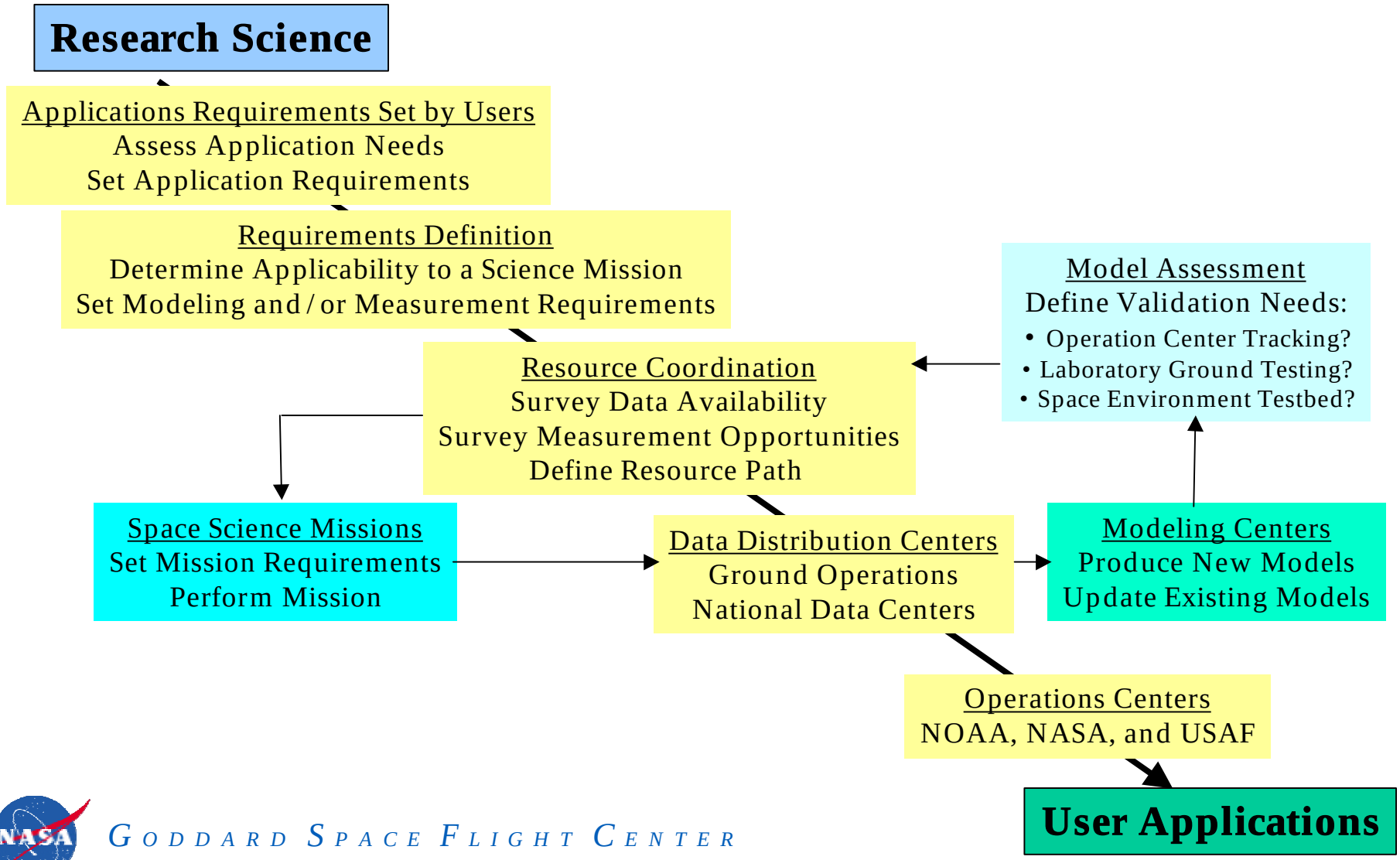
Applications

- As humans expand farther into space, they are increasingly vulnerable to the effects of Space Weather due to:
  - Increasing use of environmentally-sensitive technologies
  - Increasing dependence on space technology
- The acquisition and application of science knowledge about solar variability through the LWS program will:
  - Mitigate risk to humans in space
  - Reduce the susceptibility of spacecraft to Space Weather effects
  - Enable development of future technologies (e.g., nanotechnology and biosystems)
  - Reduce the cost of operations
- The LWS program architecture provides dual-use science (i.e. scientific research driven by application needs) and is motivated by an expanding biosphere. The process of linking science and applications is illustrated in the following block diagram.

Applications Functions of the LWS Program