

Electronic supplementary material for

Fault slip and identification of the second fault plane in the Varzeghan earthquake

doublet

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Introduction

Two figures have been presented in this document to support the discussions in the main text. The first figure demonstrates the effect of a few weighting schemes applied for the slip inversion. The second figure shows sensitivity of the P-only slip model to the input parameters of the inversion.

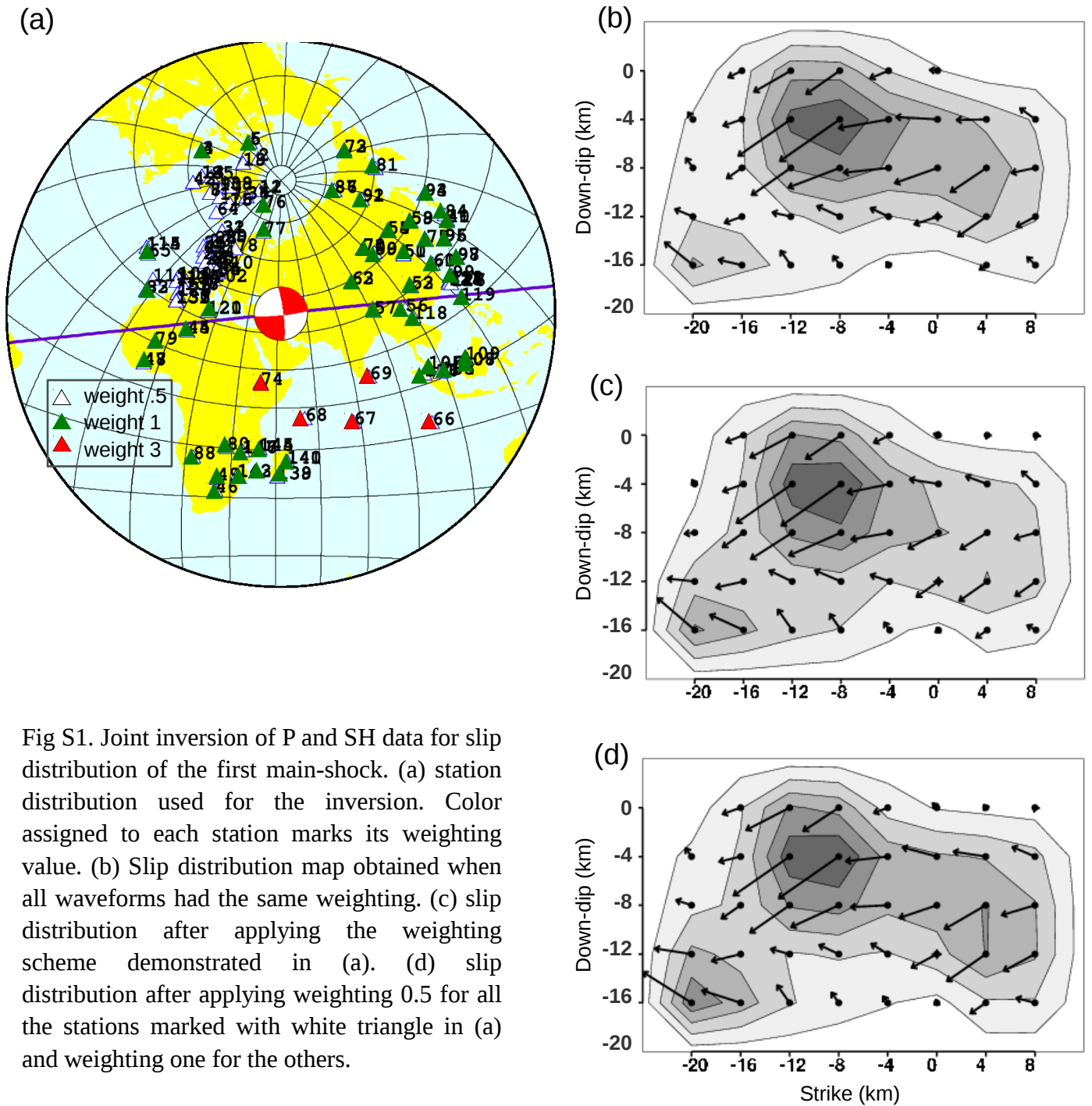


Fig S1. Joint inversion of P and SH data for slip distribution of the first main-shock. (a) station distribution used for the inversion. Color assigned to each station marks its weighting value. (b) Slip distribution map obtained when all waveforms had the same weighting. (c) slip distribution after applying the weighting scheme demonstrated in (a). (d) slip distribution after applying weighting 0.5 for all the stations marked with white triangle in (a) and weighting one for the others.

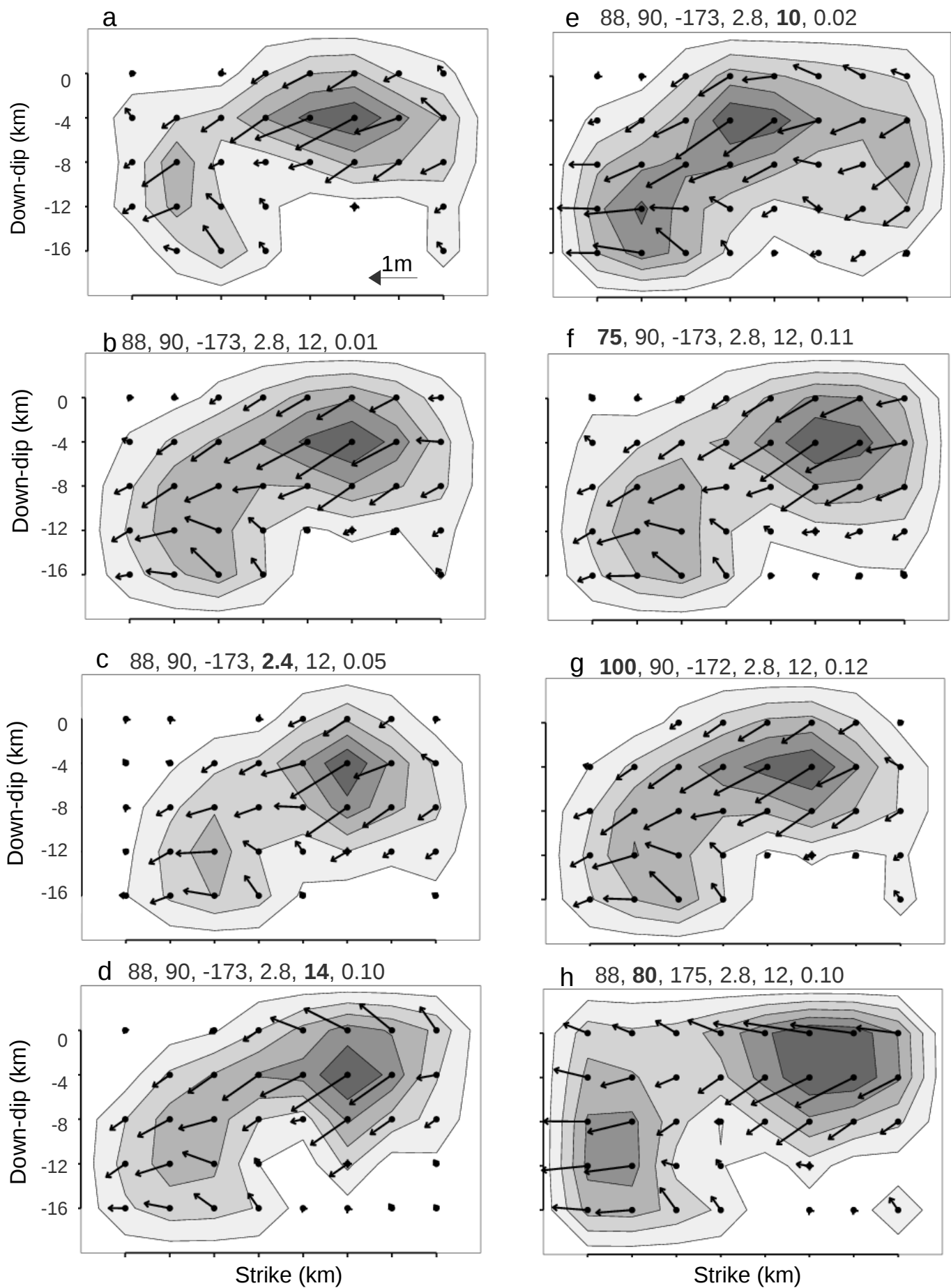


Fig S2. sensitivity of the P-only inversion results to the preselected parameters. The numbers above each plot are strike, dip, rupture velocity, hypocenter_depth, and the resulted misfit value, respectively. (a) is the reference model. The modified parameter of each model is marked as bold number.