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Multi scale surface temperature monitoring (by UAS and Satellite) on quiescent Volcanoes.

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The study of thermal anomalies linked to volcanic activity is an indispensable tool to understand the state of volcanoes and for their monitoring. Over time, the tools for studying anomalies have improved over time and from this perspective, unmanned aerial systems (UAS) have made it possible to bridge the gap between space-based and terrestrial remote sensing data. UAS provide very high resolution spatial data, which allows the detection of thermal anomalies of even smaller extent and with lower temperatures.We made a comparison in different areas between UAS and satellites such as Pisciarelli, Monte Nuovo, Biancane and Solfatara.Furthermore, the continuous monitoring of the Pisciarelli area has allowed us to understand the best method for acquiring data such as the flight plan, mosaicking, analyzes for comparisons with other satellite systems and for the future calculation of the heat flow.