Dear Prof Vieli,

Many thanks for reviewing the changes and for accepting our manuscript. Please extend our thanks to both reviewers for their comprehensive assessment, valuable suggestions and insightful comments.

In reply to your minor points:

p. 6 line 10: something wrong here with plural/singular, I guess it should be in plural: ‘...by vertical black stripes.’ (delete ‘a’)

> Sentence has been changed.

p. 14, line 10: something wrong at sentence beginning with ‘Average values...’, delete ‘Severa’???

> Sentence has been changed.

p. 20 line 21: to be consistent with changes in abstract and methods in response to the editor comment, it should here say ‘algorithm’ rather than ‘criterion’.

> Criterion has been changed to algorithm.

Just checking a general point: as a response to review the term ‘chasm’ has been replaced by ‘rift’ throughout except when you refer to ‘Chasm 1’. I assume you deliberately did not change this to ‘Rift 1’ as this is the common name of the feature.

> This is correct, we have used ‘Chasm 1’ as a place name, consistent with previous publications. The reviewer did not object against using Chasm as part of a name.

Kind regards,

Jan De Rydt and co-authors