

CMIP6 GCM  
Daily Data

ERA-5  
Hourly  
Reanalysis

Standardize

Aggregate to daily, standardize

Regrid to  
1°

Regrid to  
0.25°

Regrid to  
1°

Resample  
to 0.25°

Train QPLAD downscaling model

Train QDM bias adjustment model

Bias-adjust historical model  
simulation and SSP projections

Downscale bias-adjusted historical  
model simulation and SSP  
projections

Apply additional variable-specific  
post-processing

CMIP6 bias-adjusted and downscaled surface  
climate projections