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Monitoring seismic velocity changes in the Gulf of Corinth using earthquake multiplets

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Knowing more about fault and fractures *in-situ* properties is an important issue for a better understanding of many geological and geophysical phenomena. In this work we focus on the temporal evolution of these properties, in particular fracture stiffness by high resolution monitoring of seismic velocity variations in the Gulf of Corinth, one of the fastest extending rift in the world. To monitor changes in the seismic velocity we use repeating earthquakes sources or multiplets from the period 2001-2005. Specifically we use the Coda Wave Interferometry technique which allows us to measure very precise time delays between repeating earthquakes. Initial results indicate that temporal variations are observable in the "months" time scale possibly related to fluid migration in the fault systems of the gulf.