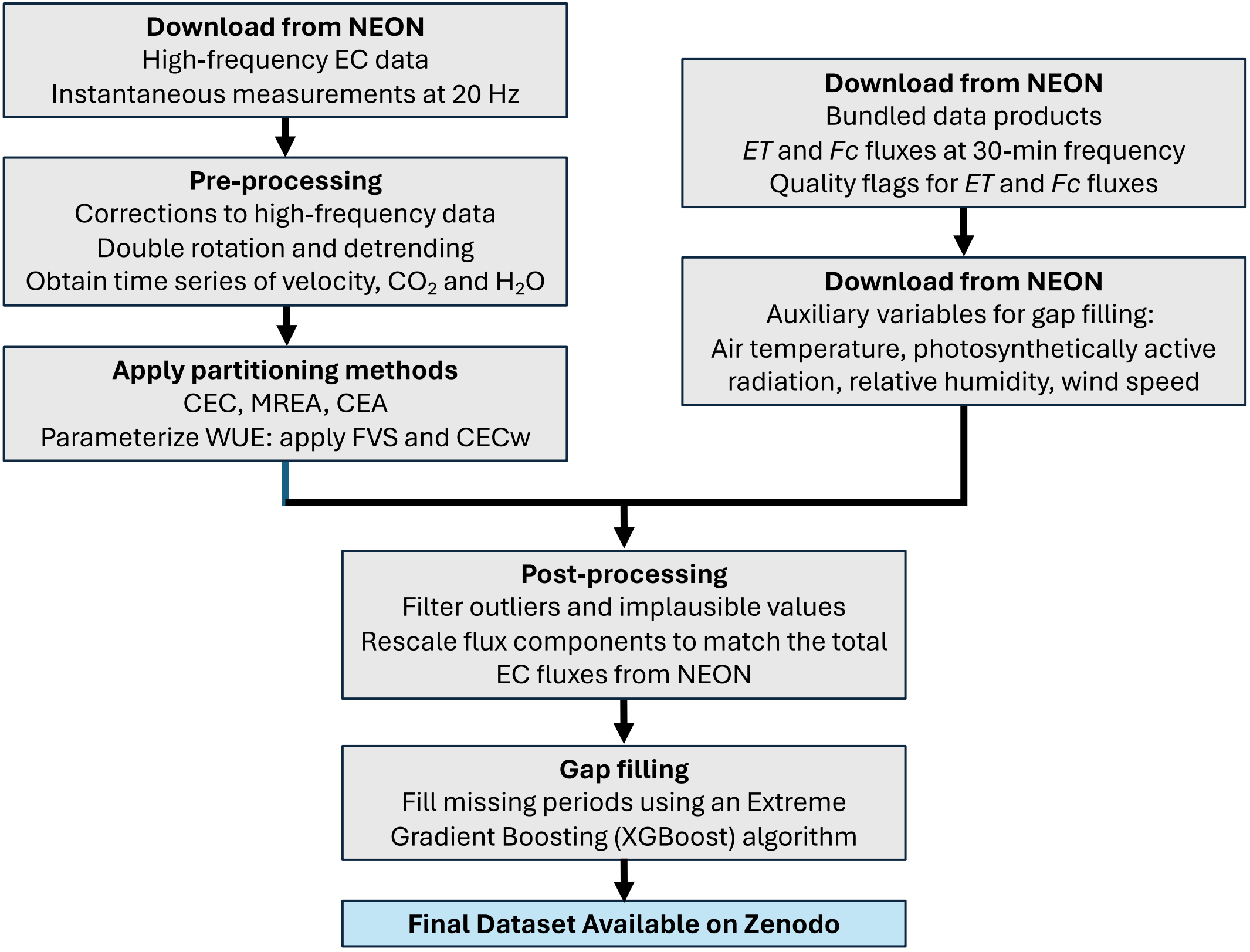
Download from NEON
High-frequency EC data
Instantaneous measurements at 20 Hz
Pre-processing
Corrections to high-frequency data
Double rotation and detrending
Obtain time series of velocity, CO_2 and H_2O
Apply partitioning methods
CEC, MREA, CEA
Parameterize WUE: apply FVS and CECw
Download from NEON
Bundled data products
ET and *Fc* fluxes at 30-min frequency
Quality flags for *ET* and *Fc* fluxes
Download from NEON
Auxiliary variables for gap filling:
Air temperature, photosynthetically active radiation, relative humidity, wind speed
Post-processing
Filter outliers and implausible values
Rescale flux components to match the total EC fluxes from NEON
Gap filling
Fill missing periods using an Extreme Gradient Boosting (XGBoost) algorithm
Final Dataset Available on Zenodo