

MONITORING OSCILLATIONS OF SLENDER STRUCTURES WITH GPS AND ACCELEROMETERS

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GOALS: monitoring the structural integrity of an industrial chimney and identifying at any time signs of stiffness changes, perhaps due to breaches, enervations or material fatigue, nearly in real time.

An integrated system combining GPS and accelerometers measurements will be installed on a chimney of the power plant of Piacenza (Italy), 120 m high.

In our paper, data analysis procedure is explained in detail and results of preliminary tests are described.

