

## Data Set Description

### Hawaii Ocean Time Series and Satellite Images from the School of Ocean and Earth Science and Technology (SOEST) University of Hawaii via WWW

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#### Summary

Last Updated: 1997-12-22

The University of Hawaii School of Ocean & Earth Science & Technology (UH/SOEST) Server address on the WWW is <http://www.soest.hawaii.edu/>.

The UH/SOEST home page features links to Academic Departments (Geology & Geophysics, Meteorology, Ocean Engineering, Oceanography); Research Institutes (Geophysics & Planetology, Marine Biology, Natural Energy); SOEST Information; and Other SOEST sites (Global Weather, Hawaii Ocean Time Series, Satellite Oceanography, and Volcanology). Products found include current GOES visible and infrared images of the islands, current regional weather map updated hourly, Hawaii state weather forecast discussion, Honolulu and vicinity weather forecast, Oahu north shore surf & wind forecast, Hurricane Emilia images and information, and current earthquake maps of all the islands.

Scientists working within the Hawaiian Ocean Time-series (HOT) project, <http://hahana.soest.hawaii.edu/>, have been making repeated observations of the hydrography, chemistry and biology at a station north of Hawaii since October 1988. The objective of this research is to provide a comprehensive description of the ocean at a site representative of the central North Pacific Ocean. Cruises are made approximately once a month to Station ALOHA, the HOT deep-water station (22 45'N, 158W) located about 100 km north of Oahu, Hawaii. Measurements of the thermohaline structure, water column chemistry, currents, primary production and particle sedimentation rates are made over a 72-hour period on each cruise.

The Coupled Ocean-Ice Linkages & Dynamics (COLD) project (same WWW home page as above) components include the Long-Term Ecological Research (LTER), Research on Antarctic Coastal Ecosystem Rates (RACER), and Studies in ANTArcticA Coupled Linkages Among micro (U) organismS (SANTA CLAuS).

The Satellite Oceanography Laboratory (SOL) has been providing real-time satellite images and other meteorological and oceanographic data over the Internet since 1990. The latest spectacular image shows the wake of the island of Kauai during a northerly wind event, as seen by the AVHRR in the thermal infrared on 8 February at 13:00 UTC. The wake reveals the formation of von karman eddies, with an approximate wavelength of 100 km. At least 4 wavelengths are seen. Additional Real-Time Satellite Images and Oceanographic Data are provided via AVHRR, GMS, composite Pacific-wide images (cloud-top temperature, sea surface temperature), and data from the drifting buoys array (Central Pacific Drifter Array, which, when fully deployed, will consist of seventy satellite-tracked drifting buoys active for a period of up to two years each, mapping the mesoscale upper ocean flow in the Hawaiian Exclusive Economic Zone).

The SOL archive also contains data from the Tropical Instability Wave Experiment (TIWE), data from the Pacific Joint Global Ocean Flux Study Experiment (JGOFS), current meter data at the Deep Underwater Neutrino Detector site, GMS-4 images from the Coupled Ocean Atmosphere Response Experiment (TOGA COARE), and current meter data south of Lanai.

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#### Coverage

## GEOGRAPHIC COVERAGE

<b>SouthWest Extent</b>	<b>NorthEast Extent</b>
18N,180W	60N,60W

<b>LOCATION KEYWORDS</b>				
EQUATORIAL				
MID-LATITUDE				
NORTH AMERICA				
NORTH PACIFIC OCEAN				
PACIFIC OCEAN				
SEA SURFACE				
UNITED STATES OF AMERICA > Hawaiian Islands				
<b>Attributes</b>				
<b>PARAMETERS</b>				
<b>Category</b>	<b>Topic</b>	<b>Term</b>	<b>Variable</b>	<b>Detailed Variable</b>
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC CHEMISTRY	TRACE GASES	
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC PHENOMENA	HURRICANES	
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC PHENOMENA	STORMS	
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC PRESSURE	ATMOSPHERIC PRESSURE	
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC TEMPERATURE	AIR TEMPERATURE	
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC WATER VAPOR	DEW POINT	
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC WATER VAPOR	HUMIDITY	HUMIDITY
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC WATER VAPOR	WATER VAPOR	HUMIDITY
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC WINDS	SURFACE WINDS	
EARTH SCIENCE	ATMOSPHERE	ATMOSPHERIC WINDS	UPPER LEVEL WINDS	
EARTH SCIENCE	ATMOSPHERE	CLOUDS	CLOUD AMOUNT	
EARTH SCIENCE	ATMOSPHERE	CLOUDS	CLOUD TOP TEMPERATURE	
EARTH SCIENCE	ATMOSPHERE	CLOUDS	CLOUD TYPES	

EARTH SCIENCE	ATMOSPHERE	PRECIPITATION	PRECIPITATION AMOUNT
EARTH SCIENCE	BIOSPHERE	ECOLOGICAL DYNAMICS	PRIMARY PRODUCTION
EARTH SCIENCE	OCEANS	MARINE SEDIMENTS	SEDIMENTATION
EARTH SCIENCE	OCEANS	OCEAN CHEMISTRY	DISSOLVED GASES
EARTH SCIENCE	OCEANS	OCEAN CIRCULATION	OCEAN CURRENTS
EARTH SCIENCE	OCEANS	OCEAN CIRCULATION	THERMOHALINE CIRCULATION
EARTH SCIENCE	OCEANS	OCEAN OPTICS	WATER-LEAVING RADIANCE
EARTH SCIENCE	OCEANS	OCEAN TEMPERATURE	SEA SURFACE TEMPERATURE
EARTH SCIENCE	OCEANS	OCEAN WAVES	WIND WAVES
EARTH SCIENCE	OCEANS	OCEAN WINDS	SURFACE WINDS
EARTH SCIENCE	RADIANCE OR IMAGERY	INFRARED WAVELENGTHS	INFRARED IMAGERY
EARTH SCIENCE	RADIANCE OR IMAGERY	RADAR	RADAR IMAGERY
EARTH SCIENCE	RADIANCE OR IMAGERY	VISIBLE WAVELENGTHS	VISIBLE IMAGERY
EARTH SCIENCE	SOLID EARTH	SEISMOLOGY	EARTHQUAKE OCCURRENCES
EARTH SCIENCE	SOLID EARTH	VOLCANOES	

<b>Sources</b>
BUOYS
GEOSTATIONARY SATELLITES
GMS-4 > Geostationary Meteorological Satellite-4
GOES-7 > Geostationary Operational Environmental Satellite 7
GOES-8 > Geostationary Operational Environmental Satellite 8
GOES-9 > Geostationary Operational Environmental Satellite 9
SHIPS

<b>Sensors</b>
AVHRR > Advanced Very High Resolution Radiometer
CURRENT METERS

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<b>Project/Campaigns:</b>
COLD > Coupled Ocean-Ice Linkages & Dynamics
HOT > Hawaiian Ocean Time Series Project
JGOFS > Joint Global Ocean Flux Study, IGBP
TIWE > Tropical Instability Wave Experiment
TOGA COARE > TOGA Coupled Ocean Atmosphere Response Experiment

<b>Discipline &gt; Subdiscipline</b>
EARTH SCIENCE

<b>General Keywords</b>
CLOUD TOP TEMPERATURE
DAILY DATA
DEW POINT
EMILIA
GRID DATA
HAWAII
HAWAIIAN OCEAN TIME SERIES
HOURLY DATA
HYDROGRAPHY
IDN_NODE GSFC/UHI
IMAGERY
KARMAN EDDIES
MESOSCALE UPPER OCEAN FLOW
PARTICLE SEDIMENTATION RATES
SEA SURFACE TEMPERATURE
SKY COVER
SOEST
SST
SURFACE
THERMOHALINE STRUCTURE
THICKNESS
WATER COLUMN CHEMISTRY
WIND DIRECTION
WIND SPEED

<b>ENTRY ID</b>	<b>Originating Center</b>
UH_SOEST	UHI

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USA/NASA

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