Author's Response:

NHESS Editors and Reviewers,

Thank you all for your time and energy in reviewing this manuscript. Your comments have greatly improved the original version of this manuscript and we cannot thank you enough! We look forward to continuing to work on this project.

Sincerely,

Corey Scheip and Karl Wegmann

Response to the Editor

Dr. Parks,

Thank you for your review of this manuscript and the minor suggestions.

<u>Color legend</u> Editor - black Author response - blue

Editor Comments

line 231 "As such, volcanologists have been using remote-sensing tools, particularly multi-spectral satellite data, as early as the mid-1980's to monitor volcanic heat signatures as precursors to eruptive activity (Rothery et al., 1988)." Please reword slightly.

The primary application of remote-sensing now used by volcanologists is mapping ground deformation related to magmatic intrusions to determine the parameters of the intrusion - location, geometry and volume change - and to map magma migration prior to the onset of an eruption. It is also routinely used for mapping co-eruptive deformation and estimating magma flow rates.

Response:

We have revised this section of the manuscript to include the use of SAR data for ground deformation monitoring

Volcanologists began using remote-sensing tools, particularly multi-spectral satellite data, as early as the mid-1980's to monitor volcanic heat signatures as precursors to eruptive activity (Rothery et al., 1988). More recently, synthetic aperture radar data aid in monitoring ground deformation associated with magmatic intrusions or eruptions (Hooper et al., 2004).

line 385 "possess"

Response:

Thank you for this catch! We have corrected this spelling error.