NASA's Eyes Relevant Tools/Links for Museums/Educators:

Here we list resources within NASA's Eyes that educators of any type might find particularly useful.

1. Main webpage - https://science.nasa.gov/eyes/ (alternate URL: eyes.nasa.gov)
    a. To make your marketing department happy, note that all the interactives are embeddable using iframes directly into your own website, so there's no need to have visitors click off your own page.
        i. HTML code is dead simple, just paste this into any html source code (it's the exact same function as embedding YouTube videos):
        ii. Example: <iframe allow="accelerometer" allowfullscreen="" frameborder="0" height="600" src="https://eyes.nasa.gov/apps/solar-system/#/story/total_solar_eclipse" title="NASA Eyes on Eclipse" width="75%"></iframe>
            1. "Src" is where you paste the URL, complete with parameters like spacecraft, timing,rate, etc.
            2. Note the customizable height and width. Eyes is "responsive" so should work in almost any size.
    b. The URLs are also customizable so you can embed exactly the feature(s) you want and take visitors to specific times and locations. Below are a series examples of what you might use depending on your learning goals and your audience.
    c. Screenshots and video recordings are also great to make/share to help you engage audiences
2. Solar System - https://eyes.nasa.gov/apps/solar-system/#/home
    a. You can use the URL to link to a specific time, place, or even spacecraft. Some examples:
        i. Upcoming Europa Clipper Spacecraft (scheduled to launch October 2024): https://eyes.nasa.gov/apps/solar-system/#/sc_europa_clipper
        ii. OSIRIS-REx Sample return: https://eyes.nasa.gov/apps/solar-system/#/sc_osiris_rex_src?rate=0&time=2023-09-24T10:41:54.806+00:00
        iii. Voyager 1 at the heliosphere boundary: https://eyes.nasa.gov/apps/solar-system/#/sc_voyager_1?time=2012-08-25T23:00:19.202+00:00&rate=0
    b. Distance Tool for
        i. the ISS: https://eyes.nasa.gov/apps/solar-system/#/sc_iss/distance?to=earth
        ii. Parker close approach to celebrate the Helio Big Year: https://eyes.nasa.gov/apps/solar-system/#/sc_parker_solar_probe/distance?rate=1&time=2024-12-24T10:57:38.666+00:00&to=sun
    c. Size Compare tool for
        i. JWST: https://eyes.nasa.gov/apps/solar-system/#/sc_jwst/compare?id=school_bus
        ii. Jupiter: https://eyes.nasa.gov/apps/solar-system/#/jupiter/compare?id=earth
        iii. Apophis: https://eyes.nasa.gov/apps/solar-system/#/99942_apophis/compare?id=101955_bennu
    d. Physics in Eyes is as accurate as possible, meaning you can recreate eclipses throughout the Solar System and throughout time (1949 to 2049):
        i. This Saros Cycle 139 (every ~18 years 11 days):
            1. 2006:
                a. https://eclipse.gsfc.nasa.gov/SEplot/SEplot2001/SE2006Mar29T.GIF
                b. https://eyes.nasa.gov/apps/solar-system/#/earth?rate=0&time=2006-03-29T08:44:34.552+00:00
            2. 2042:
                a. https://eclipse.gsfc.nasa.gov/SEplot/SEplot2001/SE2042Apr20T.GIF

        b. https://eyes.nasa.gov/apps/solar-system/#/earth?rate=0&time=2042-04-20T00:39:43.549+00:00
    ii. 2026 eclipse in Greenland: https://eyes.nasa.gov/apps/solar-system/#/earth?time=2026-08-12T17:26:57.015+00:00&rate=0
    iii. 2027 eclipse at the Rock of Gibraltar: https://eyes.nasa.gov/apps/solar-system/#/earth?time=2027-08-02T09:02:11.538+00:00&rate=0
    iv. 2045 North American Eclipse: https://eyes.nasa.gov/apps/solar-system/#/earth?rate=300&time=2045-08-12T15:41:56.726+00:00
    v. Triple on Jupiter, Nov 10, 1997
        1. https://apod.nasa.gov/apod/ap980202.html
        2. https://eyes.nasa.gov/apps/solar-system/#/jupiter?time=1997-11-11T03:27:15.513+00:00&rate=0
    vi. Saturn: February 24, 2009:
        1. https://esahubble.org/images/heic0904f/
        2. https://eyes.nasa.gov/apps/solar-system/#/saturn?time=2009-02-24T13:03:40.954+00:00&rate=0
    vii. Mars eclipses captured by rovers:
        1. Perseverance, April 2nd
            a. https://mars.nasa.gov/news/9172/nasas-perseverance-rover-captures-video-of-solar-eclipse-on-mars/
            b. https://eyes.nasa.gov/apps/solar-system/#/sc_mars_2020_landing_site?time=2022-04-02T10:54:27.271+00:00&rate=0
        2. Curiosity August 20, 2013:
            a. https://eyes.nasa.gov/apps/solar-system/#/mars?time=2013-08-21T05:57:36.469+00:00&rate=0
            b. https://mars.nasa.gov/resources/5536/annular-eclipse-of-the-sun-by-phobos-as-seen-by-curiosity/
        3. Double: March 17 and 26 2019:
            a. https://mars.nasa.gov/news/8425/curiosity-captured-two-solar-eclipses-on-mars/?site=msl
            b. Deimos March 17: https://eyes.nasa.gov/apps/solar-system/#/sc_mars_science_laboratory?time=2019-03-17T18:03:35.315+00:00&rate=0
            c. Phobos March 26: https://eyes.nasa.gov/apps/solar-system/#/sc_mars_science_laboratory?time=2019-03-27T03:44:43.745+00:00&rate=0
3. Asteroids - https://eyes.nasa.gov/apps/asteroids/#/home
    a. Asteroid Watch shows upcoming close approaches to Earth - https://eyes.nasa.gov/apps/asteroids/#/watch/ (note this will redirect to the latest data)
    b. Asteroid and Comets 101 story - https://eyes.nasa.gov/apps/asteroids/#/story/asteroids_101
4. Exoplanets - https://eyes.nasa.gov/apps/exo/#/
    a. 55 Cancri e - https://eyes.nasa.gov/apps/exo/#/planet/55_Cnc_e
    b. With surface through the Exoplanet Travel Bureau - https://exoplanets.nasa.gov/alien-worlds/exoplanet-travel-bureau/explore-55-cancri-e/?travel_bureau=true
    c. TRAPPIST-1 e - https://eyes.nasa.gov/apps/exo/#/planet/TRAPPIST-1_e
    d. With the surface: https://exoplanets.nasa.gov/alien-worlds/exoplanet-travel-bureau/explore-trappist-1d/?travel_bureau=true&intent=021
5. Earth - https://eyes.nasa.gov/apps/earth/#/

    a. Animation of Earth temperature from 2003 to 2023: https://eyes.nasa.gov/apps/earth/#/vitalsign?vitalsign=air_temperature&altid=0&animating=t&start=2003-01-01&end=2023-11-02&altView=0
    b. Ozone: https://eyes.nasa.gov/apps/earth/#/vitalsign?vitalsign=ozone&altid=0&animating=f&start=&end=
    c. Animation of water storage over 20 years: https://eyes.nasa.gov/apps/earth/#/vitalsign?vitalsign=gravity_field_map&altid=0&animating=t&start=2003-12-01&end=2023-06-01
6. DSN Now - https://eyes.nasa.gov/dsn/dsn.html
7. NSN Now - https://scan-now.gsfc.nasa.gov/dte
8. Simulations of specific missions/events such as
    a. the Mars 2020 EDL: https://eyes.nasa.gov/apps/mars2020/#/home
    b. InSight Operations: https://eyes.nasa.gov/apps/experience-insight/InSight.html
    c. Curiosity driving: https://eyes.nasa.gov/curiosity/
    d. Total Solar Eclipse: https://eyes.nasa.gov/apps/solar-system/#/story/total_solar_eclipse
9. Apps including Spacecraft AR to use a smartphone to explore models of spacecraft in your space - https://eyes.nasa.gov/mobile-apps.html