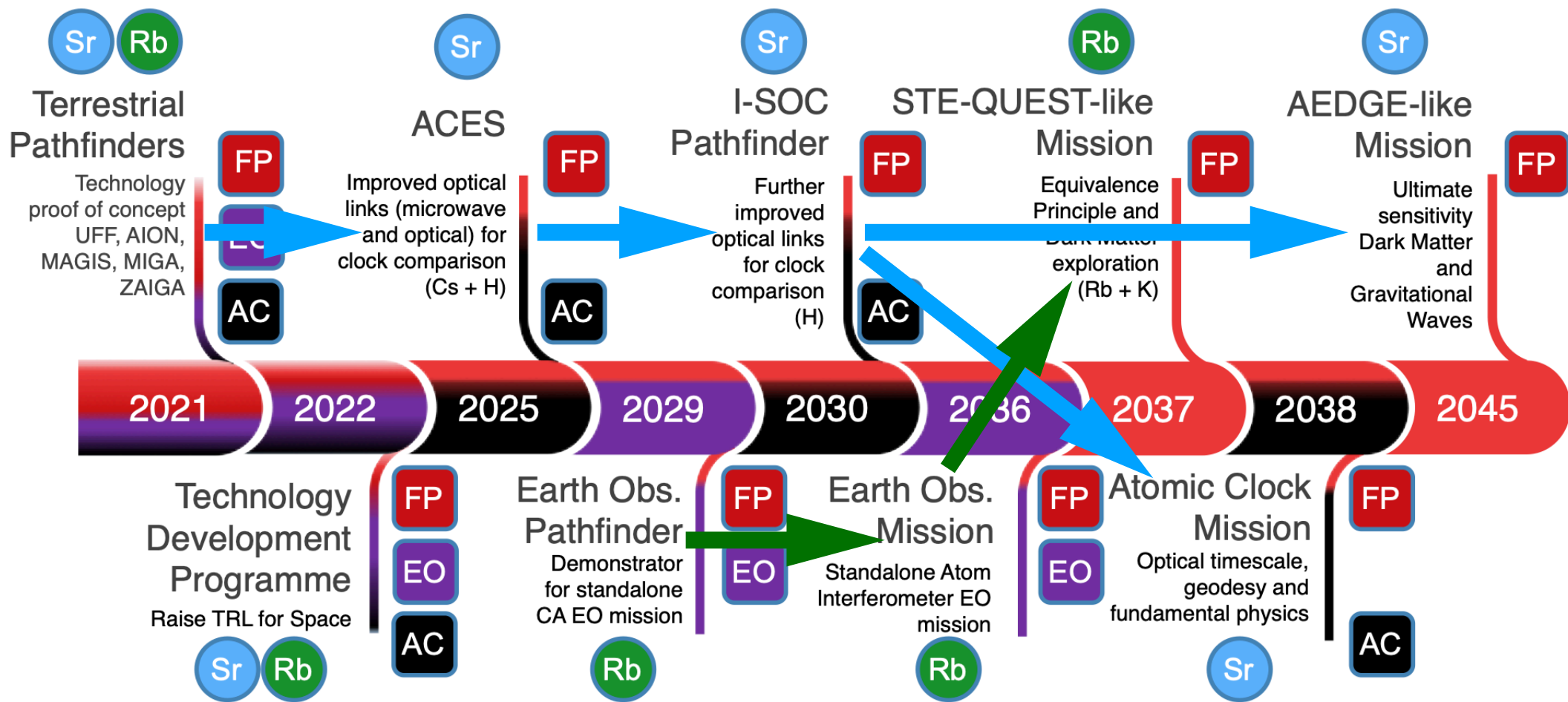


# Community Proposal for ESA Road-Map for Cold Atoms in Space



## Legends:

Main Cold Atom Species



Areas of Relevance



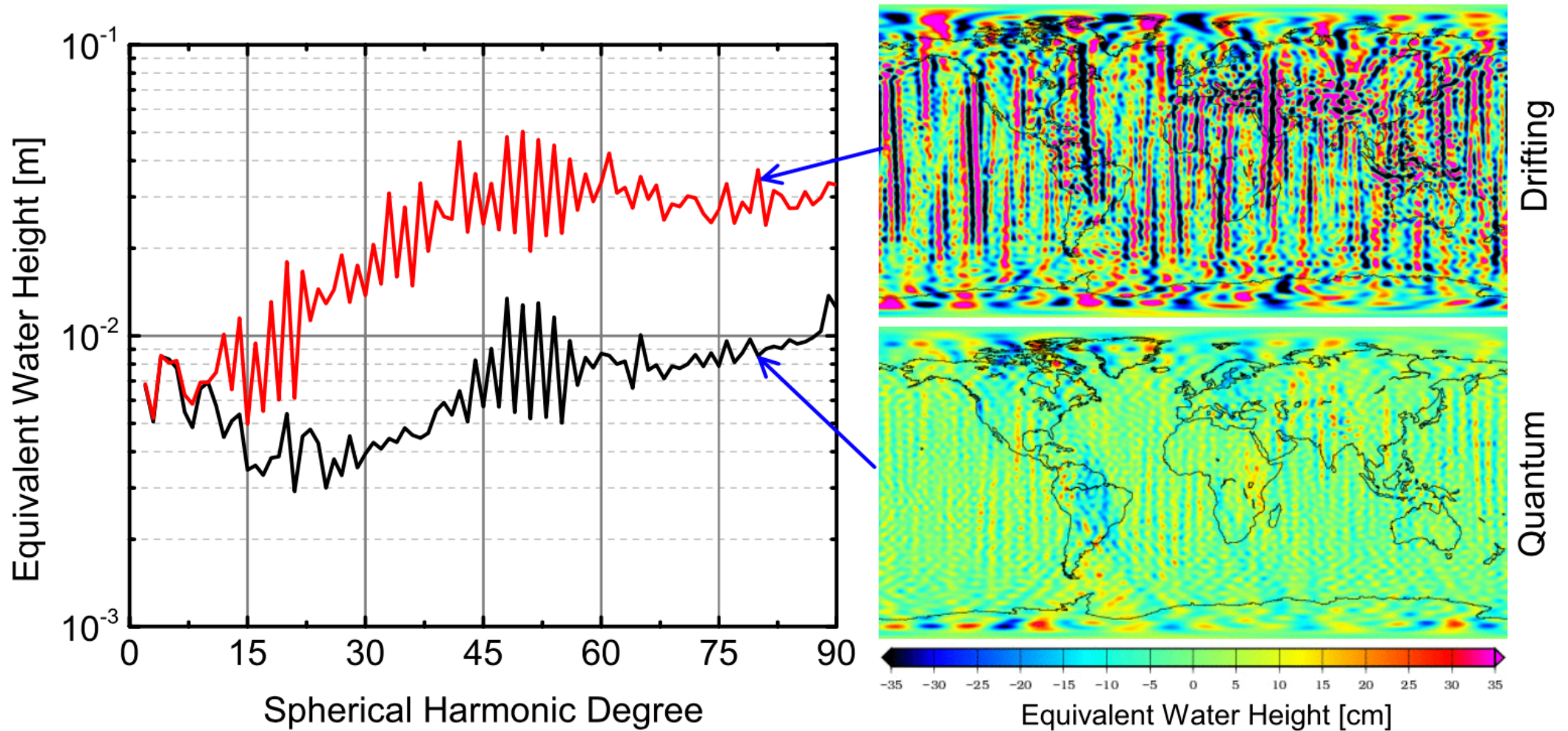
Main Milestone Area (colour coded)



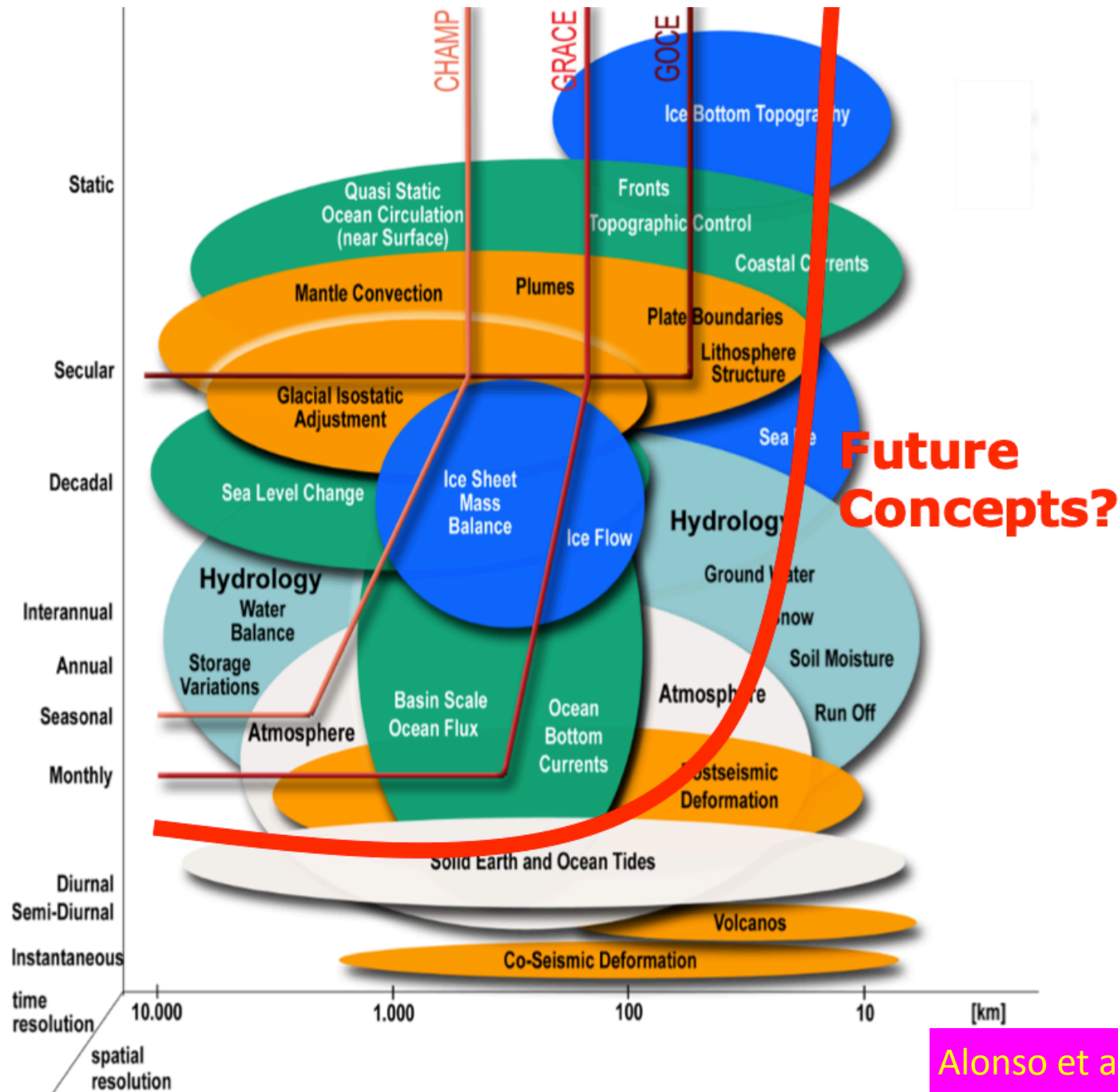
# Potential Outcomes from this Workshop

- Establish contacts between physicists, geographers and climate experts at King's and elsewhere
- Identify possible joint actions at King's and with external partners: London, UK, international
- Joint master's/doctoral students?
- Potential diversification of departmental research activities?
- Summary report to King's hierarchy

# Cold Atoms in Space: Earth Observation



# Cold Atoms in Space: Earth Observation



# Towards the Definition of an Earth Observation (Pathfinder) Mission

- The EU has committed itself to a pathfinder EO mission in collaboration with ESA
- What should be its objectives?
  - NASA survey of users
- What should be the long-term satellite EO objectives?
  - Italian study (Federica Migliaccio)
- Wishlist?
  - What sensitivity on what time-scale, with what spatial resolution?
  - C/should it be sensitive to moisture, biomass, infrastructure, ...?

# Other Possibilities?

- “Quantum Sensor Centre”?
  - Not only satellites, also other aspects of environmental monitoring (Kai Bongs)?
  - Other scientific areas (Peter Knight)?
  - Other London universities?
- Correlation with other measurement tools?
- Bankers?