



APEX
EUROPE

Using your sensor data to counter UxS threats

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Why UxS threats evade conventional tracking

- Hard-won returns from stealthy targets are discarded:
Conventional trackers threshold first - and track second so a stealthy target can never generate a track
- Swarms exploit a vulnerability:
Conventional trackers make the ambiguity appear more pronounced than it really is - so nearby tracks get confused when it matters most
- Fusion hurts:
Legacy trackers have to hurry when more sensors provide data
- so more data degrades performance



How better tracking can support more timely decisions



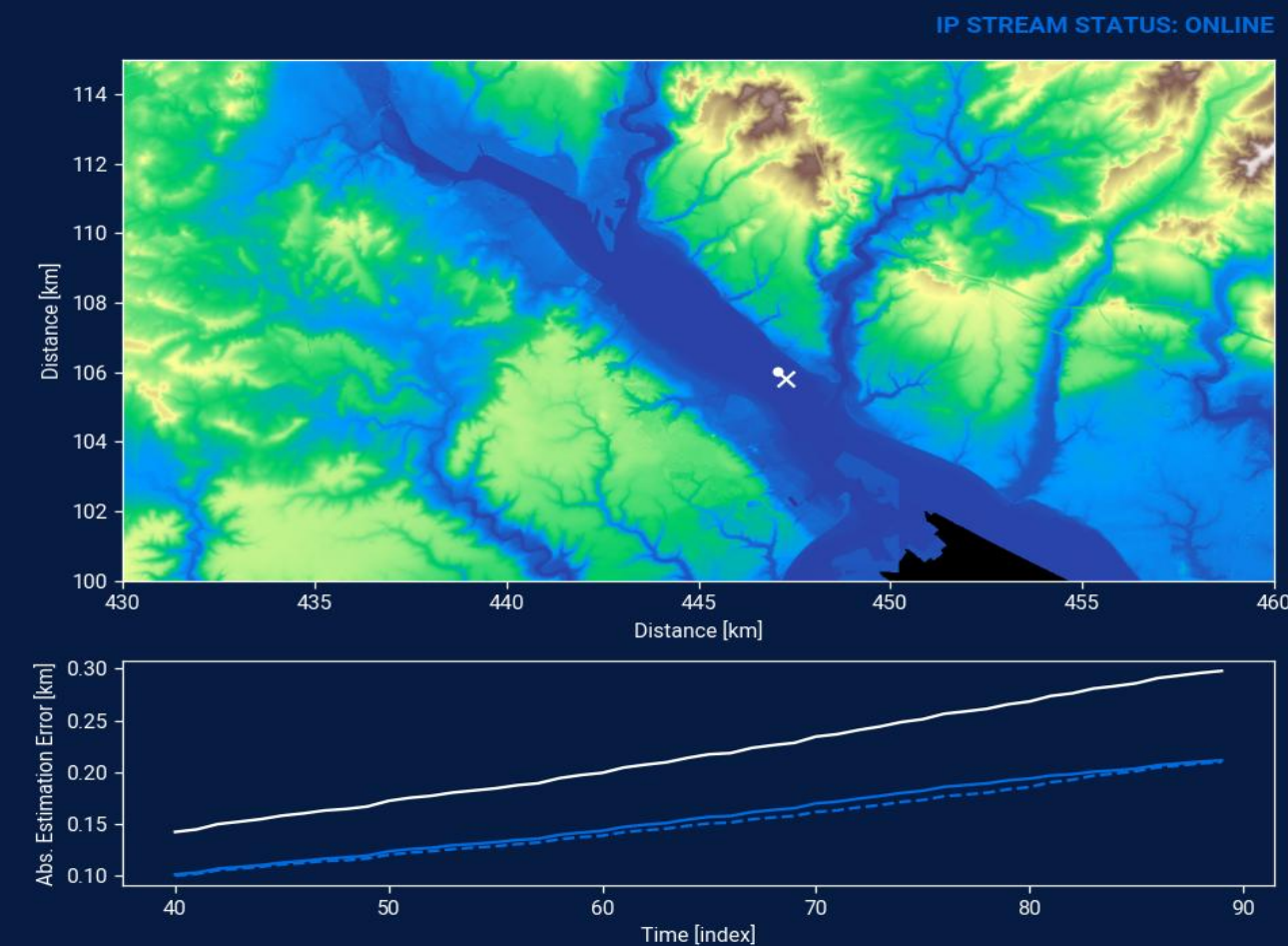
- Stealthy targets can be tracked:
By allowing free-flow of information, all targets that impact the raw sensor output can be tracked
- Swarms can't confuse us:
By representing the uncertainty accurately, tracks don't swap or merge
- Fusion helps:
Through avoiding a combinatoric explosion, the additional information provided through more sensors results in improved tracking



How this is now possible

- Using a particle filter:
By explicitly propagating hypotheses for the trajectory of each target, we approximate the uncertainty - not the models that enable the data to inform our decisions
- Ensuring scalability:
By configuring the particle filter to capitalise on modern compute resources, we avoid any perception that these performance gains are out of reach
- Capitalising on our heritage:
By building on over 20 years of development, we offer the state-of-the-art performance needed to solve the hardest tracking problems

Voyant





What makes Voyant's trackers easy to adopt

- Any sensor can be integrated:
Since the algorithm is sensor-agnostic, it can be applied to your sensors (e.g. radar, EO/IR, RF, acoustic, etc.)
- Standard and bespoke interfaces are supported:
Since we are adept at making trackers work well, we are confident we can integrate into your system
- Objective comparison is welcome:
We are confident in our performance and support Stone Soup interfaces so you can easily compare our performance with other trackers



Thank you



See the unseen.
Track the impossible.
Stay on mission.

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