

National Aeronautics and
Space Administration



EXPLORE SCIENCE

James Green
NASA Chief Scientist

June 22, 2020

Finding New Ways to do our Business

- Changes in the virtual environment for scientist to scientist
 - Collaborative tools for meetings and science conferences
 - Webex, Adobe Connect, Teams, Zoom, Goweb, . . .
 - Rapid software upgrades and bug fixes improving the collaborative tools to support larger audiences and improvements in usage
 - Ex: NASA's main collaborative tool is the Microsoft Teams system
 - From March to June there were 8 major updates to the Teams software
 - Development of science papers & proposals via eTools (ie: googledocs)
- Rapid increase in the use of Open Access (OA) journals (Ex: Covid19 papers)
 - Anyone can access these papers
 - Use of AI tools mining the papers focuses on completed research/analysis in specific areas
 - Results: Rapid progress in mitigation drugs & new approaches for vaccines
 - We must do more OA publishing enabling rapid progress in other scientific fields!
- Rapid increase in user proficiency and science etool usage
 - Pros and Cons of this new environment are being evaluated resulting in expectation of increased in use in many areas that improve scientific productivity

Expected Changes By NASA

- NASA science: Astrophysics, Earth Science, Heliophysics, Planetary
 - Research Opportunities in Space & Earth Science (ROSES) – Call for proposals
 - 2019 had ~110 calls with ONLY 4 virtual panels
 - 2020 have 112 calls with 73 review panels by the end of Sept – All virtual
 - Completed ~20 review panels so far with mostly very favorable experience
- After Covid19 expect ~70-80% proposal review panels to be virtual
- Future Scientific Meetings:
 - Many small science conferences will be virtual – which will also bring in more scientists who would now be able to attend where they would not due to time or travel constraints (attending portions of the meeting)
- Increased development of science papers & proposals via eTools
- Expectation is less travel and more Open Access publications from NASA funded research