

A stylized background graphic on the left side of the slide. It features a globe with several satellite orbits represented by thin grey lines. Two small satellite icons are positioned on these orbits. Additionally, two small aircraft icons are shown flying across the globe. The overall style is minimalist and technical.

# Making Better Use of Satellite Data: *The Satellite Needs Working Group*

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**Pontus Olofsson**  
[pontus.olofsson@nasa.gov](mailto:pontus.olofsson@nasa.gov)

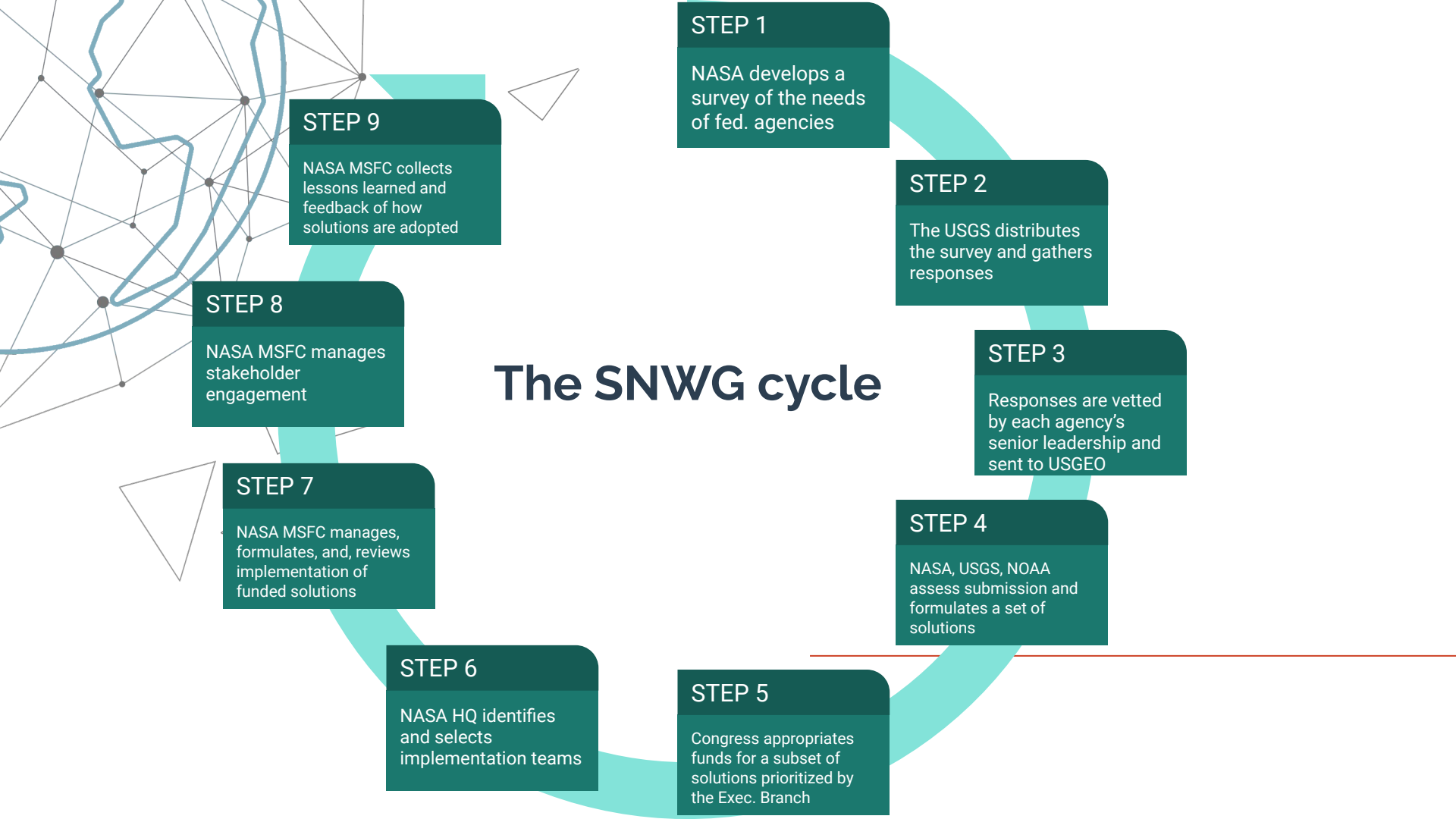
NASA Marshall Space Flight Center



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## **Goal of the Satellite Needs Working Group (SNWG):**

***Implement solutions that address Earth  
observation-needs of federal agencies***



# The SNWG cycle

## STEP 1

NASA develops a survey of the needs of fed. agencies

## STEP 2

The USGS distributes the survey and gathers responses

## STEP 3

Responses are vetted by each agency's senior leadership and sent to USGEO

## STEP 4

NASA, USGS, NOAA assess submission and formulates a set of solutions

## STEP 5

Congress appropriates funds for a subset of solutions prioritized by the Exec. Branch

## STEP 6

NASA HQ identifies and selects implementation teams

## STEP 7

NASA MSFC manages, formulates, and reviews implementation of funded solutions

## STEP 8

NASA MSFC manages stakeholder engagement

## STEP 9

NASA MSFC collects lessons learned and feedback of how solutions are adopted

# SNWG Solution Highlights

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2016 cycle:

- Harmonized Landsat Sentinel-2 ([HLS](#)) surface reflectance products
- Catalog of Archived Suborbital Earth Science Investigations ([CASEI](#))

2018 cycle:

- ICESat-2 quicklook [products](#)
- Observational Products for End-Users from Remote Sensing Analysis ([OPERA](#))

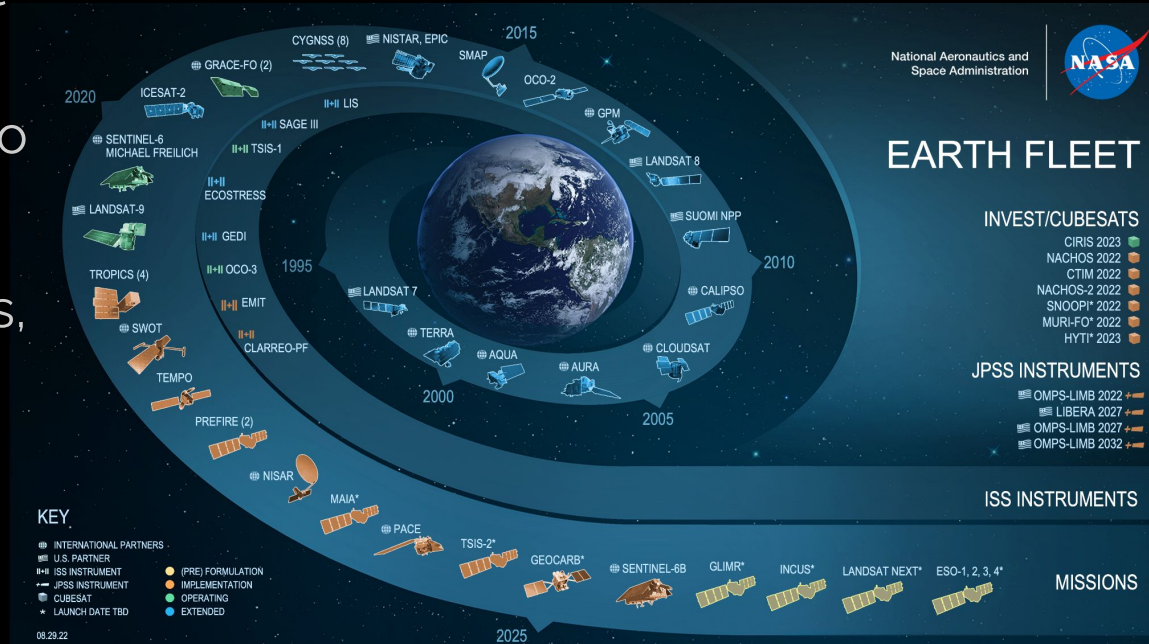
2020 cycle:

- [TEMPO](#) near real-time products
- HLS-derived vegetation indices
- Expansion of [Pandora air quality network](#) and air quality forecasts
- Merged atmospheric sounder/GNSS planetary boundary layer product

Assessment needs submitted in the 2022 cycle in progress; a full list of SNWG activities being implemented is available [here](#).

# Needs Assessment

- Online interviews conducted for each need (117 for '22 cycle!)
- Time-consuming but essential for understanding how to address needs
- Explosion of missions, data, and products!



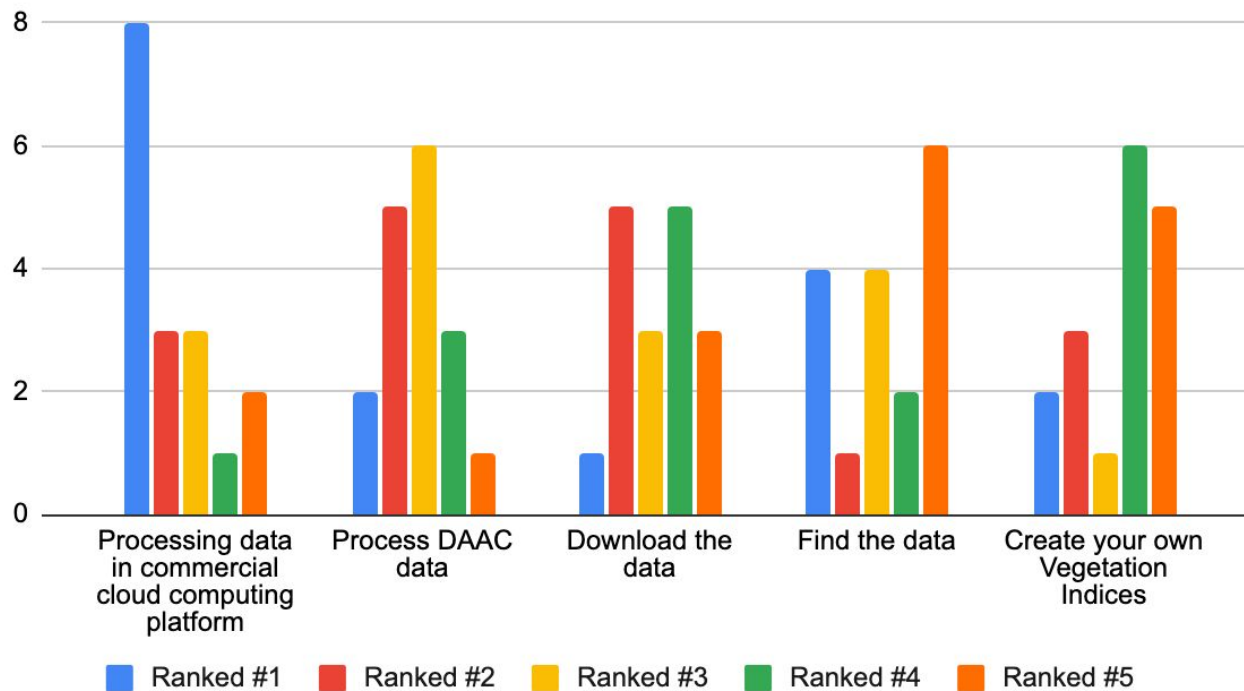
# Stakeholder Engagement

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- NASA JPL 2018 cycle (OPERA); NASA MSFC 2020 cycle onwards
- Aim: ensure stakeholder capacity sufficient to adopt solutions
- Solutions vary in specificity and coverage => stakeholder engagement vary per solution
- Fosters NASA's Open Source Science Initiative

# Stakeholder Engagement

## Ranking of Training Needs



**Thank you.**

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