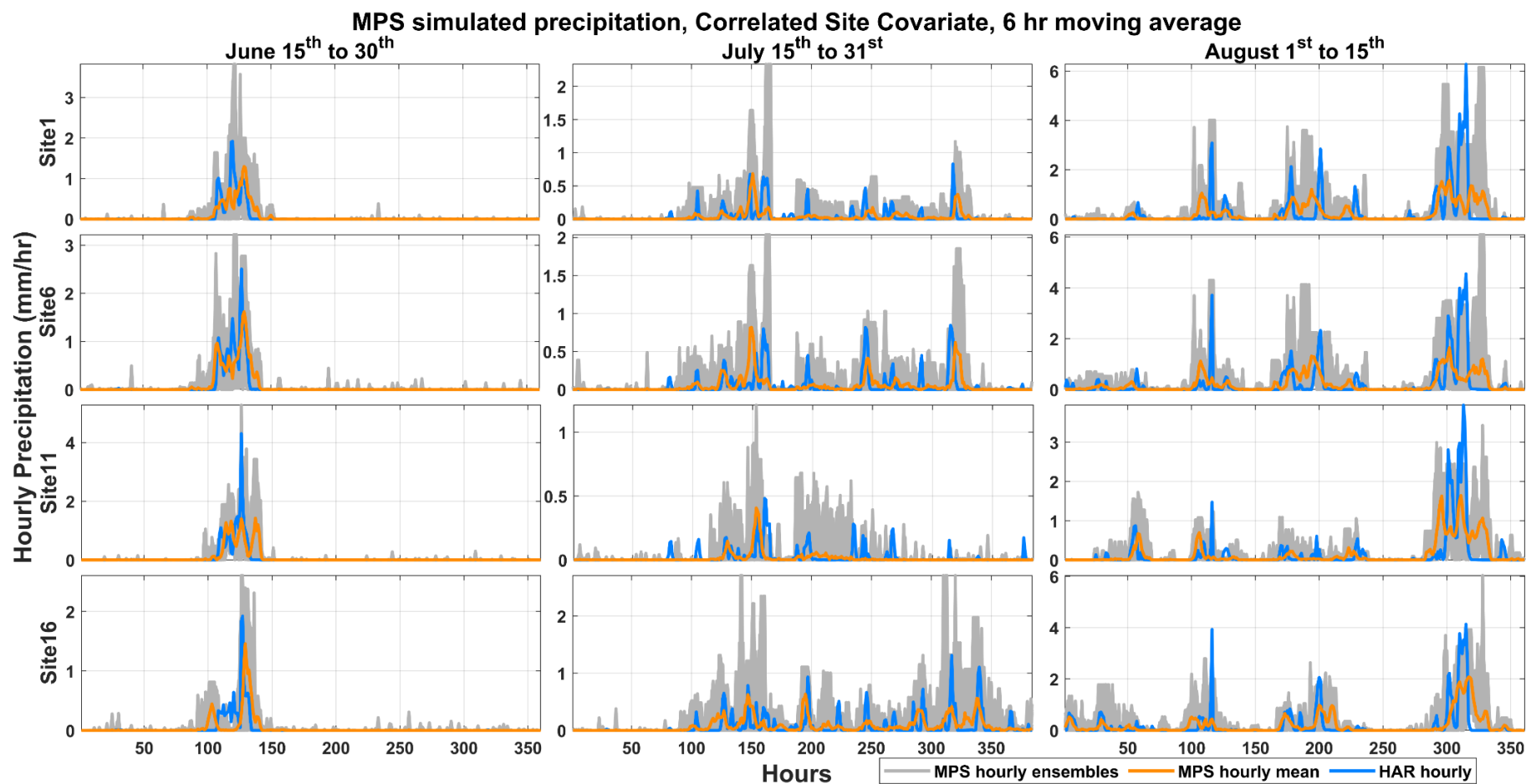
Figure S3. Hourly simulated precipitation for the monsoon season under experimental run E2_R6 for four avalanche sites. Each subplot represents time series of the HAR hourly precipitation, MPS hourly precipitation with 50 ensembles and mean of the ensembles for a time period of June 15th to 30th, July 15th to 31st, and August 1st to 15th.
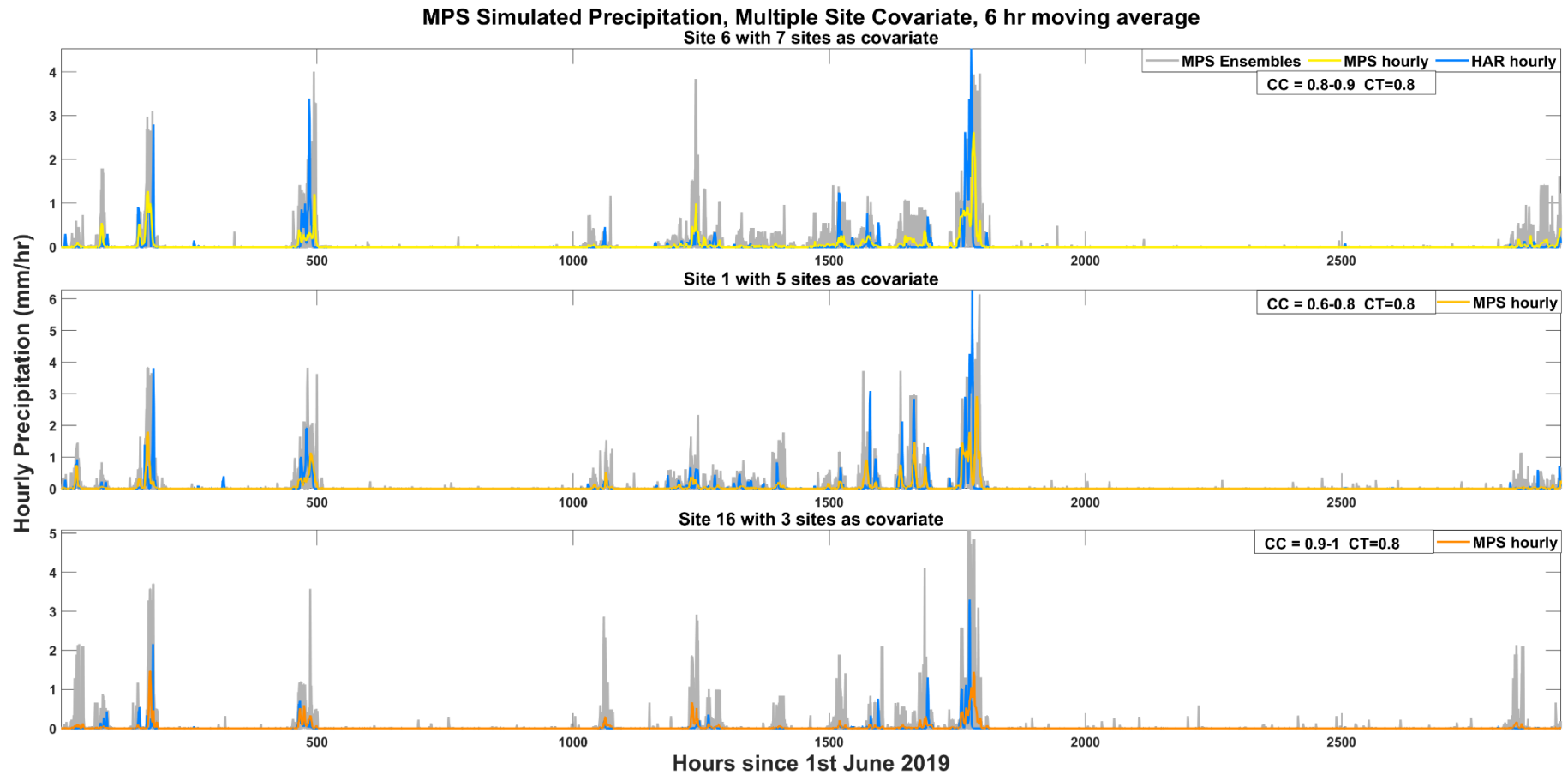
Figure S4. Hourly simulated precipitation for the monsoon season under experimental run E3_R8, E3_R10, and E3_R12 for avalanche site_6, site_1, site_16 respectively. Each subplot represents time series of the HAR hourly precipitation, MPS hourly precipitation with 50 ensembles and mean of the ensembles for a time period of 1st June 2019 to 30th September 2019.