

Modeling the Construction and Evolution of Distributed Volcanic Fields on Earth and Mars

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Volcanic Fields on Earth & Mars

Jacob
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Introduction

Overview

Sills

Lava Flows

Vent Density

Mars Clusters

Arsia Mons

Volcanic Field

Methods

Results

Implications

Conclusions

- Distributed Volcanism Definition
- Vertical Subregions can be detailed in volcanic systems

Outline of Talk

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- Overview of Dissertation
- Arsia Mons
- Conclusions

Sills in the San Rafael Swell

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- Lidar
- Sills
- Total volume, geometry
- Modulation of eruption style

- MOLASSES
- Tolbachik
- Validation

Spatial Density of Clusters

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- Earth
- Mars
- Venus
- Average Intensity

- catalog
- trend in crater age dating
- spatial density, possible recurrence rate

Arsia Mons: An introduction

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Questions

- How?
- Can?

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Tie in with Ashes and glaciers?

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Model of waning volcanism of Arsia

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Arsia Specific Conclusions

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Other Conclusions

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Additional Thanks

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