National Aeronautics and Space Administration



EXPLOREEARTH

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Using Earth Observations to Strengthen One Health Collaborations

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"To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science" (Albert Einstein)



Credit: Clipart Panda, 2019: http://www.clipartpanda.com

"One Health" Concept

"Collaborative, multisectoral, and trans-disciplinary approach working at the local, regional, national, and global levels—with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment"



CDC: https://www.cdc.gov/onehealth/basics/index.html



Anopheles freeborni

Using Satellite and Ground-based Data to Develop Malaria Risk Maps (Peru) PI Dr. William Pan (Duke University)



NASA Land Data **Assimilation System** (LDAS) data sets (precipitation, soil moisture, air temperature, humidity) are combined with public health data

NASA: https://www.nasa.gov/feature/goddard/2017/using-nasa-satellite-data-to-predict-malaria-outbreaks





Improving Health Decision-Making Using Environmental Observations

Global network of governments, organizations, and observers, who seek to use Earth observation data to improve health decision-making at the international, regional, country, and district levels

	Work Groups				
	Heat		Infectious Diseases		
	Air Quality		Food Security & Safety		
Health Care Infrastructure		Cross-cutting Issues		Integrating EO Data Techniques	

Teleconferences on Earth Observations and COVID-19: A Virtual Round the Room Update

GEO Health Community of Practice: <u>http://www.geohealthcop.org</u>