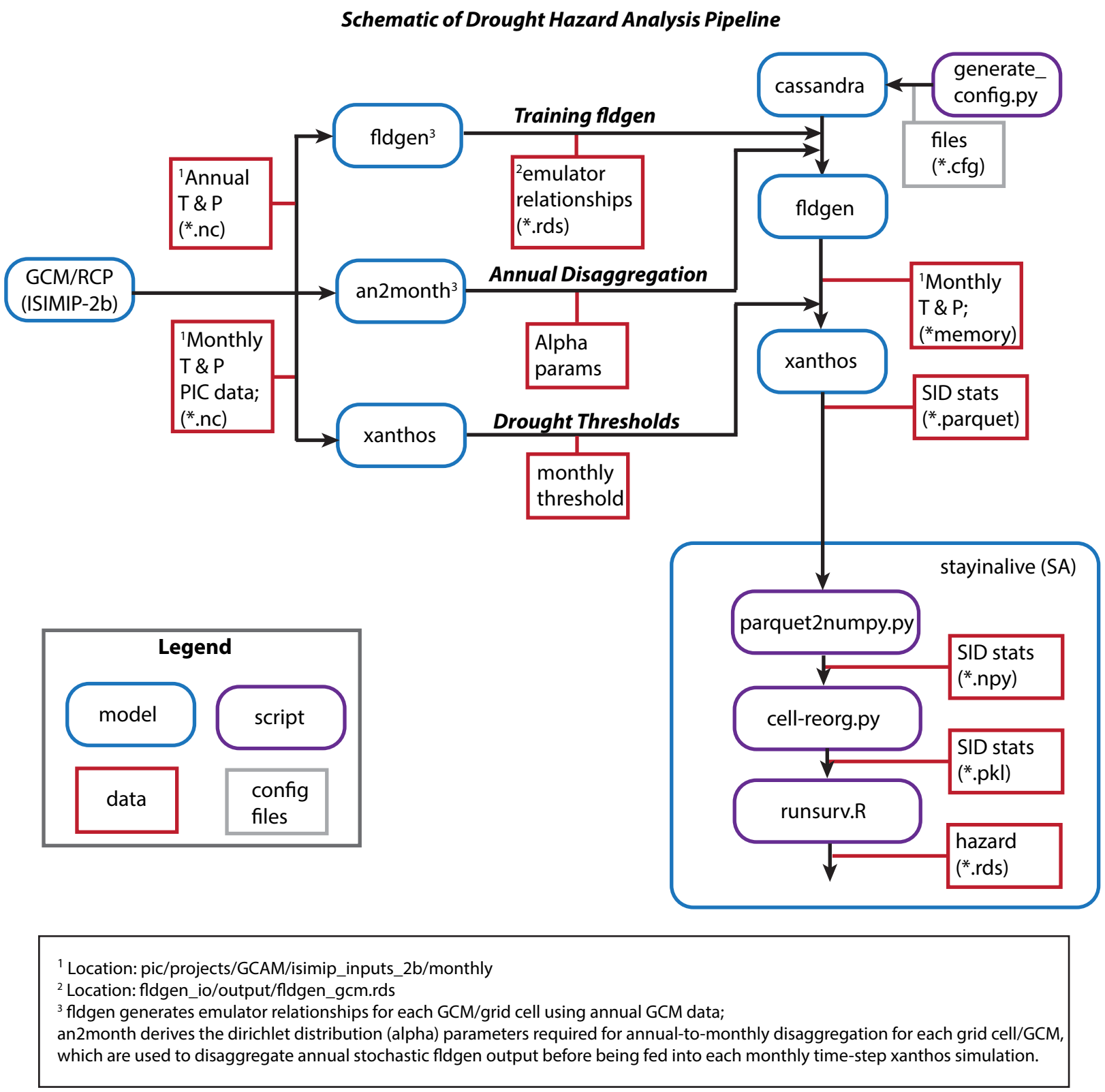
Schematic of Drought Hazard Analysis Pipeline
cassandra
generate_ config.py
files (*.cfg)
fldgen[3]
Training fldgen
[2]emulator relationships (*.rds)
[1]Annual T & P (*.nc)
fldgen
GCM/RCP (ISIMIP-2b)
an2month[3]
Annual Disaggregation
Alpha params
[1]Monthly T & P; (*memory)
[1]Monthly T & P PIC data; (*.nc)
xanthos
SID stats (*.parquet)
xanthos
Drought Thresholds
monthly threshold
stayinalive (SA)
parquet2numpy.py
SID stats (*.npy)
cell-reorg.py
SID stats (*.pkl)
runsurv.R
hazard (*.rds)
Legend
model
script
data
config files
[1] Location: pic/projects/GCAM/isimip_inputs_2b/monthly
[2] Location: fldgen_io/output/fldgen_gcm.rds
[3] fldgen generates emulator relationships for each GCM/grid cell using annual GCM data;
an2month derives the dirichlet distribution (alpha) parameters required for annual-to-monthly disaggregation for each grid cell/GCM, which are used to disaggregate annual stochastic fldgen output before being fed into each monthly time-step xanthos simulation.