



**Fig. 1:** (a-c) Geographical setting of the test sites (the DEM shown in (b) was obtained by the Spanish Instituto Geográfico Nacional (<https://www.ign.es>) and Gobierno de Canarias (<https://www.grafcan.es>, <https://opendata.sitcan.es>)); (c) general survey map showing the two ERT profiles located roughly orthogonal to the Corona lava tube system, the TLS mapped sections of the lava tube system, the sections of the lava tube system that are only supposed but not explored, the main sinkholes derived from the collapse of the lava tubes' ceiling (called jameos in the local language), the main caves (cuevas), and the Corona volcano, the

main morphological structure of the area (adapted from Google Earth 7.3.2, 2019, <https://earth.google.com/>).