

# FOREST EXPLORATION: with SOS Explorer!



For this activity we are going to use our powers of observation along with some really cool technology to help us learn more about forests around us and around the world!

## What you'll need:

- A smartphone or tablet
- Download [SOS Explorer App](#) (free download on the app store)
- This sheet, a piece of paper, or Science Notebook to write down your observations and ideas



## PART 1 - Trees and Forests Near Me:

Take a look outside to find some trees and plants to observe. Write down or draw your observations below.

- Do they look the same now as they do during other seasons?
- How have they changed?
- How have they stayed the same?

## PART 2 - SOS Explorer App

Now it's time to look at how the trees, forests and plants near you fit into forests around the world! For this section of the activity we will be using NOAA's SOS Explorer App to take a look at the Earth and its forests (and plants) from space!

### Step 1 - Download NOAA's [SOS Explorer App](#)

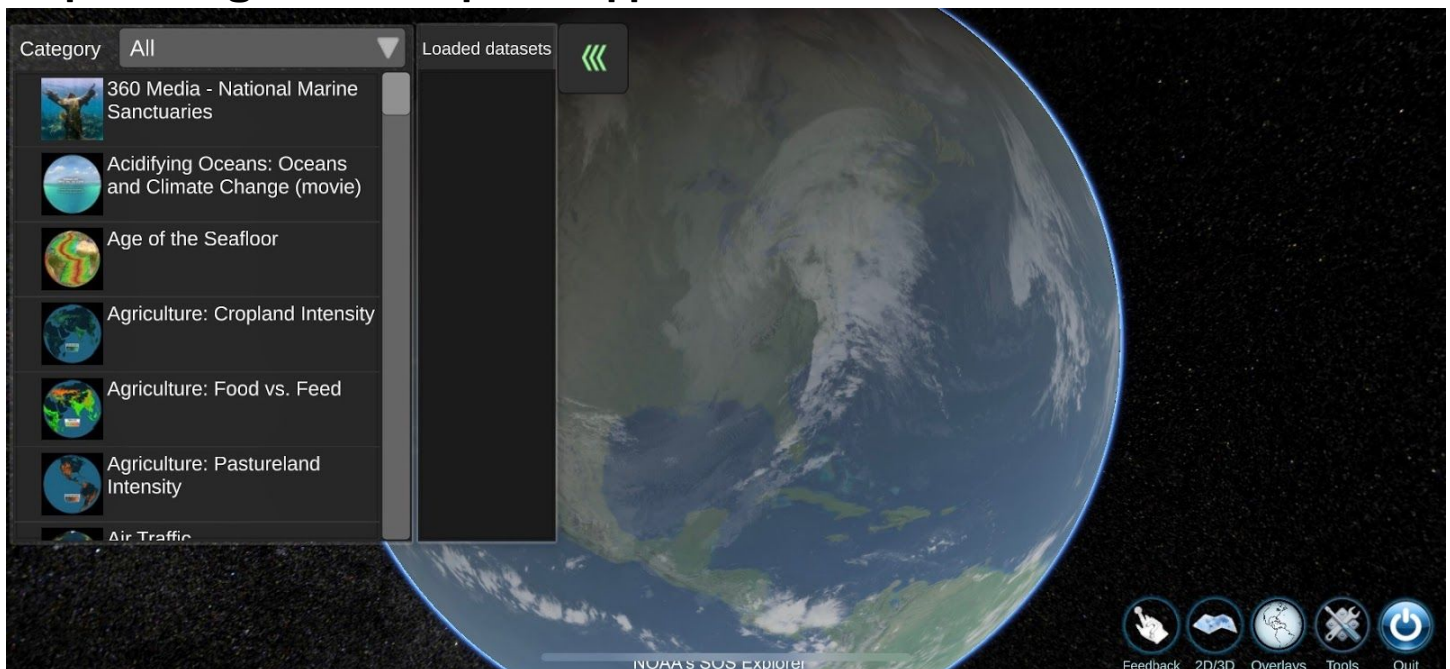
- Unable to download the app? Check out the same datasets listed below on NOAA's SOS [Website](#). Just type their names\* in the search at the top LEFT.

\*NOTE - names may be a bit different from those in the SOS Explorer App.

### Step 2 - Open up the SOS Explorer App

- What do you notice about the Earth?
- Do you see any patterns right away?
- What colors do you see and what do they represent?
- Can you find where you live on the globe?

### Step 3 - Using the SOS Explorer App



The picture above is from the SOS Explorer App.

- On the LEFT side of the screen you will find a whole list of “datasets” that you can click on to explore on the globe! These datasets let you explore over time and space/area.

- **We will be exploring Forests in these 3 Datasets:**
  - **Vegetation Change - April 2012 - April 3013**
  - **Biosphere - 20 Years**
  - **Forest Change (Extent, Gain, and Loss) - 2000 - 2014**

#### **Step 4 - Forests Across the Earth**

Time to Find our first Forest Dataset! Select the dataset “**Vegetation Change - April 2012 - April 3013.**” Use this dataset to see changes in plants on land over the course of a year. Make sure to look at the time in the top Right corner.

- What patterns do you notice?
- What do you think is causing these changes?

Now select the dataset “**Biosphere - 20 Years.**” This dataset is a lot like the one you just explored, but shows a longer period of time, 20 years! along with changes in where you can find snow and ice, and even plants (and phytoplankton) in the oceans!

- What do you notice about this dataset?
- Do you see any patterns?
- Do you see any changes in colors that seem to change together?

Our last dataset to explore for now is “**Forest Change (Extent, Gain, and Loss) - 2000 - 2014**” This dataset shows changes in where you could find forests around the world between 2000 and 2014.

- How have the forests changed around where you live?
- What do you notice about the rest of the Earth?