

IPSIG Telecon

July 11, 2014

Agenda

- Status of White Paper
- Relevant timelines
- Discussion: are we ready to submit

Status of White Paper

- White Paper Goals
 - Are measurements of CMB polarization complete once we determine the value of r to some reasonable ($\sim 5\%$) accuracy?
 - How do we recommend that NASA progress with implementing the decadal panel plan given changes in the field.
- Since April 4 Telecon
 - The white paper clarifies that an initial measurement of r is just the beginning of a more comprehensive set of measurements.
 - Added information about potential dust contributions to the measurement
 - White paper now essentially complete (few additional comments to implement)

White Paper Recommendations

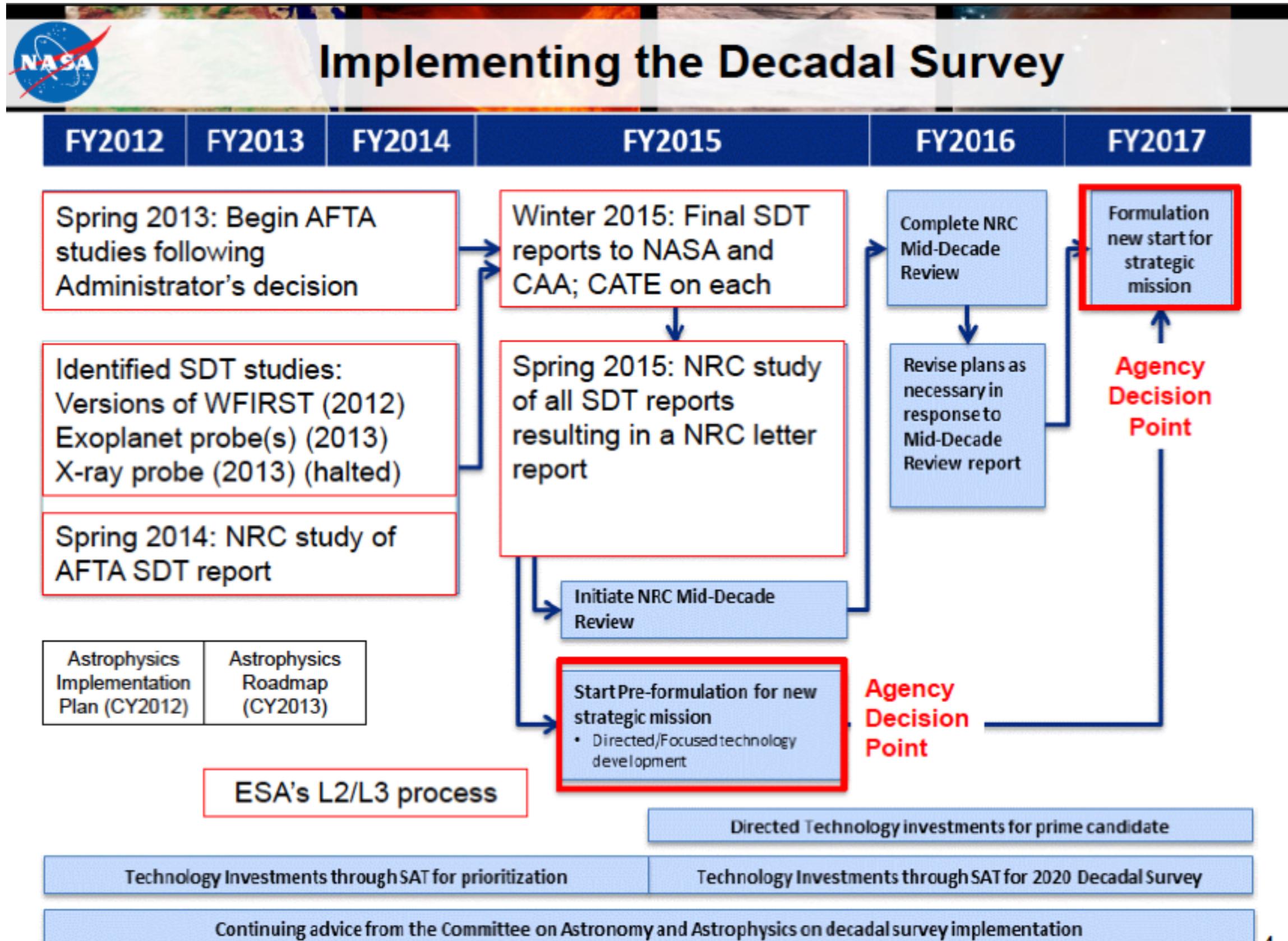
- Start Mission Study
 - Study goals are in WP and backup slide at the end
- Include CMB polarization mission, or contribution to international mission, as part of NASA's portfolio when discussing with CAA
 - For this reason, the mission study should begin very soon, and probably before the dust is settled on the B2 measurements

Relevant Timelines

- Aug. 10/11: Astrophysics Subcommittee Meeting
- Fall 2014: ESA M4 call for proposals
- 2015: US mid-decade review (CAA)

Backup Slides

Decadal Recommendation and NASA's Implementation



Mission Study Goals

We recommend that NASA initiate a new mission study. The charge for the mission study should include the following items:

1. Determine the benefit of a space mission in comparison to a program of suborbital measurements, and quantify the science return from such a mission;
2. Study the observational requirements for extraction of the inflationary B-mode signal and identify mission configurations that perform exciting science at a range of costs and launch opportunities;
3. Identify the contributions that the US community and NASA can provide to a space mission selected either in Europe or Japan;
4. Survey the technological developments since the end of the last decade and prioritize the technologies that are required for a future space mission.