

Supporting Information for

## Second Moment Statistics for Large Strike-Slip Earthquakes

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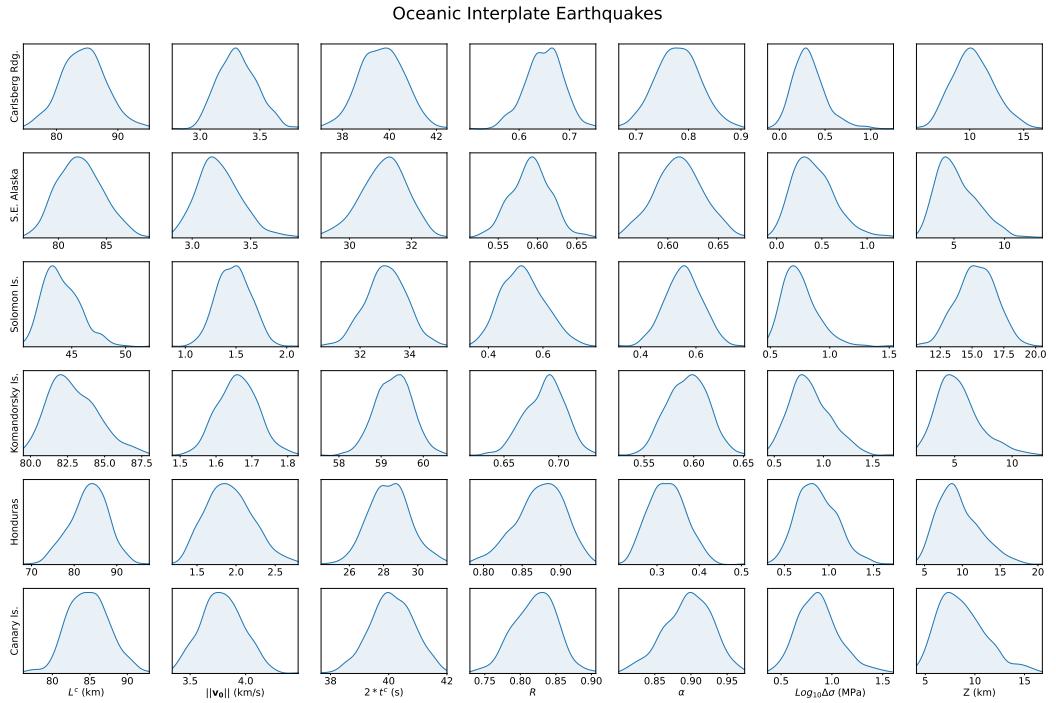
### Contents of this file

Figures S1 to S3 (Pages 2-4)

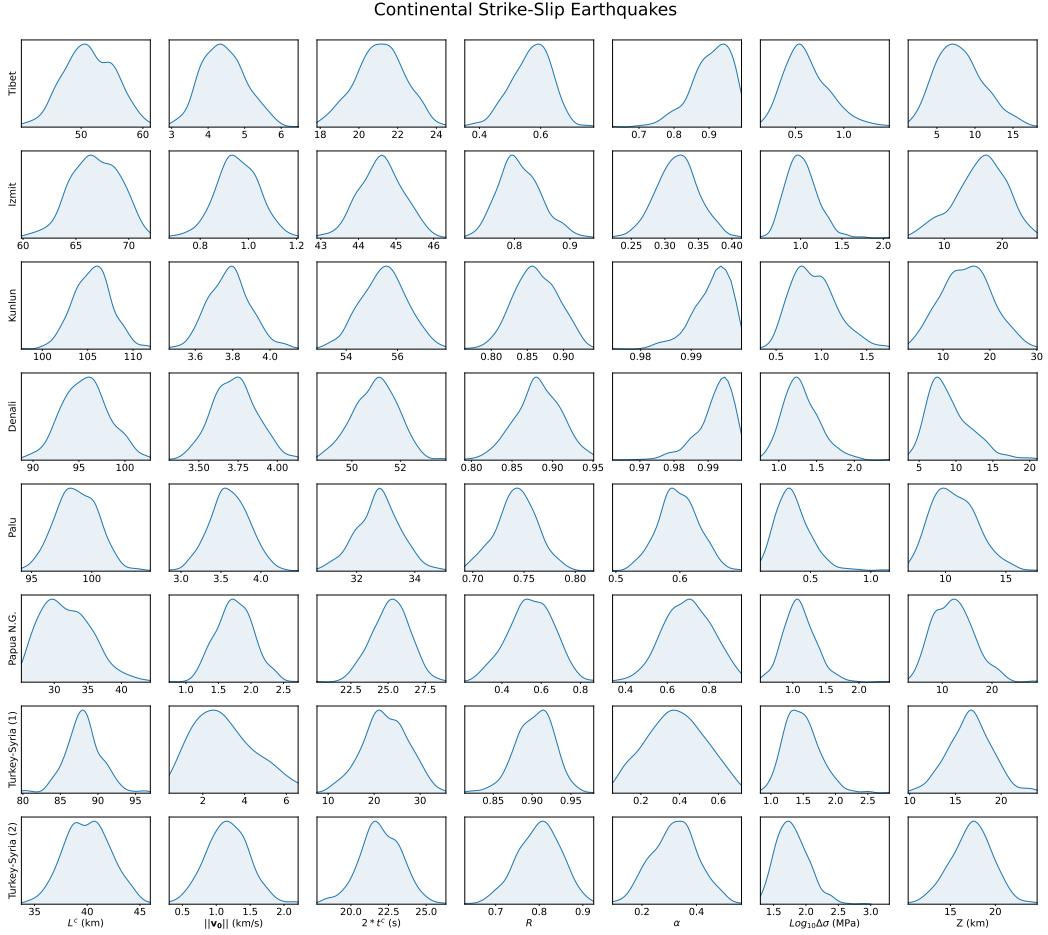
### Introduction

This file includes three figures that supplement the main text. Figures S1, S2, and S3 each give the distributions for several of the parameters derived from the ensembles of second moment solutions for each event included in this study. These parameters are defined in equations 4 and 5 of the main text and are the characteristic length ( $L^c$ ), the centroid velocity  $\|\mathbf{v}_0\|$ , twice the characteristic duration ( $2*t^c$ ), the rectilinearity ( $R$ ), the directivity ratio ( $\alpha$ ), the base 10 log of the stress drop ( $Log_{10}\Delta\sigma$ ), and the vertical extent of the source ( $Z$ ). Figure S1, S2, and S3 give distributions of these parameters for the oceanic interplate, continental strike-slip, and oceanic intraplate respectively.

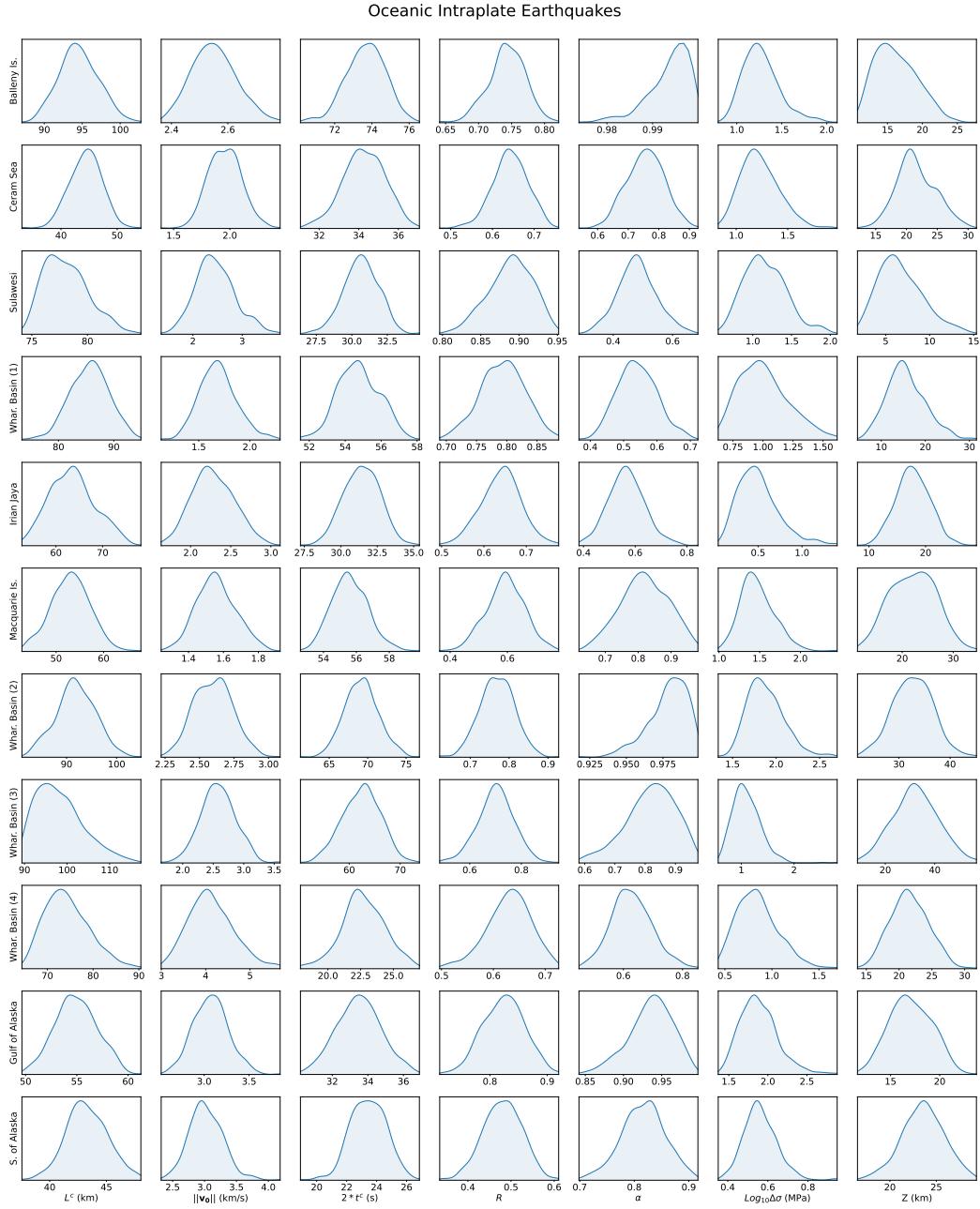
## Figures



**Figure S1.** Ensembles of parameters defined in equations 4 and 5 of the main text for the oceanic interplate earthquakes considered in this study.



**Figure S2.** Ensembles of parameters defined in equations 4 and 5 of the main text for the continental strike-slip earthquakes considered in this study.



**Figure S3.** Ensembles of parameters defined in equations 4 and 5 of the main text for the oceanic intraplate earthquakes considered in this study.