## NASA Applied Sciences Program: Additional Resources Revised October 2021

## NASA Health and Air Quality Applications

NASA Health and Air Quality Applications

- https://appliedsciences.nasa.gov/what-we-do/health-air-quality
- NASA Health and Air Quality Applied Sciences Team (HAQAST)
  - <u>https://haqast.org/</u>

# NASA Training Programs

NASA Applied Remote Sensing Training (ARSET) program

- https://appliedsciences.nasa.gov/what-we-do/capacity-building/arset
- NASA Earth Science Career Opportunities for Undergraduate, Graduate, and Early Career
  - <u>https://science.nasa.gov/earth-science/early-career-opportunities</u>

# YouTube Videos on NASA-funded Projects

Using Precipitation Data to Assess Risk of Cholera Outbreaks (2018)

- <u>https://www.youtube.com/watch?time\_continue=3&v=Gf9iww8YhSY&feature=emb\_logo</u>
- Predicting Malaria Outbreaks with NASA Satellites (2017)

<u>https://www.youtube.com/watch?time\_continue=3&v=c6g2ILL--Rw&feature=emb\_logo</u>

- Mosquito Meets MODIS: South Dakota Fights West Nile Virus (2016)
  - <u>https://www.youtube.com/watch?v=ag-Zo0izSNg&t=27s</u>

# NASA Web Features on NASA-funded Projects

Air Quality Topics

- Dust Storms and Valley Fever in the American West (2021)
  - https://www.nasa.gov/feature/dust-storms-and-valley-fever-in-the-american-west
- Saharan Dust Forecasts Minimize Health Risks in the Caribbean (2021)
  - <u>https://www.nasa.gov/directorates/spacetech/spinoff/Saharan\_Dust\_Forecasts\_Minimize\_Health\_Risks\_in\_the\_Caribbean</u>
- NASA Helps Puerto Rico Prepare for Saharan Dust Impacts (2020)
  - https://www.nasa.gov/feature/nasa-helps-puerto-rico-prepare-for-saharan-dust-impacts/
- How NASA is Helping the World Breathe More Easily (2020)
  - https://www.nasa.gov/feature/goddard/2020/how-nasa-is-helping-the-world-breathe-more-easily
- NASA Data Strengthens U.S. Air Quality Warnings (2019)
  - https://www.nasa.gov/feature/nasa-data-strengthens-us-air-quality-warnings
- NASA Satellites Help Scientists Determine the Global Burden of Asthma (2018)
  - <u>https://science.nasa.gov/earth-science/applied-sciences/making-space-for-earth/NASA-satellites-help-scientists-determine-the-global-burden-of-asthma</u>

Vector-borne Diseases

NASA Helps Fight the Mosquito Bite Coast-to-Coast (2019)

- https://www.nasa.gov/feature/nasa-helps-fight-the-mosquito-bite-coast-to-coast
- NASA Provides New Look at Puerto Rico Post-Hurricane Maria (2018)
- <u>https://www.nasa.gov/feature/goddard/2018/nasa-provides-new-look-at-puerto-rico-post-hurricane-maria</u> Help NASA Track and Predict Mosquito-Borne Disease Outbreaks (2018)
  - https://www.nasa.gov/feature/goddard/2018/help-nasa-track-and-predict-mosquito-borne-disease-outbreaks

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Environmental Health Topics

Space Views Aid Florida 'Red Tide' Health Alerts (2018)

- https://www.nasa.gov/feature/space-views-aid-florida-red-tide-health-alerts-1
- NASA Investment in Cholera Forecasts Helps Save Lives in Yemen (2018)
  - https://www.nasa.gov/press-release/nasa-investment-in-cholera-forecasts-helps-save-lives-in-yemen/
- NASA Helps New Yorkers Cope with Summer Swelter (2018)
- <u>https://www.nasa.gov/feature/nasa-helps-new-yorkers-cope-with-summer-swelter</u>
- Using NASA Satellite Data to Predict Malaria Outbreaks (2017):
- <u>https://www.nasa.gov/feature/goddard/2017/using-nasa-satellite-data-to-predict-malaria-outbreaks</u> Earth Observations are Aiding the Mission to End River Blindness (2015)
  - https://science.nasa.gov/earth-science/applied-sciences/making-space-for-earth/river-blindness

### NASA Earth Observatory Articles on Health and Air Quality Projects

Could COVID-19 Have Seasons? Searching for Signals in Earth Data (2020)

- https://earthobservatory.nasa.gov/features/covid-seasonality
- Of Mosquitoes and Models: Tracking Disease by Satellite (2020)
  - https://earthobservatory.nasa.gov/features/disease-vector
- A Dust Plume to Remember (2020)
  - https://earthobservatory.nasa.gov/images/146913/a-dust-plume-to-remember

## NASA Participation in International Health Days

National Public Health Week (April)

- 2021: https://appliedsciences.nasa.gov/our-impact/story/building-connections-national-public-health-week
- 2020: <u>https://appliedsciences.nasa.gov/our-impact/news/nasa-contributes-national-public-health-week</u>
- 2019: <u>https://science.nasa.gov/earth-science/applied-sciences/making-space-for-earth/public-health-week-feature</u>
- 2018: https://science.nasa.gov/earth-science/applied-sciences/making-space-for-earth/one-health-day

## National Mosquito Control Awareness Week (June)

- 2021: <u>https://appliedsciences.nasa.gov/our-impact/news/tracking-mosquitoes-space-nasa-does</u>
- 2020: <u>https://appliedsciences.nasa.gov/our-impact/news/nasa-contributes-national-mosquito-control-awareness-week-2020</u>
- 2019: <u>https://science.nasa.gov/earth-science/applied-sciences/making-space-for-earth/fighting-mosquitoes-from-space</u>

International Day of Clean Air for blue skies (September 7)

• 2021: <u>https://appliedsciences.nasa.gov/our-impact/story/supporting-healthy-air-healthy-planet-texas-and-beyond</u>

One Health Day (November 4)

- 2020: <u>https://appliedsciences.nasa.gov/our-impact/news/nasas-earth-applied-sciences-program-participates-one-health-day-2020</u>
- 2019: <u>https://science.nasa.gov/earth-science/applied-sciences/making-space-for-earth/nasa-earth-applied-sciences-program-celebrates-one-health-day-2019</u>
- 2018: <u>https://science.nasa.gov/earth-science/applied-sciences/making-space-for-earth/one-health-day</u>

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#### Information about Selected Satellites and Instruments

Aqua	https://aqua.nasa.gov/
Aura	https://aura.gsfc.nasa.gov/
Global Precipitation Measurement (GPM)	https://www.nasa.gov/mission_pages/GPM/main/index.html
Landsat	https://www.nasa.gov/mission_pages/landsat/main/index.html
Moderate Resolution Imaging	https://modis.gsfc.nasa.gov/
Spectroradiometer (MODIS)	
North American Land Data Assimilation	https://ldas.gsfc.nasa.gov/nldas
System (NLDAS)	
Ozone Monitoring Instrument (OMI)	https://aura.gsfc.nasa.gov/omi.html
Terra	https://terra.nasa.gov/
Terrestrial Observation and Prediction System	https://ecocast.arc.nasa.gov/topwp/
(TOPS)	

#### Information about Selected Upcoming Missions

Multi-Angle Imager for Aerosols (MAIA)

- MAIA Mission Overview: <u>https://maia.jpl.nasa.gov/</u>
- MAIA Early Adopters Program: https://maia.jpl.nasa.gov/resources/data-and-applications/

Tropospheric Emissions: Monitoring Pollution (TEMPO)

- TEMPO Mission Overview: <u>http://tempo.si.edu/overview.html</u>
- TEMPO Early Adopters Program: <u>https://weather.msfc.nasa.gov/tempo/</u>

Plankton, Aerosol, Cloud, ocean Ecosystem (PACE)

- PACE Mission Overview: <u>https://pace.oceansciences.org/home.htm</u>
- PACE Early Adopters Program: <a href="https://pace.oceansciences.org/app\_adopters.htm">https://pace.oceansciences.org/app\_adopters.htm</a>