

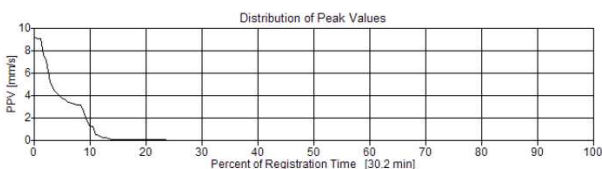
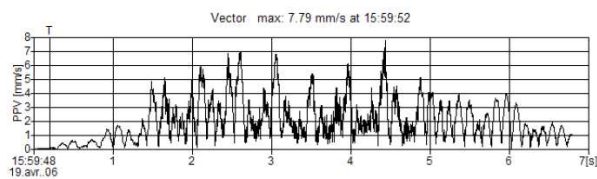
## PALACE OF VERSAILLES

VERSAILLES - FRANCE

### Vibratory monitoring of the palace during excavation works

Based on a shooting lodge prized by the King Louis XIII (1610-1643), his son, Louis XIV (1643-1715) built the Palace of Versailles. This exceptional palace was inhabited from 1682 until 1789.

Abandoned for many years, the Palace has been restored and developed by the EMOC, who built several technical galleries under the monument. The works were carried out by Lefevre Rénovation, who chose SolData to monitor the vibrations of the Palace during the works.



The vibrations were measured in real time (in accordance with the circular dated July 23, 1986 concerning “mechanical vibrations emitted in the environment by scheduled establishments”) with triaxial sensors and Gorgones installed in the Royal Court and in the Palace.

Data was transmitted by radio and displayed in real time in the site offices located near the Palace. Automatic alarms were activated if the limits, preset according to the different frequency bands provided for in the circular, were exceeded.

The displays allow the engineers to evaluate the effects of the perforations on the frame and to consult the vibratory activity historical record. Measurements are displayed in real time through our GEOSCOPE software.

Lefevre Rénovation and SolData’s engineers were provided with a secure internet access allowing the remote display of the GORGONES’ results.

Constantly attentive to the vibratory activity on the site, the GORGONES allow to protect this exceptional heritage during the works.

CONTRACTOR:	LEFEVRE RENOVATION
CONSULTANT	SOCOTEC
DATE OF WORKS :	2006
<b>SCOPE OF WORKS :</b>	
<ul style="list-style-type: none"><li>• Installation of the Gorgones</li><li>• Real time data display</li><li>• Maintenance and follow-up monitoring of the vibrations during 12 months</li></ul>	
<b>MATERIAL USED :</b>	
<ul style="list-style-type: none"><li>• 24 geophones (8 triaxial).</li><li>• 2 Gorgones.</li><li>• An automatic acquisition system with real-time display and storage of data.</li></ul>	