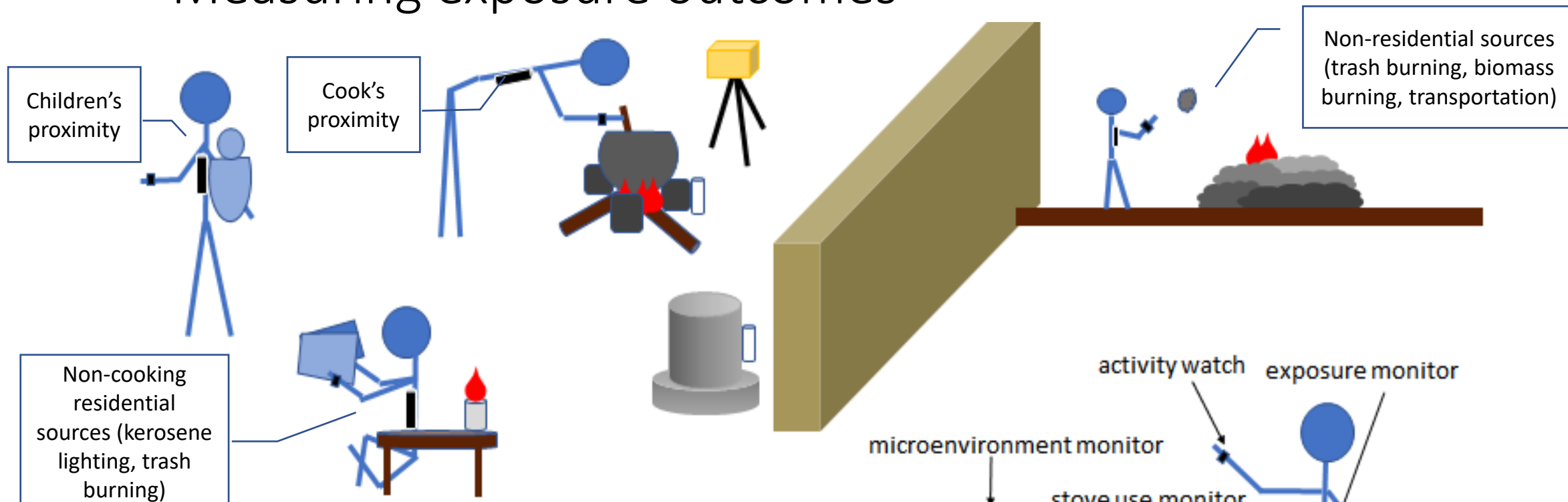
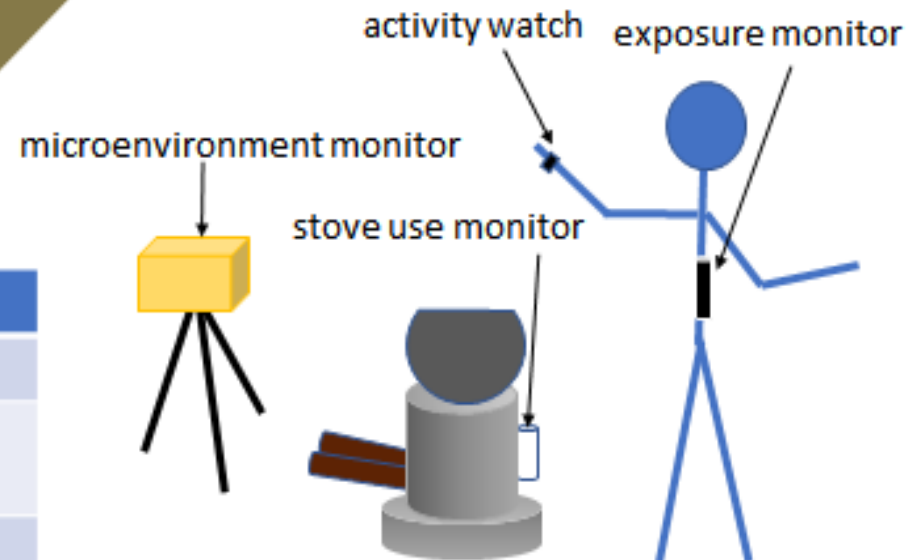


Measuring exposure outcomes

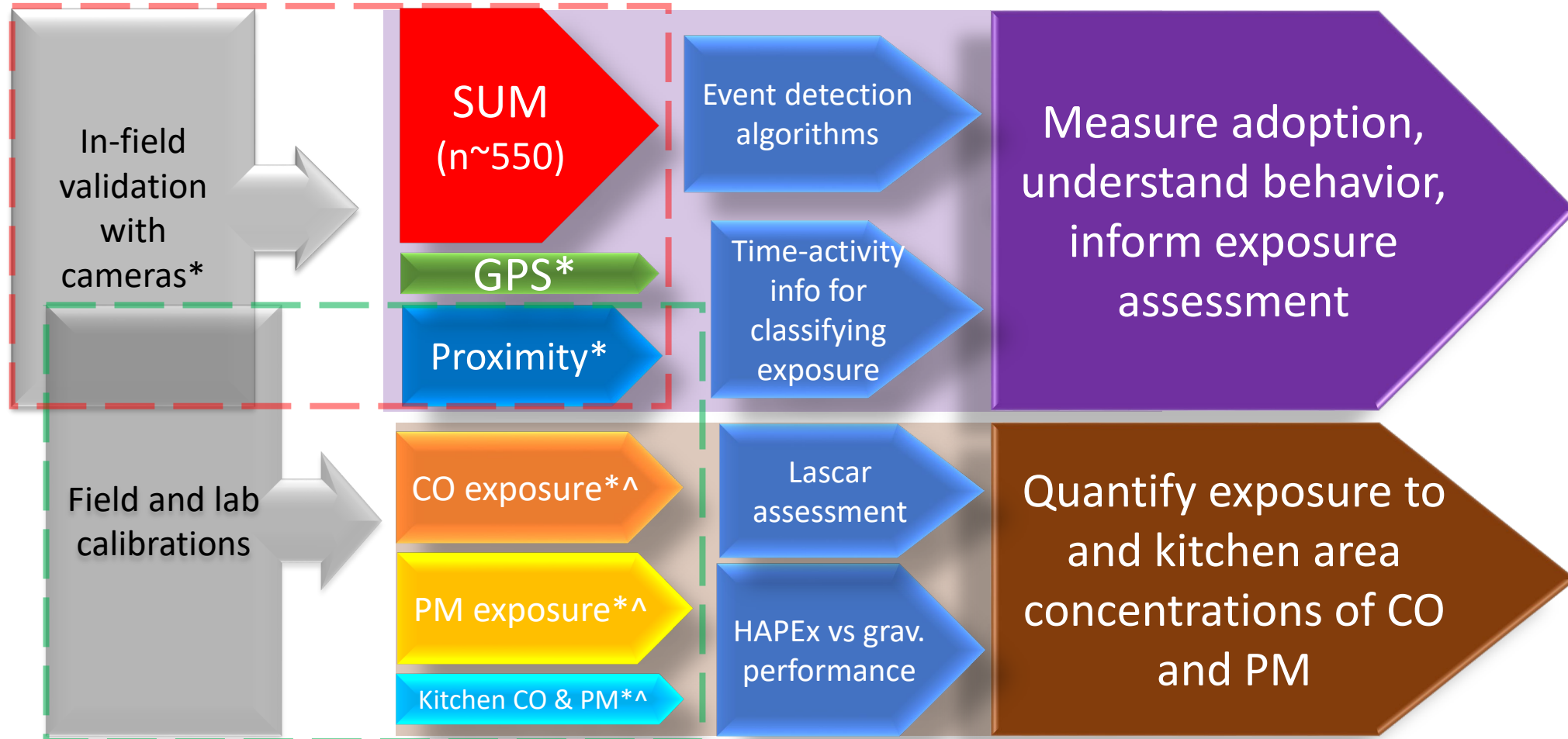


measurement tool	components	resulting information
stove use monitor	temperature	cooking events
microenvironment monitor	CO, CO ₂ , PM _{scat} , PM _{filter}	kitchen air quality (CO and PM _{2.5})
exposure monitor	CO, PM _{scat} , PM _{filter} , Beacon	CO & PM _{2.5} exposure proximity to stove
activity watch	steps, GPS	location & compliance



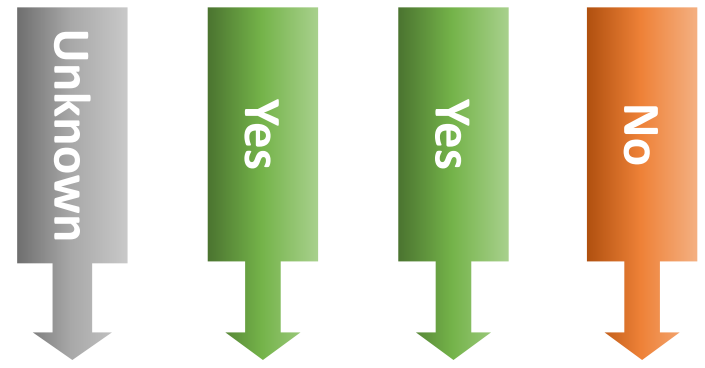
Time resolution is 1–5 minutes for all tools except the PM filter collector which is a cumulative tool.

Assessing the intervention: Measurements



*Rotating instrumentation

^Duplicate monitors



	SUM020 T008	SUM188 C004	SUM004 A023	SUM001 J013
2/19/2018 18:11	M	Y	Y	N
2/19/2018 18:12	M	Y	Y	N
2/19/2018 18:13	M	Y	Y	N
2/19/2018 18:14	M	Y	Y	N

Compile results across stoves and households

Neural Network Design (e.g. LSTM)
Training, Validation and Testing

Apply modeling results to all SUM data

Assess adoption across groups and compare to survey responses