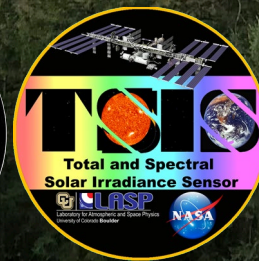


# *TSIS-2 and Beyond*

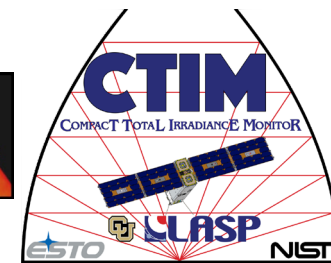
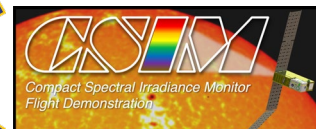
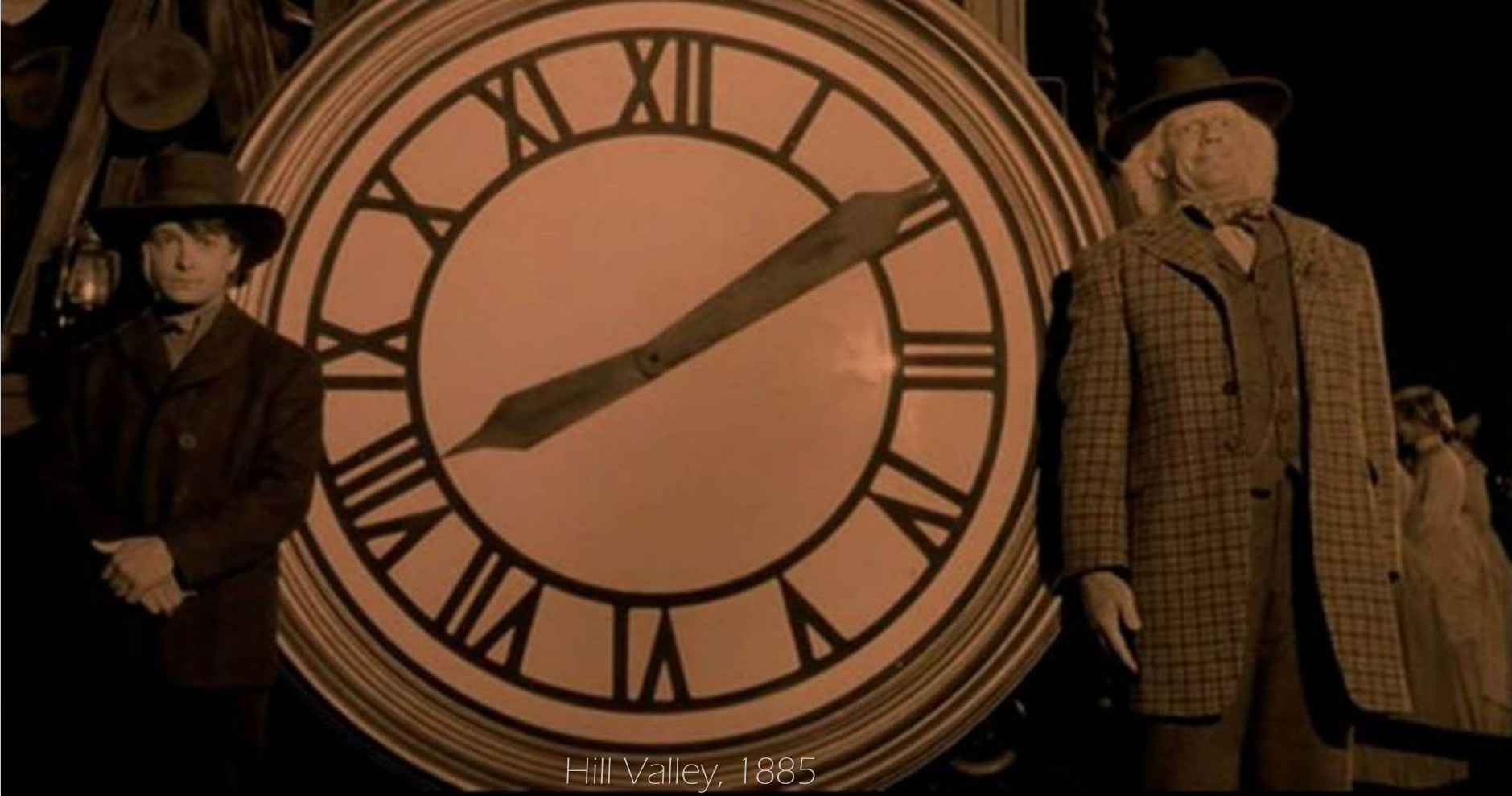
Brian Boyle – CU/LASP

TSIS Program Manager

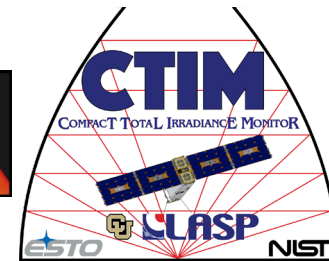
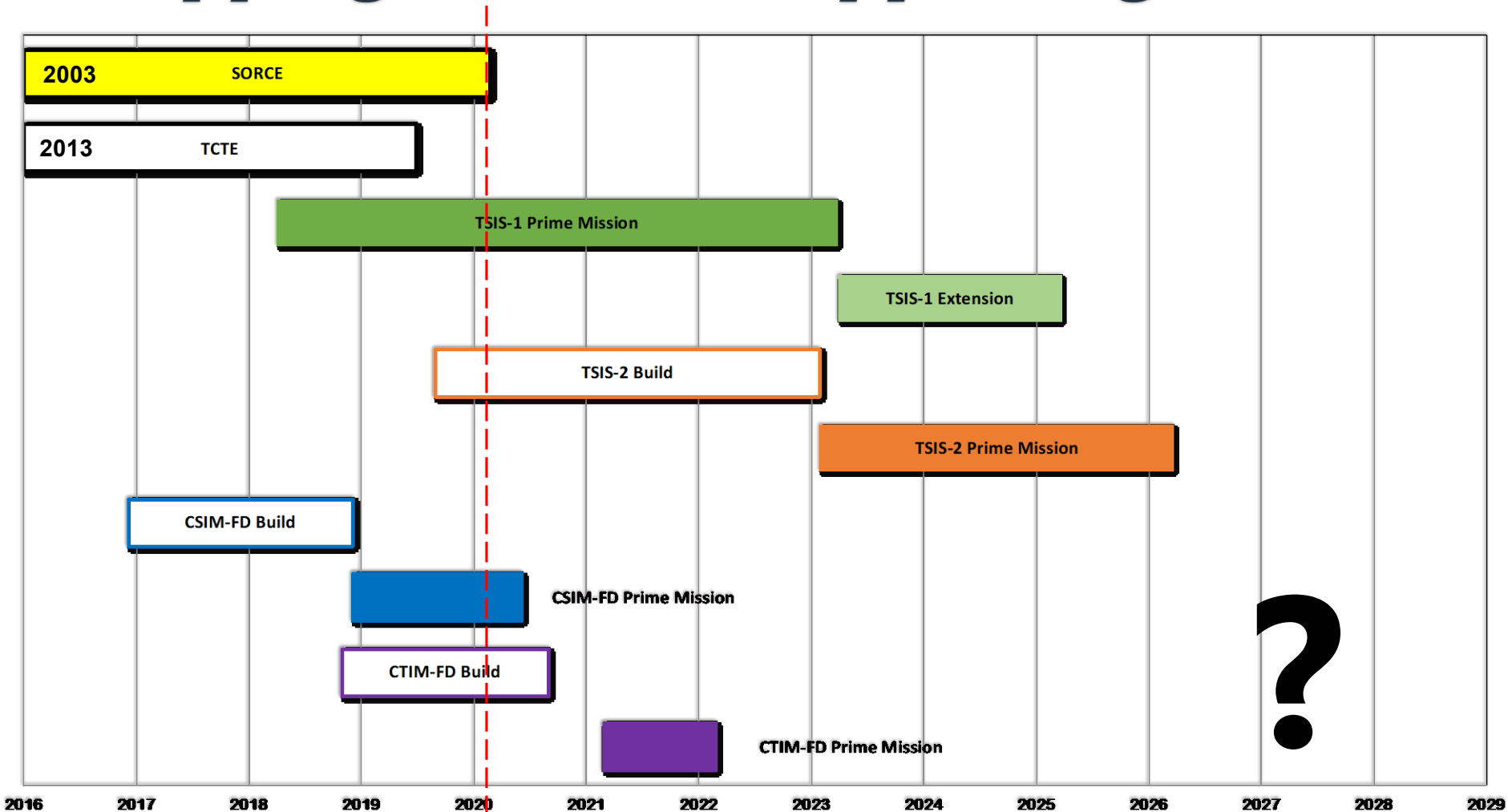




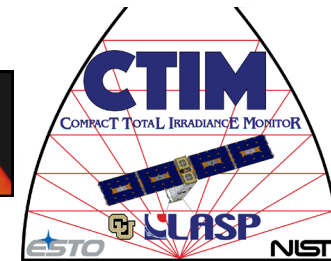
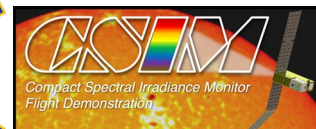
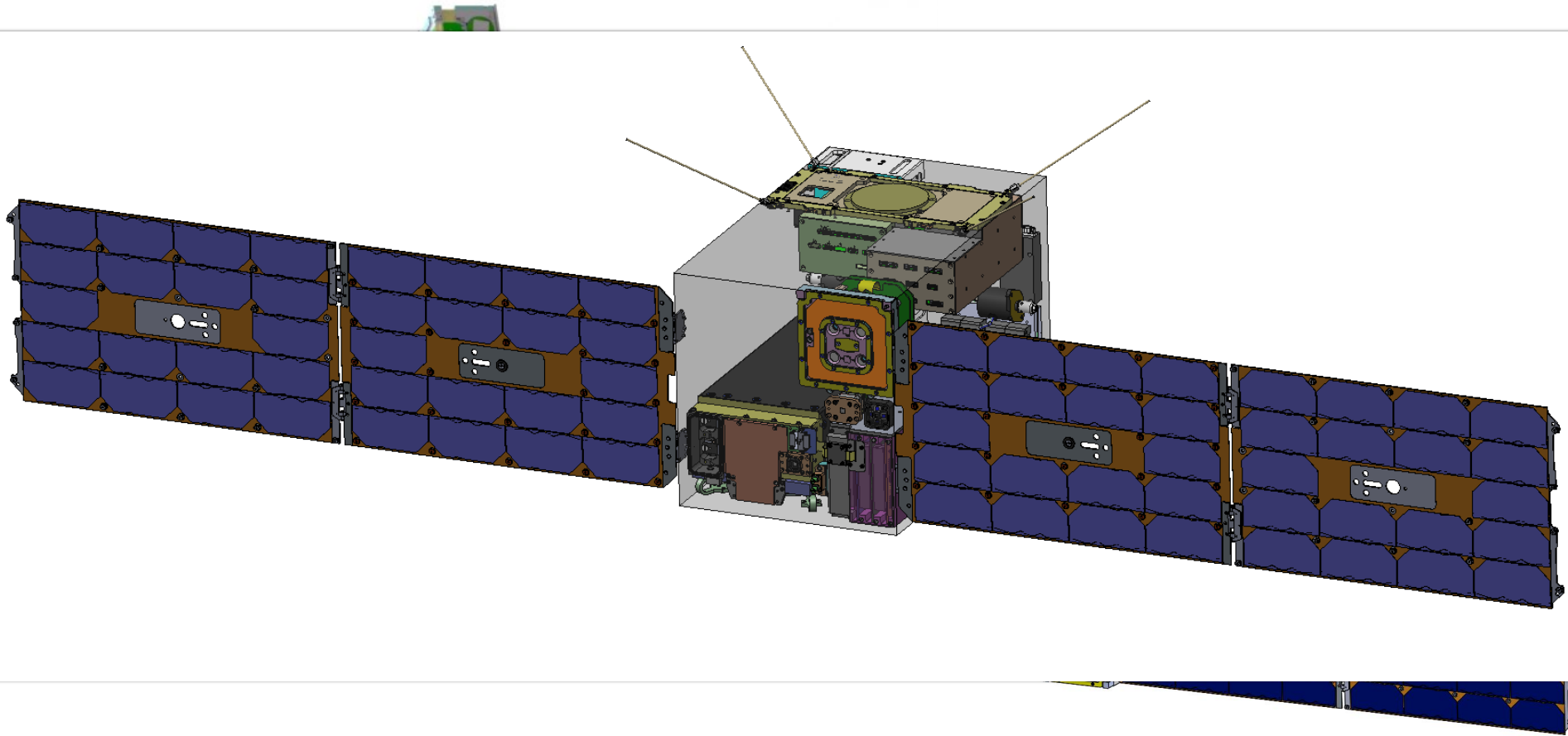
# *“Historical” Photo*



# Overlapping Missions Supporting Continuity



# *compact TSIS (cTSIS)*





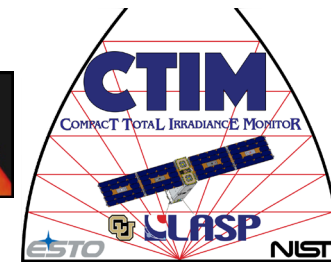
# *cTSIS Mission Demonstration*

- ◇ Leveraging compact SIM and TIM developments into reliable, long-term solution to data record
  - ◇ Demonstrate that CSIM and CTIM can fully meet TSIS requirements for accuracy, stability, and reporting
  - ◇ Demonstrate regular and reliable mission operations, data capture, processing through improving automation and efficiencies from CSIM and CTIM lessons learned
- ◇ Upgrade CSIM to a 3-channel instrument – requires 12U spacecraft
- ◇ CTIM single detector head (4 channels)
- ◇ Extend LASP 6U Cubesat design to 12U
  - ◇ Minor changes to physical layout, 6U avionics , larger solar panel design
- ◇ Improve parts reliability
- ◇ Selectively move from Cubesat-class project engineering and production processes towards Class-D like project requirements (EEE parts, QA, SE, CM)

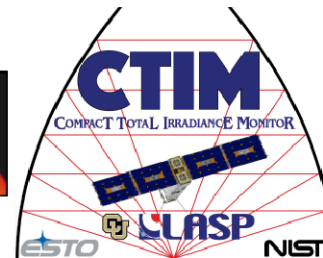
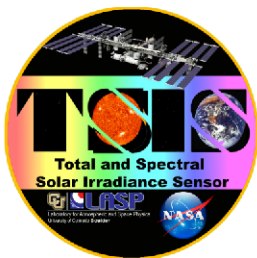
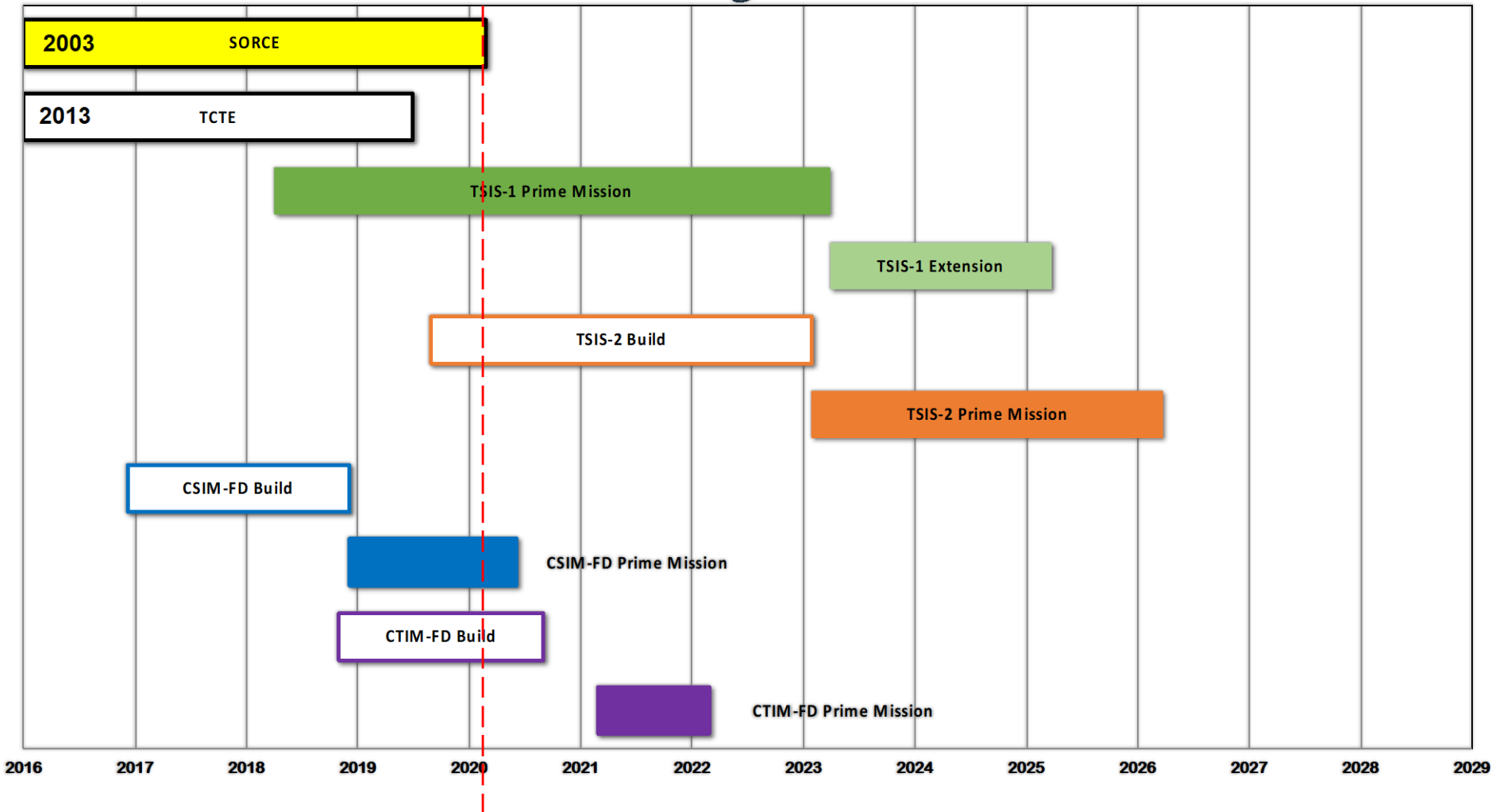


# *cTSIS - Some Assumptions*

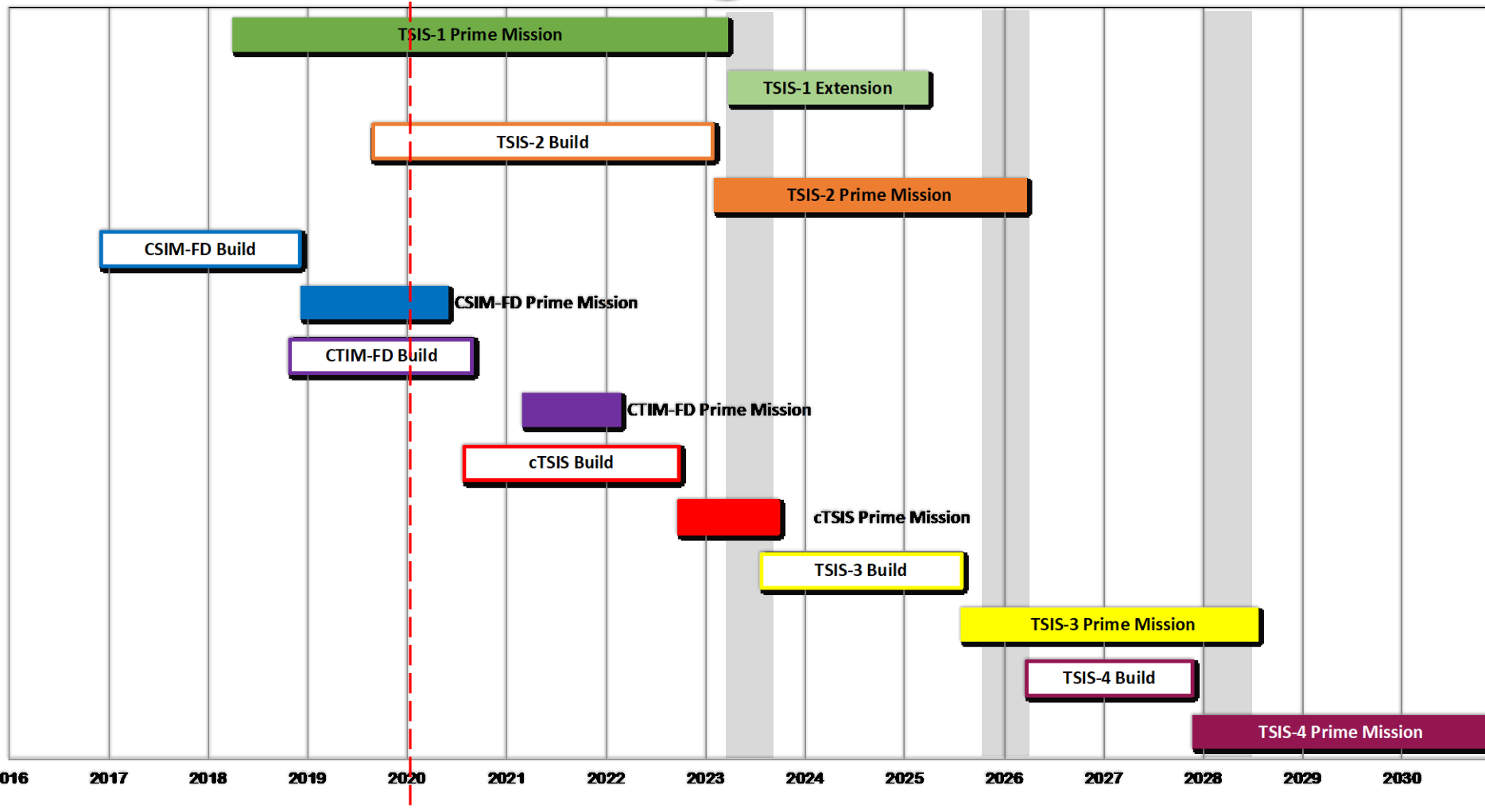
- ◇ Development and Launch Schedule driven by overlap with TSIS-2
  - ◇ Many 12U launch opportunities
- ◇ CTIM on-orbit results must inform cTSIS build
- ◇ 8 month overlap with TSIS-2 (2 mo checkout, 6 mo sci)
- ◇ Notional 24 month build for cTSIS (CTIM is 22mo including SC development)



# Maintaining the Record

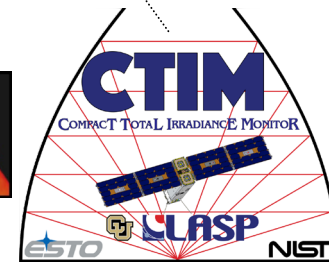
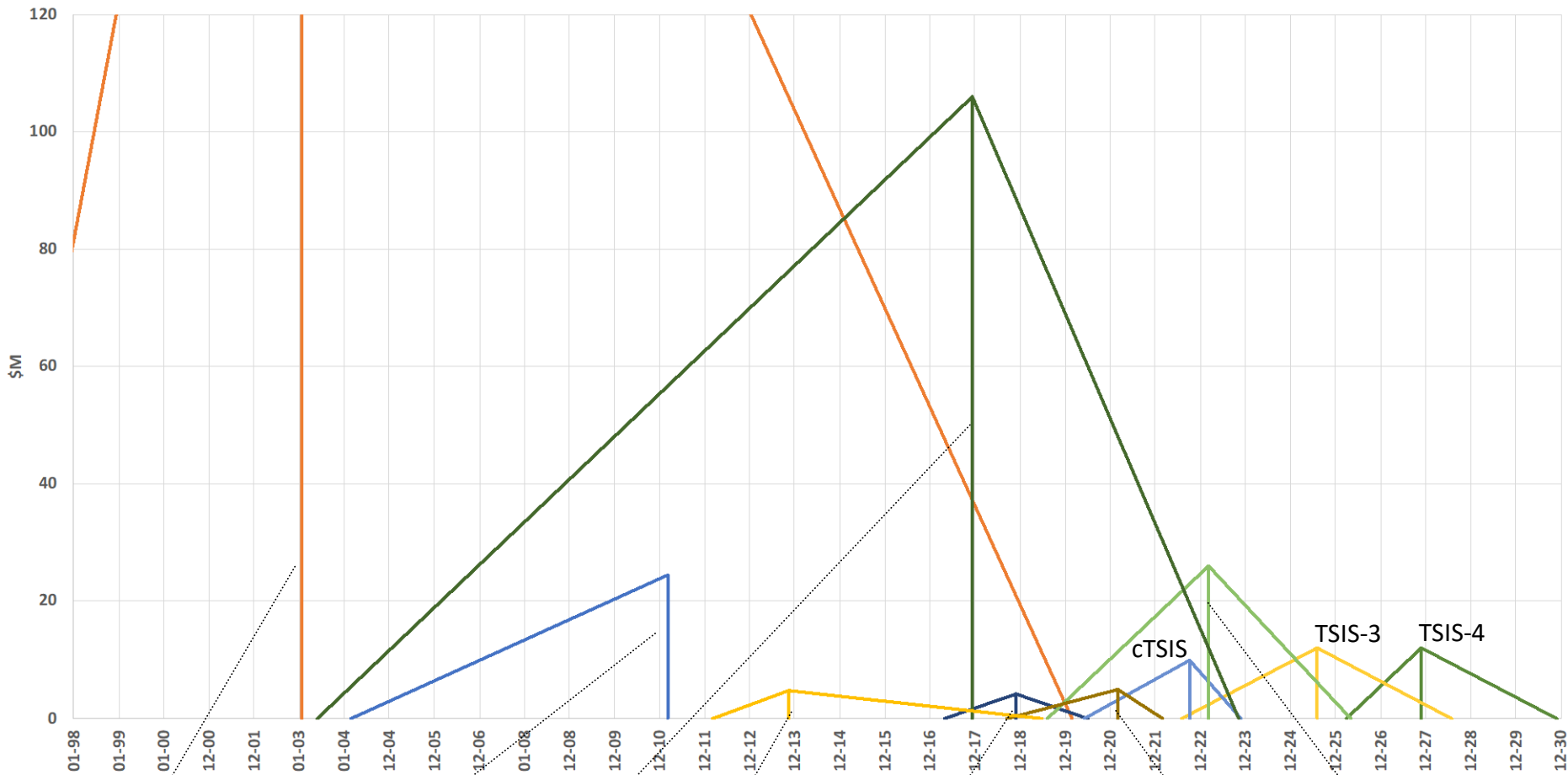


# Maintaining the Record





# Mission Triangles



*TSIS*

**TO BE**

**CONTINUED...** 