Active Pointillistic Pattern Search:
Supplementary Material

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A   Precision Plots for the Experiments

In Section 4 we showed plots for recalls in our three experiments: environmental monitoring (Figure 2), election result prediction (Figure 4), and vortex finding with a black-box classifier (Figure 6). These were the most relevant results, as our goal is to report as many matching patterns as we can when their posterior marginal likelihood pass a pre-determined threshold θ. For completeness, we show precision plots here, which are controlled mainly by the classifier and θ.

Note that we do not expect precisions to be always above $\theta(=0.7)$, because θ controls the error rate at every step, whereas in our problem setup, once an error is made, it cannot be taken back later; this mistake can only be mitigated when more true positives are found at a later time.
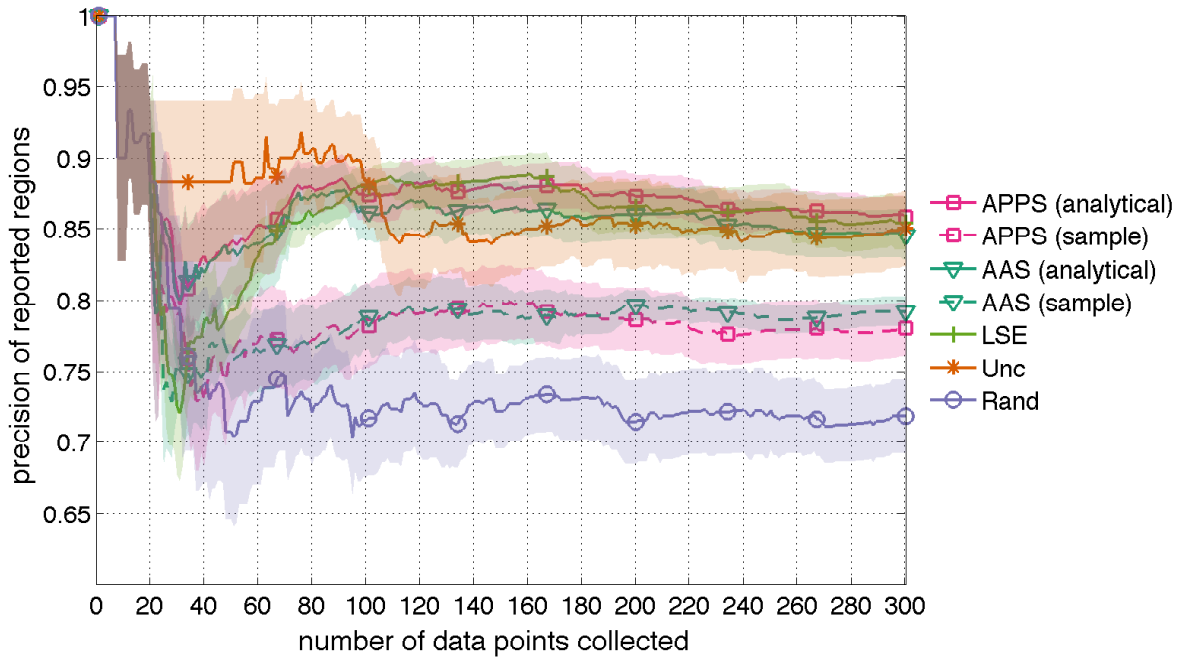

Figure A.1: Precisions for environmental sensing experiment. Color bands indicate standard errors after 15 runs.
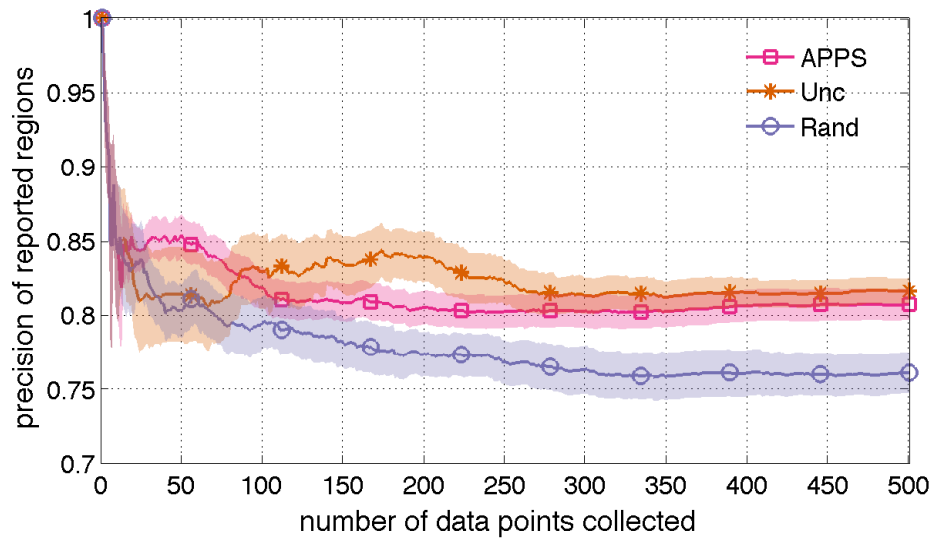
Figure A.2: Precisions for election experiment. Color bands indicate standard errors after 15 runs.
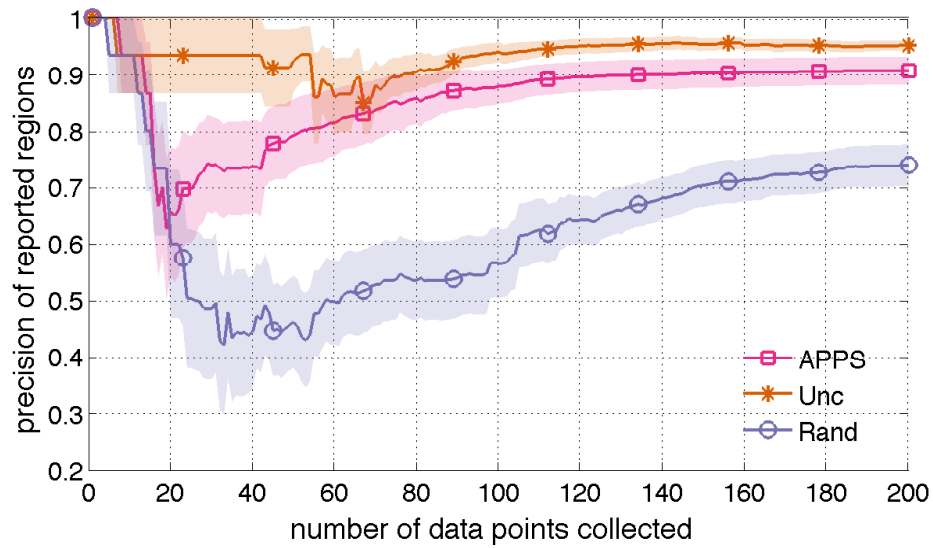

Figure A.3: Precisions for vortex finding experiment. Color bands indicate standard errors after 15 runs.