

Southern Hydrate Ridge – Summit 1 Low-Power (LP) J-Box

Location: 44.6°N, 125.1°W
Depth of Water Column: 807 m

| Instrument Name/Description | Data Products | Relative Depth |
|--|--|----------------|
| Pressure sensor on seafloor, tidal | Seafloor pressure, tides | Bottom |
| Low Frequency (Passive) Acoustic Receiver (Hydrophone) on seafloor | Frequency, Acoustic pressure waves. Measures wind, rain, and seismic t-phases | Bottom |
| Broadband seismometer for global/regional seismic activity | Broadband ground velocity and acceleration measuring ground acceleration in 3 orthogonal directions. Used to measure global/regional seismic events and harmonic tremors | Bottom |
| Short-period seismometer for regional/local seismic activity* | Short-period ground velocity measuring ground motion in 3 orthogonal directions for regional/local seismicity. | Bottom |
| 3-D Single Point Current Meter | Turbulent water velocity at a single point | Bottom |

***Note: Three Short-period seismometers will be deployed at this station.**

Disclaimer: All data are subject to revision without notice; exact locations of mooring sites are not yet finalized; exact depths of sensors will be determined at the time of deployment.

Southern Hydrate Ridge – Summit 2 Medium-Power (MP) J-Box

Location: 44.6°N, 125.1°W
Depth of Water Column: 811 m

| Instrument Name/Description | Data Products | Relative Depth (m) |
|---------------------------------|--|--------------------|
| Ethernet Camera with Strobes | Digital still images of water column biology, vents, diffuse flow, seeps, macrofauna | Bottom |
| Mass Spectrometer | Dissolved gas concentrations in diffuse flow and seep fluids | Bottom |
| Benthic Fluid Flow | Time series of benthic fluid flow rates. Measurements of benthic flow rates via optical injection of tracer at sediment-water interface | Bottom |
| Velocity Profiler (600 m range) | Acoustic backscatter, Velocity profiles | Mounted at bottom |
| Water sampler, osmosis-based | Physical water samples of diffuse flow and seep fluids for major/trace element chemistry | Bottom |

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