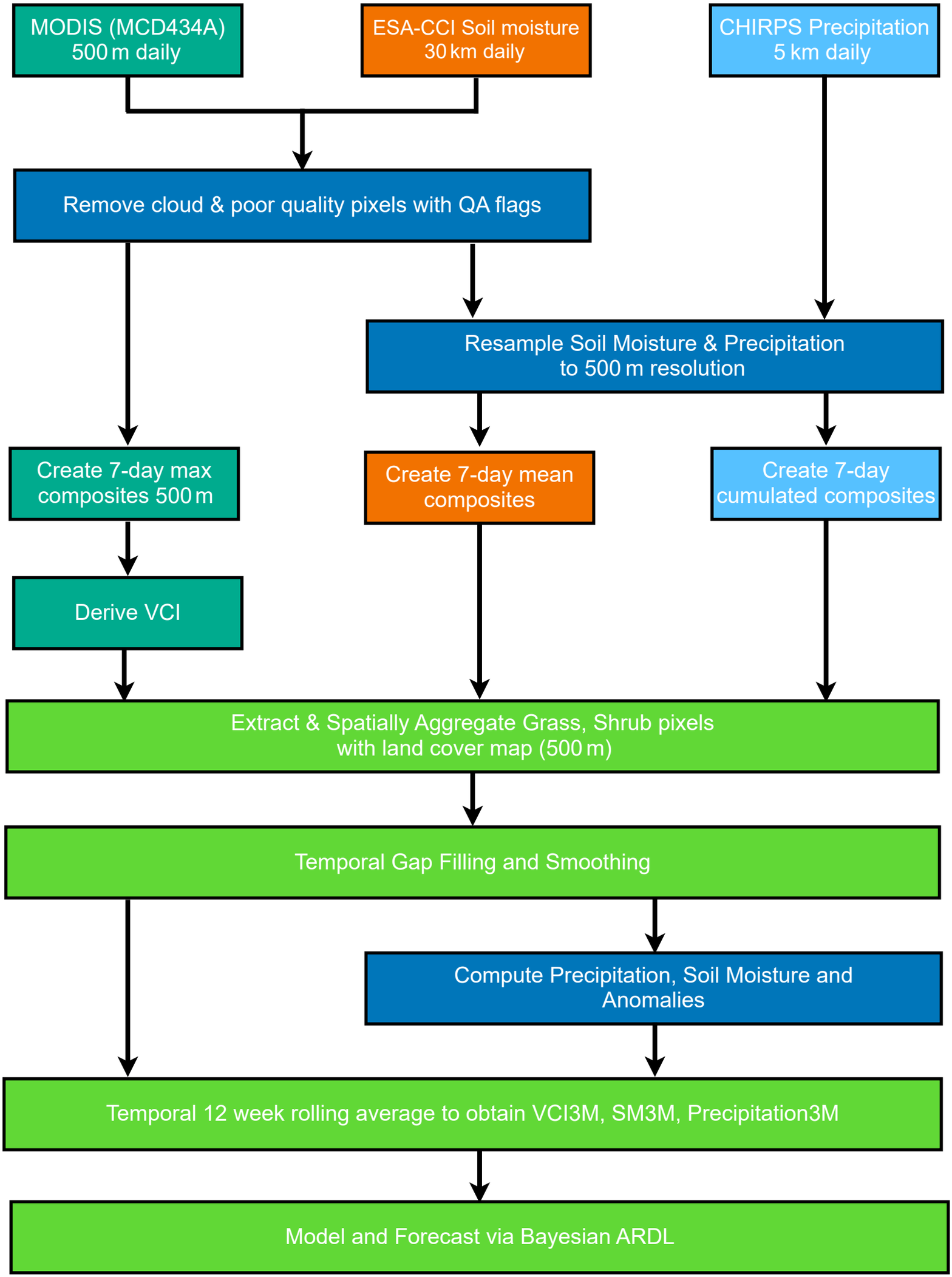
MODIS (MCD434A)
500 m daily
ESA-CCI Soil moisture
30 km daily
CHIRPS Precipitation
5 km daily
Remove cloud & poor quality pixels with QA flags
Resample Soil Moisture & Precipitation
to 500 m resolution
Create 7-day max
composites 500 m
Create 7-day mean
composites
Create 7-day
cumulated composites
Derive VCI
Extract & Spatially Aggregate Grass, Shrub pixels
with land cover map (500 m)
Temporal Gap Filling and Smoothing
Compute Precipitation, Soil Moisture and
Anomalies
Temporal 12 week rolling average to obtain VCI3M, SM3M, Precipitation3M
Model and Forecast via Bayesian ARDL