

# Ocean Networks Canada

## **Seismic Display**

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# About the ONC

- Operates interdisciplinary cabled **observatories** which host scientific instruments **collecting oceanographic** and **seismic** data
- **Data** from the seismometers are **available online** through the Incorporated Research Institutions for Seismology (IRIS) database
- Partners with **Emergency Management BC**. NOAA and other organizations in developing **public safety initiatives**

# About Their Needs

- A tool for **the general public**, teachers, students, and scientists
- To **display when** and **where earthquakes** were **detected** by ONC sensors, or by instruments operated by other organizations in close proximity to the observatory.

# About the process

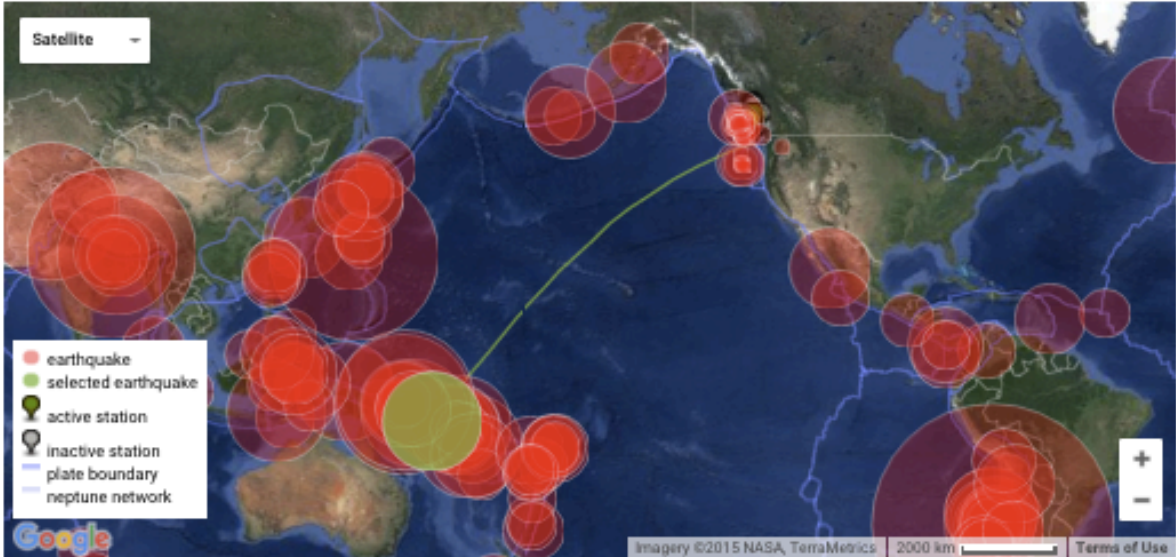
- **Gathering** user needs and **documenting** requirements
- Created static **wireframes** to explore **design ideas**
- Implementation of an online **functional prototype in D3.JS**
- **Usability testing** with 1 user
- **ONC Usability testing** with 2 users

# About my Solution

- A dashboard with **multiple synchronized charts**
  - **Map**
  - **Table** for the list of earthquakes events including magnitude, date and location
  - **Timelines** for the seismometers
- **Brushing and linking across charts.** For example, selecting an individual earthquake allows to display of the data reported by the ONC sensors

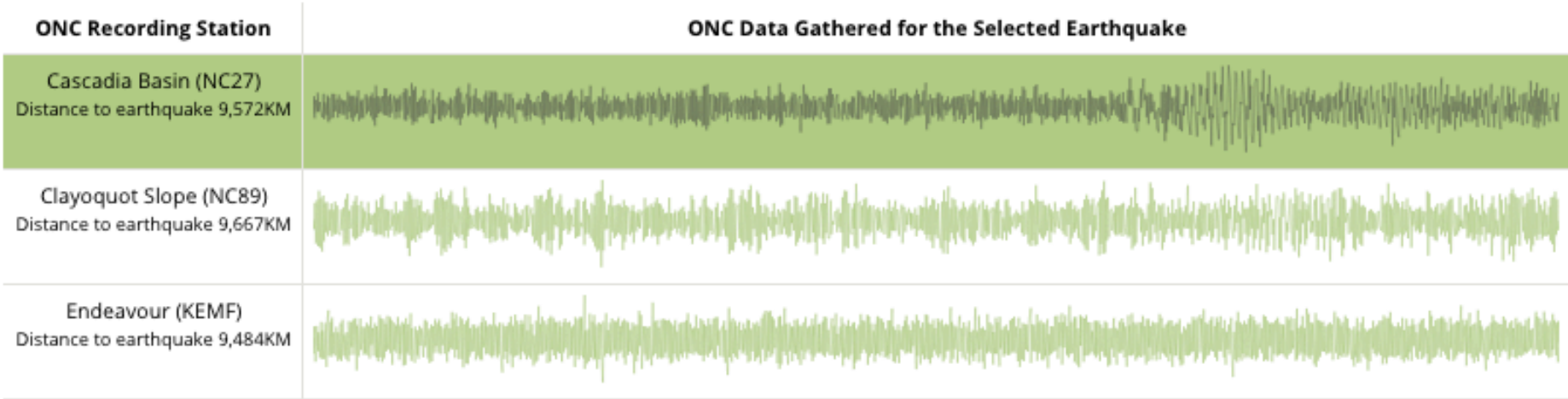
# Earthquake Data Dashboard

The interactive dashboard below lets you explore recent earthquakes around Vancouver Island and around the world (see below for additional information and instructions).



Mag.	Date (UTC)	Location
7	2015-11-18 18:31:04	SOLOMON ISLANDS
6.5	2015-11-17 07:10:08	GREECE
6.7	2015-11-13 20:51:30	NORTHWEST OF RYUKYU ISLANDS
6.9	2015-11-11 02:46:19	OFF COAST OF CENTRAL CHILE
6.9	2015-11-11 01:54:38	OFF COAST OF CENTRAL CHILE

selected earthquakes within the last year



the selected earthquake waveforms as recorded by the ONC stations

# Questions