Presentation to GLOBE Teachers of Slovenia

NASA, Future Earth Missions and STEM Resources

Peter Falcon, Earth Science Communications
NASA, Jet Propulsion Laboratory
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pcfalcon@jpl.nasa.gov

Jet Propulsion Laboratory
California Institute of Technology

Topics of Discussion

Things we'll go over in this presentation

- Awesome stuff we're doing with James Webb and The Artemis mission.
- Future NASA Earth missions Surface Water and Ocean Topography (SWOT), and NASA-ISRO SAR mission (NISAR).
- Exploring our planet, solar system, universe, exo-planets and asteroids using interactive visualizations
- Highlight NASA STEM resources for educators and students.
- Share NASA resource links and open for discussion

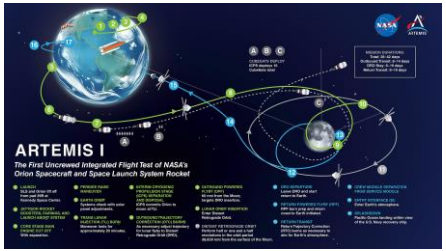
Thank you

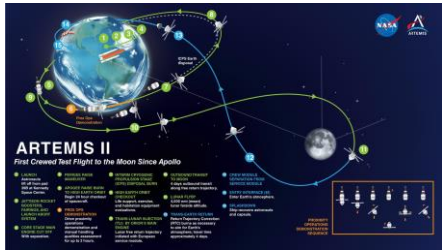
All The Teachers and Students of the GLOBE Program

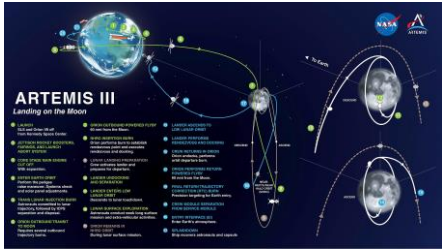

JWST
Near-Infrared Camera (NIRCam)

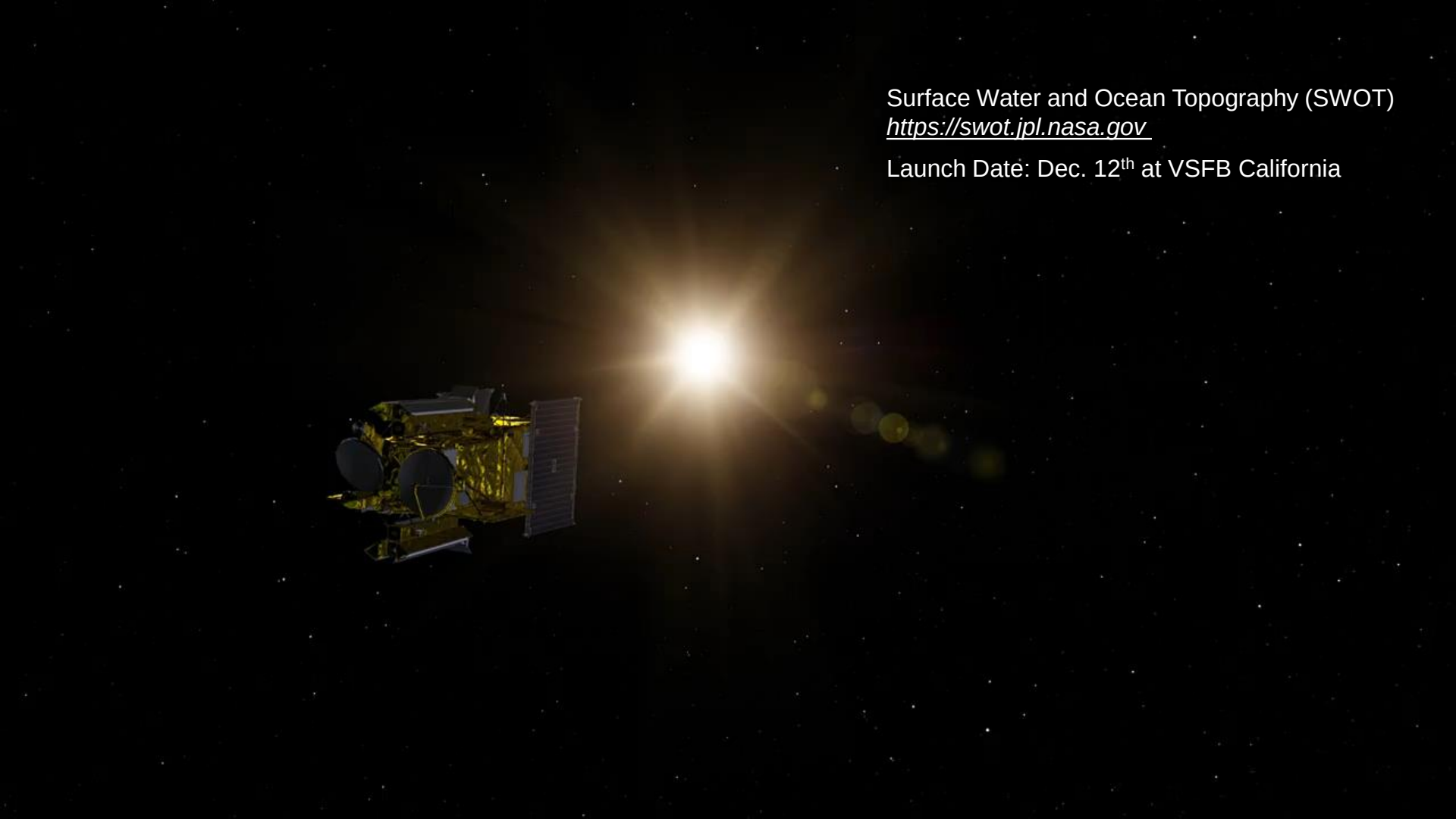
https://webbtelescope.org/resource-gallery/images

https://www.nasa.gov/specials/artemis/









Surface Water and Ocean Topography (SWOT)
https://swot.jpl.nasa.gov

Launch Date: Dec. 12th at VSFB California


Rivers of the Mississippi Watershed


NASA-ISRO SAR Mission (NISAR)
https://nisar.jpl.nasa.gov
Launch Date: No earlier then Jan. 2024

NISAR Science Objectives

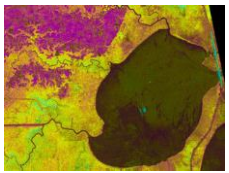
NISAR will make global measurements of the causes and consequences of land surface changes, ecosystem disturbances, ice sheet collapse and natural hazards (earthquakes, tsunamis, volcanoes and landslides).

Science objectives include:

- Determine the likelihood of earthquakes, volcanic eruptions, landslides and land subsidence.
- Understand the dynamics of carbon storage and uptake in wooded, agriculture, wetland, and permafrost systems.
- Understand the response of icesheets to climate change, the interaction of sea ice and climate, and impacts on sea 0level rise worldwide.

*These science objectives will will have a direct impact on societal benefits throughout the world.







https://eyes.nasa.gov

INSPIRE - ENGAGE - EDUCATE - EMPLOY

The Next Generation of Explorers

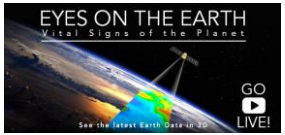
NASA Educational and Data Resources

A list of NASA resources with hyperlinks

- Global Climate Change Vital Signs of the Planet: Mission to engage the world with accurate, accessible, and actionable information about our rapidly changing climate, from the global perspective of NASA. *https://climate.nasa.gov/about-us/*

- Climate Kids: Telling the story of our changing planet through the eyes of the NASA missions studying Earth. The site inspires upper-elementary-aged kids with games, activities and articles that make climate science accessible and engaging. *https://climatekids.nasa.gov*

- NASA STEM Engagement Earth Science Toolkit: and classify land cover over an area the size of a soccer field, you'll be helping scientists to enhance global maps of land cover. Your observations will contribute to new maps with a finer spatial resolution than is possible using satellites alone. *https://www.nasa.gov/stem/nextgenstem/earth-toolkit.html*

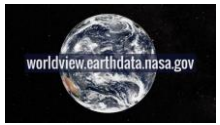


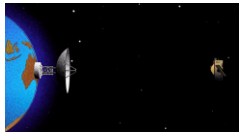
- NASA Eyes: Experience Earth and our solar system, the universe and the spacecraft exploring them. *https://eyes.nasa.gov/*
- Images of Change: An extensive collection of global warming resources. *https://climate.nasa.gov/images-of-change?id=534 - 534-columbia-glacier-melt-alaska*

NASA Educational and Data Resources

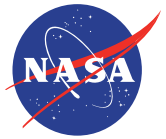
A continued list of NASA resources with hyperlinks

Scientific Visualization Studio





- Scientific Visualization Studio: Visualizations and multimedia products free to download. *https://svs.gsfc.nasa.gov*
- NASA Worldview NASA Earth satellite data. Create gifs, screen shoots, and more. *https://worldview.earthdata.nasa.gov*
- JPL Education "Learn": Educational lesson plans, classroom activities for all grades and subjects. Aligns with Next Generation Science Standards (NGSS). *https://www.jpl.nasa.gov/edu/learn/*
- EO Kids: Discover Earth imagery for students aged 9-14 using NASA's Landsat, Terra and Aqua missions. *https://earthobservatory.nasa.gov/blogs/eokids/*
- NASA Space Place: Another site for young learners interested in Earth , Sun, Solar System, Universe, Science and technology. *https://spaceplace.nasa.gov/menu/earth/*



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