

# Michael Freilich Passed Away on Wednesday, August 5



- Former director of ESD, 2006 – 2019.
- Passed away Wednesday, August 5, 2020 - 66 years old.
- Oversaw implementation of the 2007 Decadal Survey.
- Oversaw the launch of 24 NASA missions.
- NASA Distinguished Service Medal, Distinguished Achievement Award, Distinguished Presidential Rank Award, etc.
- Sentinel-6A/Jason CS - on schedule for launch in November, was renamed Sentinel-6 Michael Freilich in his honor.
- Personal Observations:
  - Was completely committed to and cared about the ESD mission.
  - Always walked into a meeting prepared.
  - Bright and did not suffer fools easily.
  - Demanded thorough and clear briefings from subordinates.
  - Willing to make hard decisions and take the responsibility for them.
  - Principle-based decision-making style.

## Karen St. Germain, Director, NASA Earth Science Division



“... expert in major systems acquisition, with particular proficiency in transitioning new technology into operational systems ...”

- Former Deputy Assistant Administrator, Systems, for NOAA’s Satellite, Data, and Information Service (NESDIS).
  - Oversaw JPSS and GOES-R programs while at NESDIS.
- Former Director of the NOAA Office of Systems Architecture and Advanced Planning.
- Space, Strategic and Intelligence Systems Office at DOD, 2011-2016.
- System Performance Lead, Suomi-NPP, 2006 – 2011.
- NRL Remote Sensing Division, 1996 - ???
- Faculty: University of Nebraska, 1993 – 1996.
- B.S. (EE) Union College (Schenectady, NY), 1987.
- M.S., National War College, 2013.
- Ph.D. (Microwave Remote Sensing) University of Massachusetts, 1993.

# ESD Research Opportunities News

- **2019: A.33 Earth Science Research from Operational Geostationary Satellite Systems**
  - NASA selected 9 of 83 proposals for funding (5.7 M/3 years).
  - NOAA selected 18 of 69 proposals for funding (9.6 M/3 years).
- **2020: A.16 Modeling, Analysis and Prediction**
  - Proposals were due July, 2020.
  - Expected funding: 7M/yr, 32 Selections.
  - Announcements expected March, 2021.
- **2020: A.49 Solar Irradiance Science Team**
  - Proposals were due September 11, 2020.
  - Expected funding: 1.0 M/yr, 6 – 8 Selections.
  - Announcements expected March, 2021.
- **2020: A.XX The Science of Terra, Aqua, and Suomi-NPP**
  - Currently under review.
  - ROSES 17: ~14M/yr, 50 – 60 awards
  - **Expected release later this month.**

# ESD Flight News

- **CloudSat:**
  - Lost its 2<sup>nd</sup> (of 4) reaction wheel on August 27.
  - Currently stable in a safe mode.
  - Dropping out of “C-train” (formation flying with CALIPSO), moving to graveyard orbit.
  - Mission is currently trying to figure if it can operate with 2 reaction wheels.
    - Cannot operate in the “DO-Op” mode it has maintained since battery failure in 2011.
  - If operations are possible, mission must determine what sort of science is possible.
  - Should mission propose continuation, HQ will have to decide if science return justifies cost.
  - Could be EOM.
  - CloudSat launched in April, 2006. Fabulous return on investment.
- **ESD Senior Review:**
  - All operating missions reviewed this year in Senior Review process.
  - Review panel met in early July.
  - Senior Review Steering Committee Meeting late September.
  - Extended operations decisions will be made based on Senior Review evaluations.
- **CALIPSO:**
  - Keeps on ticking! Transition to primary laser not imminent, low energy shots not increasing as fast as expected.

# ESD Flight News (continued)

## TSIS-2:

- Will continue measurements of total and spectral solar irradiance, overlapping with TSIS-1.
- Spacecraft provider chosen – announced in July. (General Atomics Electromagnetic Systems)
- Still scheduled for launch in March, 2023.
- Launch vehicle not yet identified.

## Libera:

- Peter Pilewski (PI) will provide update later in meeting.
- HQ working on (but not signed).
  - Formulation Authorization Document (FAD)
  - Program Level Requirements Document (PLRA)
    - PLRA contains the Level 1 science requirements for the mission.