

WHERE ARE THEY GOING? A REAL-TIME FORECASTING SYSTEM FOR ANIMAL TRACKING

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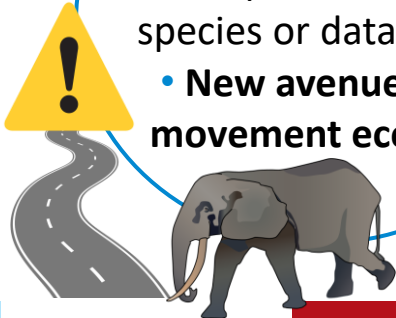
- 1**
- New technologies and reporting Apps now allow to locate megafauna in real-time
 - Helps improve wildlife – human interactions



- 2**
- Predicting future animal positions and trajectories would be even more efficient
- We develop a real-time forecasting system for animal tracking**



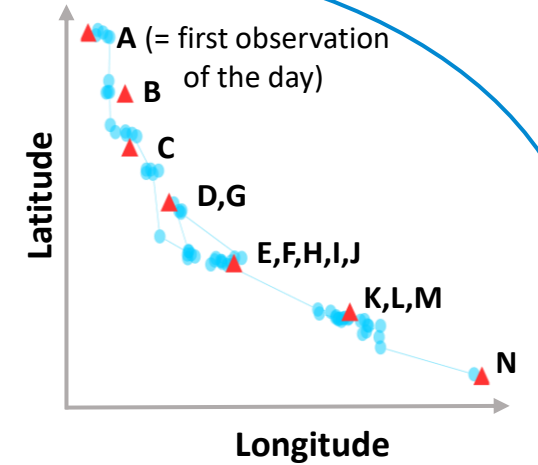
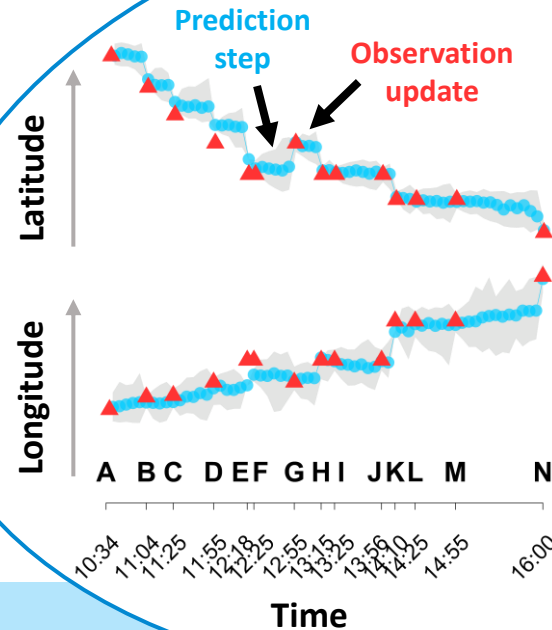
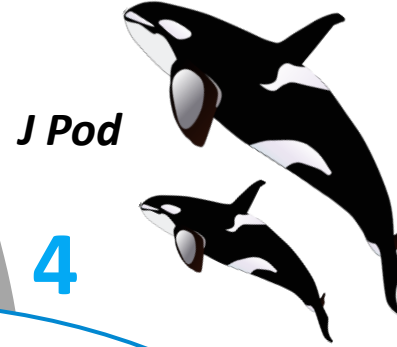
- 6**
- Flexible statistical framework
 - Adaptable to any species or data types
 - **New avenue for movement ecology**



COLLISION AVOIDANCE TOOL



- 3**
- Real-time data assimilation (**prediction step** – **observation update**)
 - Estimation method (particle filter)
 - 2D movement model (State Space Model)
 - **Endangered Southern Resident Killer Whales**



- ▲ Visual sightings
- Median predictions
- Filter distribution

