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Displacement and Settlement Monitoring in Large Geotechnical Structures with a Novel Approach to Distributed Brillouin Sensing

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Distributed Brillouin sensing for temperature and strain measurements in optical fibers has become a well-known tool for health monitoring of large structures in industry, geotechnical engineering and public infrastructure. This paper reports on a novel approach to this technology, replacing the common pulse-based measurements by a frequency-domain analysis. It outlines the evolution of the system from the architecture development via lab and field evaluation to an industrial product.

Доклад. Конференция по мониторингу технического состояния гражданских сооружений (CSHM-4), «Системы мониторинга технического состояния сооружений, обеспечивающие продление срока службы сооружений». Ноябрь, 2012. Берлин. Германия.

Ключевые слова:

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