

Exceptional heatwave in Phoenix, Arizona, United States, throughout July 2023

Sentinel-3 SLSTR LST acquired on 01 July 2023 at 17:50:51 UTC

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Sentinel-2 MSI acquired on 26 July 2023 at 18:09:21 UTC

Sentinel-3 SLSTR LST acquired on 31 July 2023 at 17:11:14 UTC

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[2D Layerstack](#)

Fig. 1 - COP-DEM - The city of Phoenix is located in Arizona, southwest of USA, in the Sonoran Desert

[2D view](#)

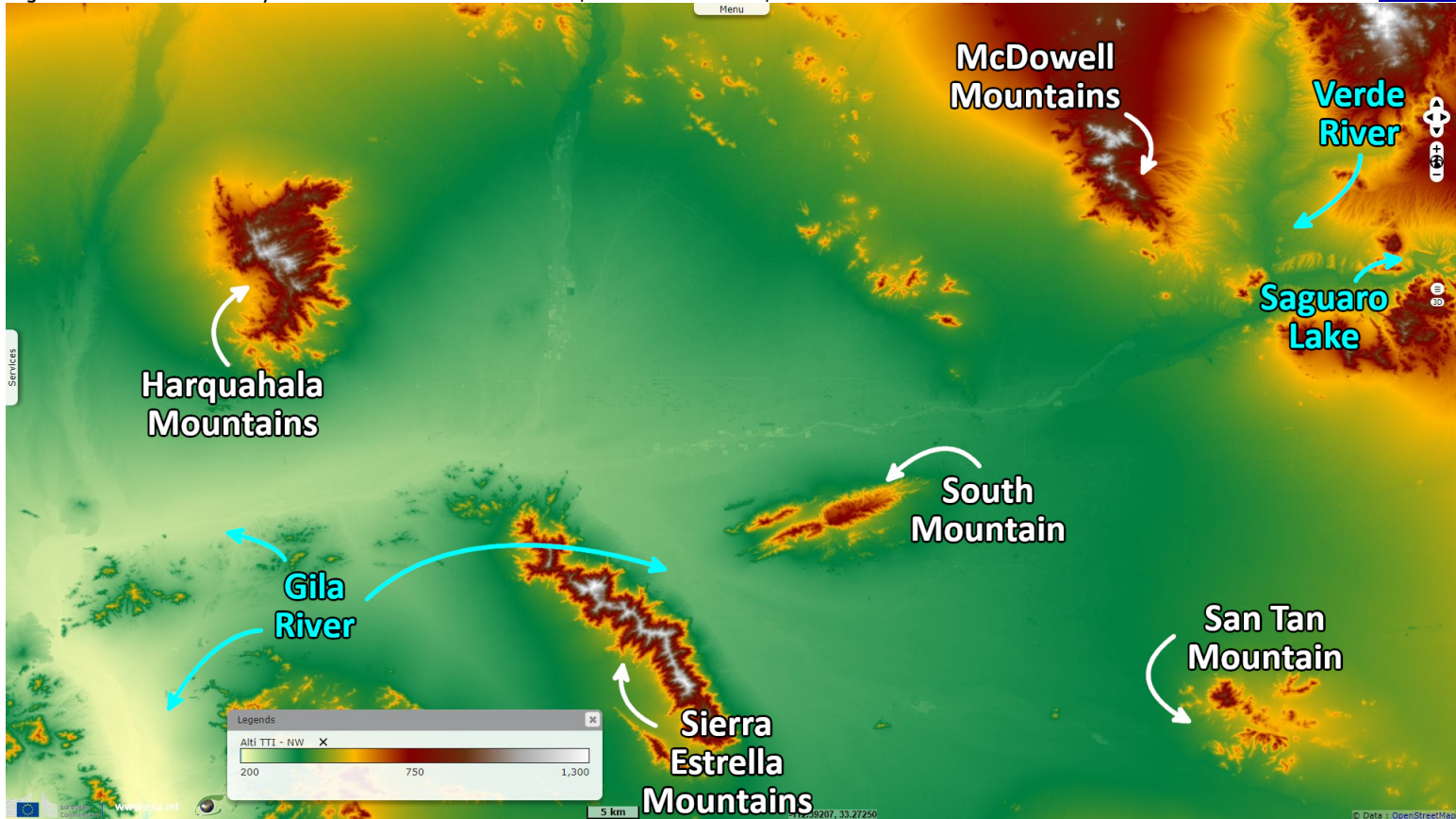


Fig. 2 - S2 (26.07.2023) - Phoenix experienced the whole of July 2023 with an average daily temperature (combining night and day) above 43°C. [2D view](#)

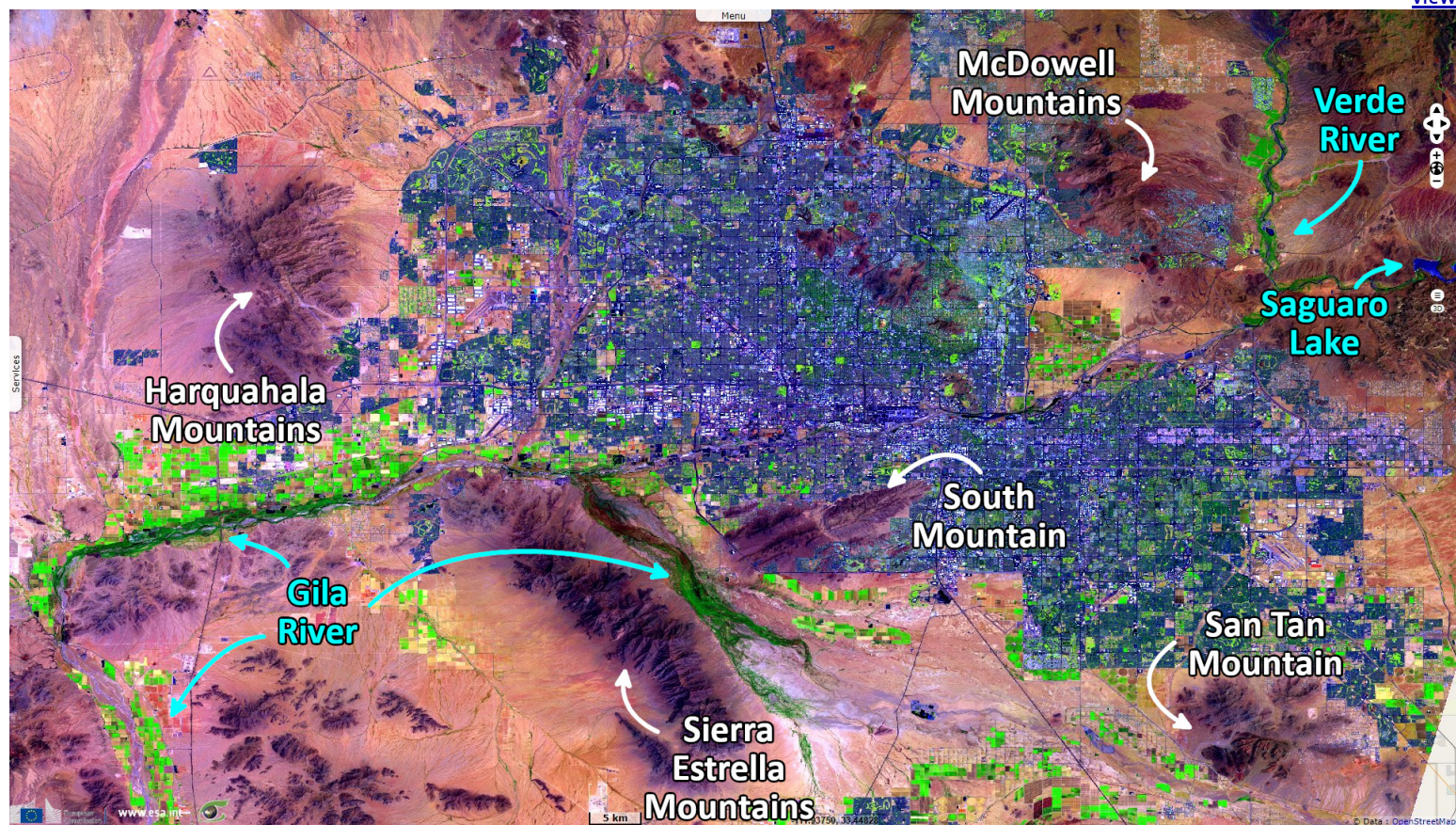
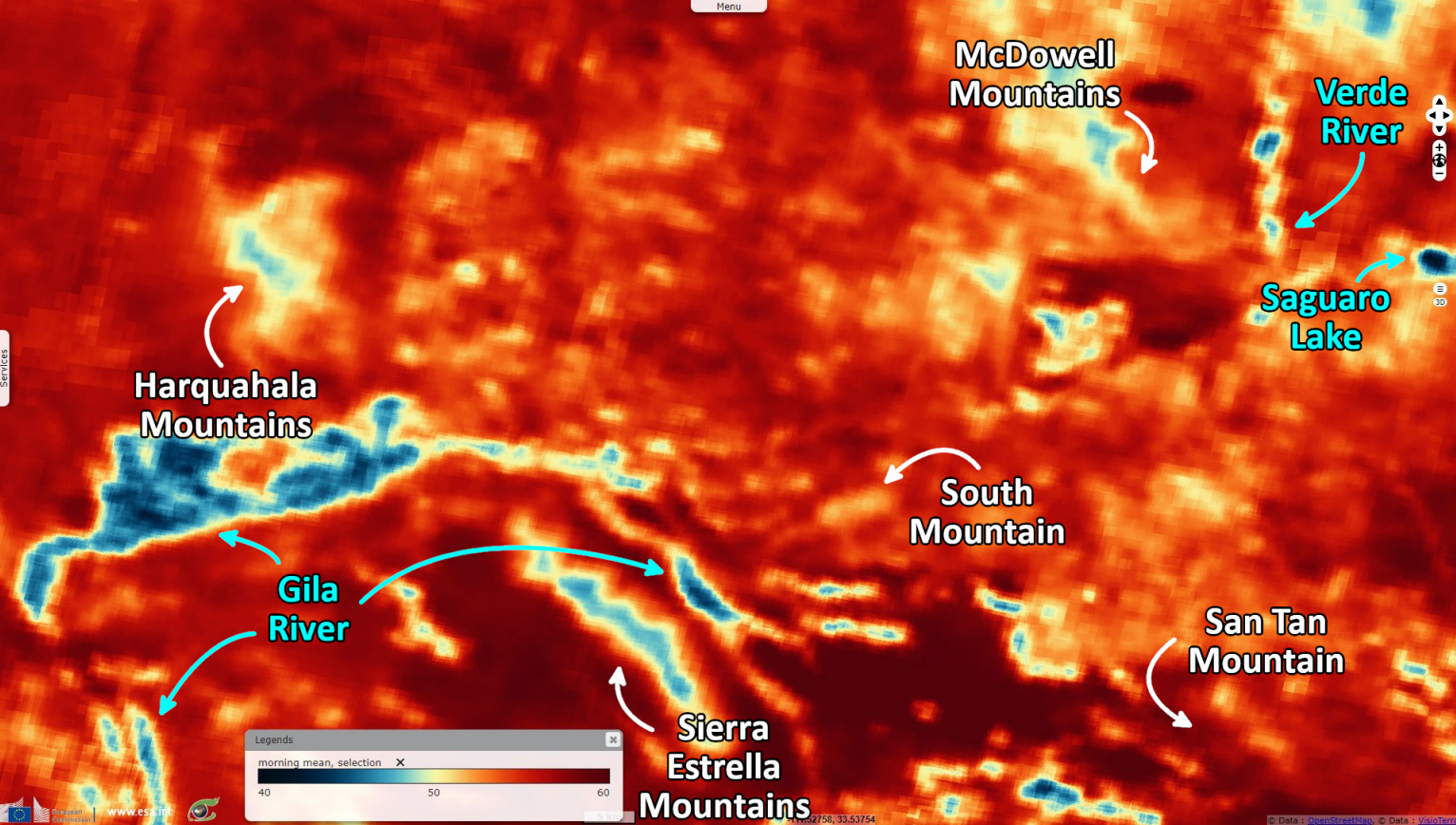


Fig. 3 - S2 (26.07.2023) - Red band: NDWI-SM, Green band: NDVI, Blue band: NDWI-OW. [2D view](#)



This colour composite shows an approximate Land Cover. Natural vegetation and irrigated cropland are mostly located near watercourses.

Fig. 4 - S3 SLSTR [01->31.07.2023] - Mean of morning soil surface temperature, only cloudless days have been kept.



Elevation, open water & vegetated areas show as colder spots, as opposed to bare soil which encompass the hottest areas. Crossing the desert, the Gila river displays a low discharge volume, limiting its ability to sustain irrigated vegetation which act as mildness oases.

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