Long-term temperature monitoring at diffuse hydrothermal sites using stand-alone temperature loggers at RM24 site, S-EPR

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Thirteen stand-alone thermometers were deployed at RM24 hydrothermal site of S-EPR for one year. Four thermometers were located on a diffusive flow area at Oasis site, within a small area of < 1m in radius. However, observed temperature variations differ by up to several factors, implying the importance of deploying more than one instrument on one site to have a reliable heat flux through the diffuse flow.

Two temperature data away from the diffuse sites coincide very well each other, with their amplitude of 0.05 deg-C. At Kaminari and Matsu sites, located about 700 m south of Oasis site, observed temperature have increasing amplitude with time.