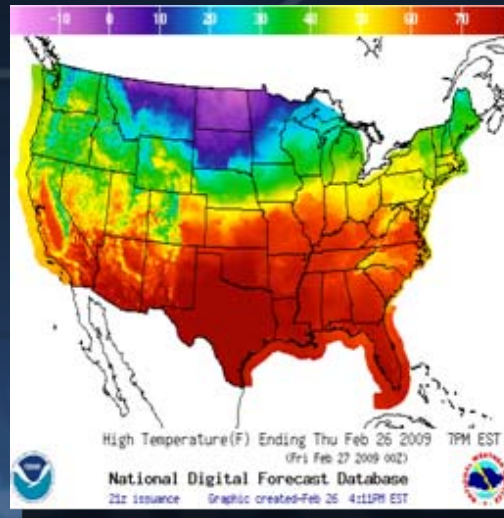


# Building a Weather-Ready Nation





# National Weather Service

## *Building a Weather-Ready Nation*

***SITREP for March 21, 2011***

***FY 12 Budget Request***

**Dr. Jack Hayes**

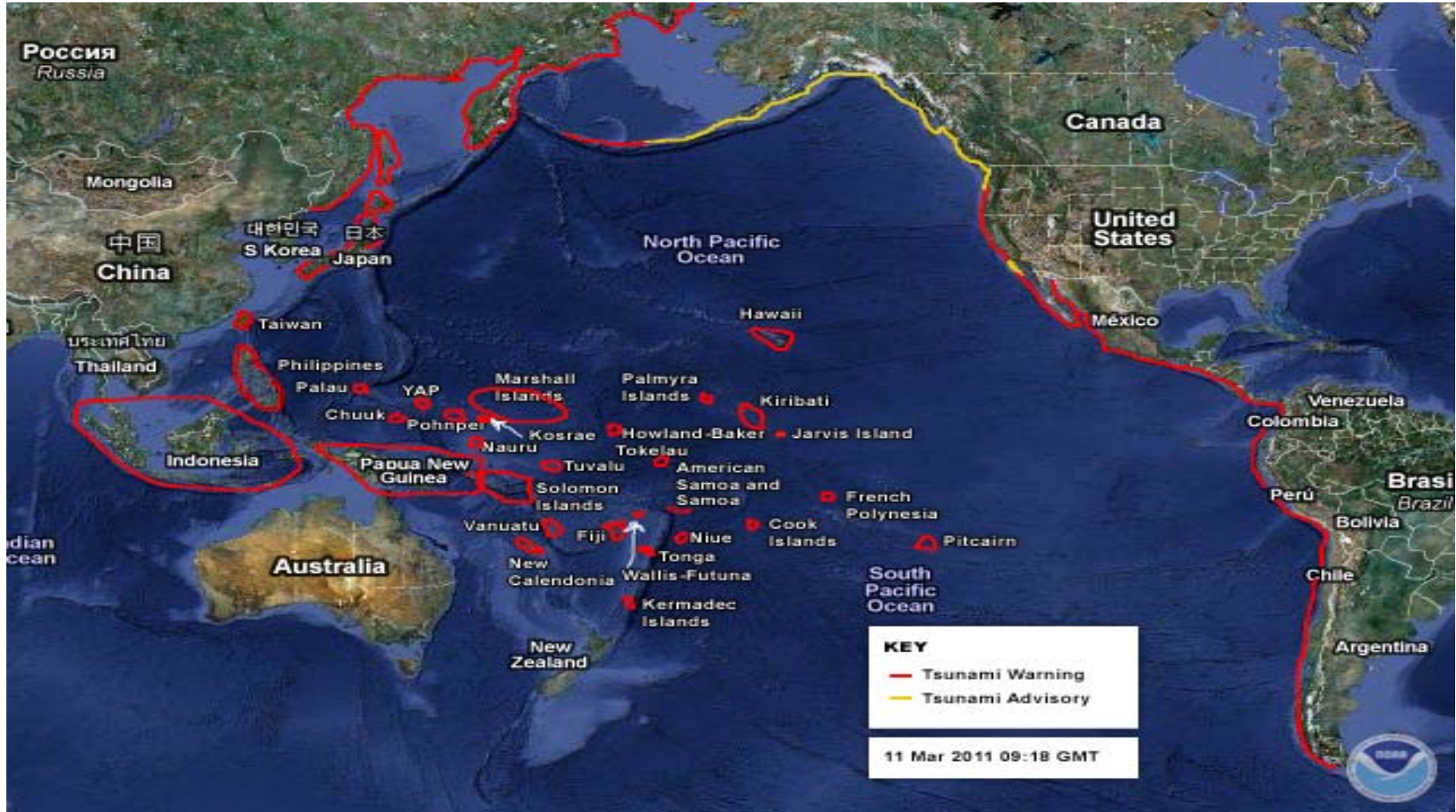
***NOAA Assistant Administrator for Weather Services and  
NWS Director***





# Operational SITREP

## *Tsunami*



NOAA's Tsunami Warning and Advisory Areas for Japan Tsunami

03/11/2011 - 04:18am EST

# Operational SITREP

## *Tsunami*

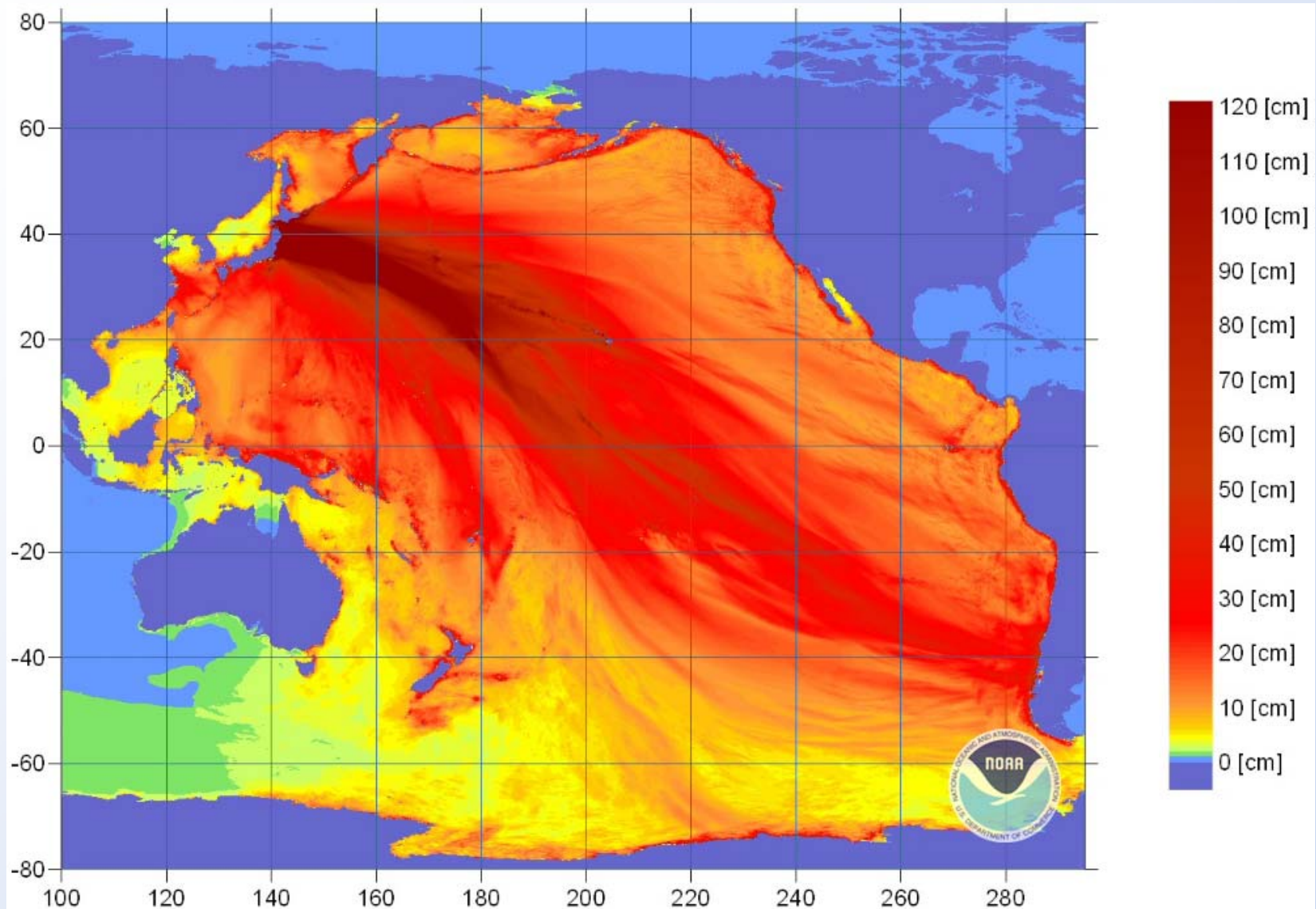


<http://www.tsunamiready.noaa.gov>



# Operational SITREP

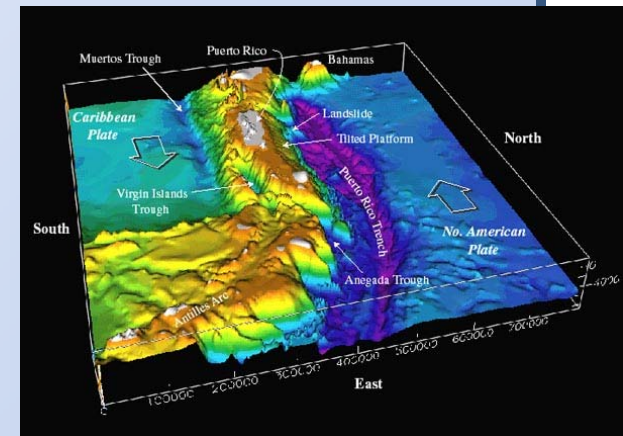
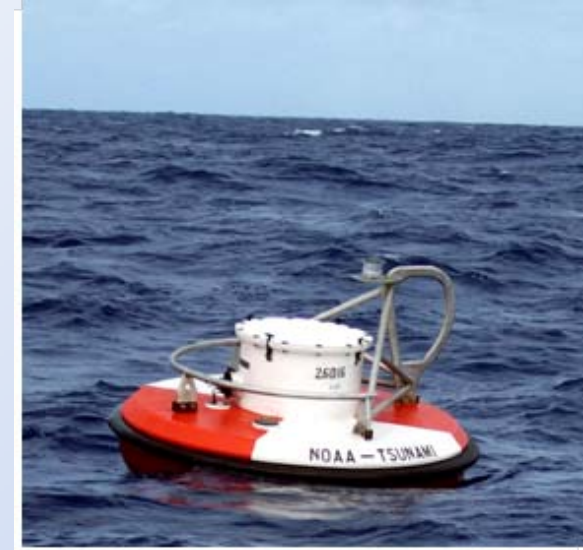
## *Tsunami*

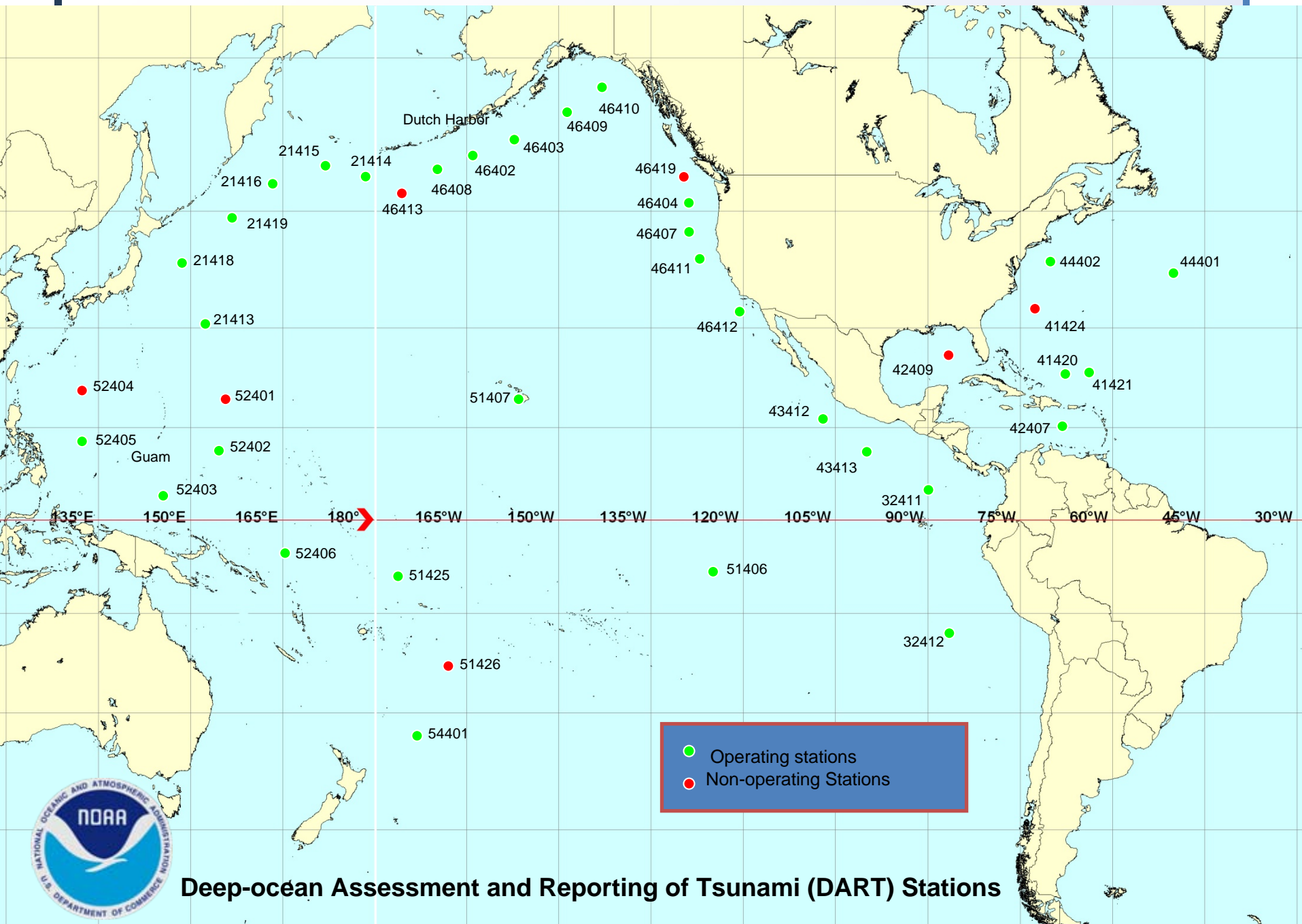


# Operational SITREP

## *Tsunami*

- **24/7 Tsunami Warning Centers**
- **Detection and Evaluation of Earthquakes**
  - *Seismic Networks*
- **Detection and Evaluation of Tsunami Waves**
  - *39 DART Stations (Atlantic, Caribbean, and Pacific)*
  - *164 Water-level Stations*
- **Forecasting the Tsunami Threat**
  - *Modeling*
- **Product Generation and Dissemination**
  - *Warnings, Watches, Advisories and Bulletins*

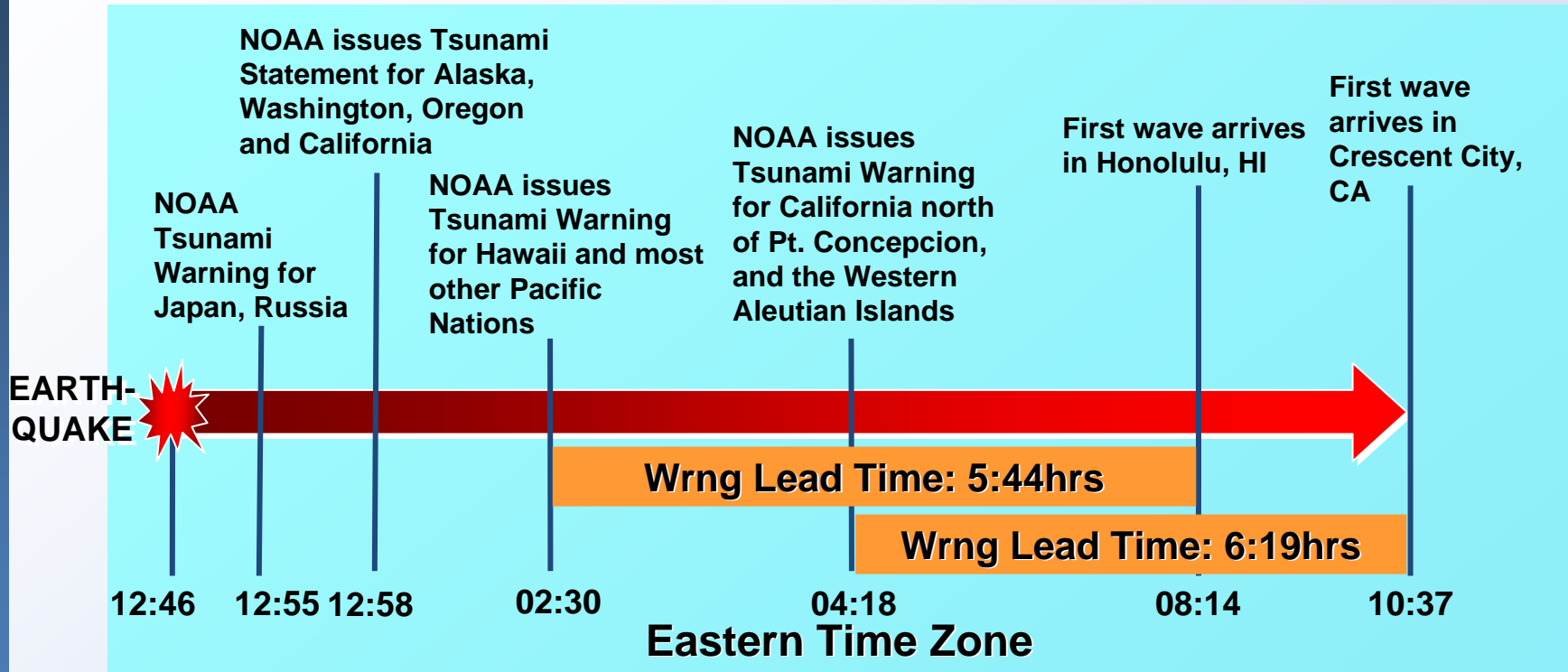




## Deep-ocean Assessment and Reporting of Tsunami (DART) Stations

# Operational SITREP

## *Tsunami, March 11, 2011*

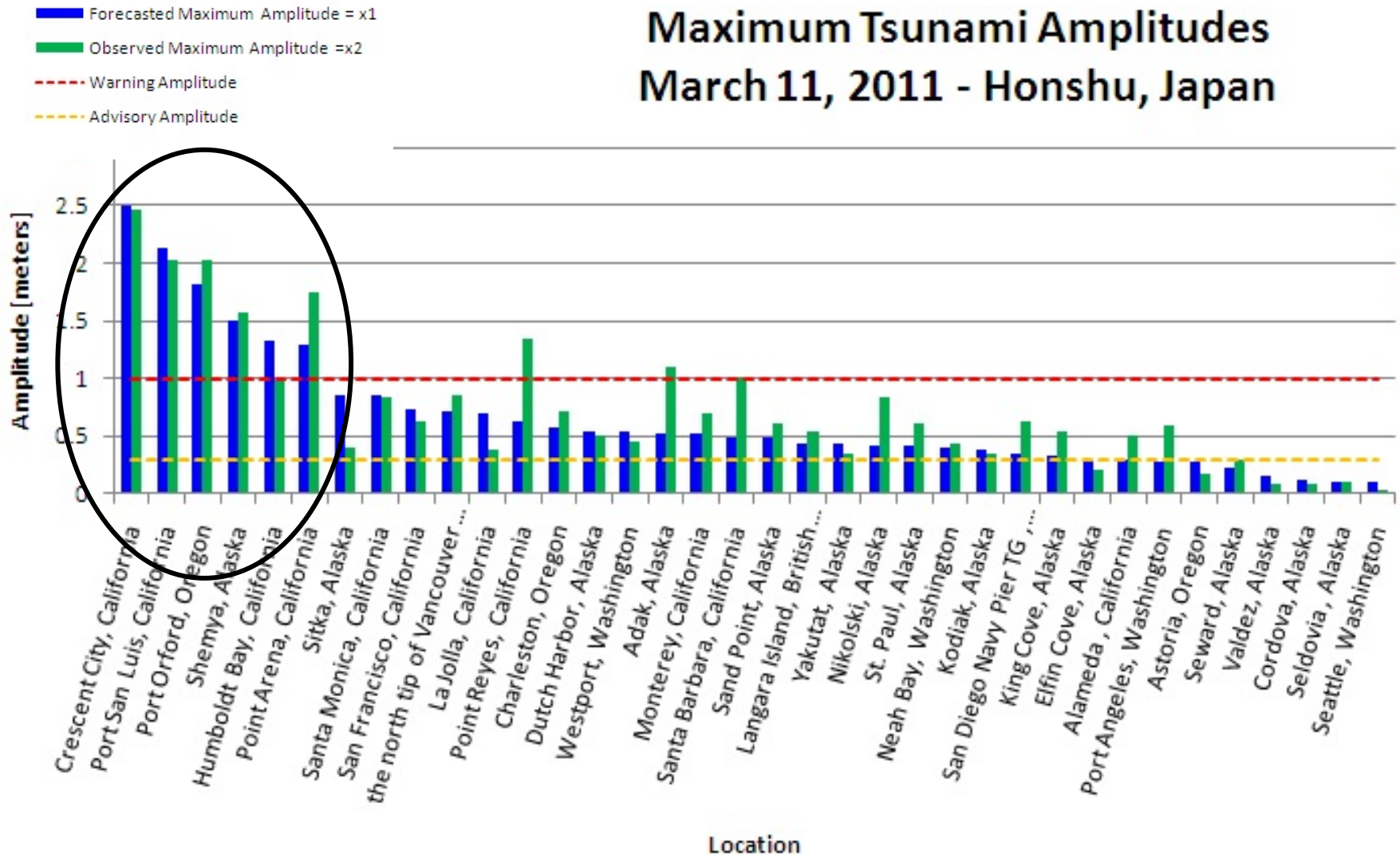




# Operational SITREP

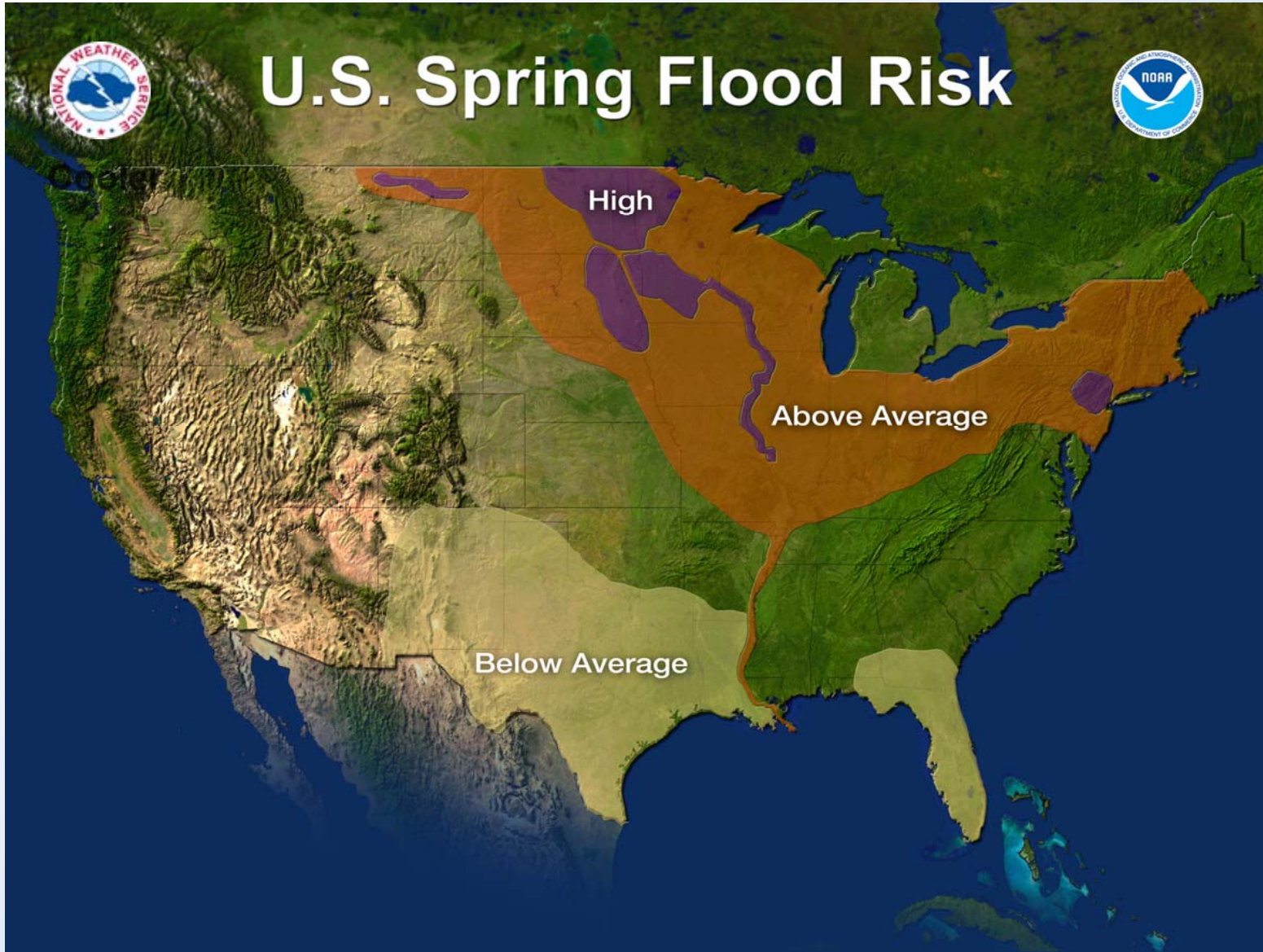
## Forecast and Observed Wave Heights

### Maximum Tsunami Amplitudes March 11, 2011 - Honshu, Japan



# Operational SITREP

## *Spring Outlook*

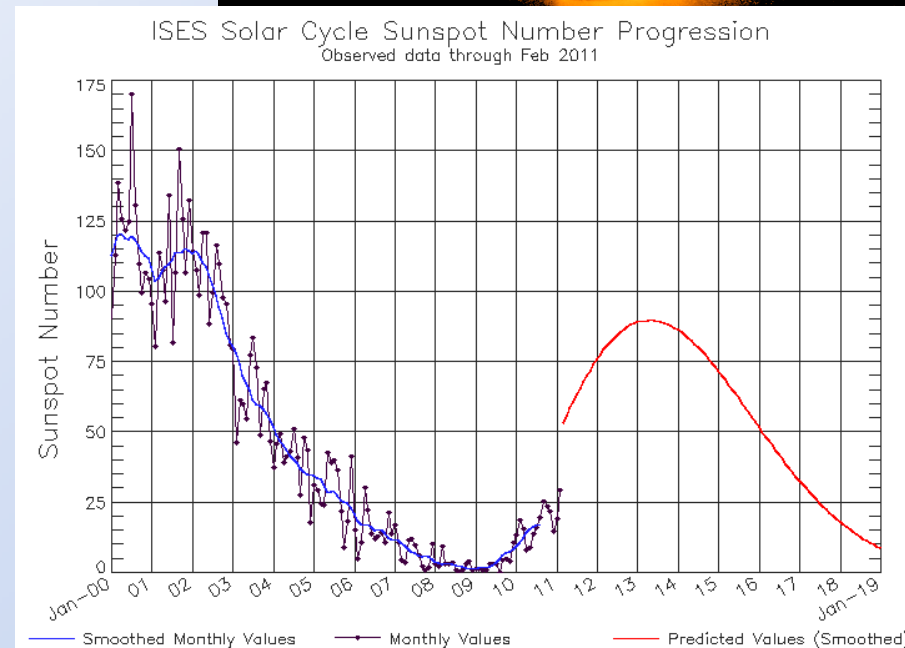
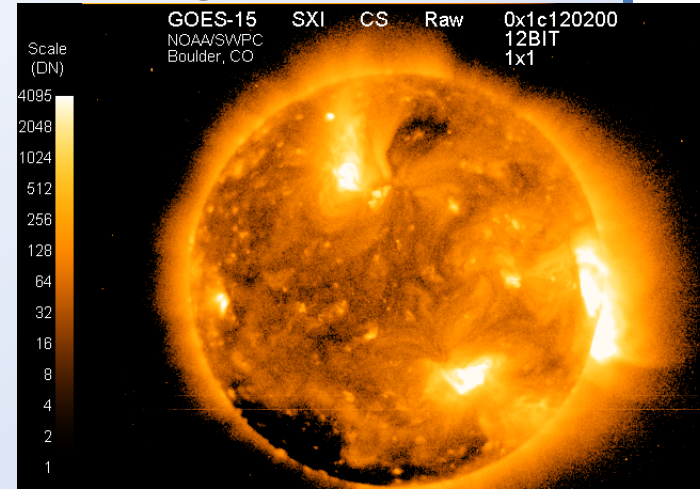


# Operational SITREP

## *Space Weather Activity*

- **Solar Maximum in 2013**
- **Space Weather Impacts**
  - *Satellites*
  - *GPS Reliability*
  - *Aviation (Polar Flights)*
  - *Energy distribution*
- **2 geo-magnetic storms**
  - *HF Radio*
  - *Airline Routes*

<http://www.swpc.noaa.gov/>





# Building a Weather-Ready Nation

## *NWS Response to A Changing World*

### Annual Averages



**6 Atlantic  
Hurricanes**



**1,300 Tornadoes**



**5,000 Floods**



**26,000 Severe  
Thunderstorms**



**Drought and  
Large Wildfires**



**600 Deaths  
\$14B in Losses**

# **Building a Weather-Ready Nation**

## ***NWS Response to A Changing World***

- **Trends & Changing Needs**
  - Population growth and demographic trends increase vulnerability
    - *50% of U.S. population living along coasts*
    - *Urbanization*
    - *High-impact weather*
- **NWS People and Infrastructure**
- **NWS Future**

# Building a Weather-Ready Nation

## *FY12 Budget Overview*

- **FY 2012 NWS \$988.0M**
  - **\$11.9M (1.2%) decrease from the FY 2010 Enacted**
  - **Net increase of \$3.1M (0.3%), after the \$15.0M technical transfer of programs to the NCS.**
    - *\$16.8M for non-labor inflationary Adjustments to Base*
    - *(\$15.0M) for Climate Reorganization*
    - *(\$13.7M) for Program Changes*
- **Supports the priorities of the Administration, Department of Commerce, and NOAA.**



# Building a Weather-Ready Nation

## *NWS Budget Change Table*

| Budget Line – Program Change                     | Program Change<br>(\$ in millions) |
|--|------------------------------------|
| <b>Local Warnings &amp; Forecasts Base</b>       |                                    |
| - National Data Buoy Center                      | \$4.0M                             |
| -GPS Radiosondes                                 | \$5.0M                             |
| - Aviation Weather: NextGen                      | \$26.9M                            |
| -National Critical Space Weather System          | \$2.0M                             |
| -Cooperative Observer Program                    | (\$1.2M)                           |
| -Telecommunications Efficiencies                 | (\$3.2M)                           |
| -National Mesonet Program                        | (\$19.0M)                          |
| <b>Weather and Climate Supercomputing</b>        | \$11.0M                            |
| <b>NEXRAD - Product Improvement</b>              | (\$2.2M)                           |
| <b>Complete &amp; Sustain NOAA Weather Radio</b> | (\$5.4M)                           |
| <b>NOAA Profiler Conversion</b>                  | (\$2.0M)                           |
| <b>Weather Forecast Office Construction</b>      | \$3.2M                             |

# Building a Weather-Ready Nation

## *Plan for the Future*

### *Meet State, Local, and Federal Needs*

- Improve **weather, water, and climate** decision services for events that threaten lives and livelihoods
- Improve **warning accuracies and lead times** for high-impact events
- Better **communicate levels of confidence** in our forecasts
- Help improve community emergency **preparedness and response**
- **Embed** with Emergency Managers
- **Enable** the Weather Enterprise



Increased accuracy    Increased timeliness    Increased accessibility

# Building a Weather-Ready Nation





