

Analysis of the long-term subbottom temperature by the Deep Sea Floor Observatory off Hatsushima Island in Sagami Bay

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Long-term subbottom temperature observation was conducted by the Deep Sea Floor Observatory off Hatsushima in Sagami Bay. There is a *Calyptogena soyoae* community area around the observatory and it means that cold water gushes with methane and hydrogen sulfide. Sampling interval of subbottom temperature is 10 seconds and the observation duration reached 3 and half years. Spectrum analysis of the observed subbottom temperature shows that subbottom temperature has outstanding component of tide. Making comparison between subbottom temperature and hydraulic pressure at the observatory reveals that differential of the pressure agree with the observed subbottom temperature well.