



Science on a Sphere Explorer

Tour - HRRR-Smoke and 2020 Fire Season

Debrief



SOS Explorer on your device:

- Be sure the SOS Explorer app is on one of your mobile devices. It is available for phones, tablets or Chromebooks.
- You can search “SOS Explorer” in an app store or follow the link on the Science on a Sphere website: https://sos.noaa.gov/SOS_Explorer/
- Launch the app, open up the dataset window (green arrow on the left) select “Tour - Monster Saharan Dust Plume,” go through the whole tour, complete the following questions.

Name

Class

Date

Science on a Sphere Explorer (SOSx) is a presentation tool created in NOAA Research Global Systems Laboratory in Boulder, CO. We hope you learned a little about one of our fantastic forecast models today: HRRR-Smoke. Learn more about fires and forecasting smoke by working through this follow-up activity.

What did you learn?

If you need to, take the tour again before answering the next few questions.

- In your own words, what were some surprising things you learned about during the tour?
- How do scientists and emergency managers track forest fires?
- What are some of the causes of increased fire activity?

Learn more about the science behind it...

Read The Washington Post article on worldwide fires and fire seasons

<https://www.washingtonpost.com/climate-environment/2019/08/30/were-peak-global-fire-season/?arc404=true>

- Summarize the content of this article in two sentences.

Look again at the first map diagram: **Fires Detected by Satellites, 2000 - 2019**

- Choose three areas of the world and jot down: Where, what month do their fires happen, why do you think they have fires there?

HRRR-Smoke Forecast Model - Who uses it?

Go to

<https://research.noaa.gov/article/ArtMID/587/ArticleID/2664/When-smoke-is-in-the-air-all-eyes-turn-to-this-NOAA-weather-model>

Read the article, then explain who uses the HRRR-Smoke experimental forecast and why.

- 1.
- 2.
- 3.

Write down words that you don't understand ...

either ask your teacher or look them up later.