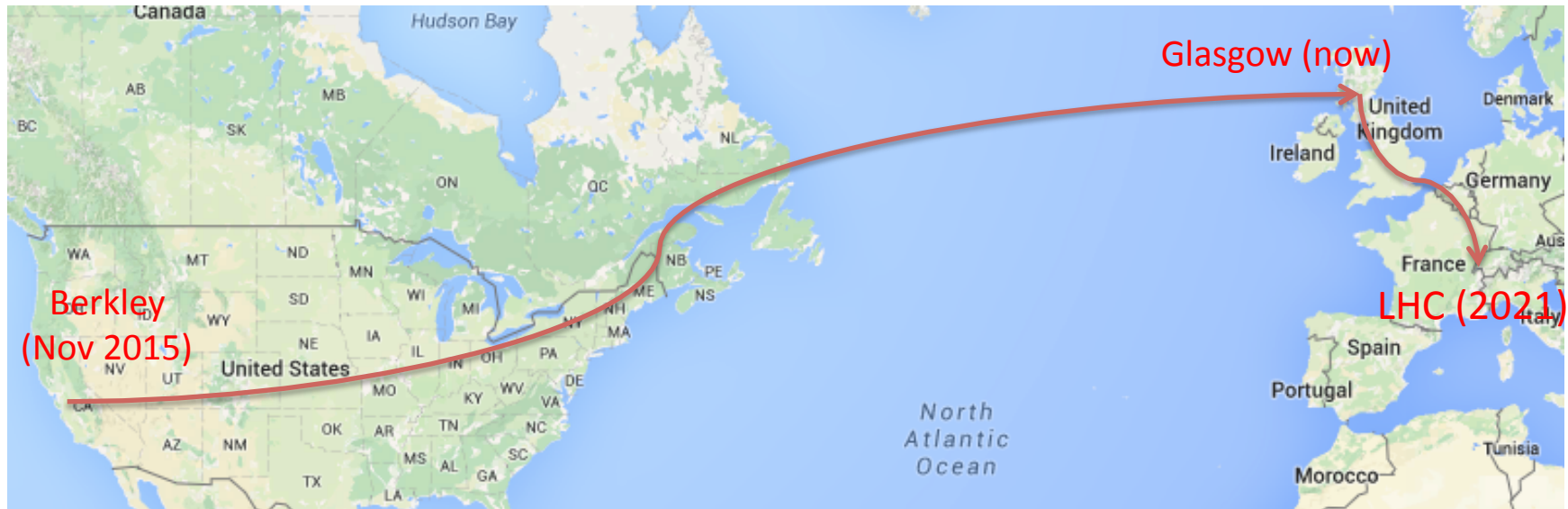


# ATLAS Software TIM Workshop Goals

Walter & Graeme

# Stepping stones to Run 3 Software



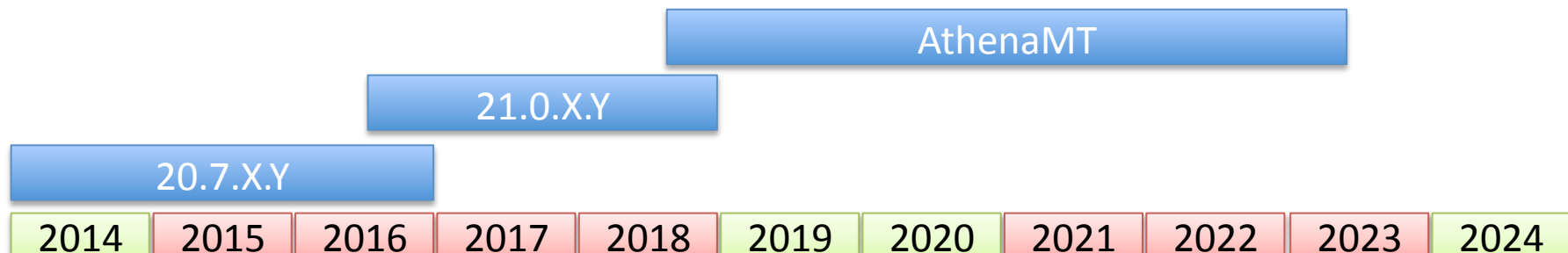
- For the start of run 3 (in 2021) we need software that can efficiently process the data we expect on the hardware we expect to have
- Necessitates a multi-threaded framework
  - AthenaMT based on GaudiMT (formerly known as GaudiHive)

# Work ahead 2016+

- How difficult will it be to migrate all the Algorithms and AlgTools to a multi-threaded framework?
  - Answers we got from the ongoing Software Review rather positive: “No blocker found for threading ... “
  - ... but we haven't tried yet!
- Maybe less coding work than the migrations we did during LS1 ...
  - Tracking EDM, xAOD
- ... but debugging will be harder!
  - Need to plan for debugging time
  - Fine-grain testing
- Should be more aggressive with removing deprecated code

# Upcoming releases

- Release 20.7.X remains in use until end of this year
- Release 21.0.X that will be finalized over the summer should serve us for the remainder of run 2
  - No major new production release before LS2



# Topics of this week

- Framework:
  - Re-entrant Algorithms
  - Incidents
  - Conditions
  - Event Views
- Reconstruction
- Simulation
- Infrastructure evolution
  - git, Jenkins
  - Tools to improve software quality
- Views from outside ATLAS:
  - ROOT, LHCb, CMS
- Workshop Notebook (google-doc, no authentication required)
  - [https://docs.google.com/document/d/1cShm32eKJEU4dXZVwNjG4czH6xF\\_mJZQ70TQlB4nss](https://docs.google.com/document/d/1cShm32eKJEU4dXZVwNjG4czH6xF_mJZQ70TQlB4nss)

- Thanks to Graeme and the Glasgow Crew for organizing this meeting!
- Thanks to you for coming!
- Let's get started!

