

NOAA's Geostationary Operational Environmental Satellites (GOES) orbit the Earth about 22,300 miles above the equator, at speeds equal to the planet's rotation.

The GOES West and GOES East satellites each monitor the Earth from different positions, and together keep watch over the Western Hemisphere. The images on this card are views from GOES West and GOES East respectively.



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NOAA's geostationary (GEO) satellites orbit the Earth about 22,300 miles above the equator, at speeds equal to the planet's rotation.

NOAA's low earth orbiting (LEO) satellites follow a polar orbit roughly 500 miles up, circling the Earth to provide full global coverage twice a day.

Together, these environmental satellites help us monitor our environment and gain a better understanding of weather patterns and climate change.



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NOAA satellites don't just monitor the Earth, but some also monitor the sun and space weather—conditions resulting from solar activity—that can potentially affect Earth, our atmosphere, and the near-Earth space environment.

NOAA's latest series of Geostationary Operational Environmental Satellites (GOES-R) as well as the Deep Space Climate Observatory (DSCOVR) satellite help us study the sun and space weather.



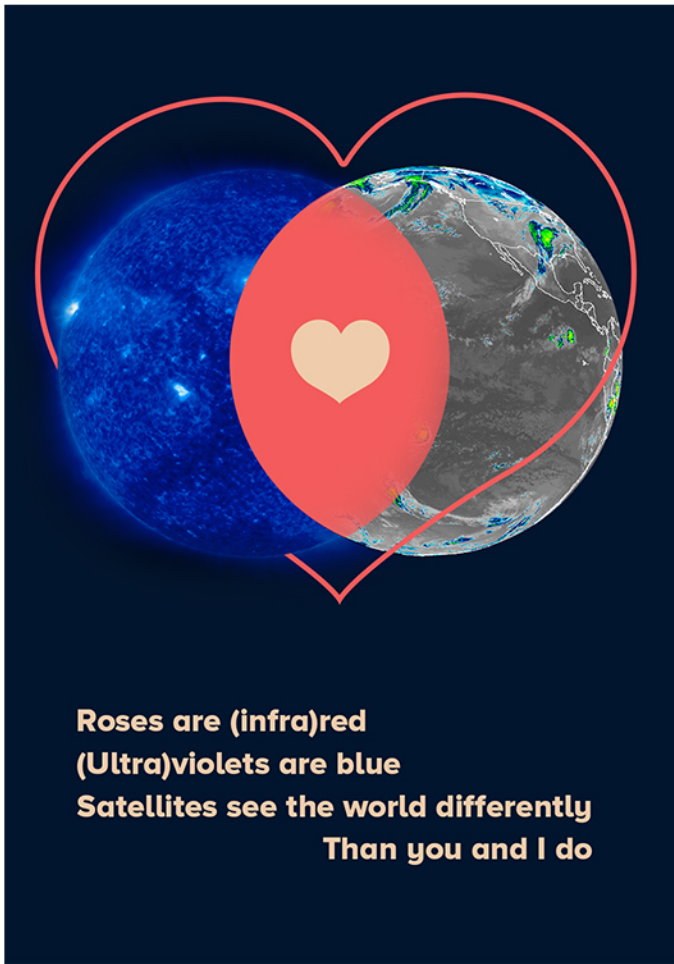
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NOAA's latest series of Geostationary Operational Environmental Satellites (GOES-R) are equipped with a Geostationary Lightning Mapper (GLM) instrument.

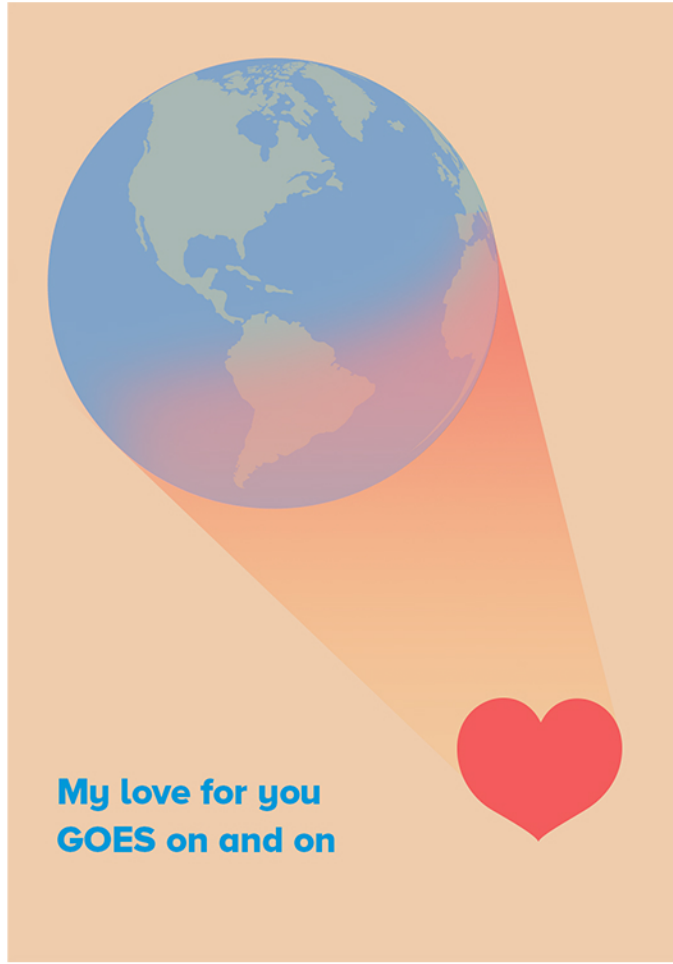
This instrument enables early predictions of intensifying storms and severe weather events while reducing false alarms, including weather events that could affect aviation safety.



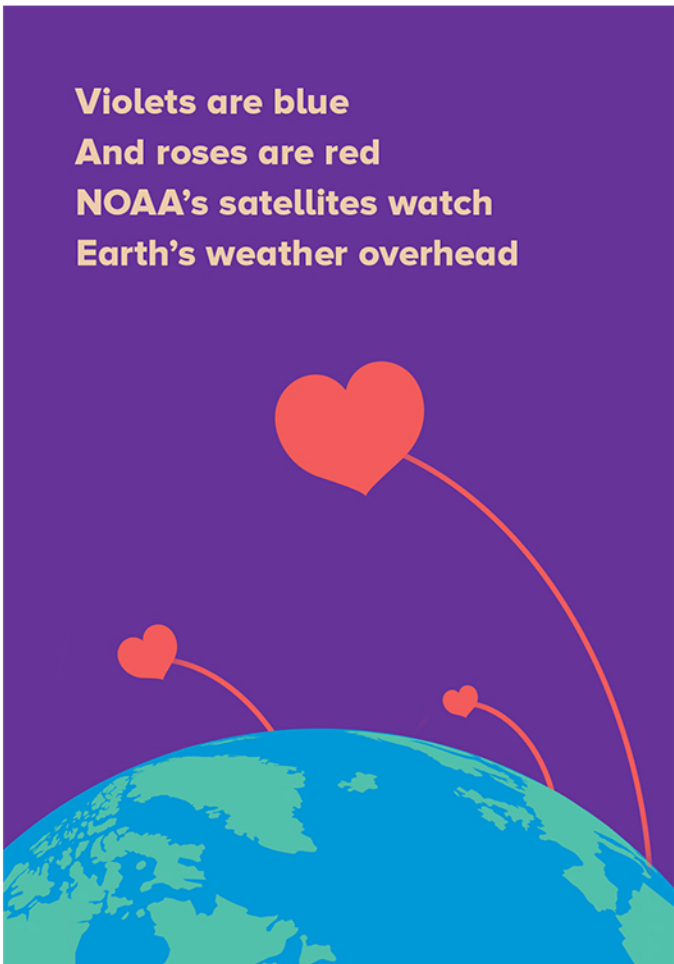
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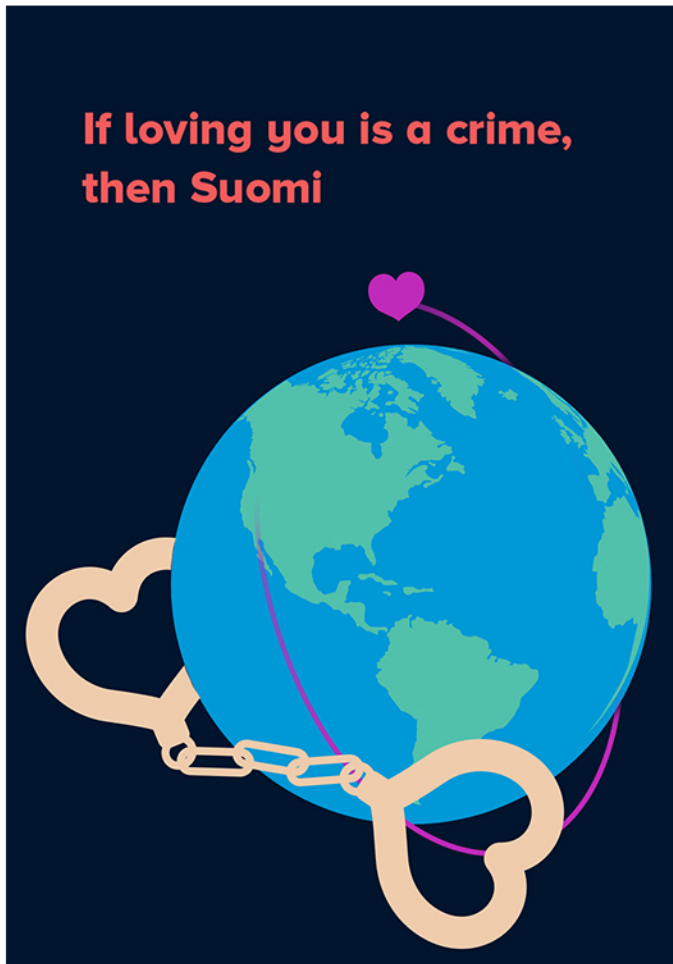
Roses are (infra)red  
(Ultra)violets are blue  
Satellites see the world differently  
Than you and I do



My love for you  
GOES on and on



Violets are blue  
And roses are red  
NOAA's satellites watch  
Earth's weather overhead



If loving you is a crime,  
then Suomi

NOAA's GOES-T is the third satellite in NOAA's Geostationary Operational Environmental Satellite (GOES)-R Series, the Western Hemisphere's most sophisticated weather-observing and environmental-monitoring system.

GOES-T is scheduled to launch on March 1, 2022, and will become GOES-18 once operational in orbit.



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NOAA's National Environmental Satellite, Data, and Information Service (NESDIS), provides secure and timely access to global environmental data and information from satellites and other sources to promote and protect the nation's security, environment, economy, and quality of life.



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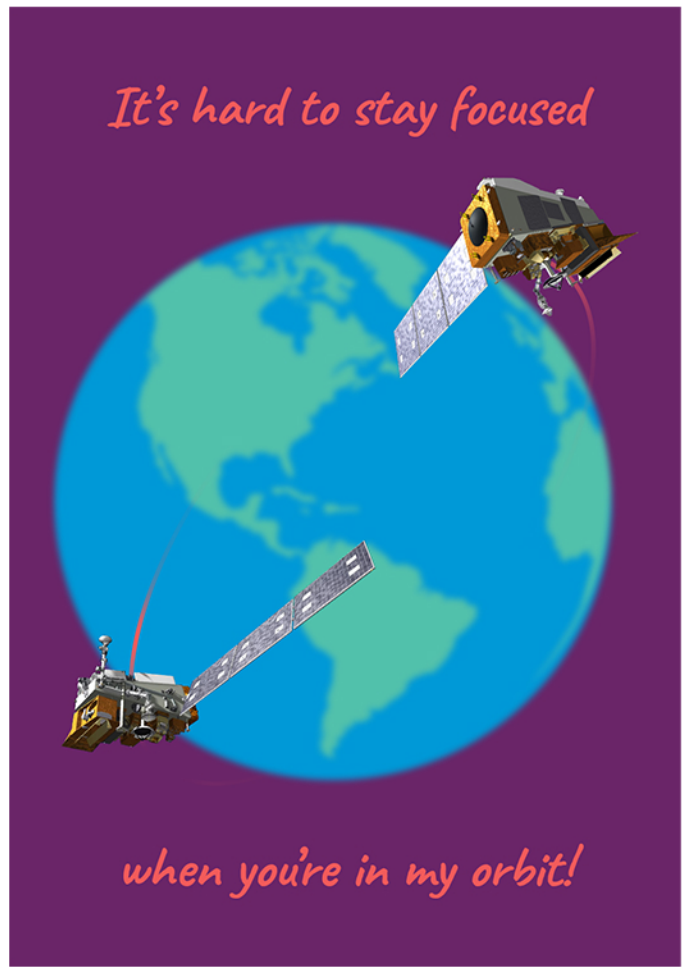


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NOAA's Deep Space Climate Observatory (DSCOVR) satellite monitors changes in solar wind, providing alerts and forecasts for space weather events—like geomagnetic storms—that have the potential to disrupt nearly every major public infrastructure system on Earth, including power grids, telecommunications, aviation, and GPS. DSCOVR is a joint mission between NOAA, NASA, and the USAF.



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As the Nation's authoritative environmental intelligence agency, NOAA's mission is to understand and predict changes in climate, weather, ocean, and coasts, to share that knowledge and information with others, and to conserve and manage coastal and marine ecosystems and resources.



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