NEPTUNE Canada in 5 minutes

Available infrastructure and data

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Network Infrastructure

Research Themes

• Plate tectonic processes and earthquake dynamics
• Dynamic processes of fluid fluxes and gas hydrates in the sea bed
• Regional oceanic/climate dynamics and effects on the marine biota
• Deep-sea ecosystem dynamics
• Engineering and computational research

Networks

- Seismic
- Tsunami
- Chemical
- Fluid Dynamics
- Visual
- Acoustic

Networks

ODP 889 @ 1250 m
Folger Passage @ 20 - 100 m
Barkley Canyon @ 400 - 1000 m
ODP 1027 @ 2660 m
Middle Valley* @ 2400 m
Endeavour Ridge @ 2300 m

Infrastructure

Operations & Data Centre at UVic
Shore Station at Port Alberni
Fibre optic cable (10kV DC, 10Gb/sec)
Nodes
Junction Boxes
Instruments

*not yet instrumented

Washington State, USA
2.5 years of data available online
2 years of data available online
Seismometer data at IRIS DMC

Network summary (1 time span)

<table>
<thead>
<tr>
<th>Network</th>
<th>NV = Neptune Canada = NV Network Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Year</td>
<td>2009</td>
</tr>
<tr>
<td>End Year</td>
<td>2500</td>
</tr>
</tbody>
</table>

Stations for NV network to (5 stations)

<table>
<thead>
<tr>
<th>Station</th>
<th>Site</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Elevation</th>
<th>First start</th>
<th>Last end</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA</td>
<td>KEMF Main Field</td>
<td>47.95</td>
<td>-129.10</td>
<td>-2205</td>
<td>2010/09/30</td>
<td>2599/12/31</td>
</tr>
<tr>
<td>RA</td>
<td>NC27 Node ODP1027, BC</td>
<td>47.76</td>
<td>-127.76</td>
<td>-2656</td>
<td>2009/09/14</td>
<td>2599/12/31</td>
</tr>
<tr>
<td>RA</td>
<td>NC89 Node ODP1089, BC</td>
<td>48.67</td>
<td>-126.85</td>
<td>-1258</td>
<td>2009/09/17</td>
<td>2599/12/31</td>
</tr>
<tr>
<td>A</td>
<td>NCBC Barkley Canyon, BC</td>
<td>48.43</td>
<td>-126.18</td>
<td>-398</td>
<td>2009/09/07</td>
<td>2599/12/31</td>
</tr>
<tr>
<td>RA</td>
<td>NCHR High Rise</td>
<td>47.97</td>
<td>-129.08</td>
<td>-2154</td>
<td>2010/10/04</td>
<td>2599/12/31</td>
</tr>
</tbody>
</table>

Real-time data availability (see BUD Tools for access)

<table>
<thead>
<tr>
<th>Earliest</th>
<th>Latest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/01/29 (029) 00:00:00</td>
<td>2012/04/05 (096) 00:00:00</td>
</tr>
</tbody>
</table>

Archive data availability - Make a batch request for data (breq_fast) - (data access overview)

<table>
<thead>
<tr>
<th>Earliest</th>
<th>Latest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/10/13 (286) 22:40:46</td>
<td>2012/04/04 (095) 00:00:00</td>
</tr>
</tbody>
</table>
Talk to me right by the window...