

Designing a Swarm-based Tumbleweed Mission Architecture...

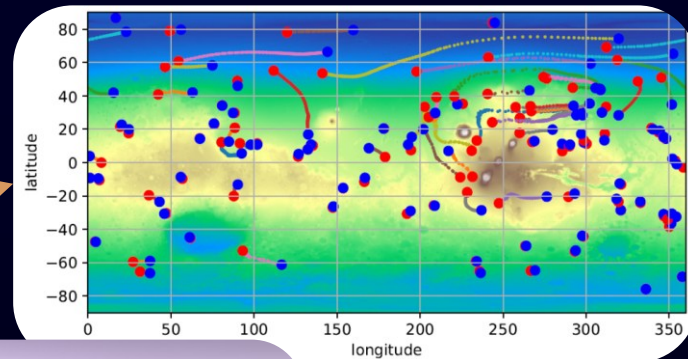
Where, and **when**, does a swarm of n tumbleweed rovers need to be deployed to achieve our **scientific goals**?

1

Spreading Simulation

- **Global**, full swarm

a swarm of n rovers
with x rovers reaching targets

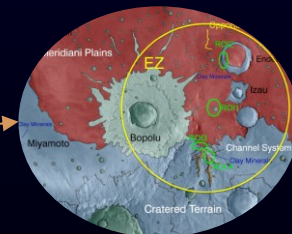
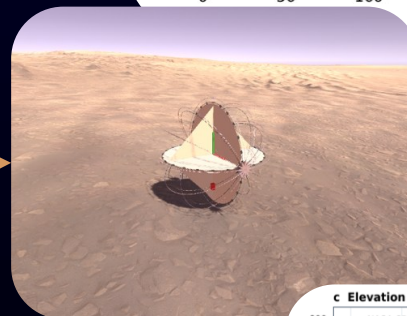


2

Martian Digital Twin

- **Regional**, Unity-based

and y rovers reaching
regions of interest



3

Modelling/Prototyping

- **Local**, specific to individual measurement requirements

and z rovers
yielding data
per
**measurement
requirement**

