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Provenance of granites used to build the Santa Maria de Valdeiglesias Monastery, Pelayos de la Presa (Madrid, Spain), and conservation state of the monumental complex

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The construction of the Cistercian Monastery began at 1180, in an initial Late Romanesque style in which the Church was erected; later on, in 1258, the church underwent a severe fire, only the apse stood standing. The church was reconstructed at the end of the 13th century in Mudejar style. Gothic style was used later on, in the 16th century, for the reconstruction of the funerary chapel, and Renaissance style for the Plateresque door in between the church and the sacristy. At the end of the 16th century, the main door to access the church was built in Baroque style. In 1836, the Ecclesiastical Confiscations resulted on transfer the Monastery into particular owners. This fact favoured its abandon and ruin state until 1979, when architect Mariano Garcia Benito purchased the property and started the conservation and consolidation of the complex, beginning with the Bell Tower.
Natural stone materials used in the Monastery are igneous (granite) and metamorphic rocks (gneiss and schist), and artificial stone materials are bricks and mortars, both joint and rendering ones. Granite is the most abundant material used in the complex, with a structural/reinforcing role in elements such as lintels, jambs, buttresses, or bottom areas of the walls with greater sizes and better dimensioned. Some pillars are granite built, from the large ashlars of the sacristy, to the rubble-work of the Mozarab chapel. Two types of monzogranite can be differentiated in relation to distinct constructive stages: the coarse texture monzogranite is used in the first building stages, while the fine texture monzogranite was employed mainly from 17th century on.
Petrophysical characteristics of these granites are different but show a good quality to be used in construction. Nevertheless, the abandon and partial ruin of the complex, the devastating fire events (the second one in 1743) leaded to the decay acceleration of the monumental complex, being nowadays the church in ruin, with no roofs and walls in the risk of collapse, leaving the wall fillings exposed to the environment, speeding up the deterioration of the monumental complex.
The Monastery construction was supplied of the natural stone closest to it, the monzogranite that outcrops in the surroundings of the monastic complex, with main differences based on its grain-size. The Monastery settles in a coarse grain-size monzogranite area, material that was used in its first building stages. Provenance quarries are scarce hundreds meters far from the building, and a little bit further, in the San Esteban hill, we can find the fine grain size area. In both areas, marks of the extractive processes can be found. The geological provenance of the Monastery building materials has been for first time located with the importance it may have for restoration purposes.