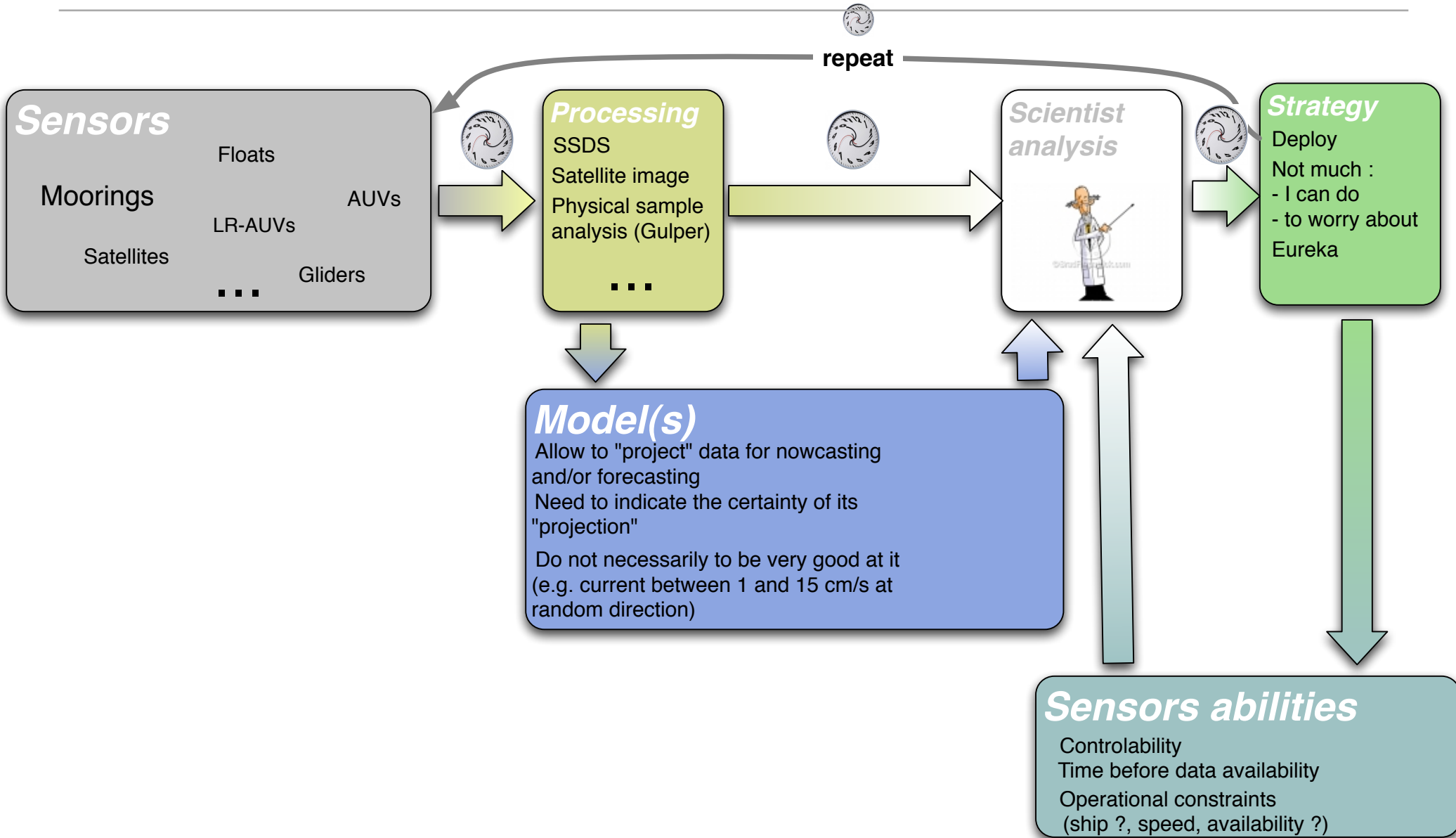


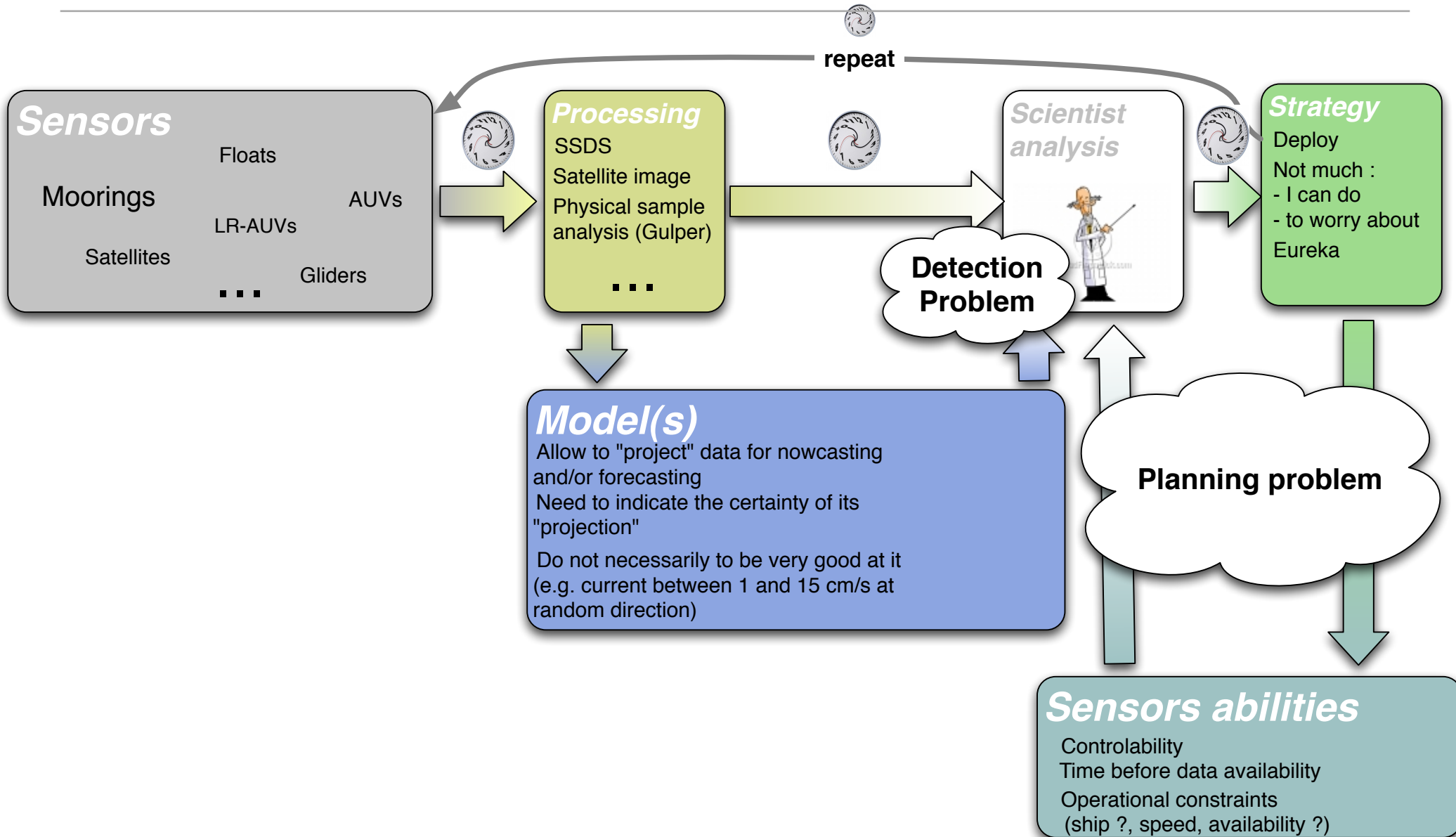
Decision Support for CANON

Thom Maughan
Tom O'Reilly
Frederic Py
Kanna Rajan
Brent Roman

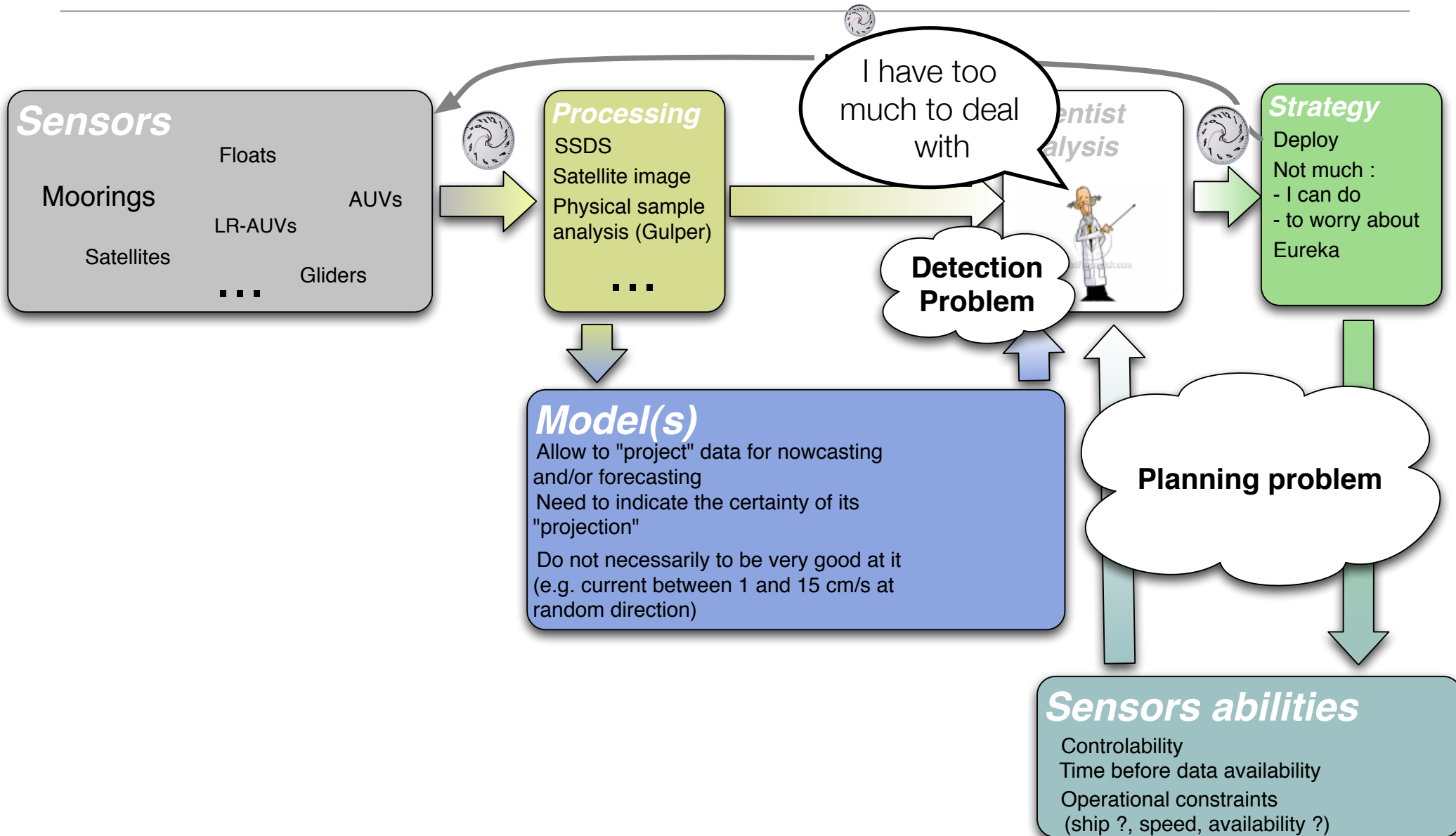
The “classic” sampling cycle



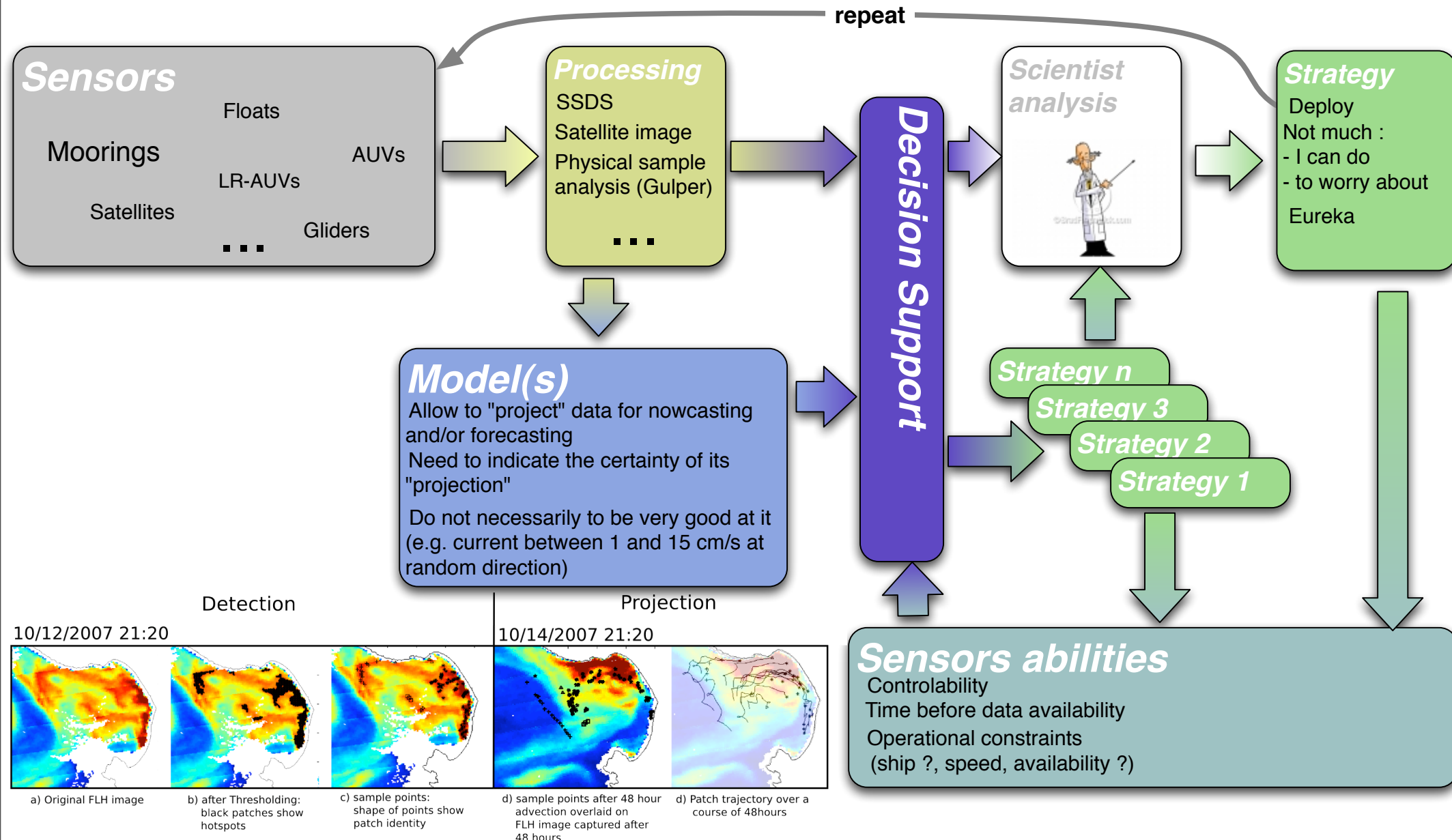
The “classic” sampling cycle



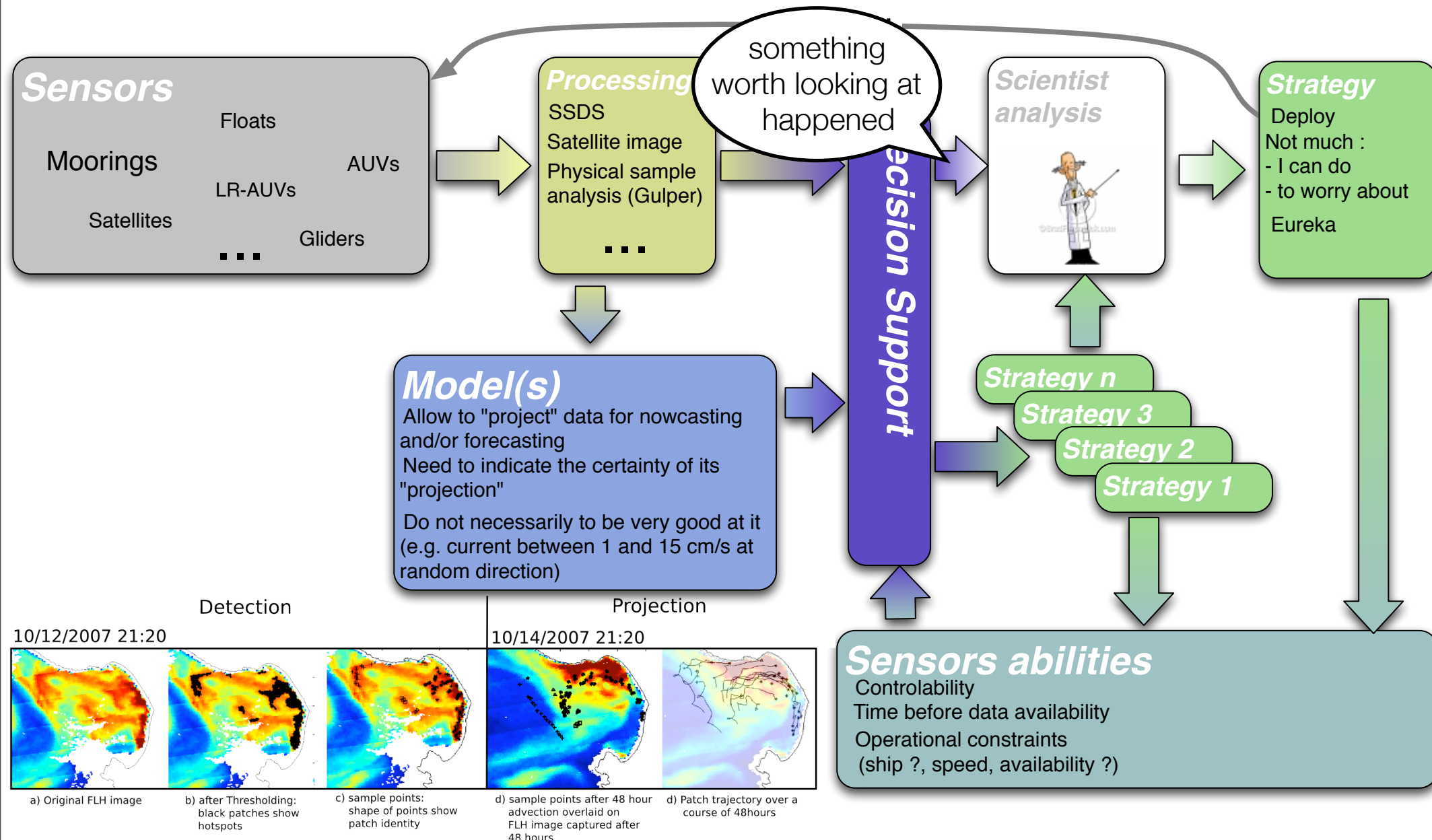
The “classic” sampling cycle



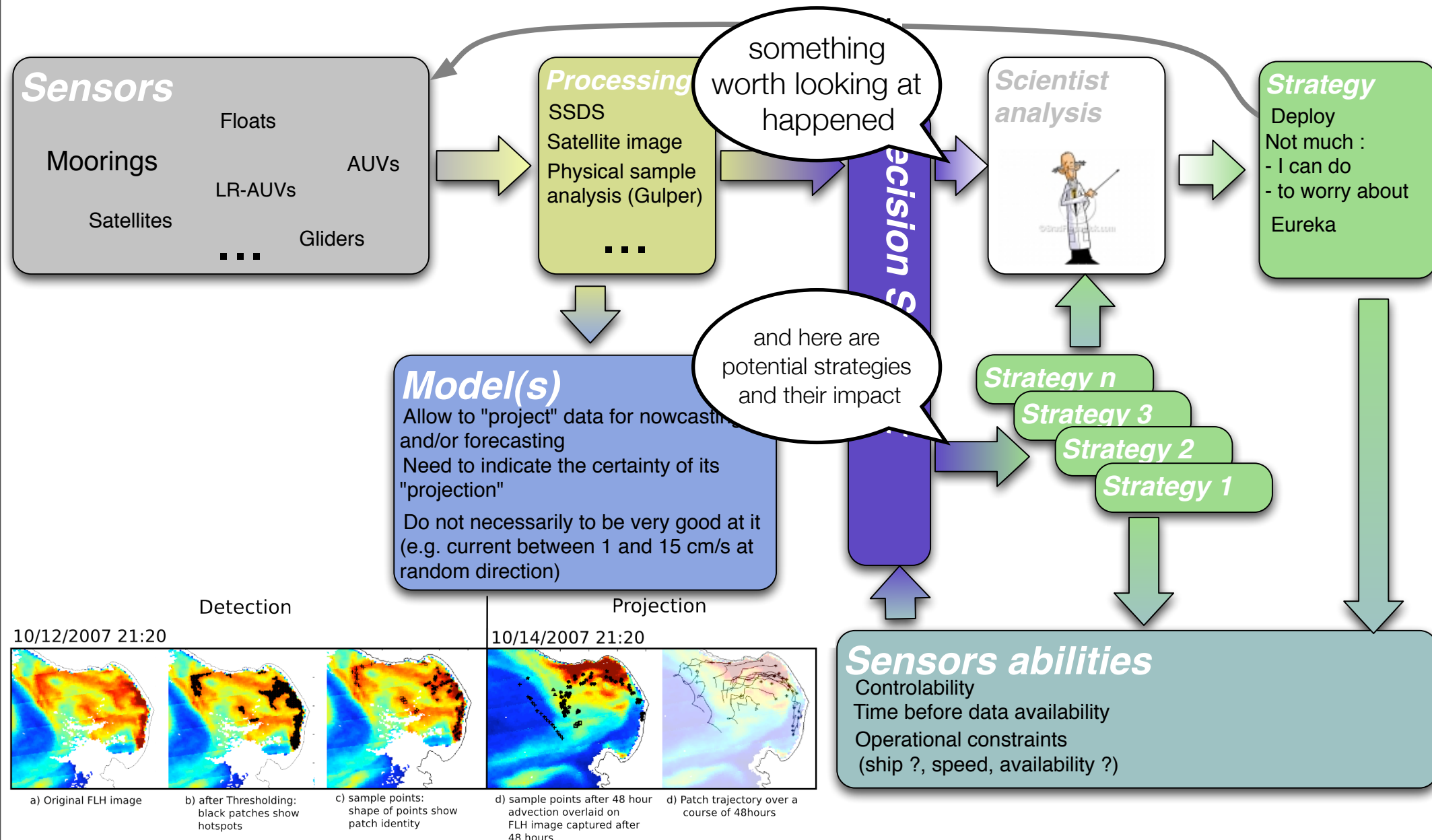
A Potential Solution



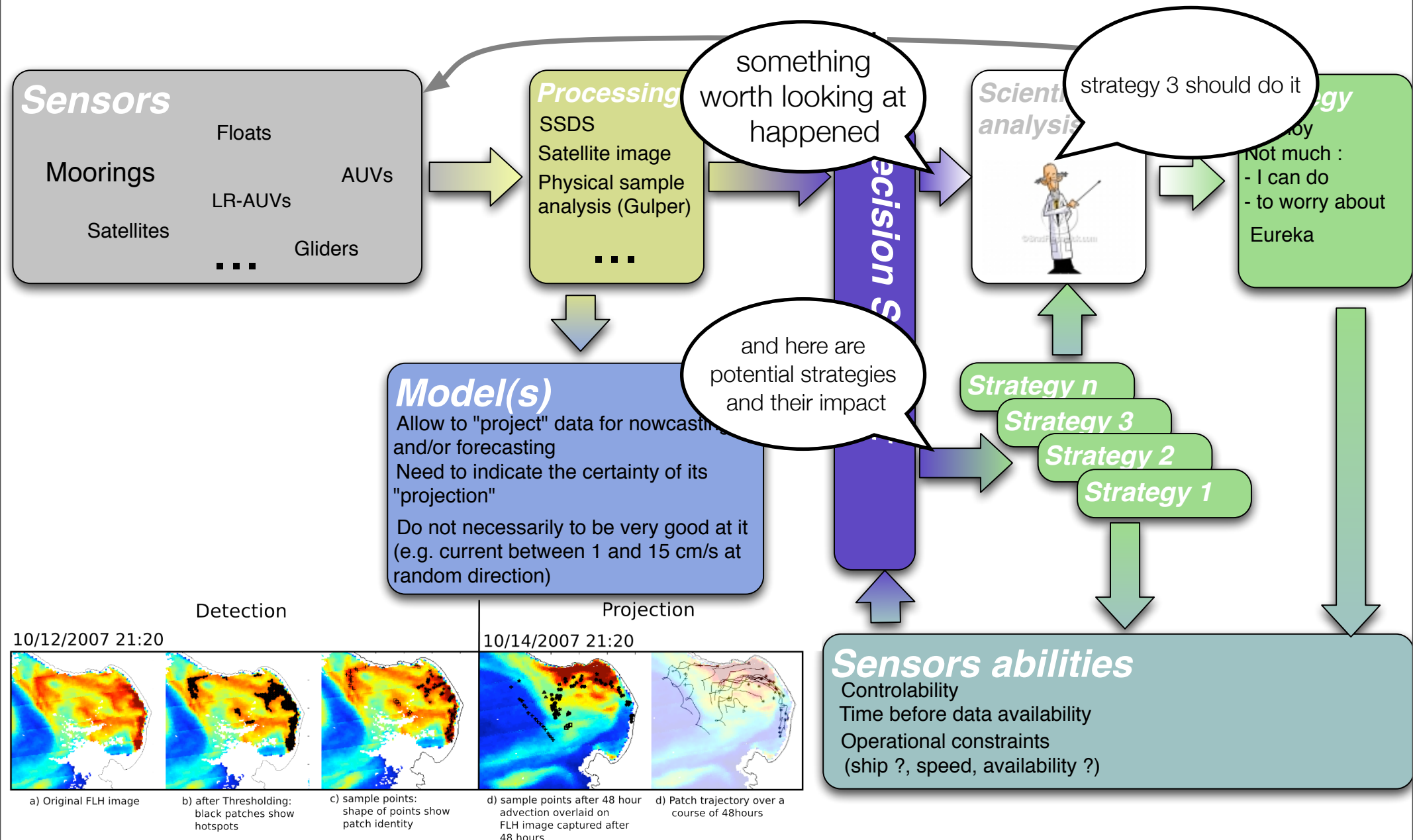
A Potential Solution

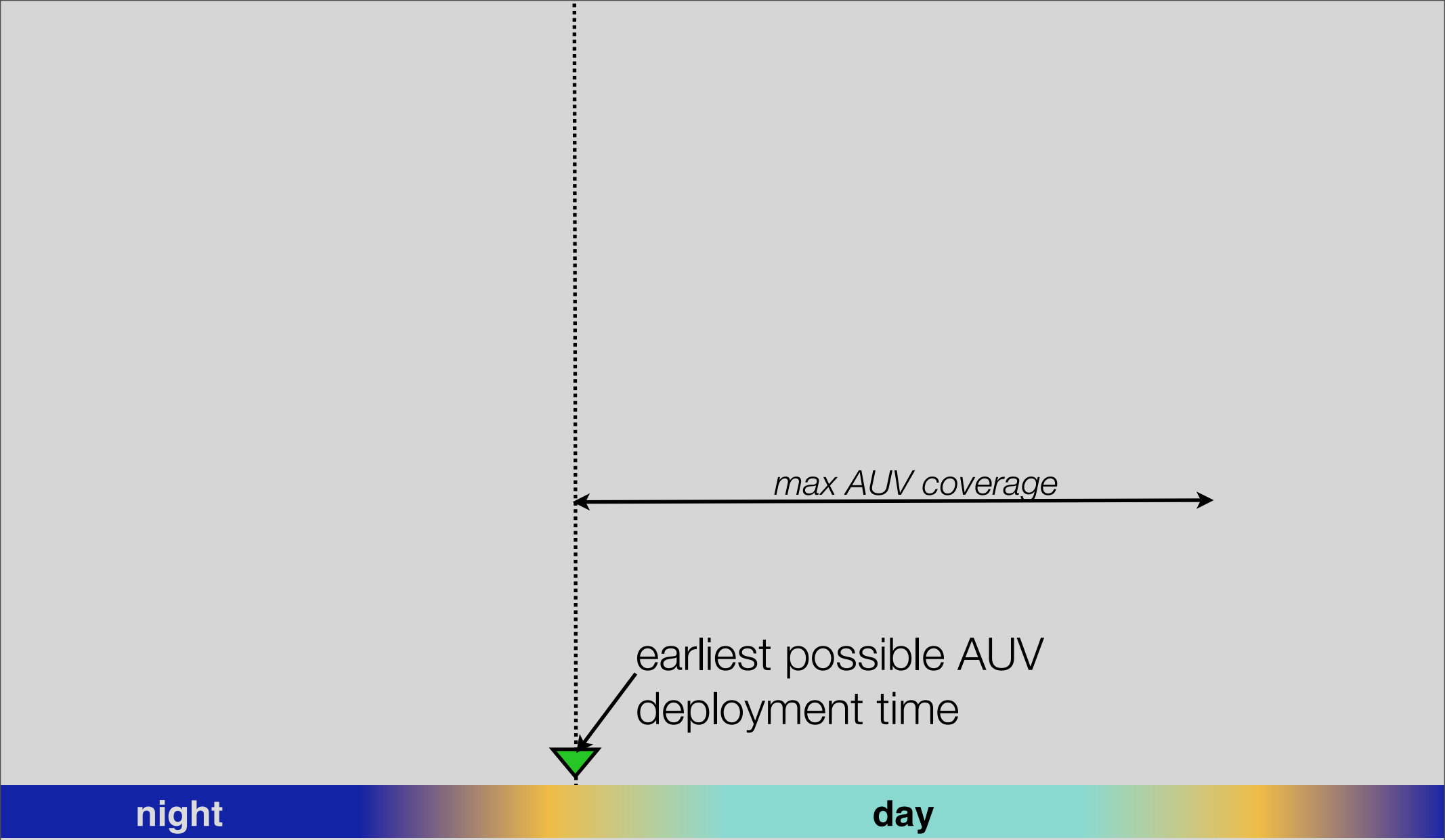


A Potential Solution



A Potential Solution





Decision support

example for planning for AUV
sensing

(lat,lon)



max AUV coverage



earliest possible AUV
deployment time

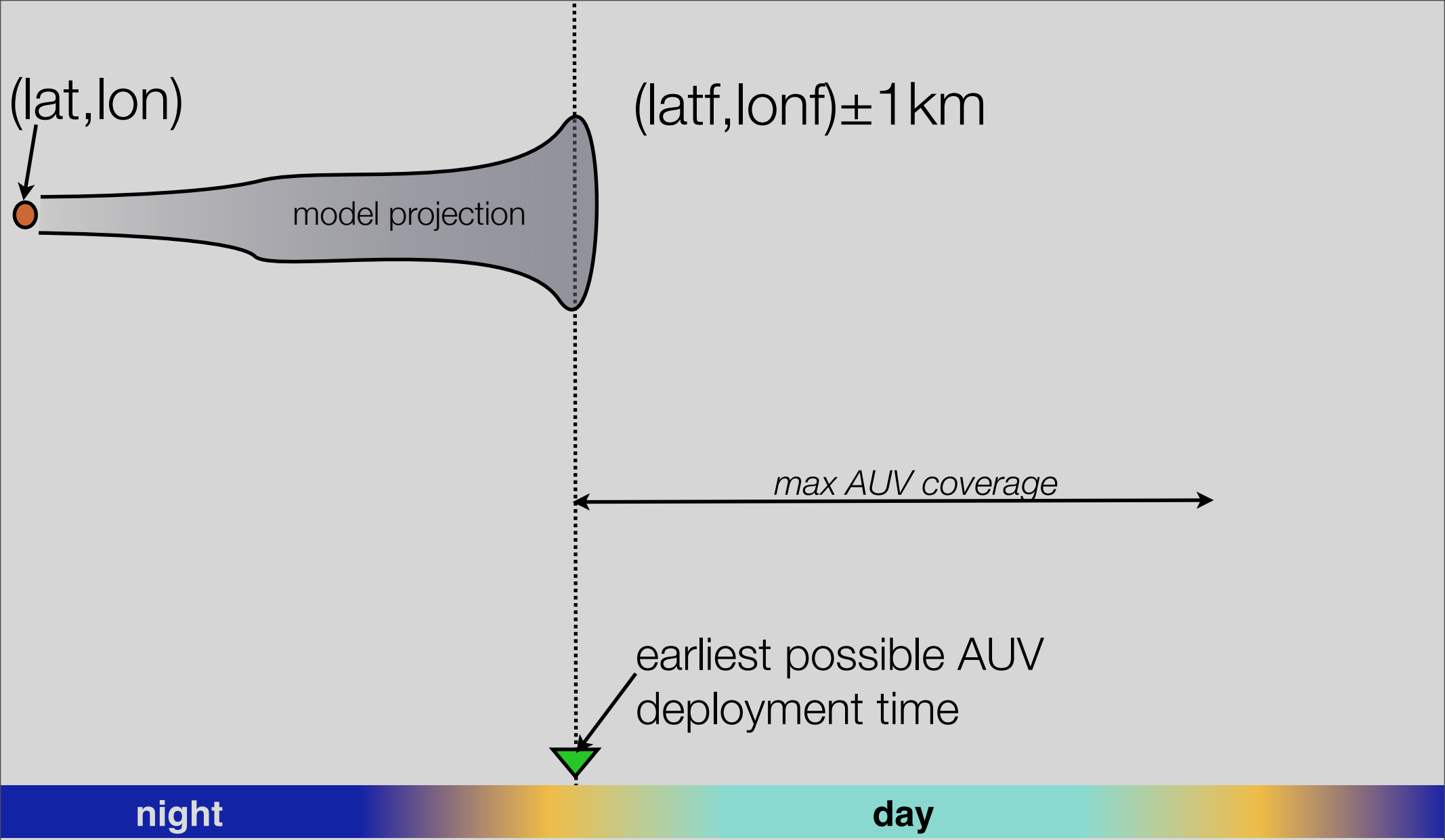


night

day

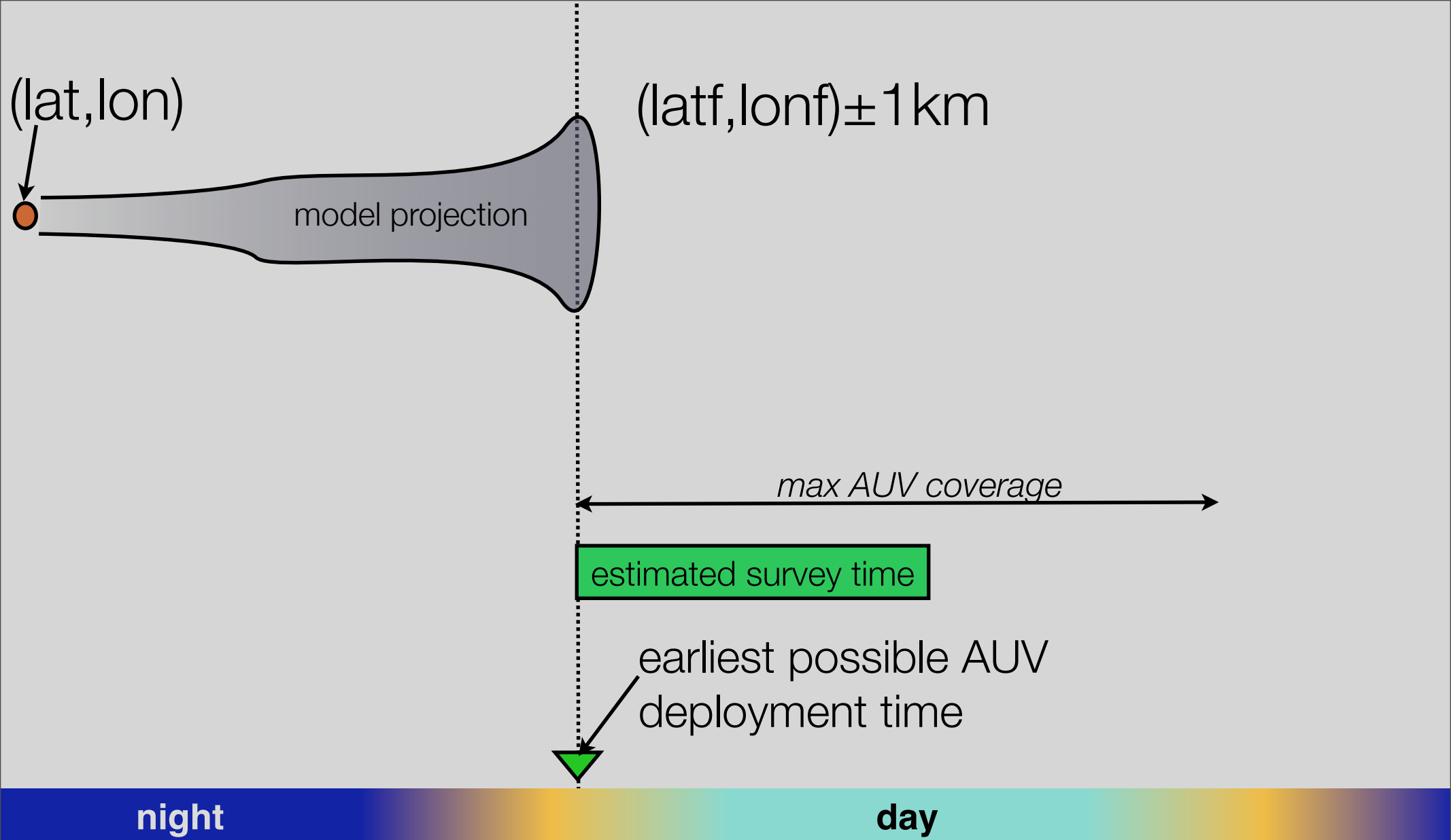
Decision support

example for planning for AUV
sensing



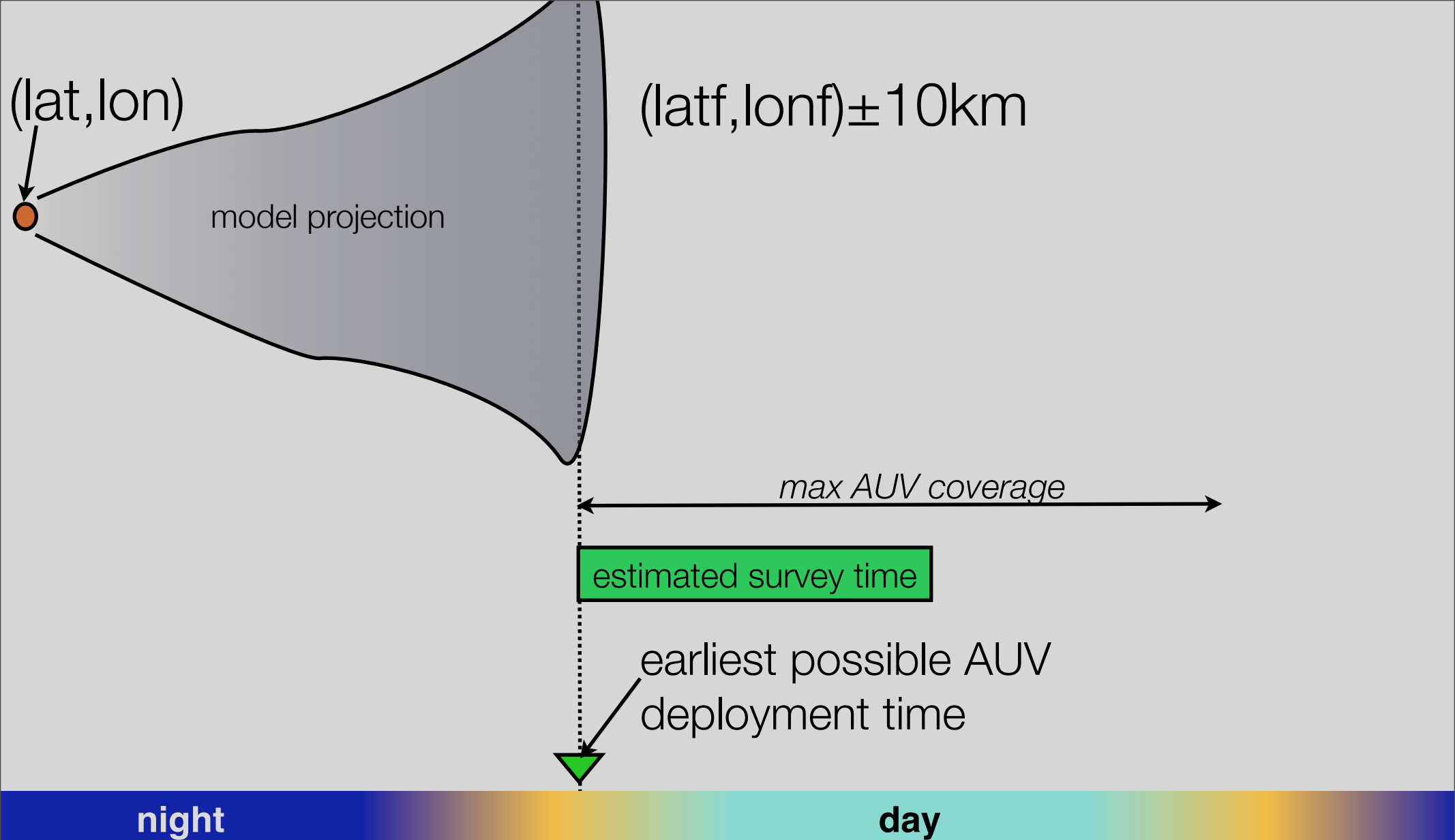
Decision support

example for planning for AUV sensing



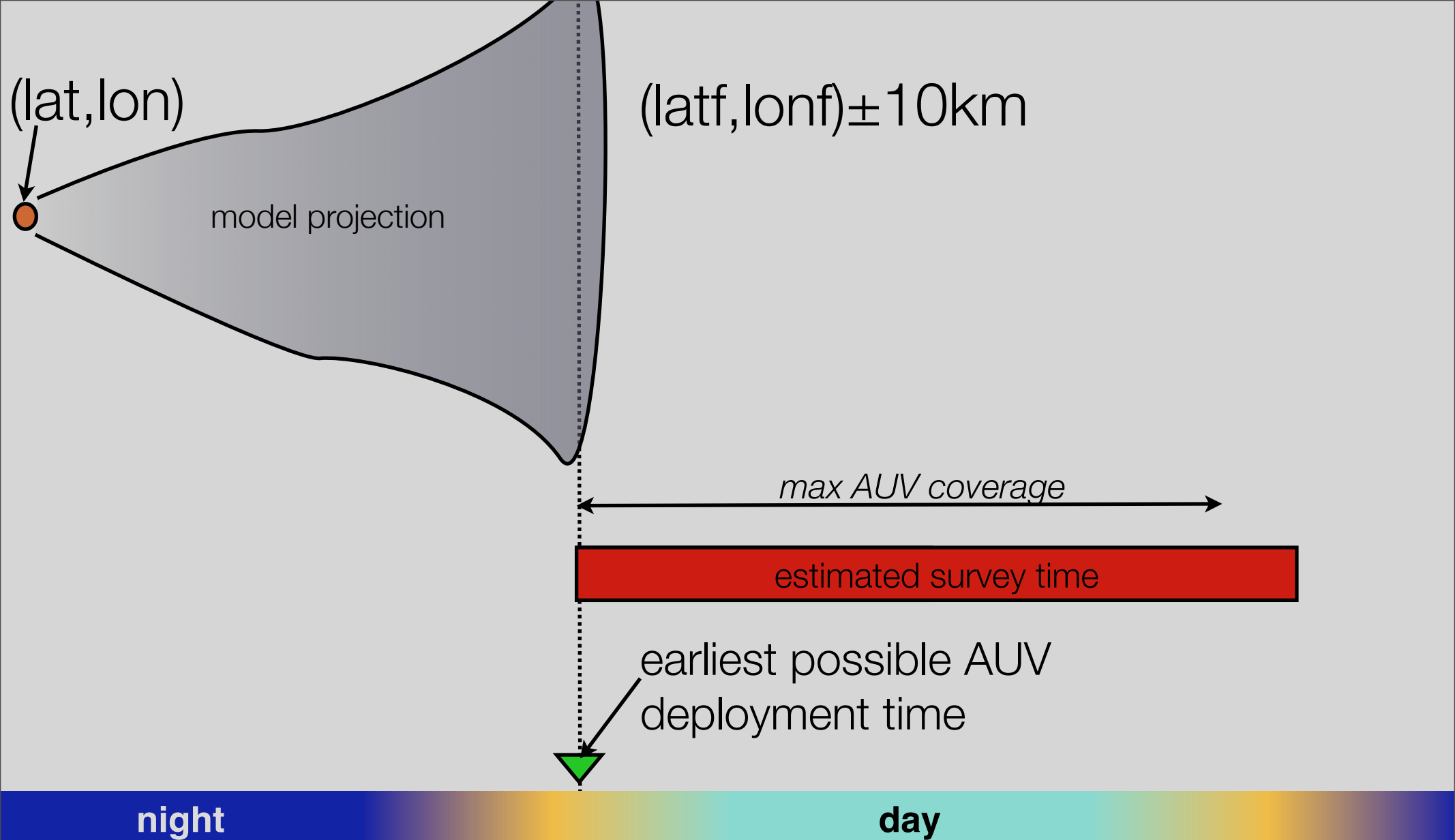
Decision support

example for planning for AUV sensing



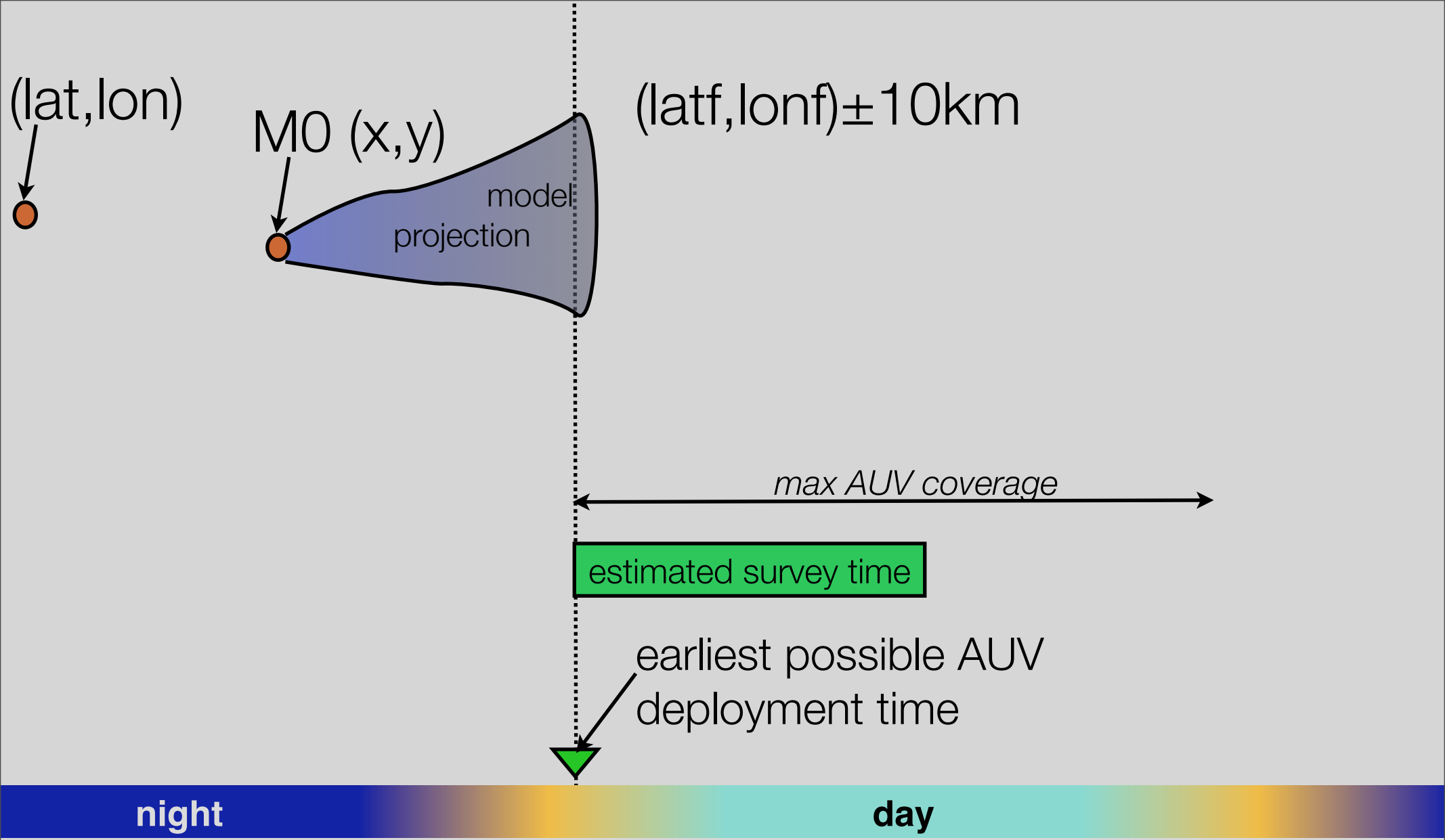
Decision support

example for planning for AUV sensing



Decision support

example for planning for AUV sensing



Decision support

example for planning for AUV sensing

Challenges

- Inputs :
 - Data Collection
 - sources, quality, automation, calibration
 - Interpretation of data (ad-hoc, learned, ...)
 - Prediction uncertainty
- Control :
 - Extent of automation and role of the mixed-initiative approach
 - What is the Impact on operational management?
 - Can an event driven survey be envisaged?
 - how far can we go down this route (humans in the loop, change vehicle behaviors safely ?...)

Backup Slides

Towards Marine Bloom Trajectory Prediction for AUV Mission Planning

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What is Decision-Support?

