Section 2

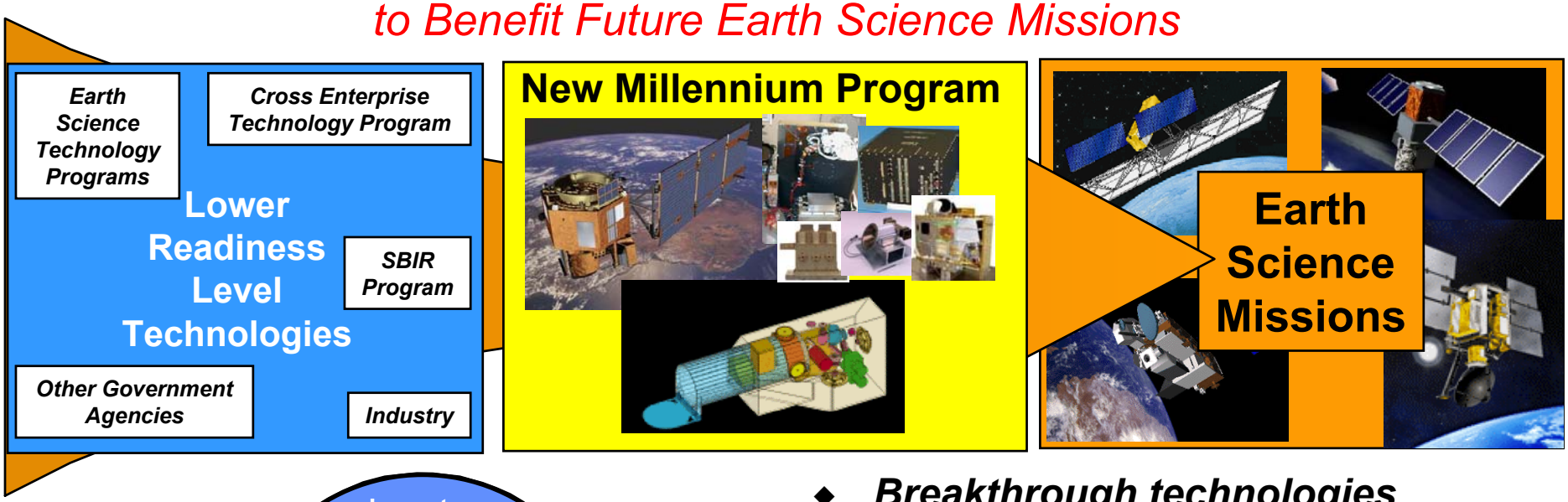
New Millennium Program Overview & Status

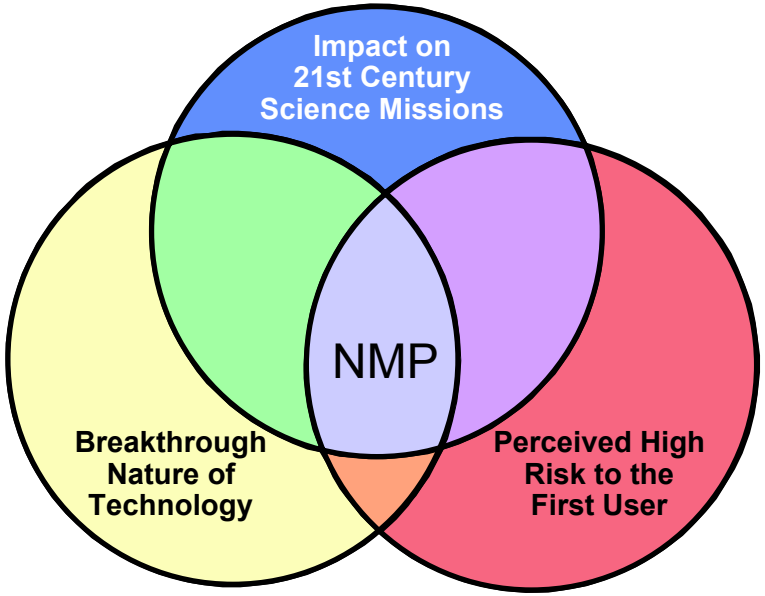
. . . Dr. Christopher M. Stevens

Jet Propulsion Laboratory, California Institute of Technology

New Millennium Program Role

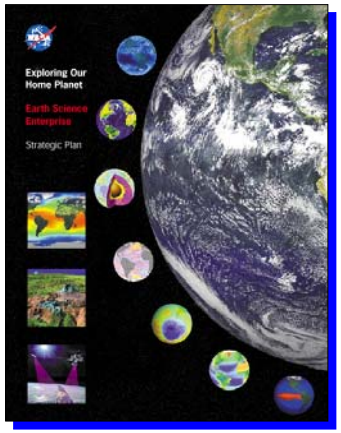
Flight Validation of Breakthrough Technologies to Benefit Future Earth Science Missions



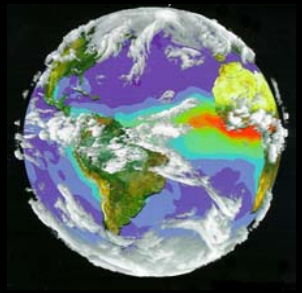


- ***Breakthrough technologies***
  - ***Enable new capabilities to meet Earth Science needs***
  - ***Reduce costs of future missions***
- ***Flight validation***
  - ***Mitigates risks to first users***
  - ***Enables rapid technology infusion into future missions***

ESE Strategy Documents



Research Strategy



Systematic: land cover/land use change, global precipitation, ocean topography, stratospheric ozone, ice sheet mass ...

Applications Strategy*

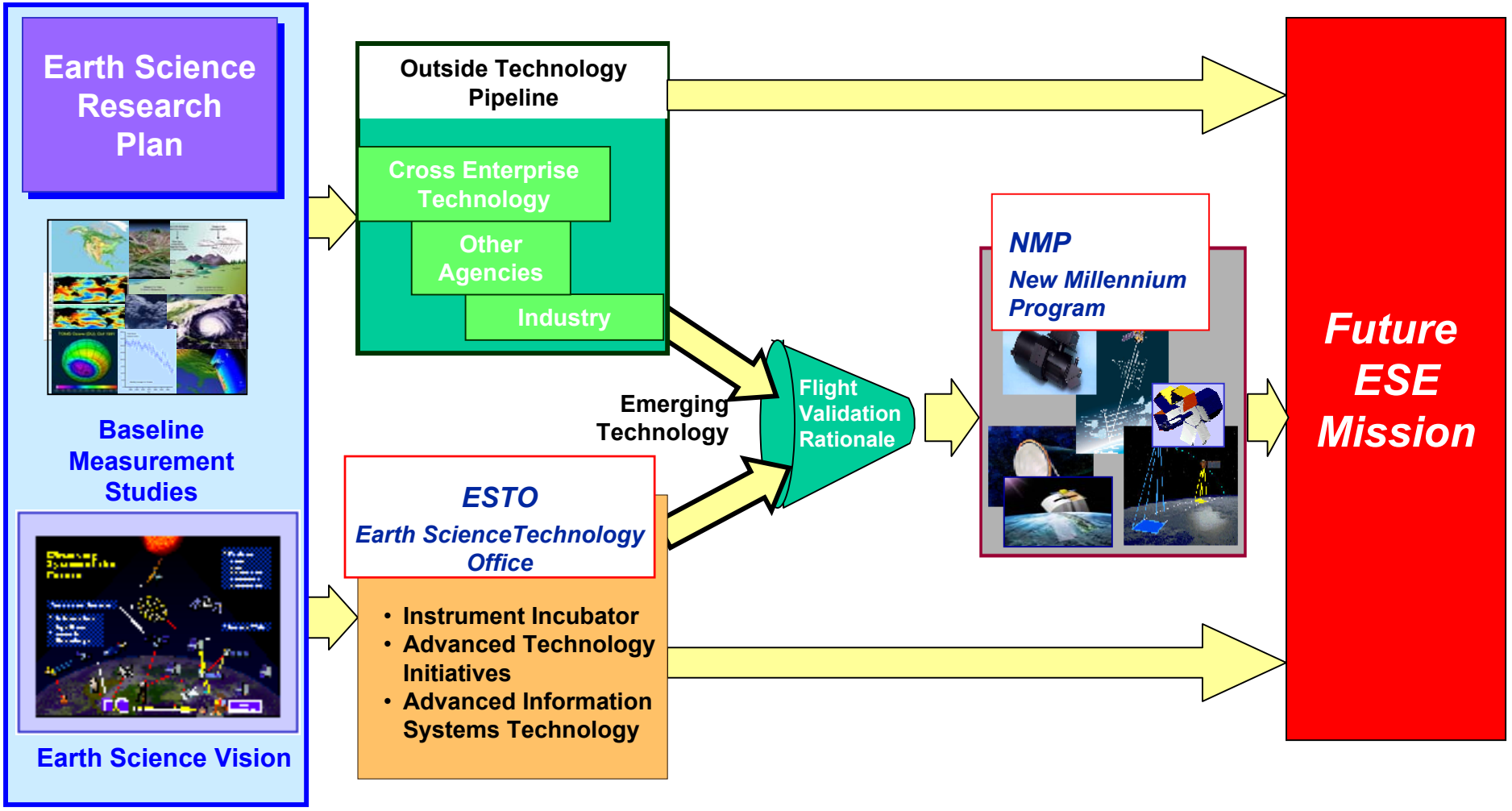
Technology Strategy

- ***Reduce the cost, mass, and volume of continuing, systematic measurements***
- ***Enable new exploratory measurements***

Exploratory: CO2 column/profile, soil moisture, ocean surface salinity, tropospheric chemistry, coastal changes ...

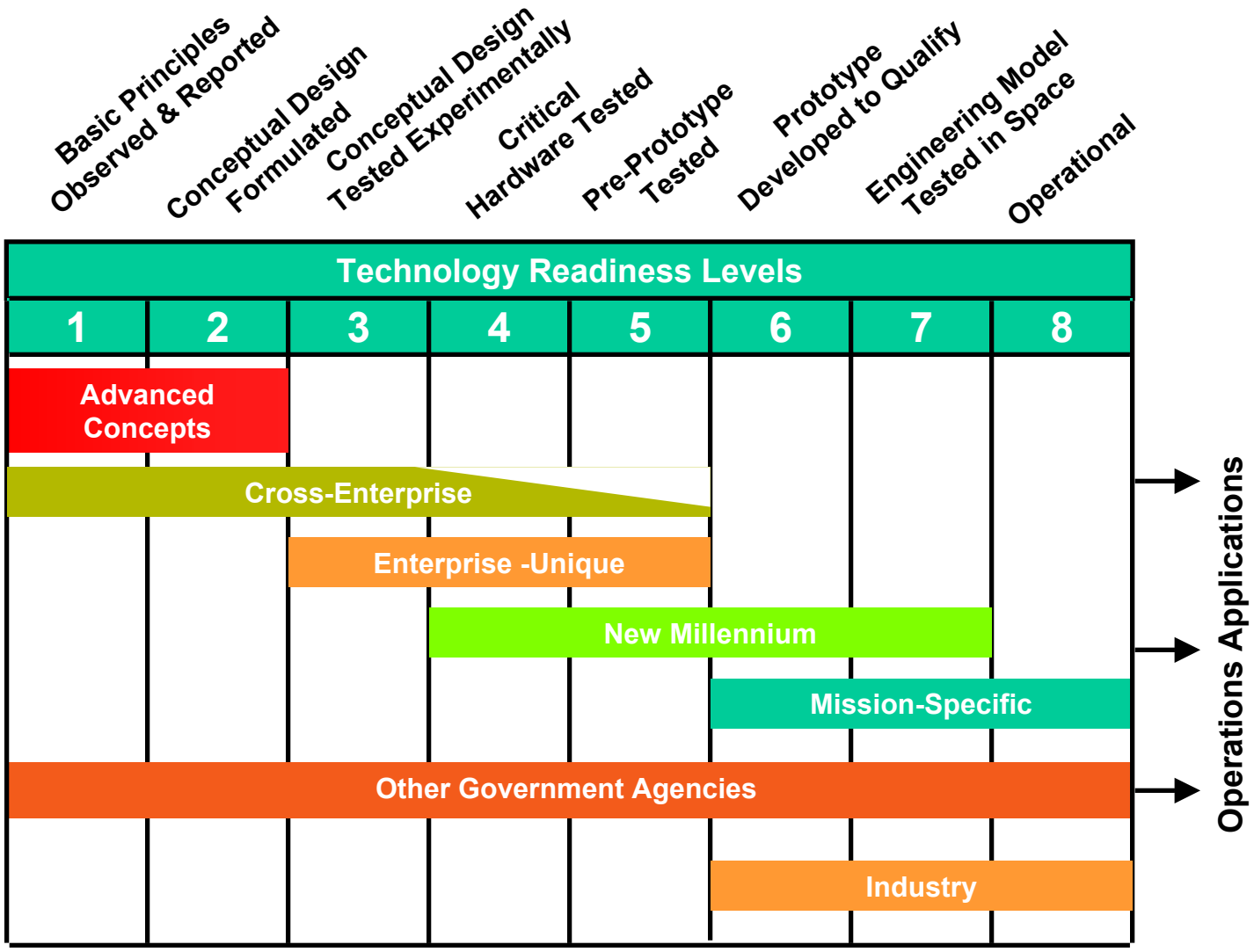
**** Not yet available***

ESE Technology Development Process

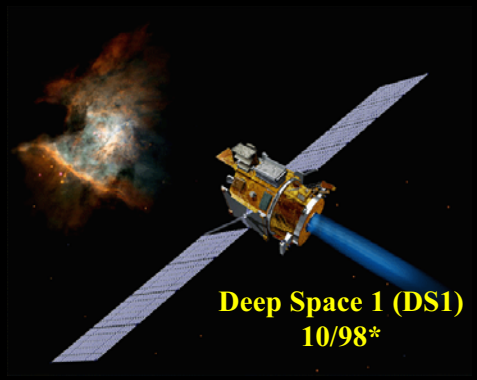


NMP Role in Technology Development

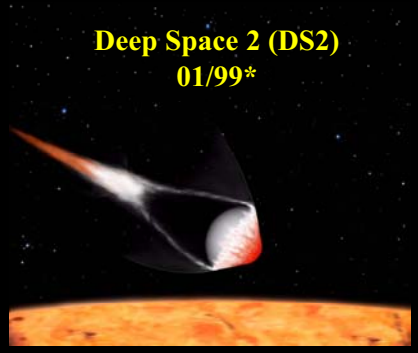
Mission Technology Forum



Program Overview



Deep Space 1 (DS1)
10/98*

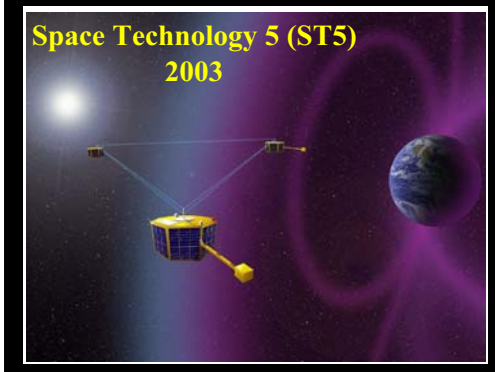


Deep Space 2 (DS2)
01/99*

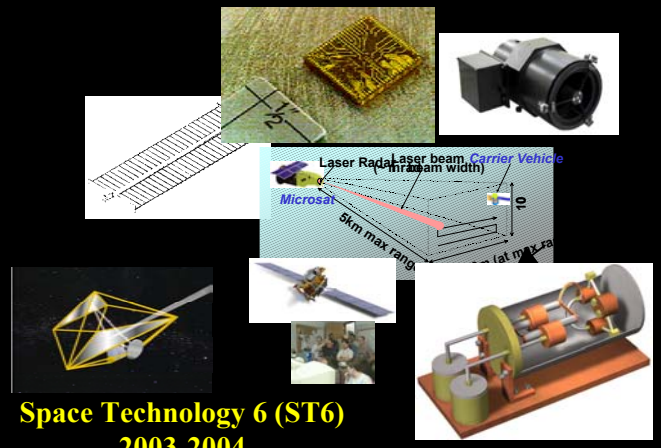
Earth Orbiting 1 (EO1)
11/00*

Earth Observing 3 (EO3)
2004

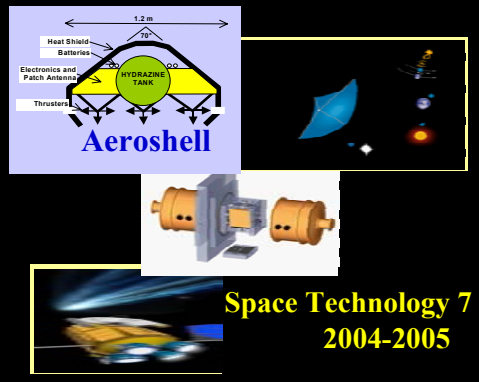
A cross-Enterprise program to identify and flight validate breakthrough technologies that will significantly benefit future Space Science and Earth Science missions.



Space Technology 5 (ST5)
2003



Space Technology 6 (ST6)
2003-2004



Space Technology 7 (ST7)
2004-2005

* Actual Launch Date