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## Pierwsze Ogólnopolskie Seminarium Marsjańskie

### *Late Amazonian parasitic cones of giant Tharsis volcanoes give insight into regional magmatic plumbing system*

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[POSTER]

Although Tharsis is the largest volcanic province on Mars, the origin of numerous small volcanic cones in this area is not yet fully explained. Characterizing the system of small volcanic cones in terms of space and time is essential to determine whether or not they are geologically associated with the giant Tharsis volcanoes. To remedy this gap we analyzed (1) the spatial distribution of small volcanoes, (2) orientation of volcano summit craters or central fissure vents, as well as dating to estimate (3) surface age of their flanks. We identified at least five parasitic cone systems related to the giant Tharsis volcanoes (Olympus Mons, Alba Mons, and three Tharsis Montes volcanoes: Arsia Mons, Pavonis Mons, Ascraeus Mons). These systems have been fed by recent and potentially still active magma chambers connected to a system of radial dikes as controlled by regional stress regime and magma pressure related to magma supply.