# The El Pintado section, Spain: replacement GSSP for the base of the Telychian

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**Abstract**

Graptolites offer the best means of defining the base of the Telychian Stage, particularly as there are no major changes in chitinozoan or conodont faunas around this time. The most suitable section for the GSSP for the base of the Telychian Stage is that at the east end of El Pintado reservoir, Seville Province, Spain, which lies within the Sierra Norte de Sevilla UNESCO Global Geopark (Gutiérrez-Marco et al. 2021). Here, the base of the *Spirograptus guerichi* Biozone, 0.6 m above the top of a layer of decalcified nodules, in a continuously graptolitic, predominantly black shale section, is selected as the level for the "golden spike". The graptolite biostratigraphy and organic carbon isotope record of the El Pintado section were presented by Loydell et al. (2015). In addition to the changes in graptolite faunas in the lowermost Telychian (e.g. FAD of *Spirograptus guerichi*, FAD of *Pardiversograptus runcinatus*, major diversification of *Streptograptus*), a negative $\delta$13Corg excursion (the Rumba low) close to the base of the Telychian offers a means of chemostratigraphical correlation.
References

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