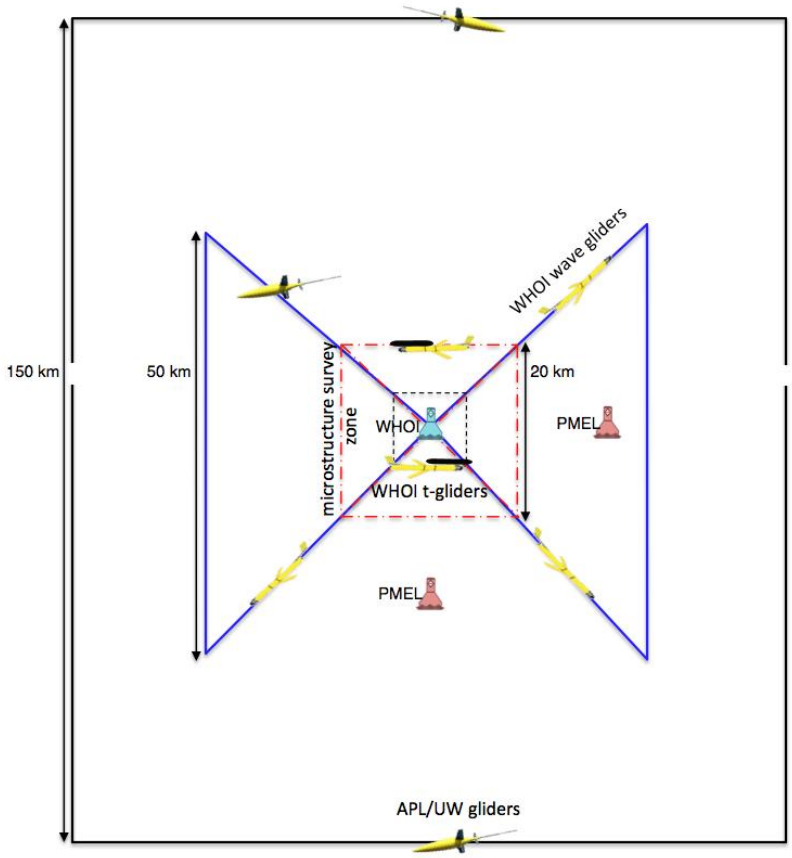

Figure 1. Map of the SPURS study region showing various assets deployed in the nested-grid of spatial scales. The WHOI IMET buoy at 25°N 38°W is the primary mooring of the SPURS study, and includes an extensive suit of air-sea flux and sub-surface sensors, including ADCP coverage of the upper 1000-m. Microstucture measurement activities, including the t-glider missions, will take place within a 20-km box (shown by red dashed lines) around the WHOI buoy.

SPURS is "anchored" by a WHOI IMET flux buoy to provide the best possible estimates of the surface fluxes of heat, water and momentum. Two PMEL profiling ("PRAWLER") moorings will be deployed approximately 20 km east and south of the WHOI mooring. They will cycle a CTD repeatedly from the surface to 500m depth, telemetering the data in real time via inductive modem. Two UW/APL Seagliders will profile to 1000-m depth along a 150 km outer box surrounding the region. An additional Seaglider, along with three WHOI wave glider "surfboards" will survey along a 50-km wide bowtie pattern centered on the mooring. Approximately 50 profiling ARGO-type floats will be deployed in the 150 km SPURS box, half additionally equipped with surface profiling salinity sensors and wind/rain acoustic sensors. Other shipboard work will include additional AUVs, upper-ocean gliders as well as SST/SSS measurements from both ship-mounted and towed packages.