

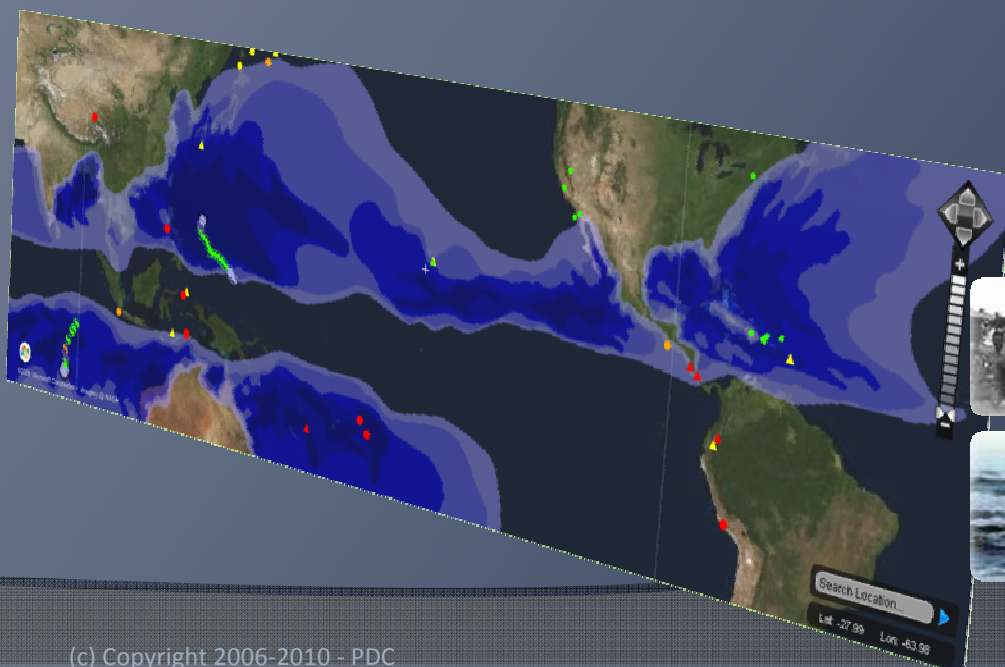


Fostering Disaster-Resilient Communities ...

UN SPIDER
Addis Ababa, Ethiopia
6 – 9 July 2010

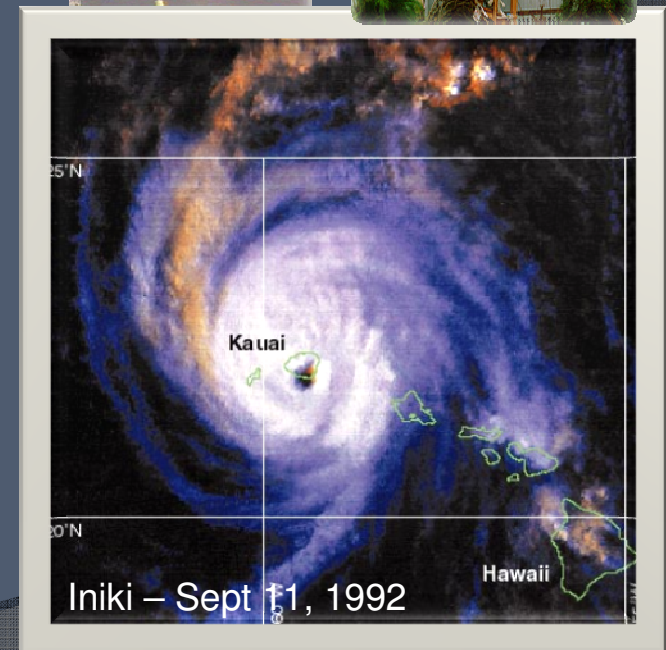
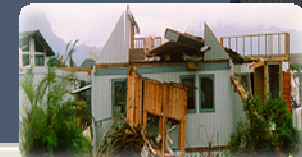
INFORMATION SHARING FOR DECISION MAKING

Mr. Chris Chiesa
Deputy Executive Director
cchiesa@pdc.org



PDC Concept & Origin

- Established in 1996.
- A center to provide access to new, innovative, and more effective information resources supporting all levels of emergency management to **better prepare for** and **respond to** disasters.
- Today, PDC is an acknowledged leader in using the application of science and technology to advance international best practices in **Disaster Risk Reduction (DRR)**.
- Managed by University of Hawaii (USA) since 2006.



Avoid Hazards => Disasters => Crises

● Vision: **Safer & More Secure World**

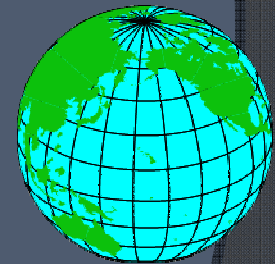
- Sustainable communities, safer nations, and a more secure world through Disaster Risk Reducing

● Goal: **Disaster Resiliency**

- Foster disaster-resilient communities through information, science, technology, and exchange

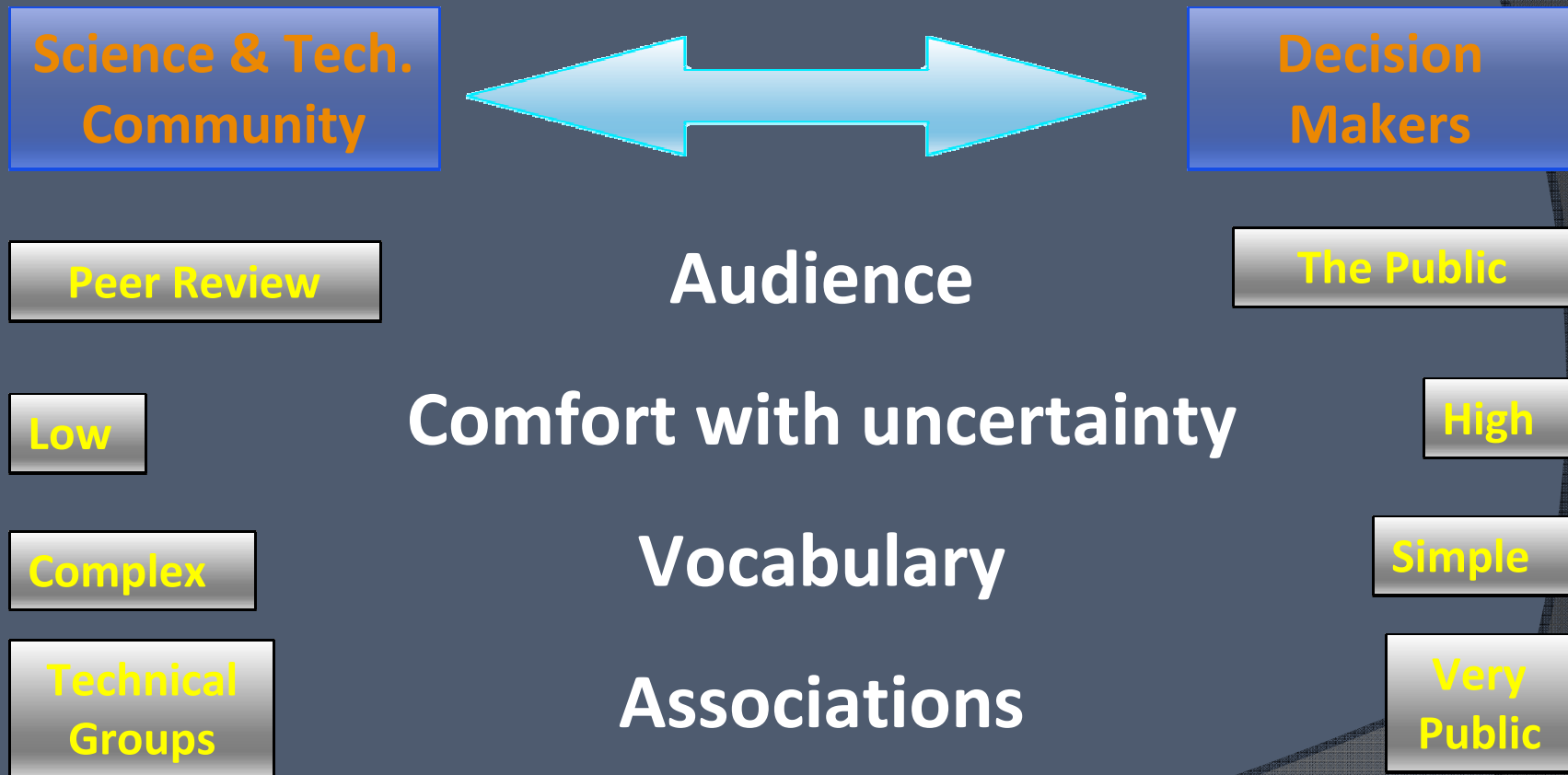
● Mission: **Reduce Disaster Risks**

- Provide *applied* information research and *evidence-based* analysis supporting development of more effective disaster risk reduction (**DRR**) *policies and practices*; and applications and information products supporting Humanitarian Assistance and Disaster Relief (**HA/DR**) *practitioners* in the Asia Pacific region and beyond.



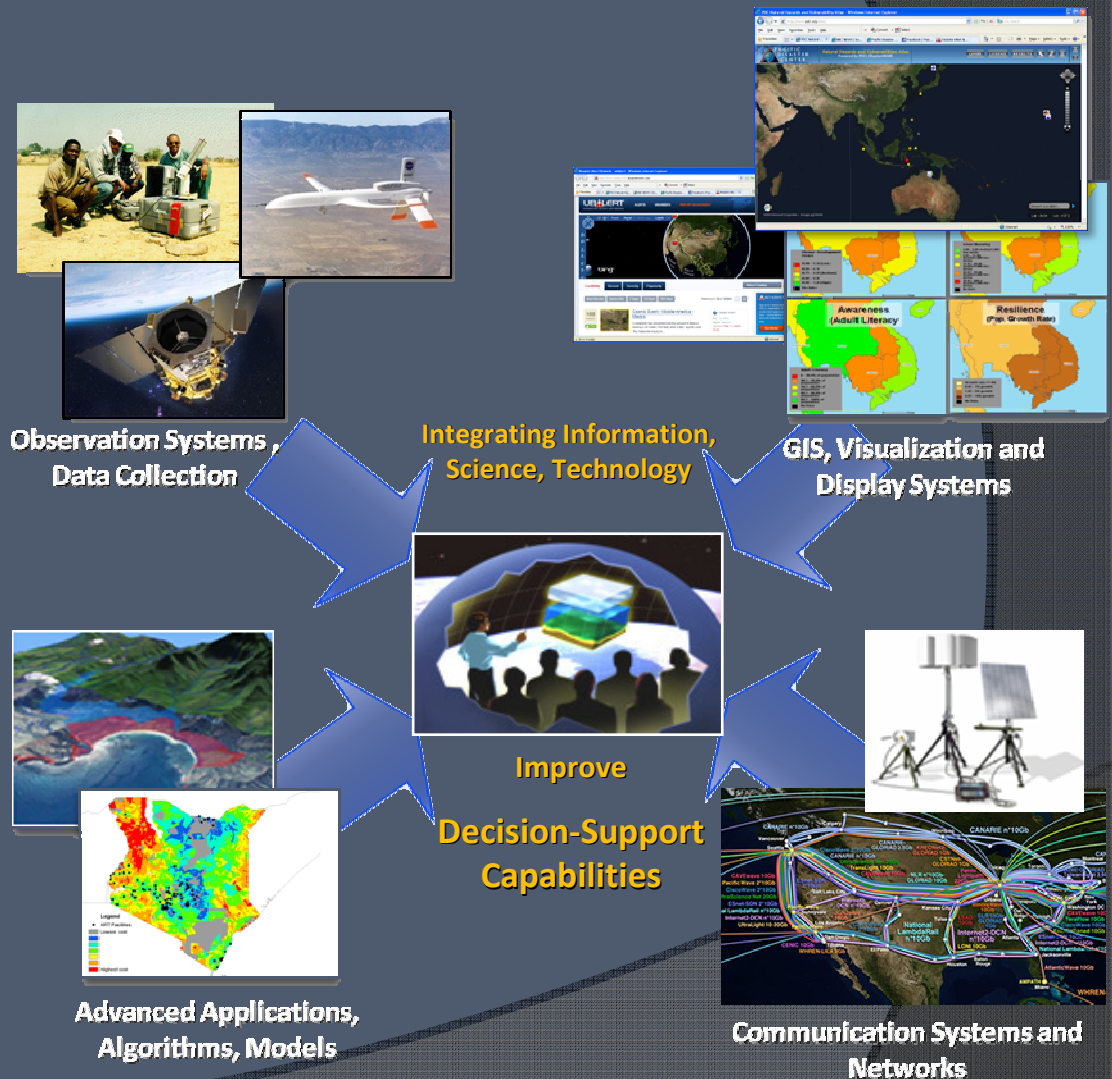
Asia Pacific:
● 38% of World's Disasters
● 80% of World's Casualties

Objective: Building a Bridge



PDC's Integrated Approach

- Applied Science & Technology
- Capability Building
- Evidence-Based Information Products
 - Policy & Decision Makers
 - Disaster Managers
 - Planners
 - Humanitarian Assist. Orgs



Challenges & Gaps ...

⦿ Inadequate Tools for the Decision Makers

- Information is Scattered
- Dissemination is Limited
- Warnings are Hard to Digest
- Lack Situational Awareness
- Risks are not Understood

⦿ Time = LIFE

- Information you can't easily understand and act upon isn't particularly useful

Sample Advisories

HURRICANE NATIONAL W
0000Z WED /

Starting ti
Starting ti
Location: J
Magnitude:

Ar MAG UT
y

5.9	2006
5.1	2006
5.2	2006
5.3	2006
5.1	2006
5.2	2006
5.3	2006
5.3	2006



Overcoming Challenges

Tools for Decision Makers

- Simplify, Integrate, & Expedite Processing
- Understand Exposure
- Disseminate Early Warning
- Support Decisions Based on Latest Assessments

Info for Policy Makers & Planners

- Assess Socio-Econ Risks & Vulnerabilities

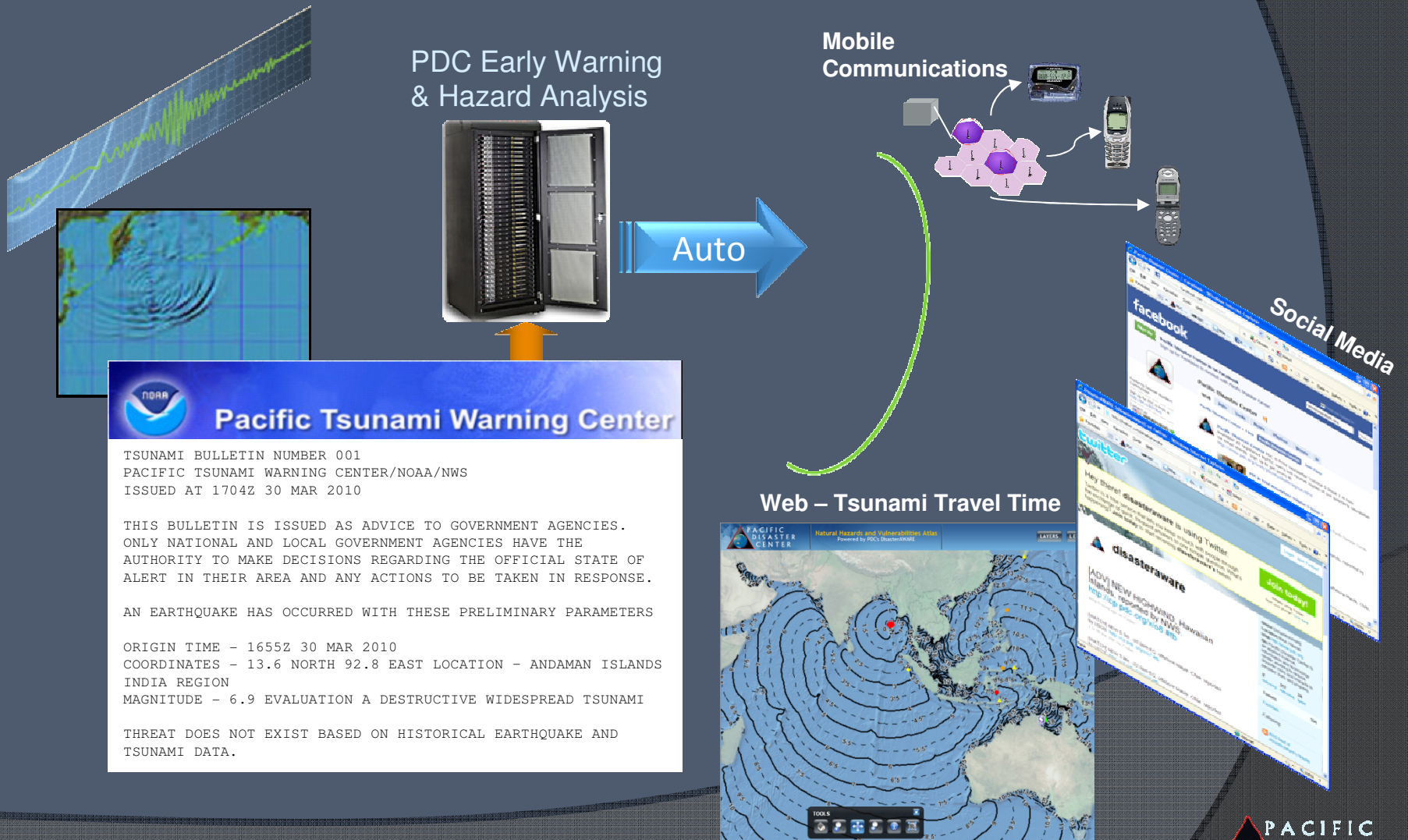
Capacity for Practitioners


- Train & Exercise
- Workshops



(c) Copyright 2008 PDC

Integrated Early Warning



 **Pacific Tsunami Warning Center**

TSUNAMI BULLETIN NUMBER 001
PACIFIC TSUNAMI WARNING CENTER/NOAA/NWS
ISSUED AT 1704Z 30 MAR 2010

THIS BULLETIN IS ISSUED AS ADVICE TO GOVERNMENT AGENCIES. ONLY NATIONAL AND LOCAL GOVERNMENT AGENCIES HAVE THE AUTHORITY TO MAKE DECISIONS REGARDING THE OFFICIAL STATE OF ALERT IN THEIR AREA AND ANY ACTIONS TO BE TAKEN IN RESPONSE.

AN EARTHQUAKE HAS OCCURRED WITH THESE PRELIMINARY PARAMETERS

ORIGIN TIME - 1655Z 30 MAR 2010
COORDINATES - 13.6 NORTH 92.8 EAST LOCATION - ANDAMAN ISLANDS INDIA REGION
MAGNITUDE - 6.9 EVALUATION A DESTRUCTIVE WIDESPREAD TSUNAMI

THREAT DOES NOT EXIST BASED ON HISTORICAL EARTHQUAKE AND TSUNAMI DATA.

DisasterAWARE DSS

- Integrated Multi-hazard Hazard Monitoring
- Disaster Early Warning
- Automated / Integrated Modeling
- Exposure (Risk) Maps & Historical Hazard data
- Customized Impact Modeling **AND**
- Intra-Agency Info Sharing
 - User Added Situation Reports
 - Damage Products, ...
- Remote Access

May 10, 2010

The screenshot displays the DisasterAWARE DSS interface. At the top, a browser window shows the URL <http://www.pdc.org/emops/index.jsp#1273455896244>. Below the browser, the main interface features a map of Indonesia with a table of hazards and a regional reporter window.

Available Product(s)	Edit	Flags	Updated By	Organization	GMT	Last Update	GMT-10:00
7.4 - northern Sumatra, Indonesia			d2p2	PDC	2010-05-09 06:24	2010-05-08 20:24	
7.2 - northern Sumatra, Indonesia			d2p2	PDC	2010-05-09 08:14	2010-05-08 22:14	
7.4 - northern Sumatra, Indonesia			d2p2	PDC	2010-05-09 06:34	2010-05-08 20:34	
7.2 - northern Sumatra, Indonesia			d2p2	PDC	2010-05-09 06:24	2010-05-08 20:24	
Automated Product - Regional Reporter			d2p2	PDC	2010-05-09 06:24	2010-05-08 20:24	
Automated Product - Hazard Inform...			d2p2				

The regional reporter window shows population data for 2001, 2002, 2006, and 2007, including total population and maximum density.

iPhone App



Situation Reports

Haiti Earthquake 2010

#1277498426897 - Windows Internet Explorer
 http://www.pdc.org/emops/index.jsp#1277498426897

File Edit View Favorites Tools Help

#1277498426897

PACIFIC DISASTER CENTER Fostering Disaster-Resilient Communities
EMOPS Release 4.0.1 Powered by PDC's DisasterAWARE

LAYERS LEGEND RESULTS

LEGEND

- Haiti Internally Displaced Persons
- Haiti Police
- Haiti Hospitals
- Haiti Aid Distribution Sites
- Haiti Damage Areas (Jan 16)
 - Catastrophic
 - Extensive
 - Moderate
 - Limited

RESULTS

Identify 4

Haiti Aid Distribution Sites

AGENCY	DESCR	TYPE
WFP	Cham de Mars aid distribution site	Food, Water, and NFI

Haiti Hospitals

NAME	TYPE	COUNTRY	DEPARTMENT	MUNICIPALI	ADDRESS	DAMAGE	OP STATUS	NUM BEDS	CONTACT
De LOFATMA (Cite Militaire)	Health Center	Haiti	Ouest	Port-Au-Prince	36 Rue Piquant	No Visible Damage	Full	47	509-222-3846, 509-222-7853

Haiti Internally Displaced Persons

NAME
Camp Increase (size / population)
Camp Increase (size / population)

Baye de Port-au-Prince

LAYERS

Keyword Search

- Government
 - Haiti Prisons
 - Haiti UN Facilities
 - Haiti Military Facilities
 - Haiti Government Facilities
 - Haiti Embassies
- Emergency Services
 - Haiti Operations Center
 - Haiti Aid Distribution Sites
 - Haiti Police
 - Haiti Hospitals
 - Haiti Field Hospitals
 - Haiti Fire Stations

Hospitals
[Click to view metadata summary](#)
 Transparency: ██████████

TOOLS

METADATA SUMMARY

Haiti Hospitals

Abstract:
 Various facilities in and around Port-au-Prince, Haiti derived from multiple sources including NGA, UN, UNJLC, PDC, Reliefweb, and OpenStreetMap. Infrastructure locations are unverified and should only be used as a guideline.

[Open in Browser](#) [Full Metadata](#)

Internet | Protected Mode: Off 100%

Hurricane Preparedness Exercise 2010



PACIFIC DISASTER CENTER
Fostering Disaster-Resilient Communities

EMOPS Release 4.0.1
Powered by PDC's DisasterAWARE

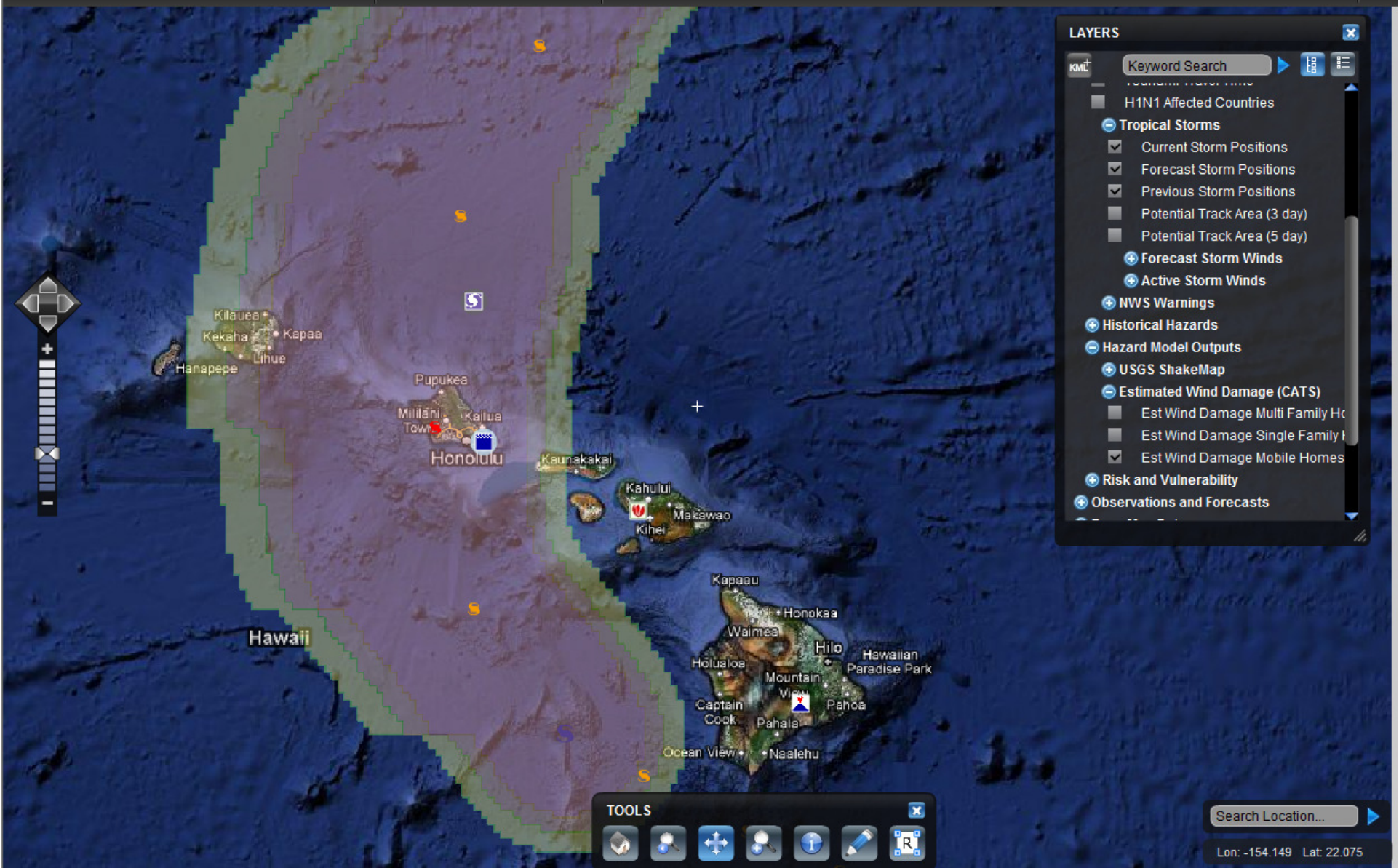
LAYERS

LEGEND

RESULTS



HP



LAYERS

Keyword Search

- H1N1 Affected Countries
- Tropical Storms
 - Current Storm Positions
 - Forecast Storm Positions
 - Previous Storm Positions
 - Potential Track Area (3 day)
 - Potential Track Area (5 day)
 - Forecast Storm Winds
 - Active Storm Winds
- NWS Warnings
- Historical Hazards
- Hazard Model Outputs
- USGS ShakeMap
- Estimated Wind Damage (CATS)
 - Est Wind Damage Multi Family Ho
 - Est Wind Damage Single Family H
 - Est Wind Damage Mobile Homes
- Risk and Vulnerability
- Observations and Forecasts

TOOLS

-
-
-
-
-
-
-



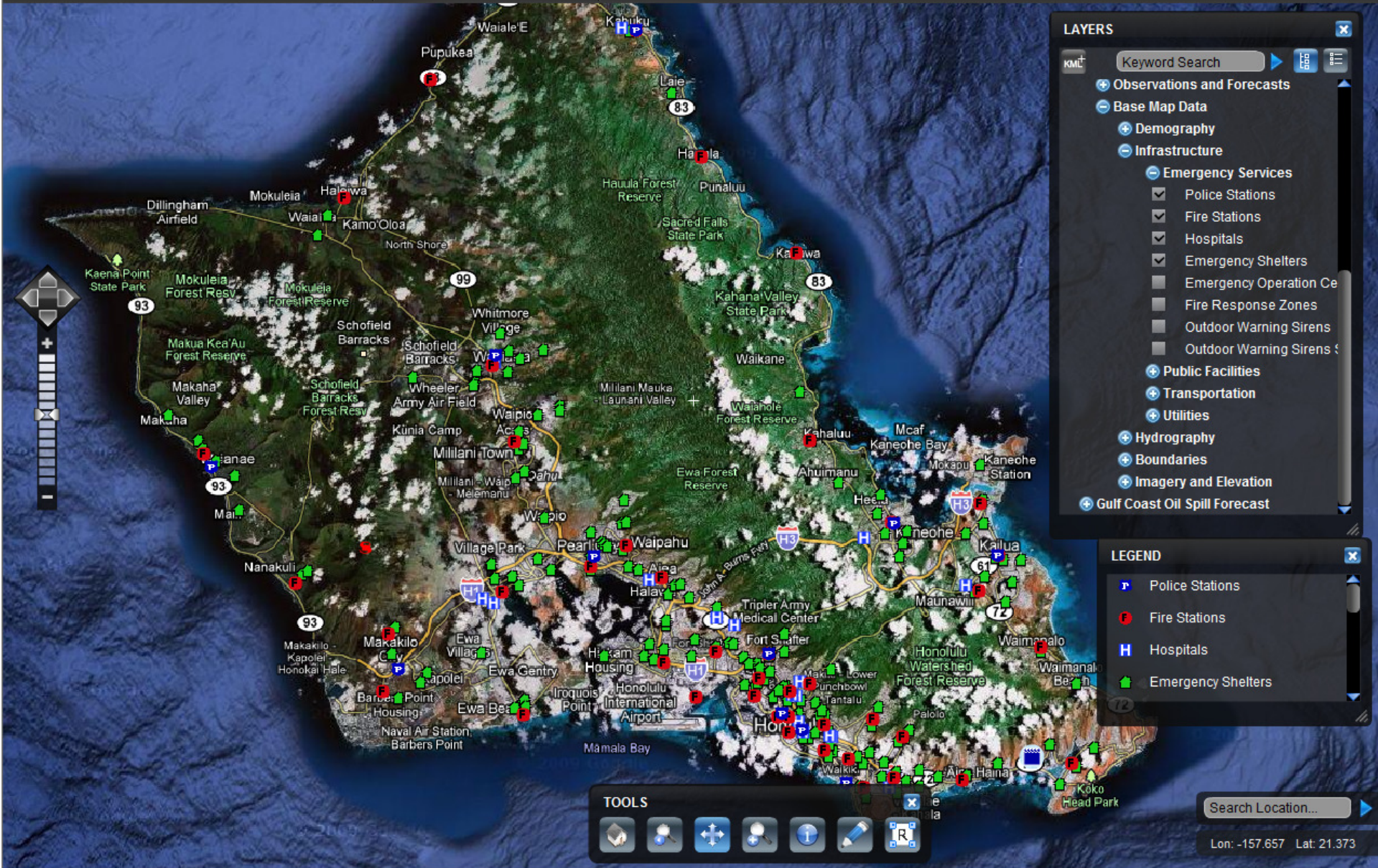
Hurricane Preparedness Exercise 2010



PACIFIC DISASTER CENTER
Fostering Disaster-Resilient Communities

EMOPS Release 4.0.1
Powered by PDC's DisasterAWARE

- LAYERS
- LEGEND
- RESULTS
- Settings
- Link
- Global
- Print
- HP



LAYERS

Keyword Search

- Observations and Forecasts
- Base Map Data
- Demography
- Infrastructure
- Emergency Services
 - Police Stations
 - Fire Stations
 - Hospitals
 - Emergency Shelters
 - Emergency Operation Ce
 - Fire Response Zones
 - Outdoor Warning Sirens
 - Outdoor Warning Sirens
- Public Facilities
- Transportation
- Utilities
- Hydrography
- Boundaries
- Imagery and Elevation
- Gulf Coast Oil Spill Forecast

LEGEND

- Police Stations
- Fire Stations
- Hospitals
- Emergency Shelters

TOOLS

- Home
- Search
- Navigation
- Layers
- Scale
- Print
- Full Screen

Information Sharing Resources

www.pdc.org/atlas

PACIFIC DISASTER CENTER
Natural Hazards and Vulnerabilities Atlas
Powered by PDC's DisasterAWARE

LAYERS LEGEND RESULTS

PACIFIC DISASTER CENTER
Global Hazards Information Network (GHIN)
Powered by Pacific Disaster Center

Keyword Search

LAYERS

- Hazards
 - Active Hazards
 - Active Hazards
 - Historical Hazards
 - Hazard Model Outputs
 - Risk and Vulnerability
 - Tectonic Plate Boundaries
 - Storm Intensity Zones
 - Earthquake Intensity Zones
 - Volcano Density
 - Observations and Forecast

SEARCH BROWSE PARTNERS

PDC Geospatial Information Services

Partnership

Organizations wishing to share data with the global GIS Disaster Management user community, can do so by becoming a GHIN Partner. When information is shared in this fashion the high cost of data collection, processing, and maintenance is spread amongst many, thereby reducing the cost to each. Additionally, data consumers benefit because data accessed via a dynamic, distributed network are more likely to be current—since they are retrieved each time from the originator rather than from a duplicated archive—and synergies between the efforts of multiple organizations are more easily discovered and leveraged.

SOPAC
United Nations Office for the Coordination of Humanitarian Affairs

OCHA
United Nations Office for the Coordination of Humanitarian Affairs

NOAA Pacific Services Center
NOAA Coastal Services Center

USGS
science for a changing world

USGS
science for a changing world
Hawaii Data Clearinghouse

The National Map

PDC - 1305 North Holoopono Street, Suite 2, Kihei, HI 96753 - 808.891.0525

Managed by University of Hawaii | Disclaimer | Feedback

www.pdc.org/ghin

(c) Copyright 2006-2010 - PDC



Capacity Development with National DM Partners

Disaster Management Skills and Decision Support Applications

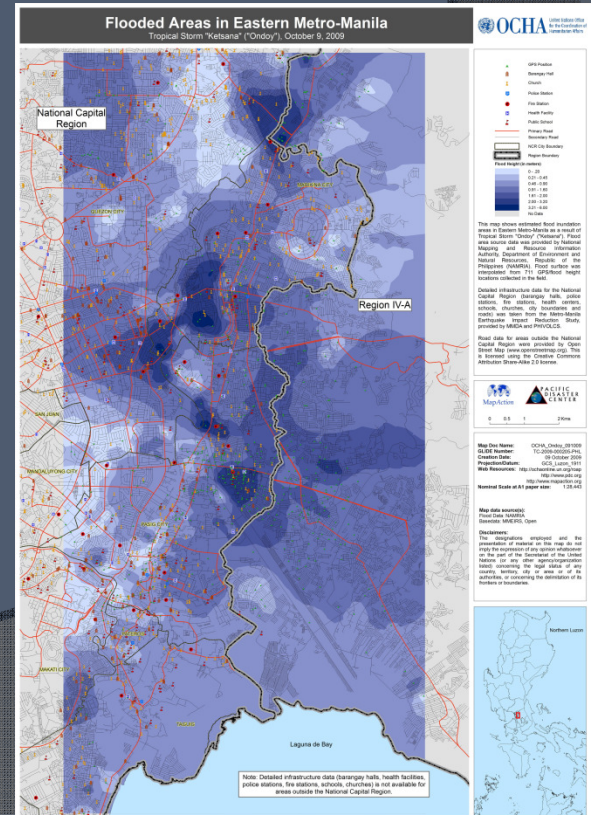
- Vietnam
 - National Disaster Risk Management Program
 - DM Education and Training Program
 - Damage and Needs Assessment
 - National Disaster Management Center
 - Flood modeling and early warning
- Thailand
 - National Disaster Warning Center
 - Tsunami early warning
- Philippines
 - National Disaster Coordinating Council
 - Flood early warning



International Networks

Capacity Building and Disaster Response Information Support

- Association of Southeast Asian Nations (ASEAN)
 - Committee on Disaster Management (ACDM)
 - ASEAN Humanitarian Assistant Coordinating (AHA) Center ICT Gap Analysis
 - ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2010-2015
- Asia-Pacific Economic Cooperation (APEC)
 - Task Force for Emergency Preparedness (TFEP)
 - Hazard Mapping and Risk and Vulnerability Assessment Workshop
- United Nations
 - OCHA (Philippines flooding, 9/09)
 - SPIDER (Fiji, 12/09; Ethiopia, 7/10)





PACIFIC DISASTER CENTER

Fostering Disaster-Resilient Communities

For More Information:

[Http://WWW.PDC.ORG](http://WWW.PDC.ORG)

Follow us on:



DisasterAWARE

Contact Us At: Info@PDC.Org