Current LDT components

Parameter processing

- Surface model and hydrological parameters
- Meteorological terrain parameters
- Topographic parameters
- Irrigation and crop parameters

DA preprocessing

- DA observation exchange grid processing
- Generate scaling files for bias correction
- Scale GRACE observations to absolute values

Restart file processing

- Ensemble restart generation
- Climatological initial condition (IC) file generation

Meteorological forcing processing

- Overlay and merge different forcing datasets
- Generate climatological forcing datasets
- Temporally downscale precipitation

Machine learning layer

- Artificial neural network (ANN)
- DA environment operator (e.g., in radiance assimilation)