



**PACIFIC  
DISASTER  
CENTER**



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Global Spatial Data and Information User Workshop  
CIESIN / Columbia University

## The Asia Pacific Natural Hazards Information Network (APNHIN)

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EAST-WEST CENTER



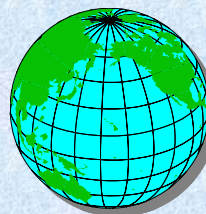
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### PDC Mission ...

Provide applied information research and analysis support for the development of more effective policies, institutions, programs and information products for the disaster management and humanitarian assistance communities of the Asia Pacific region and beyond.

Hawaii, Alaska, and the  
Pacific and Indian Ocean Regions

- 38% of World's Disasters
- 76% of World's Casualties





## Asia Pacific Natural Hazards Information Network

### APNHIN Vision

- Engage other participants in formation of a distributed information network to foster sharing of geospatial data resources supporting natural hazard risk and vulnerability assessment and mitigation applications in Asia-Pacific.
- Leverage ...
  - Advances in internet and spatial data technologies
  - Advances in COTS S/W and other standards
  - Investment in development of data resources
- Develop and apply...
  - Common geospatial data framework / schema for hazard data
- Foster ...
  - Improved understanding of availability of data resources
  - Improved understanding of hazards, vulnerabilities, and risk
  - Improved development and mitigation strategies



## Dynamic Data

### Automated Acquisition & Processing

- Perl scripts, C code, etc.
  - FTP push, FTP pull, HTML "harvest"
  - Parse & populate data structures
  - Monitoring Scripts

### Current Layers

- Tropical Storm Tracks/Forecasts
  - NWS, JTWS
  - 6 hr. updates
- Earthquakes
  - USGS NEIC
  - 5 minute updates
- Volcanoes
  - SWVRC
  - 2x per day
- Wildfires / Hot Spots
  - MODIS / NASA
  - 4x per day
- Hydronet Rain Gauge
  - NWS
  - 15 minute updates
- Global Cloud Cover
  - NASA
  - 30 minute updates





## Using APNHIN to Access Data

### Search by Region-of-Interest & Keywords

The image shows a sequence of three screenshots from the APNHIN web application. The first screenshot shows the search interface with a search bar and filters. The second screenshot shows a search results page with a list of items. The third screenshot shows a detailed view of a search result, including a title, description, and metadata. A small dialog box is overlaid on the first screenshot, asking for confirmation to download a file.

Search

Review

Understand

Obtain



## PDC's APNHIN Services (A-P)

### Pacific Island Imagery

### Active Hazards

The image shows three screenshots from the APNHIN web application. The first screenshot shows a satellite image of a Pacific island. The second screenshot shows a map of the Pacific region with various hazards marked. The third screenshot shows a map of Luzon with various hazards marked.

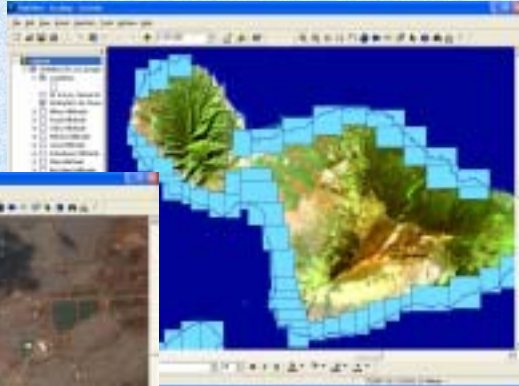
Maps/ Digital Raster Graphics





## PDC's APNHIN Services (Hawaii)

Imagery / Remote Sensing

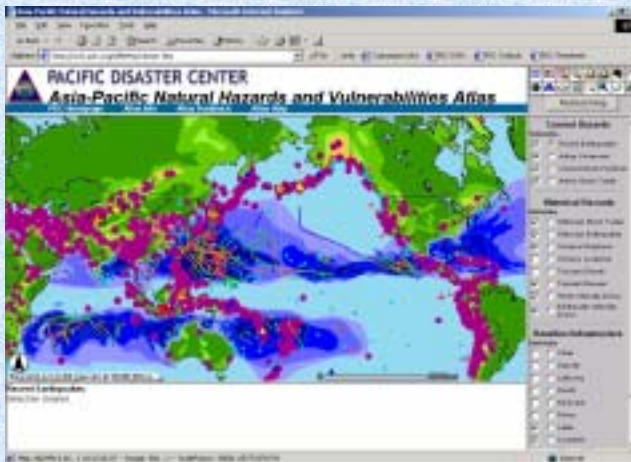


Emergency Services



## Asia Pacific Natural Hazards Atlas

Web-based, Geospatial Information Application Supporting Regional Hazard and Vulnerability Assessments



- Natural Hazards
  - Tropical Storms
  - Wildfires
  - Earthquakes
  - Tsunamis
  - Volcanoes
  - Floods
- Risk Exposure
  - People
  - Infrastructure

<http://atlas.pdc.org>



## Becoming an APNHIN Partner

### Formalize relationship with PDC

- MOA detailing roles and responsibilities of parties, general categories of data, access constraints, etc.

### Identify resources supporting hazard applications

- Geophysical / natural hazards
- Risk and vulnerability measures

### Prepare data documentation (metadata)

- ISO/FGDC-consistent
- PDC Metadata automation tools (ArcCatalog extension)
- APNHIN Starter Kit



## APNHIN Partners

The screenshot shows a web browser window with the URL [www.pdc.org/ahin](http://www.pdc.org/ahin). The page is titled "APNHIN Partners" and features a registration form. A red circle highlights the "APNHIN Partners" link in the left sidebar, and a red arrow points from it to the main content area. The main content area contains the registration form and a "PACIFIC DISASTER CENTER" logo.