

## Subducted Cadet Seamount causes a hydrogeology and tectonics at Kuril Trench significance-

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Subducted Cadet Seamount causes the hydrogeology of the Kuril Trench forearc at about 250 k.y. and yield a huge chemosynthetic animal community. seismic profile, topography, gravity and geomagnetic dat show the critical conditions of the subducted seamount and two strong reflectors. Submersible dives covers the foot and slope of the Cadet SM finds two notable successions of the dense animal communities which consist of Calyptogena clams, carbonate chimneys and bacterial mats. These Chemosynthetic communities may be supported by the drastic change of the hydrogeology under the Kuril forearc resultant squeezing interstitial water rich in CH<sub>4</sub> for the bacteria.