



Supplement of

Inverse modelling of Köhler theory – Part 1: A response surface analysis of CCN spectra with respect to surface-active organic species

Samuel Lowe et al.

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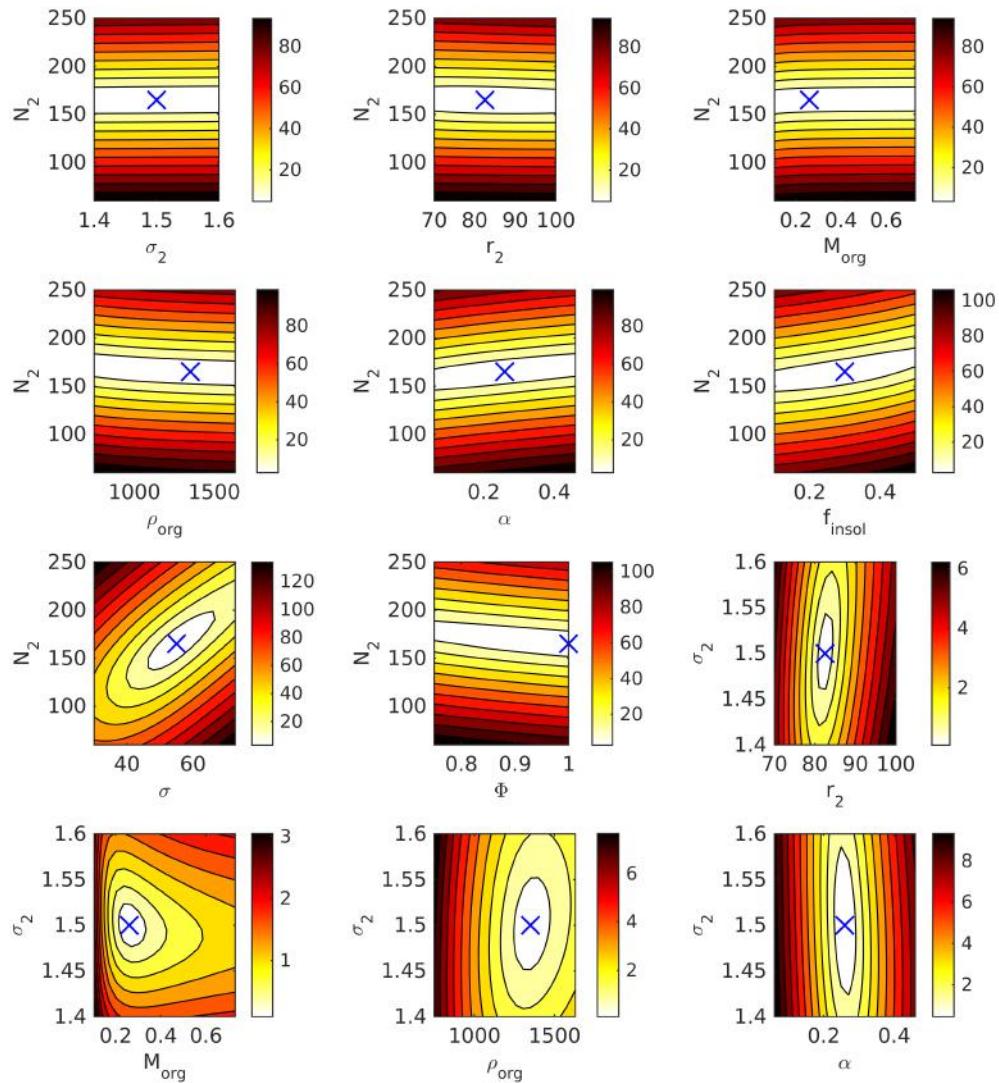
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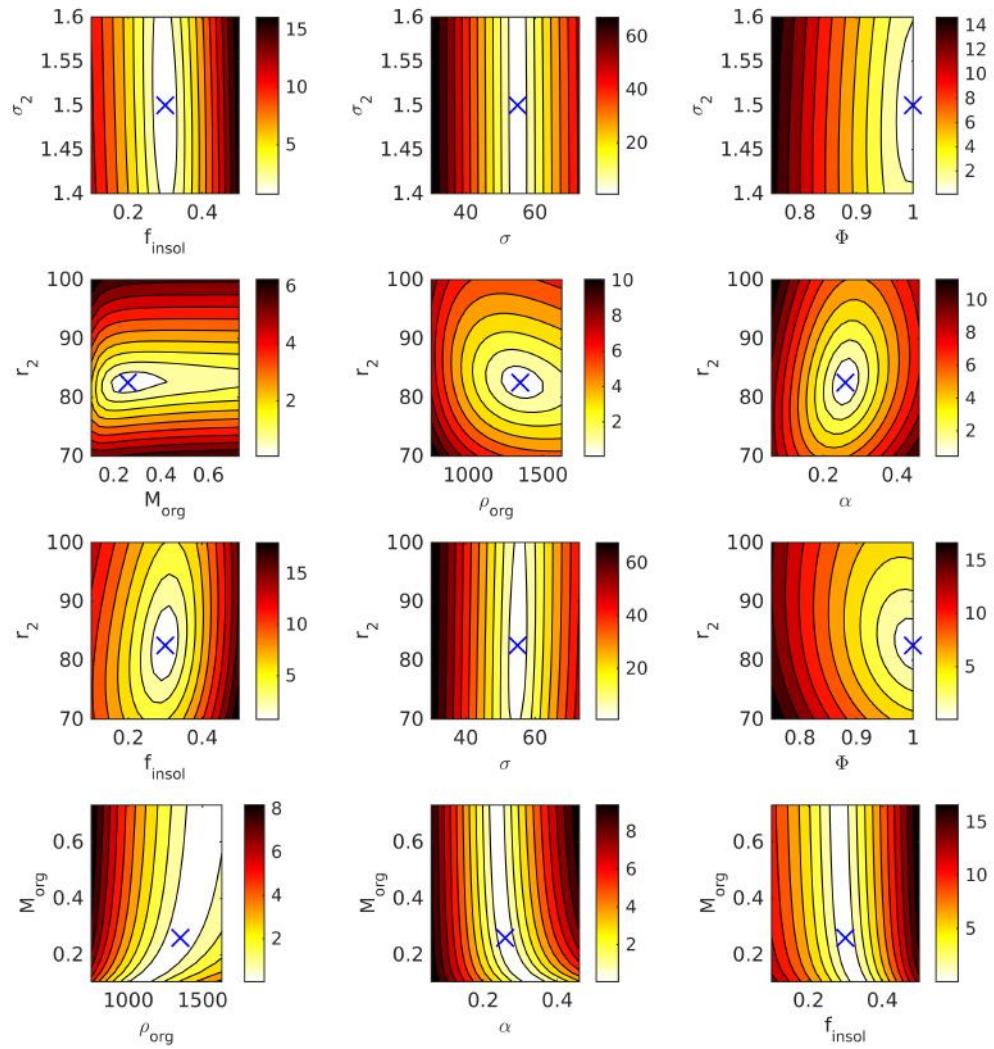
1 Response surfaces

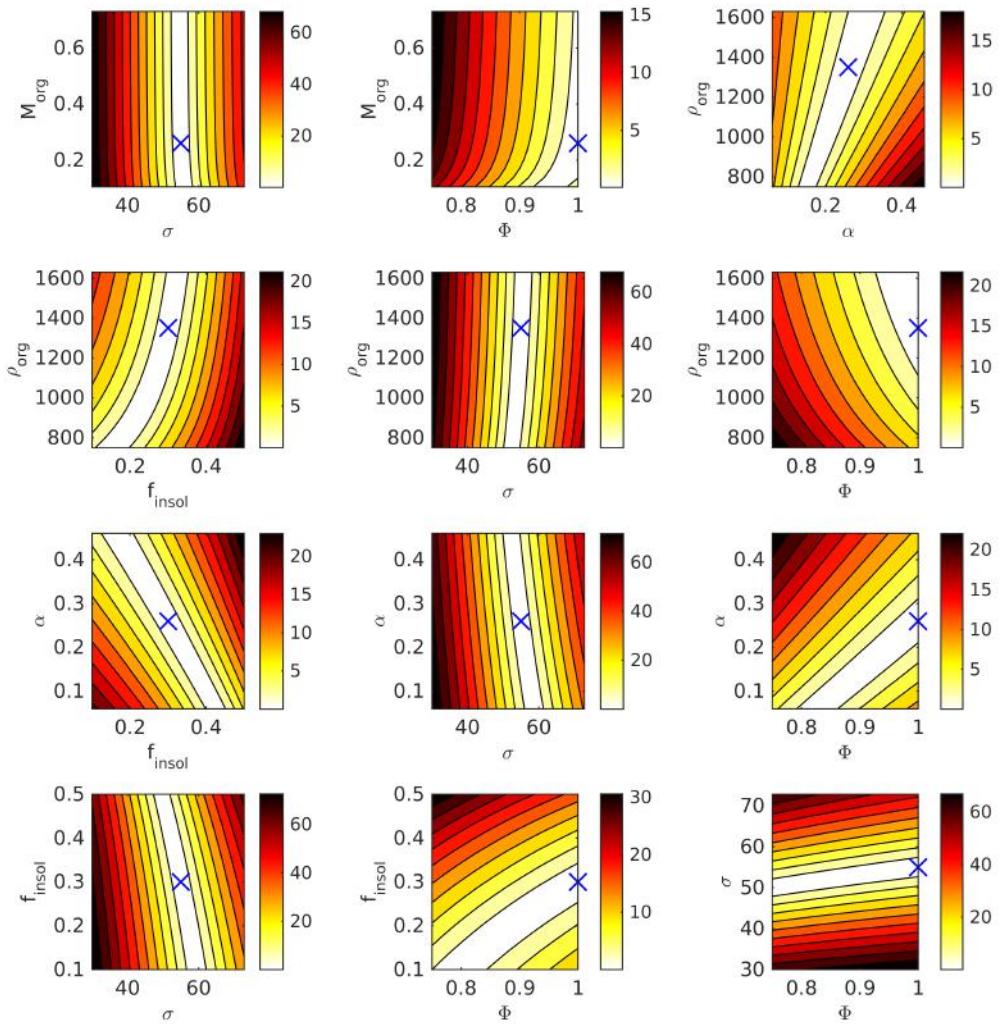
Here all response surfaces are supplied for the interested reader. Surfaces for each of the partitioning schemes (Nos. 1-4) discussed in Sect. 2 of the main text are presented in the same sequential order. Sections 1.1-1.3 correspond to the marine average, rural continental and polluted continental environments, respectively.

1.1 Marine average

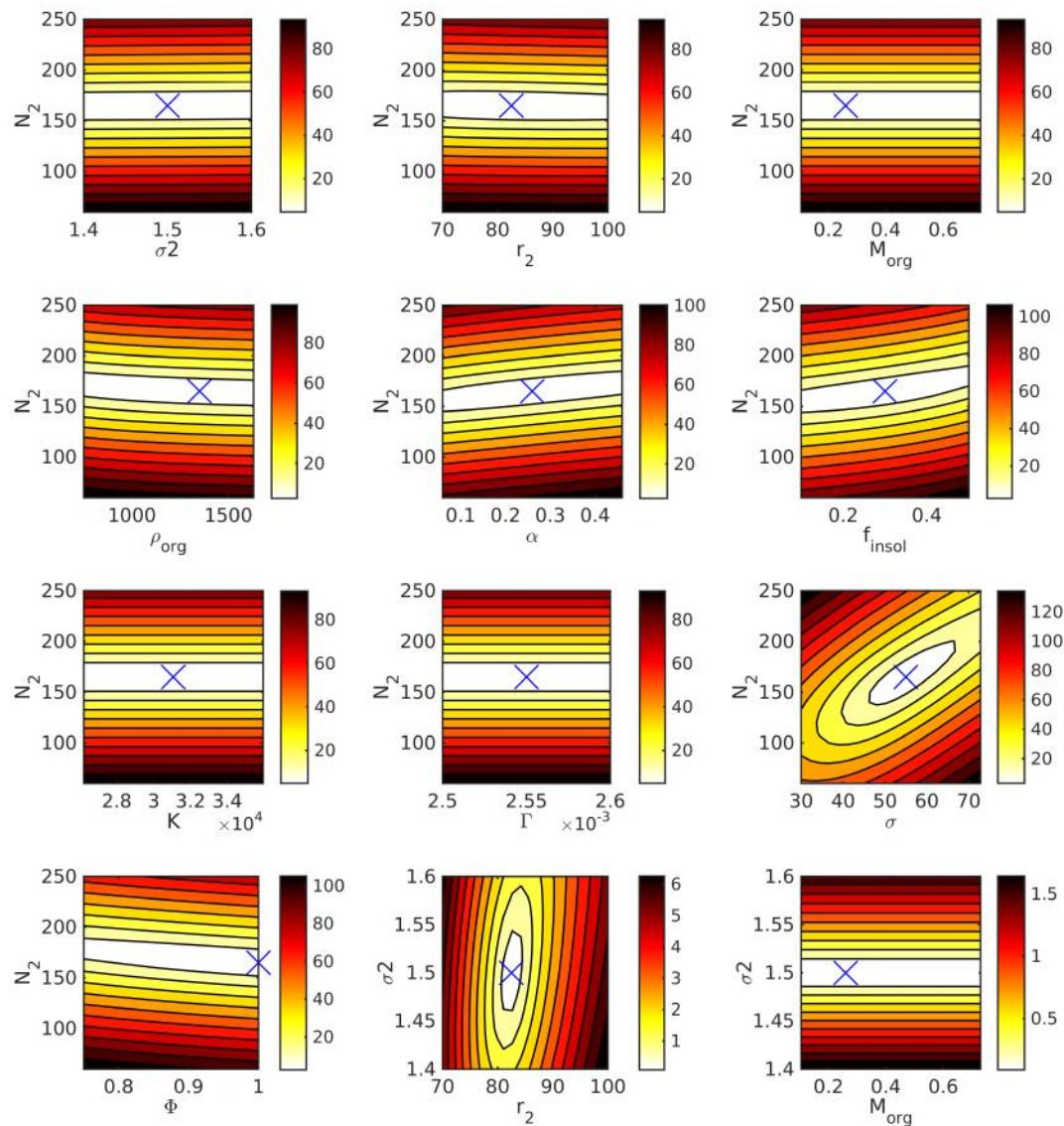
1.1.1 Case 1: $a_w^{np}\sigma^f$

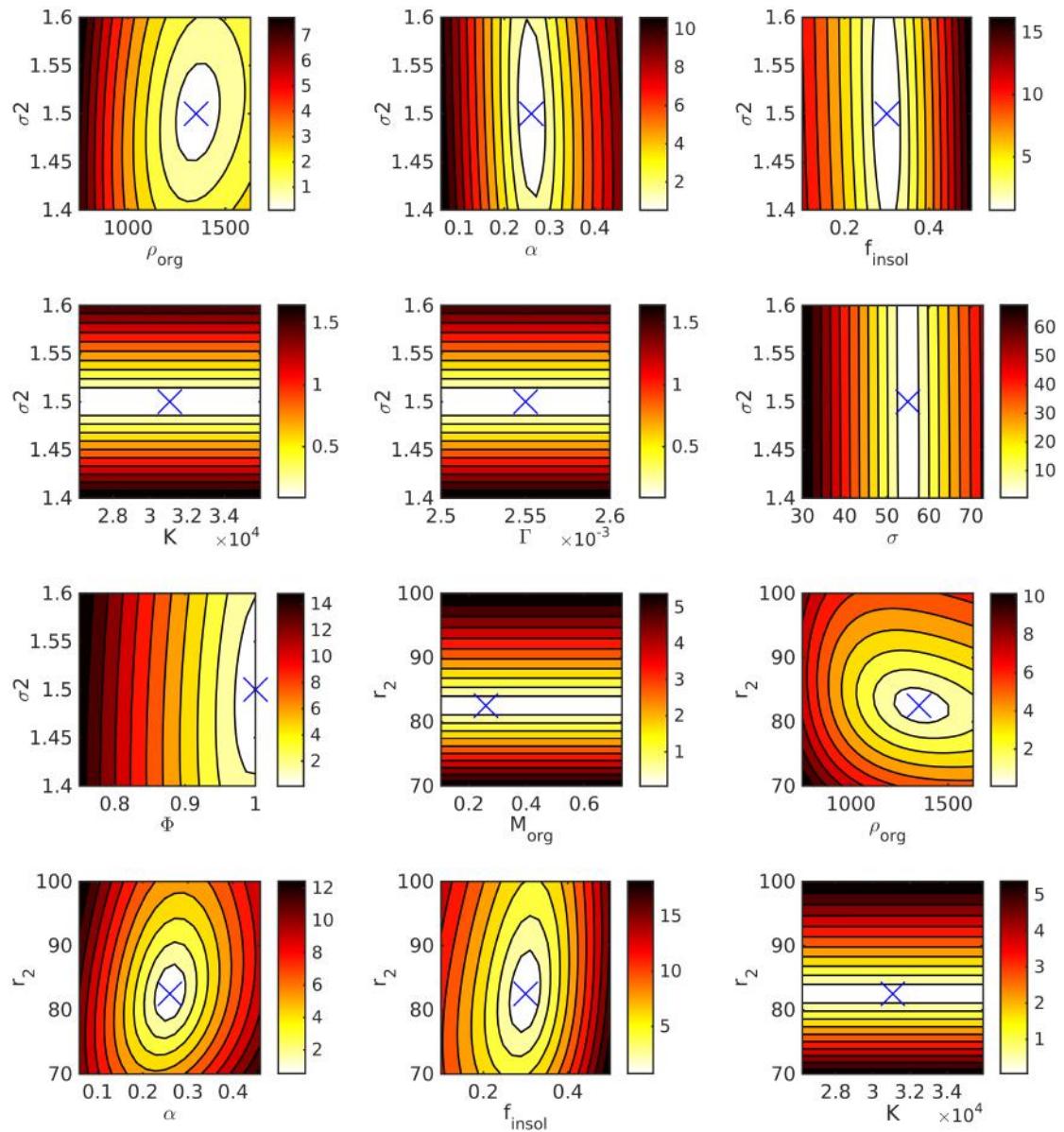


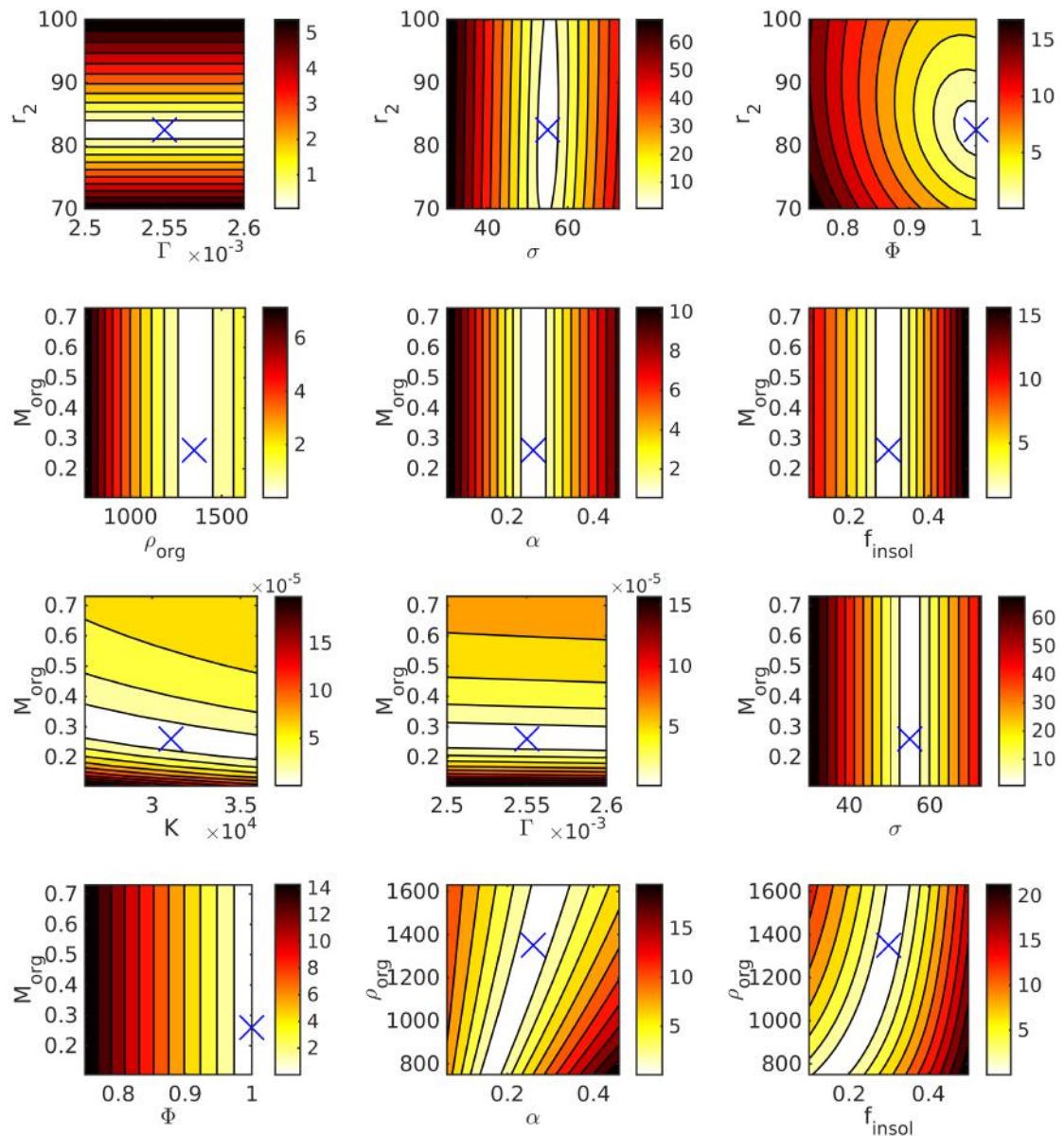


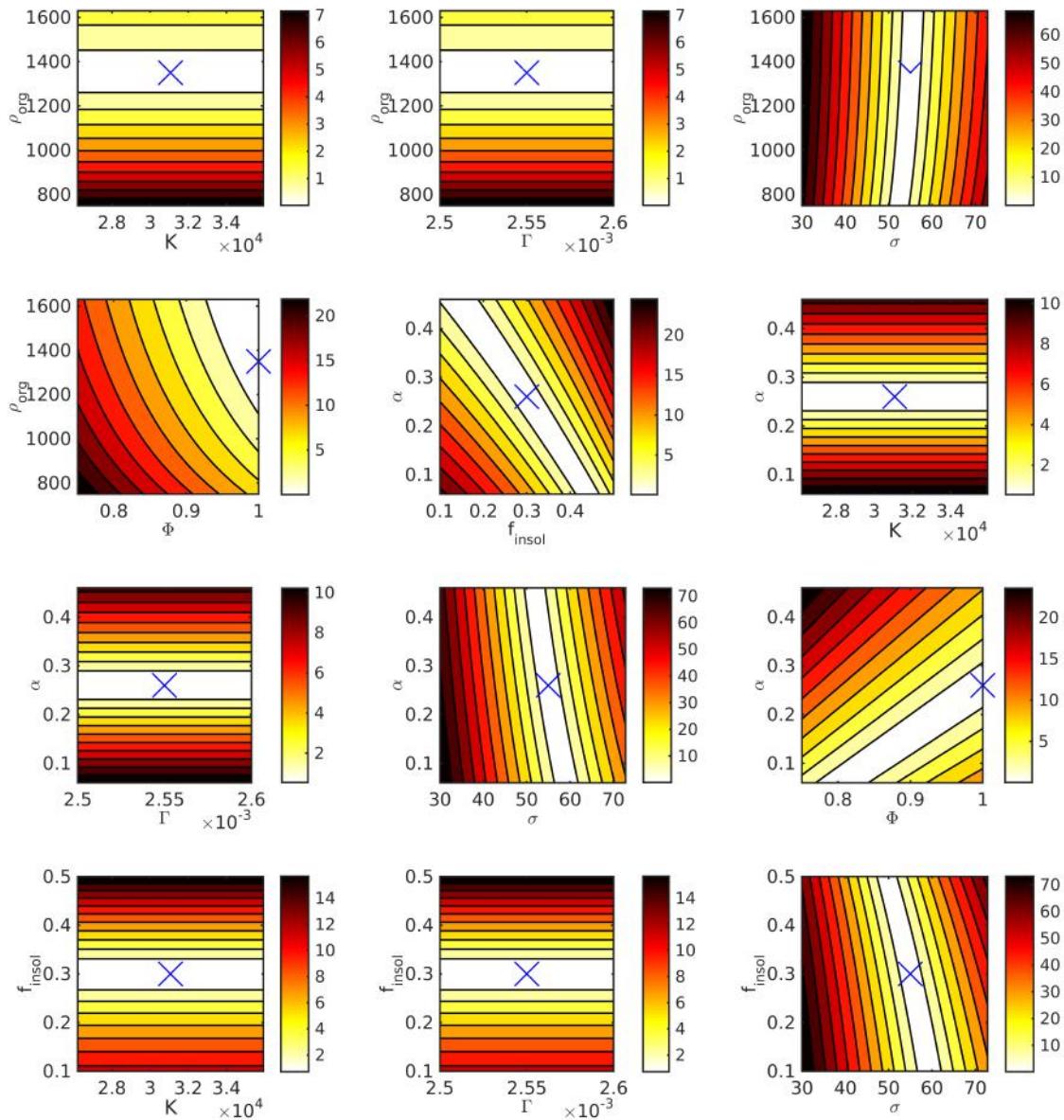


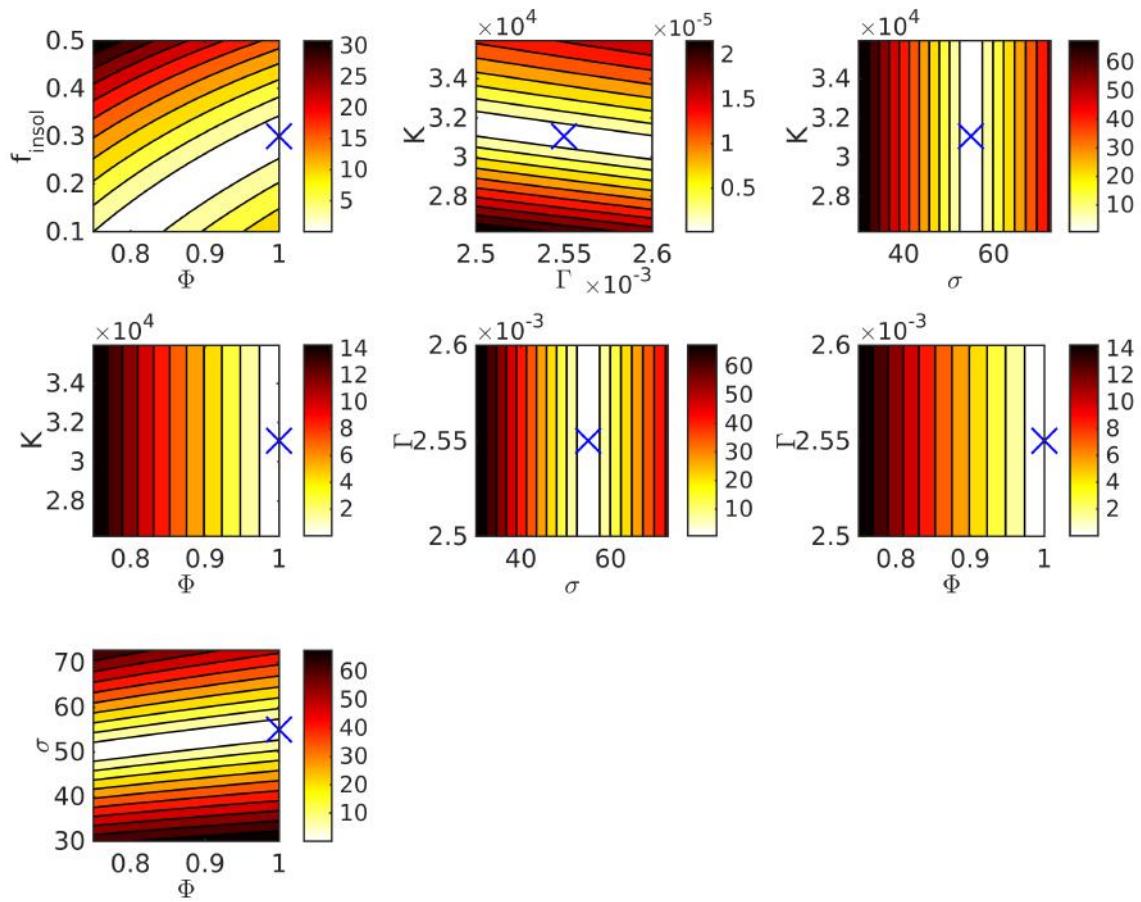
1.1.2 Case 2: $a_w^p \sigma^f$



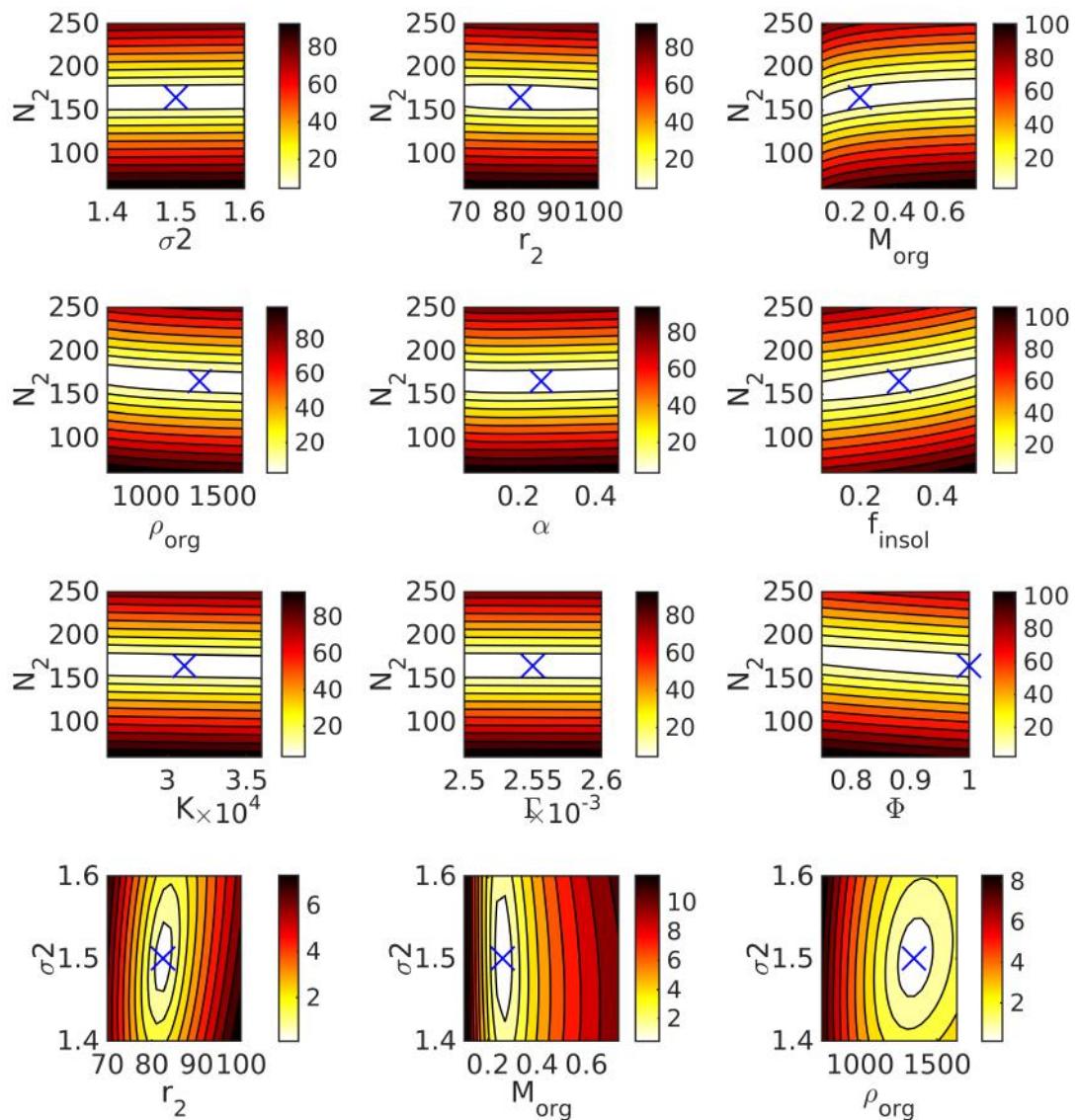


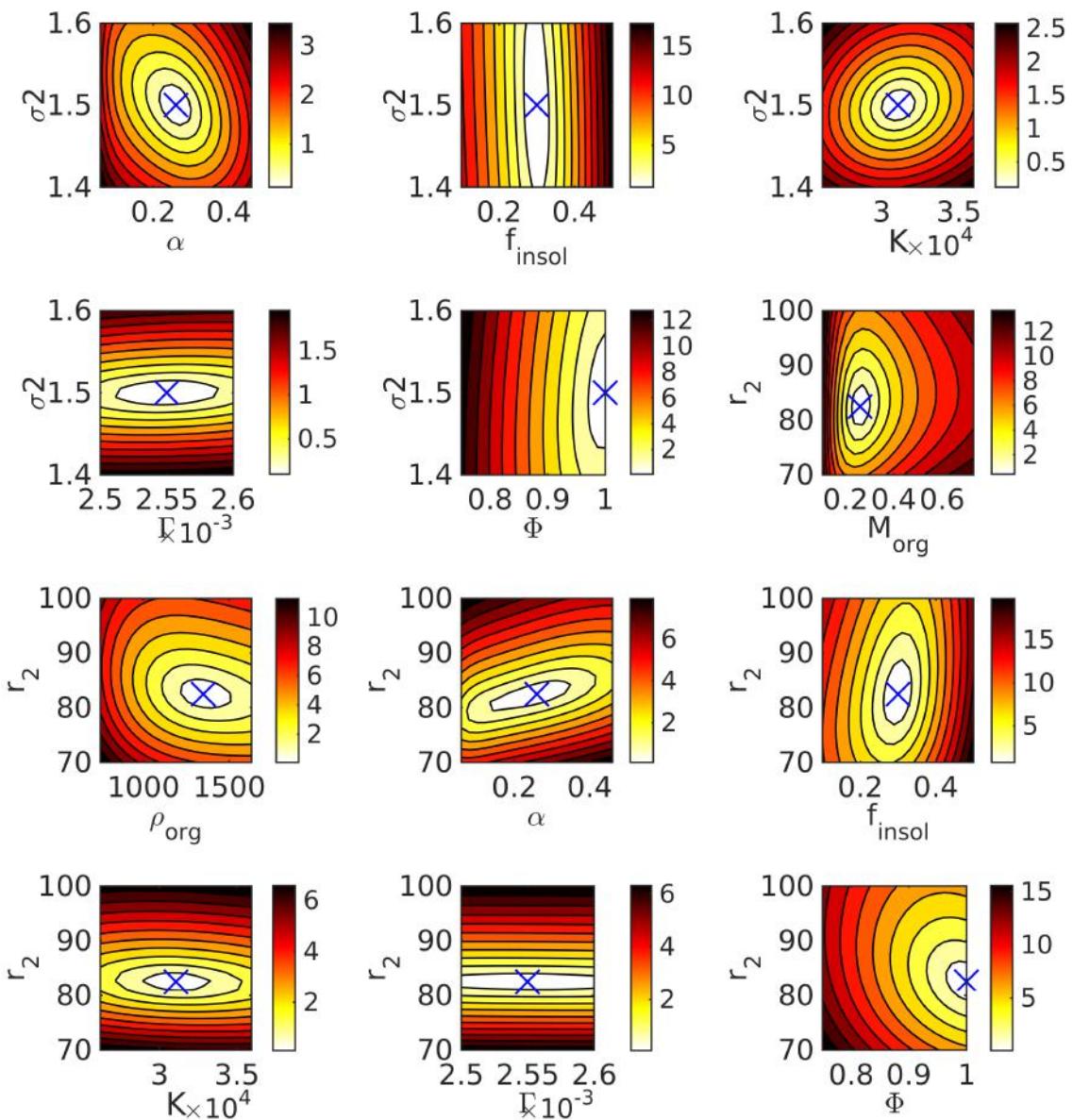


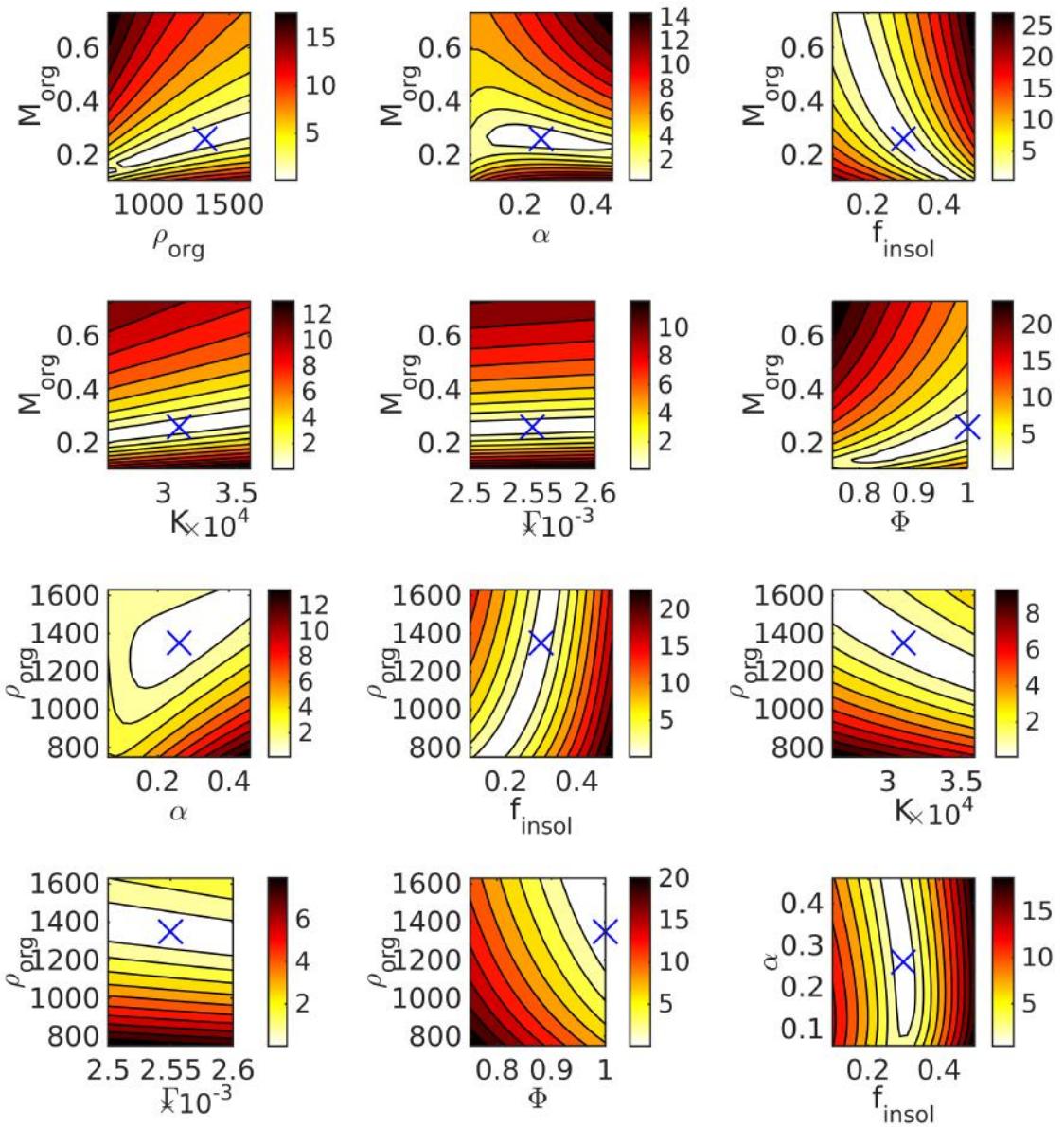


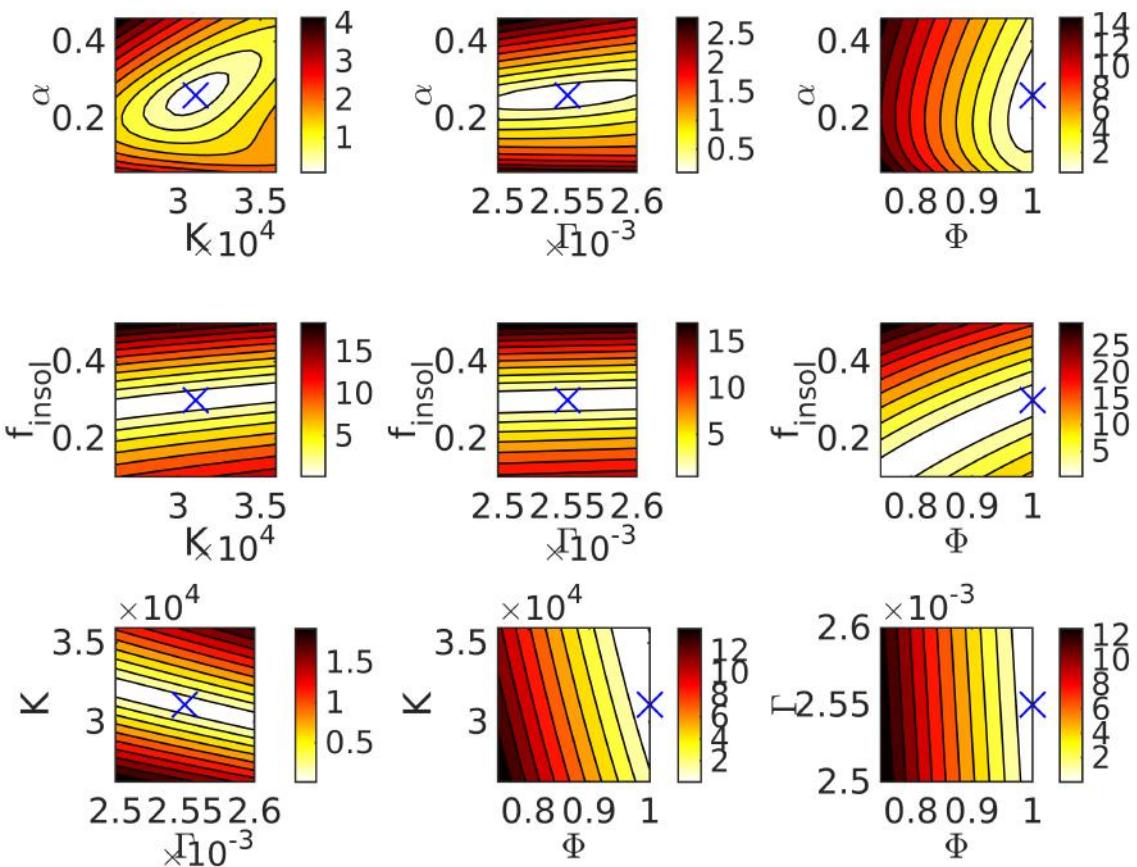


1.1.3 Case 3: $a_w^{np}\sigma^{nf}$

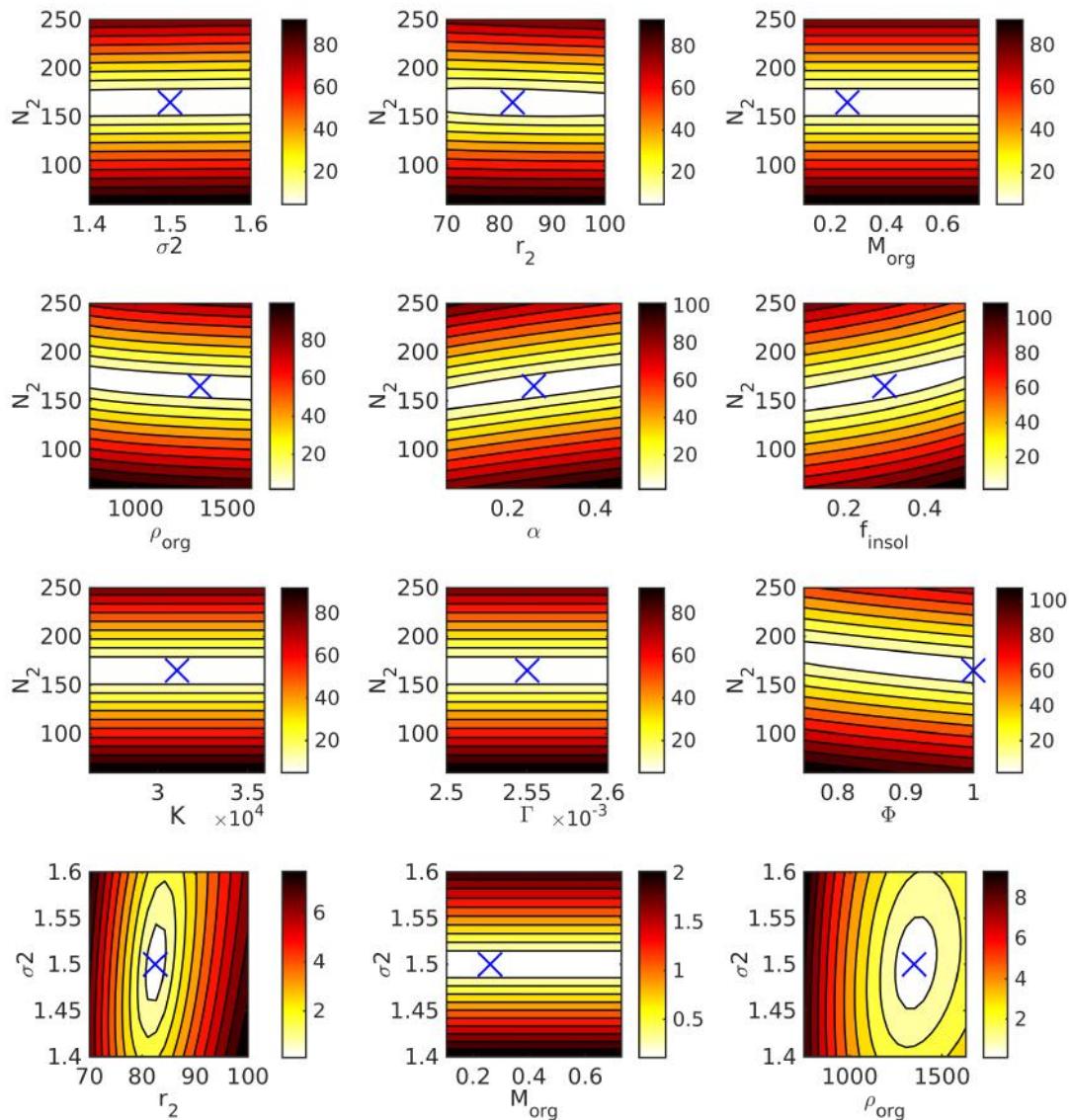


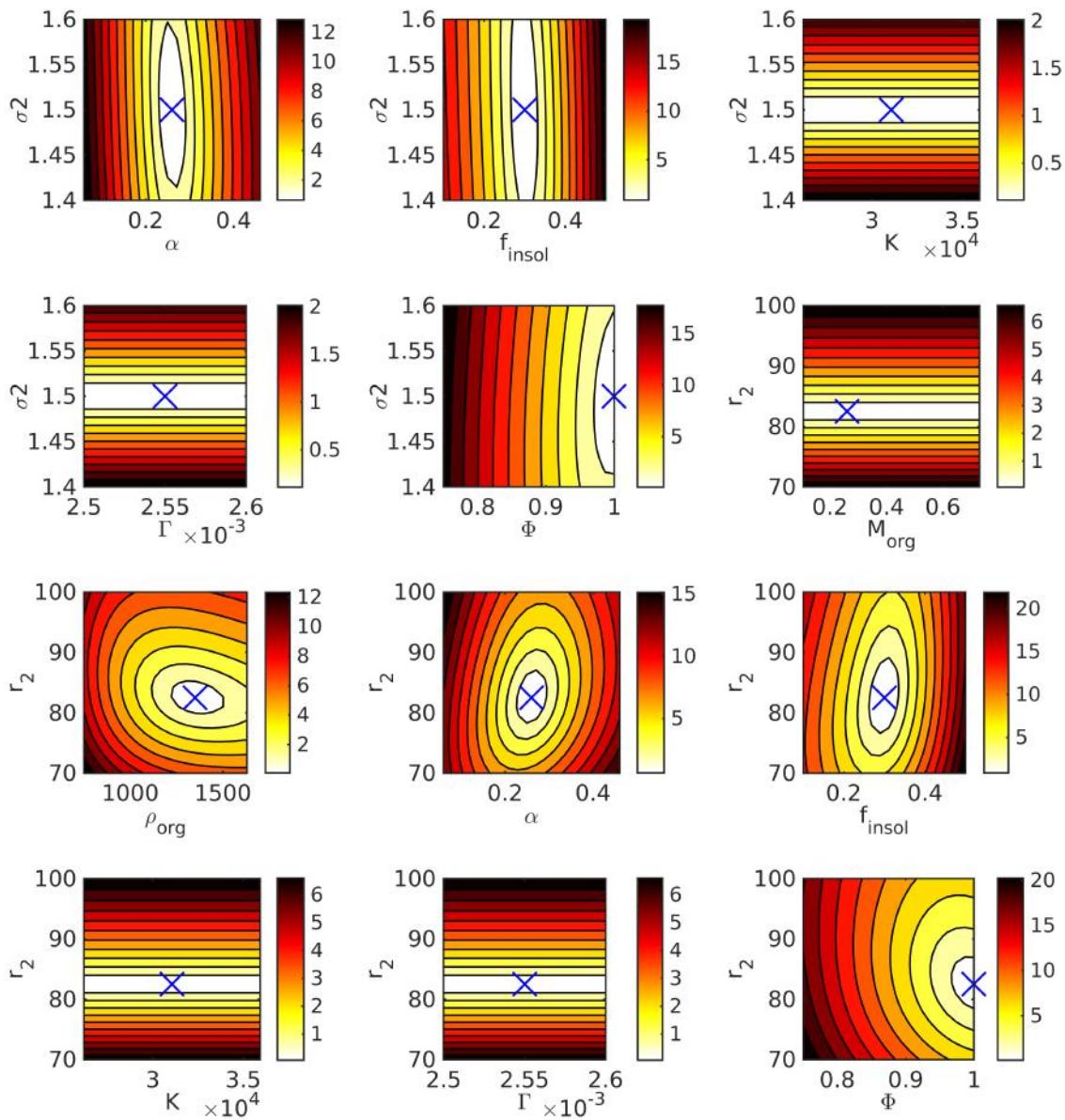


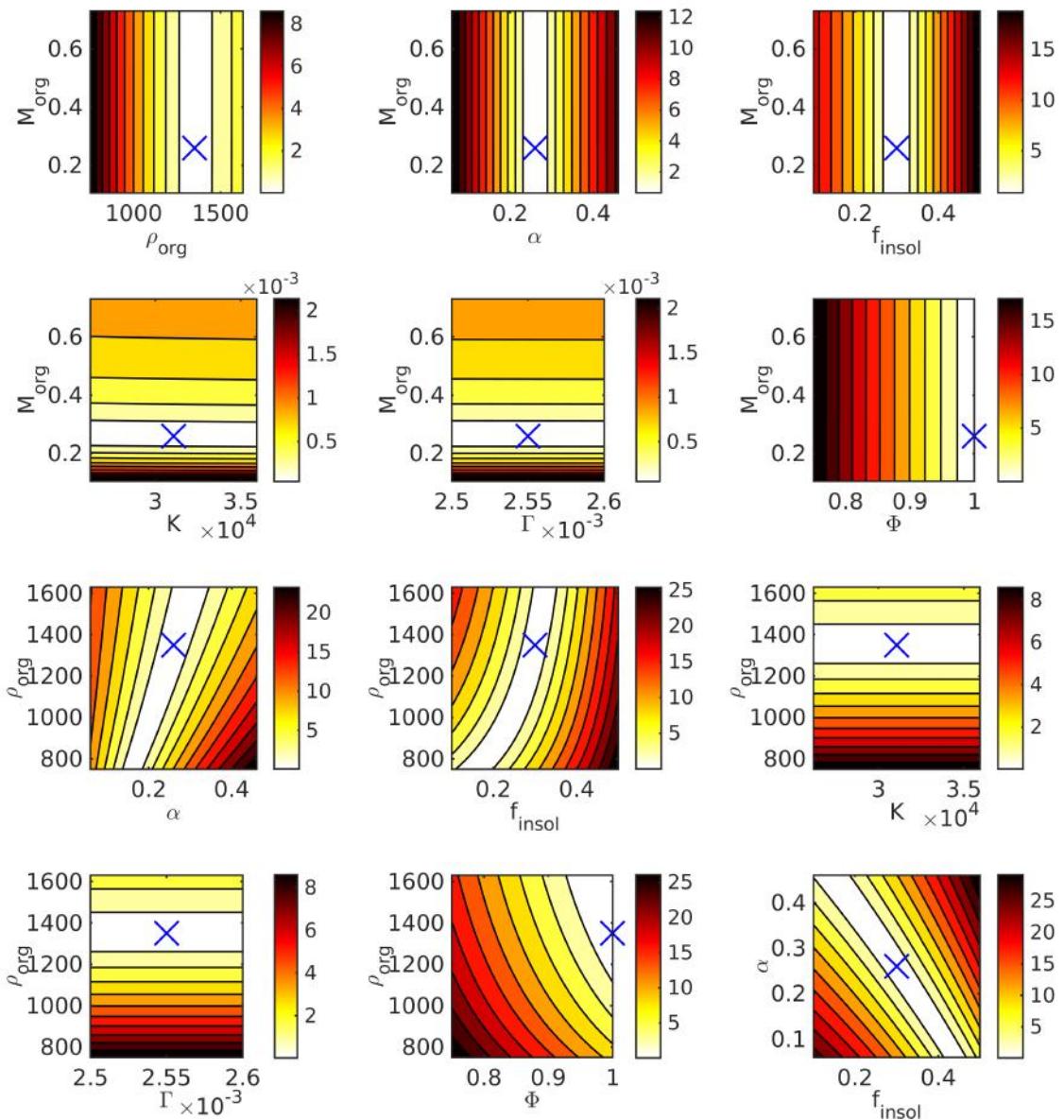


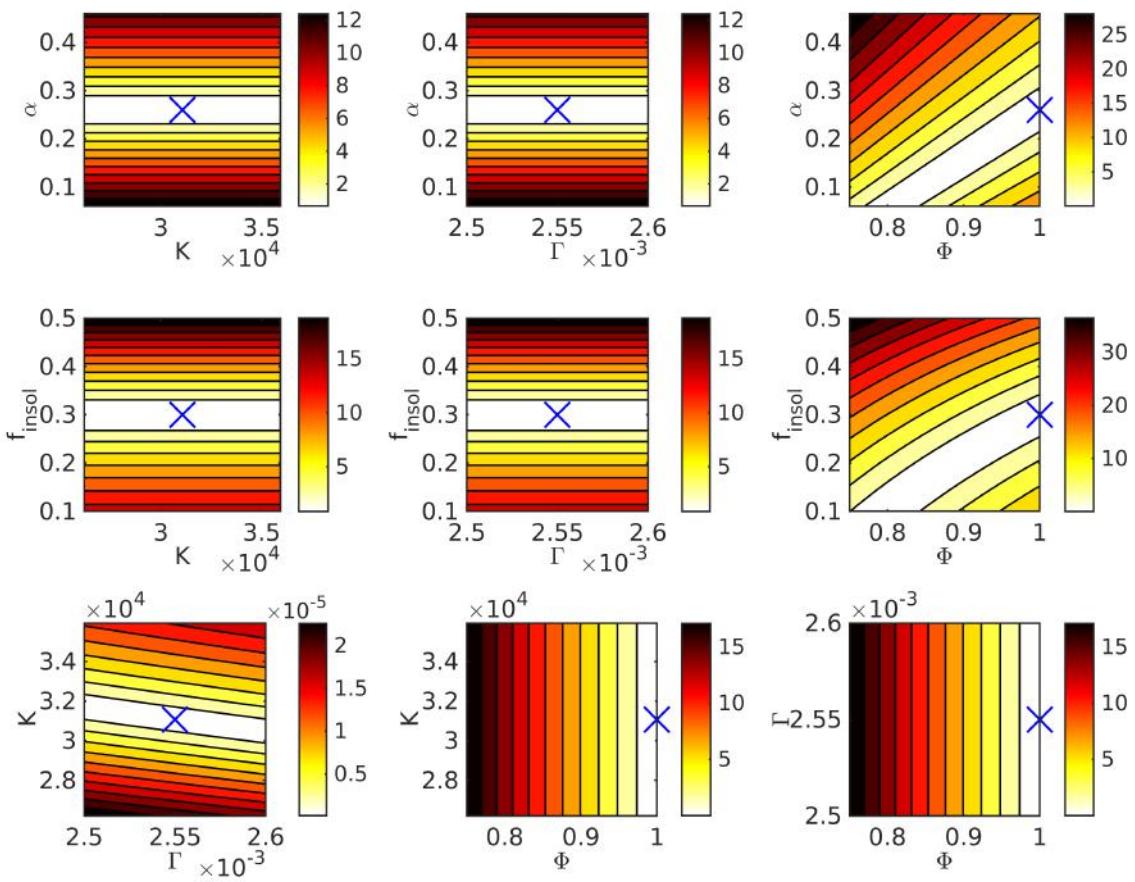


1.1.4 Case 4: $a_w^p \sigma^{nf}$



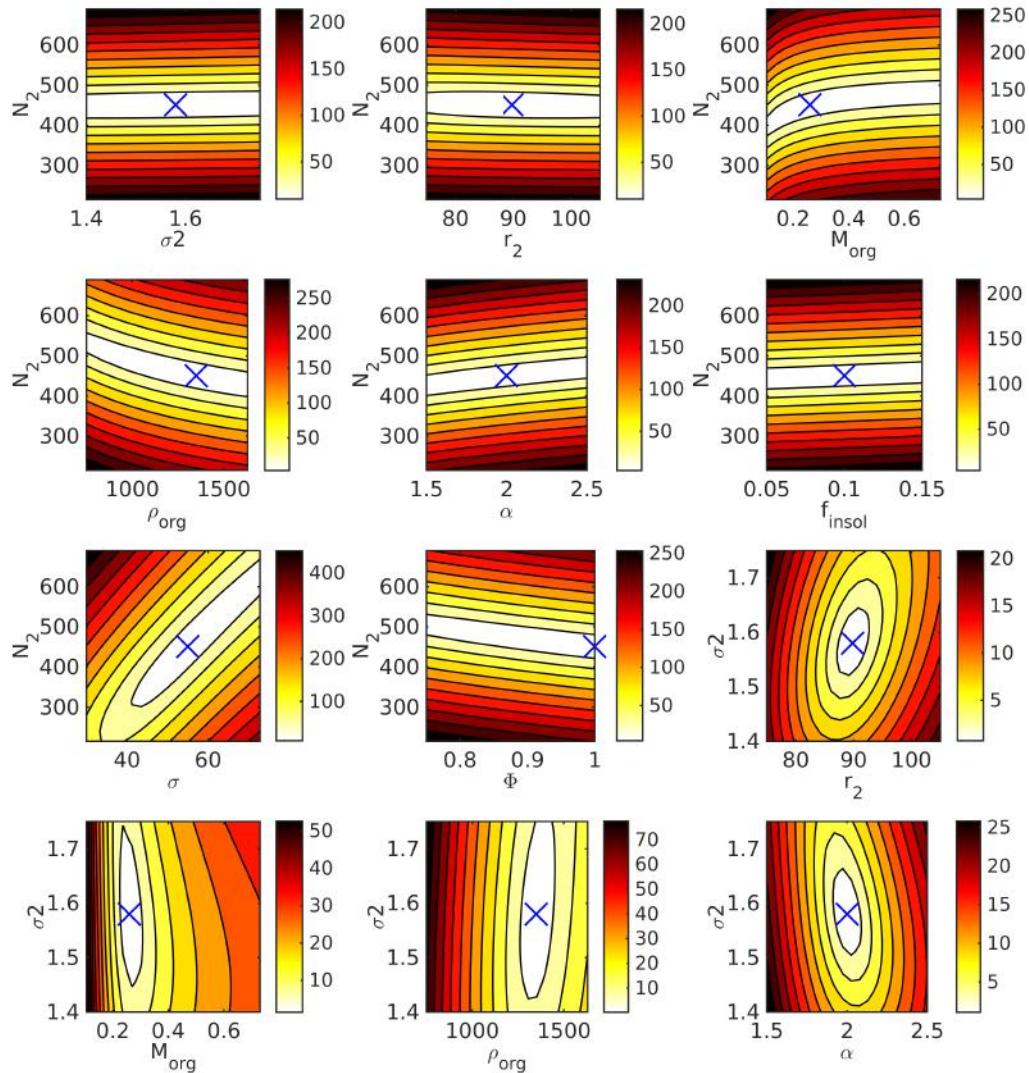


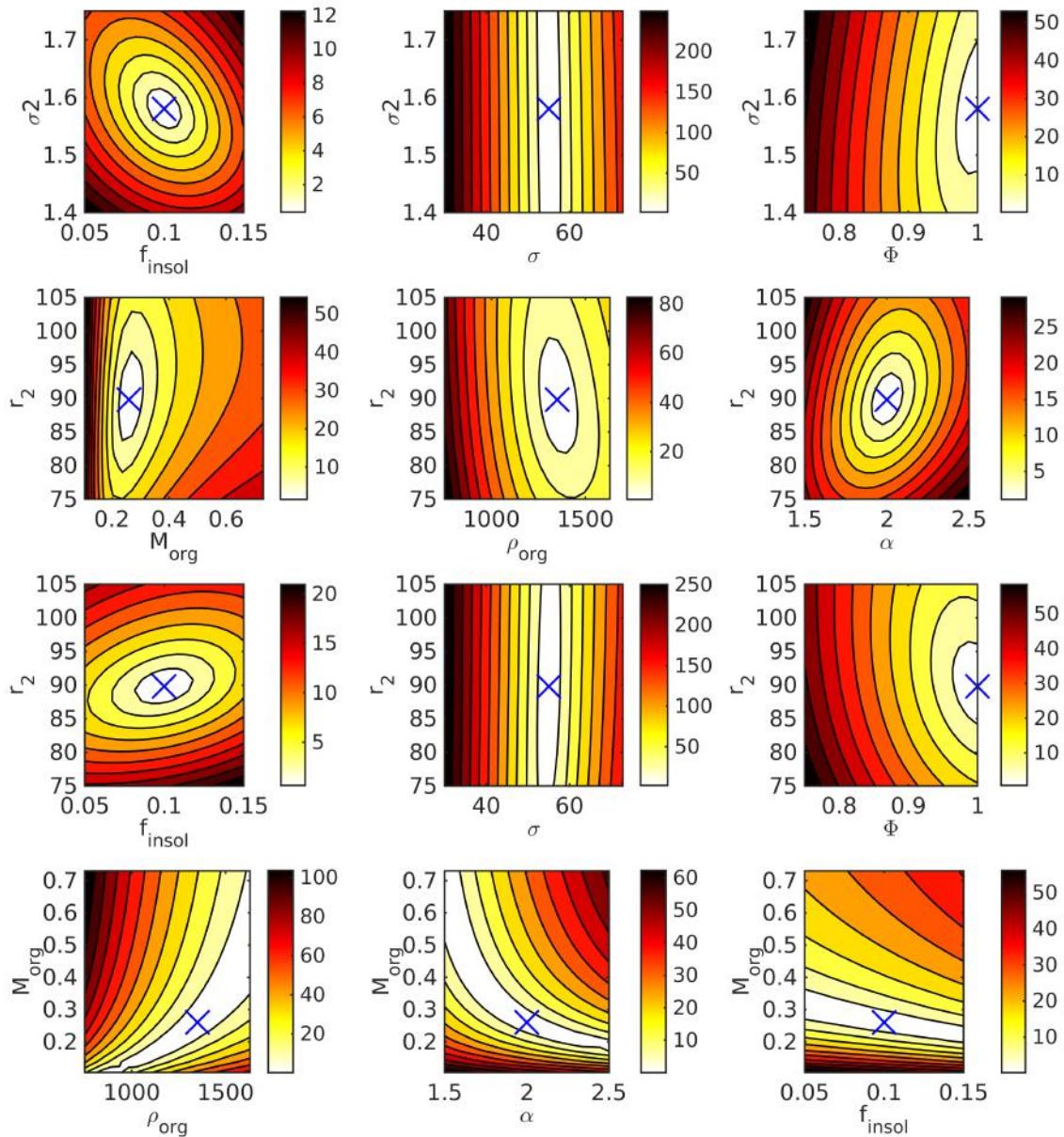


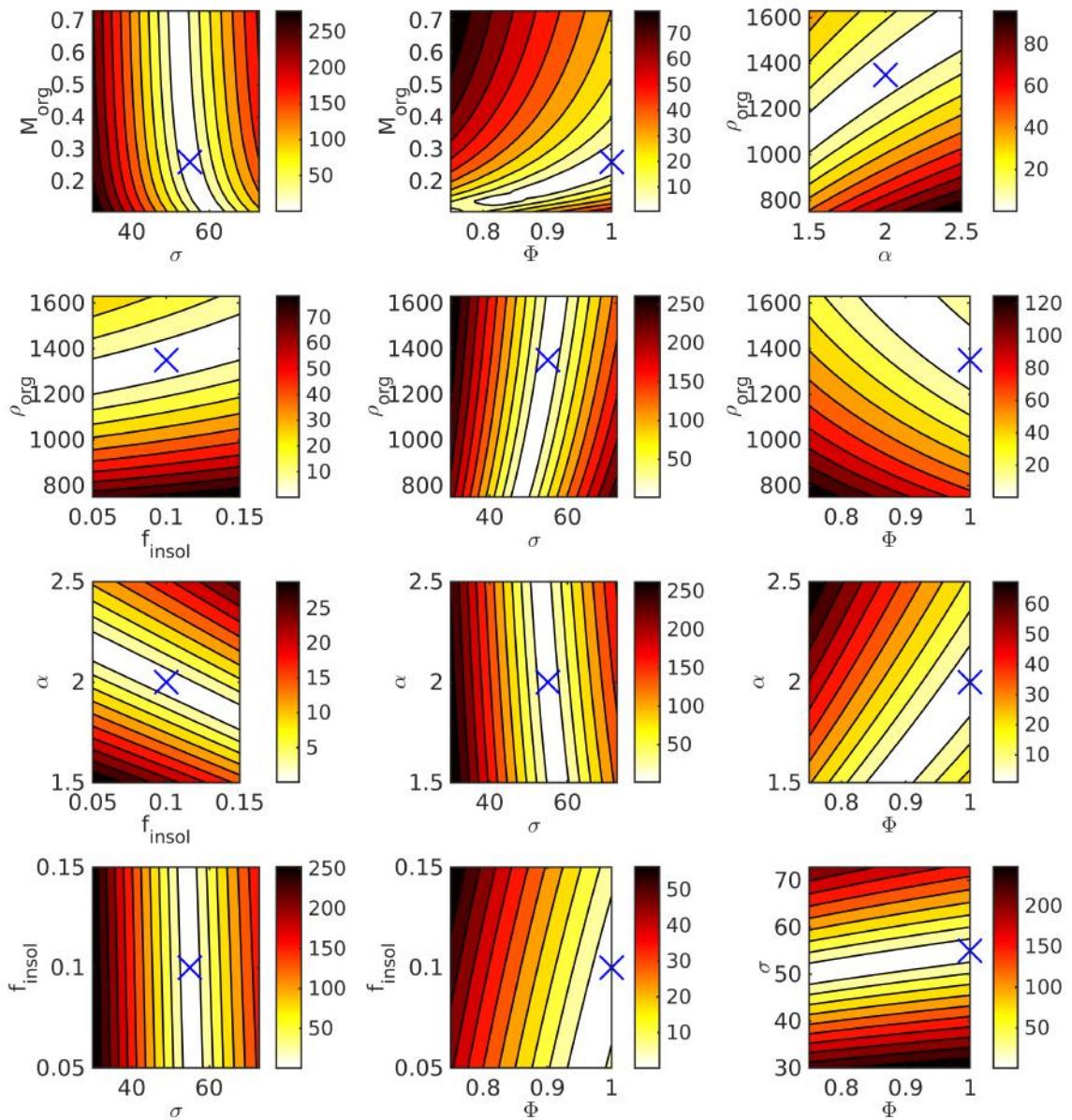


1.2 Rural continental

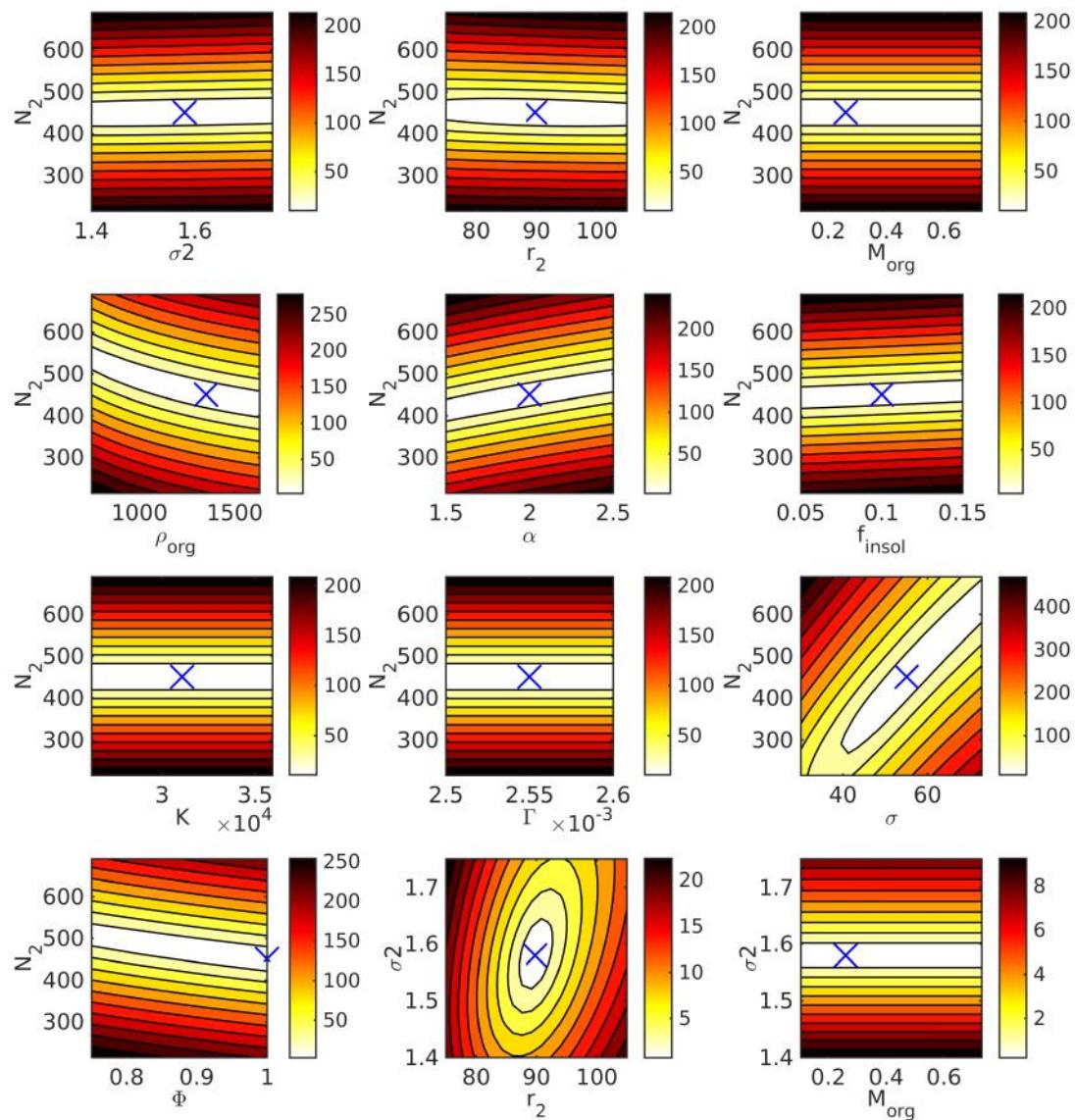
1.2.1 Case 1: $a_w^{np}\sigma^f$

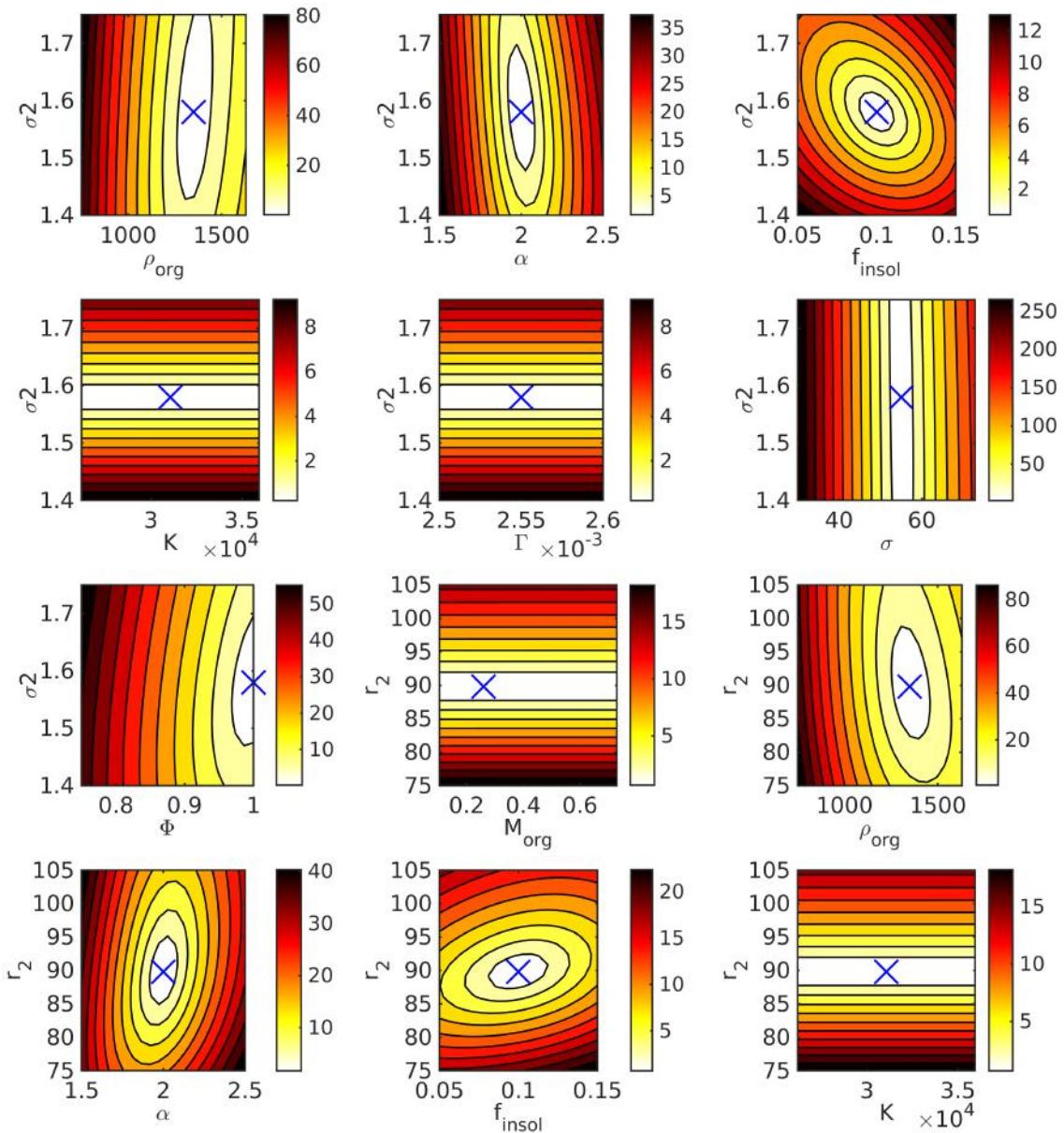


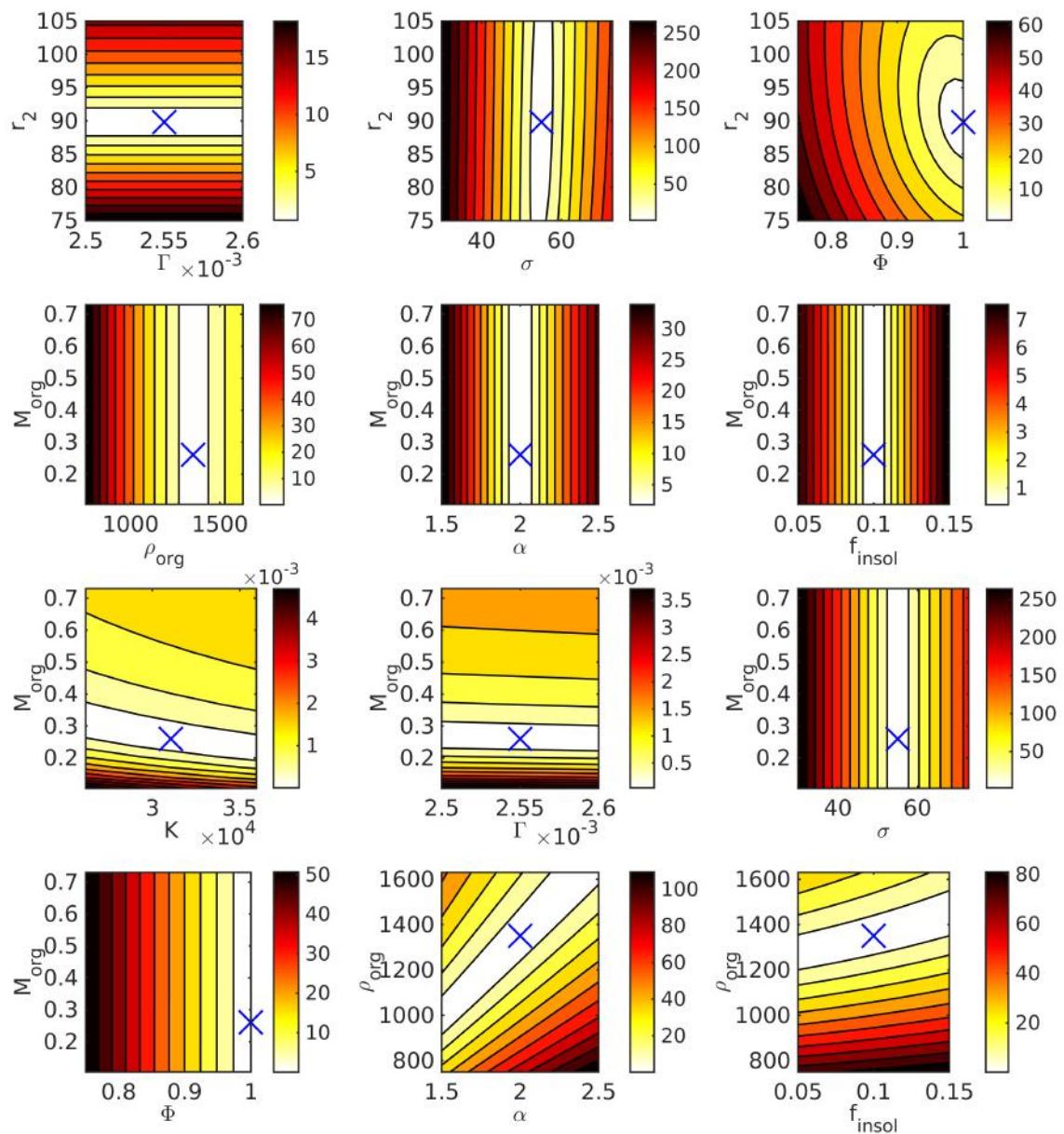


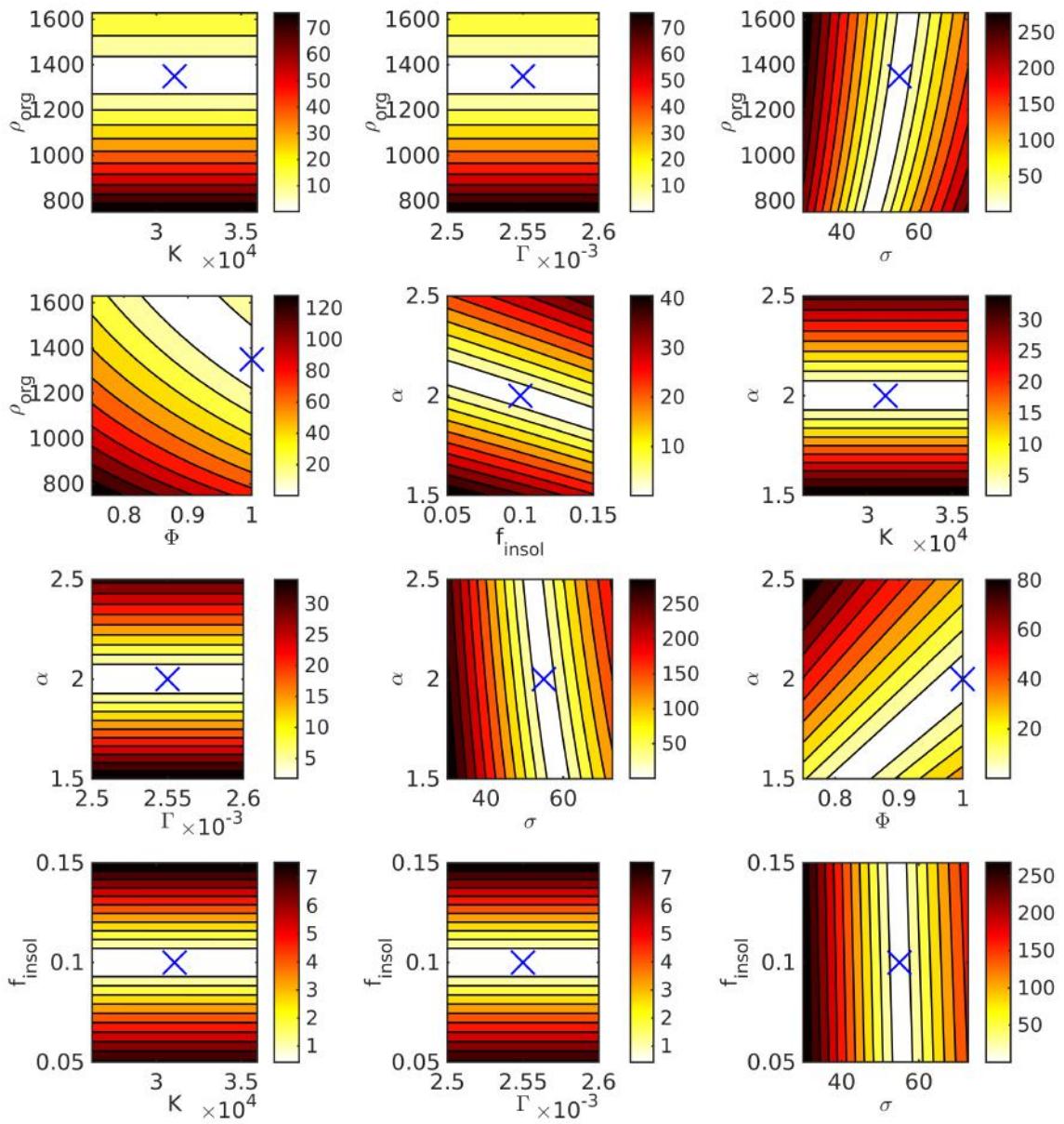


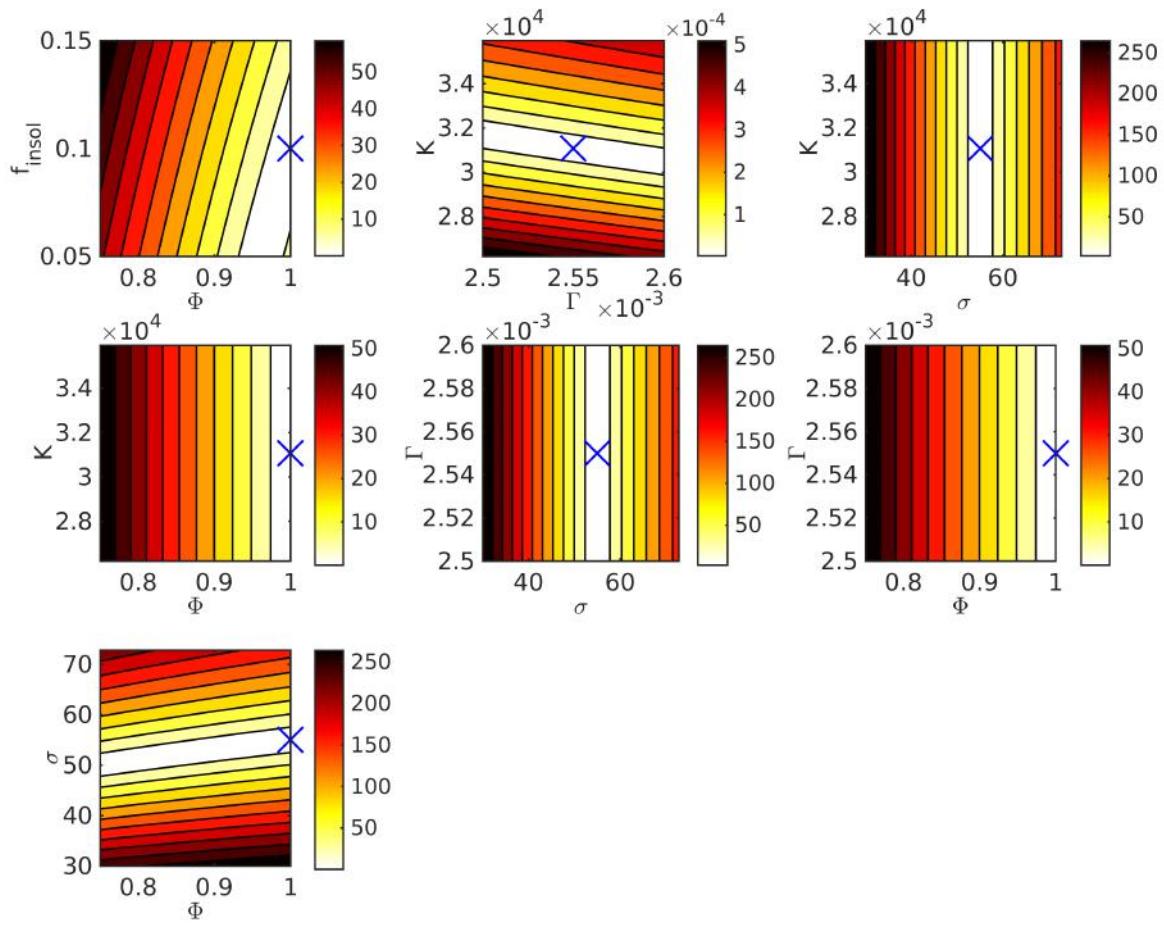
1.2.2 Case 2: $a_w^p \sigma^f$



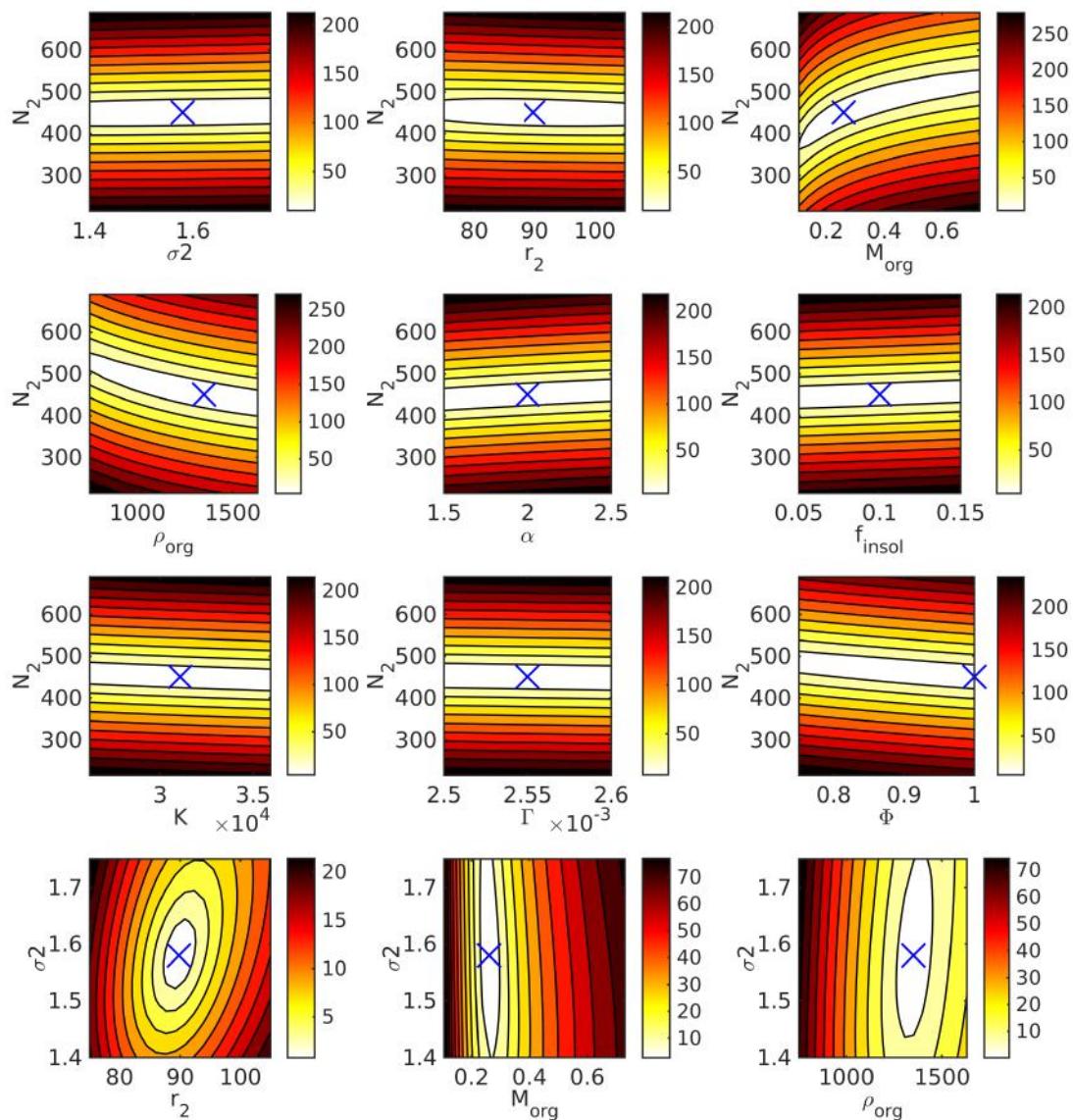


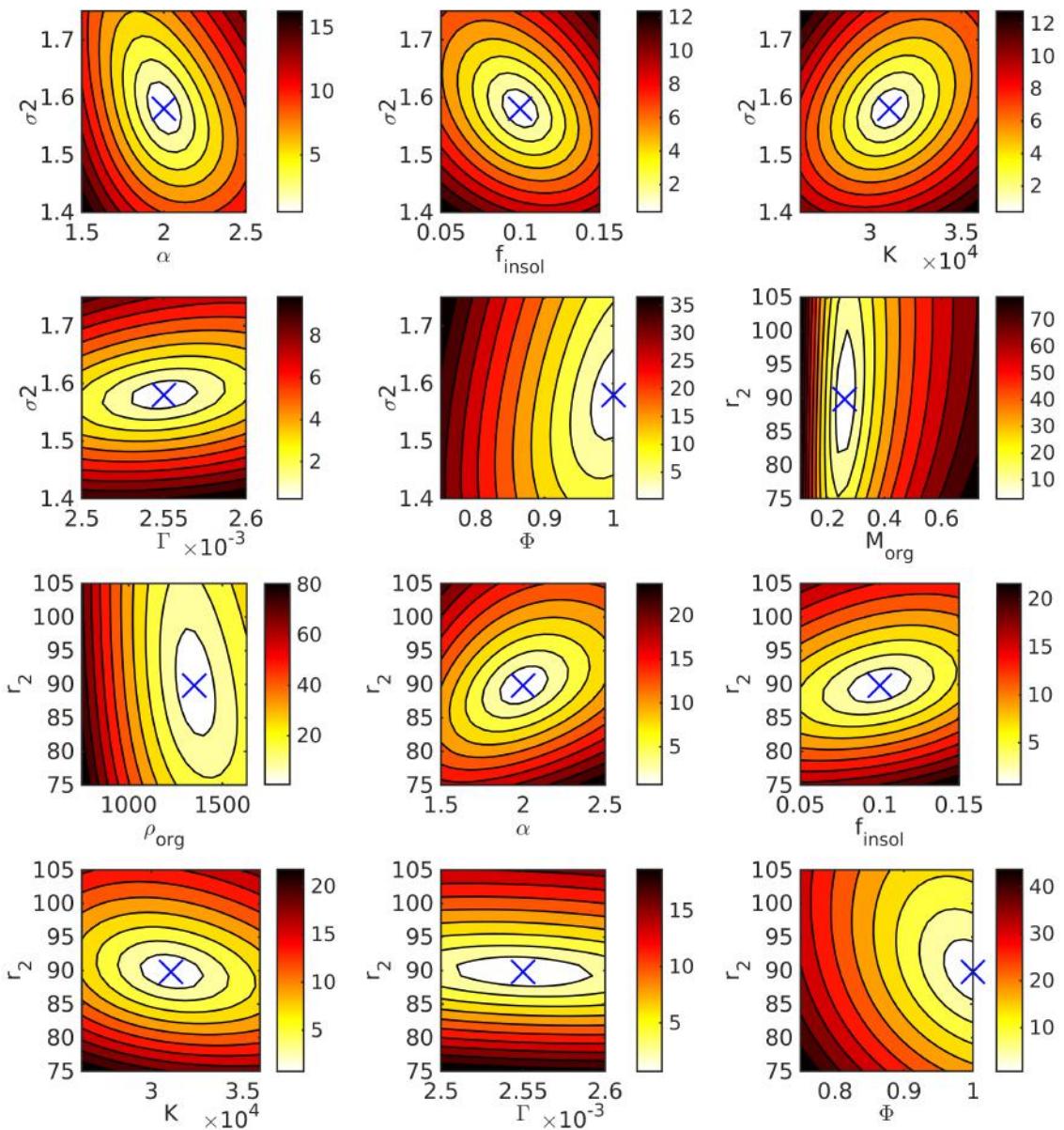


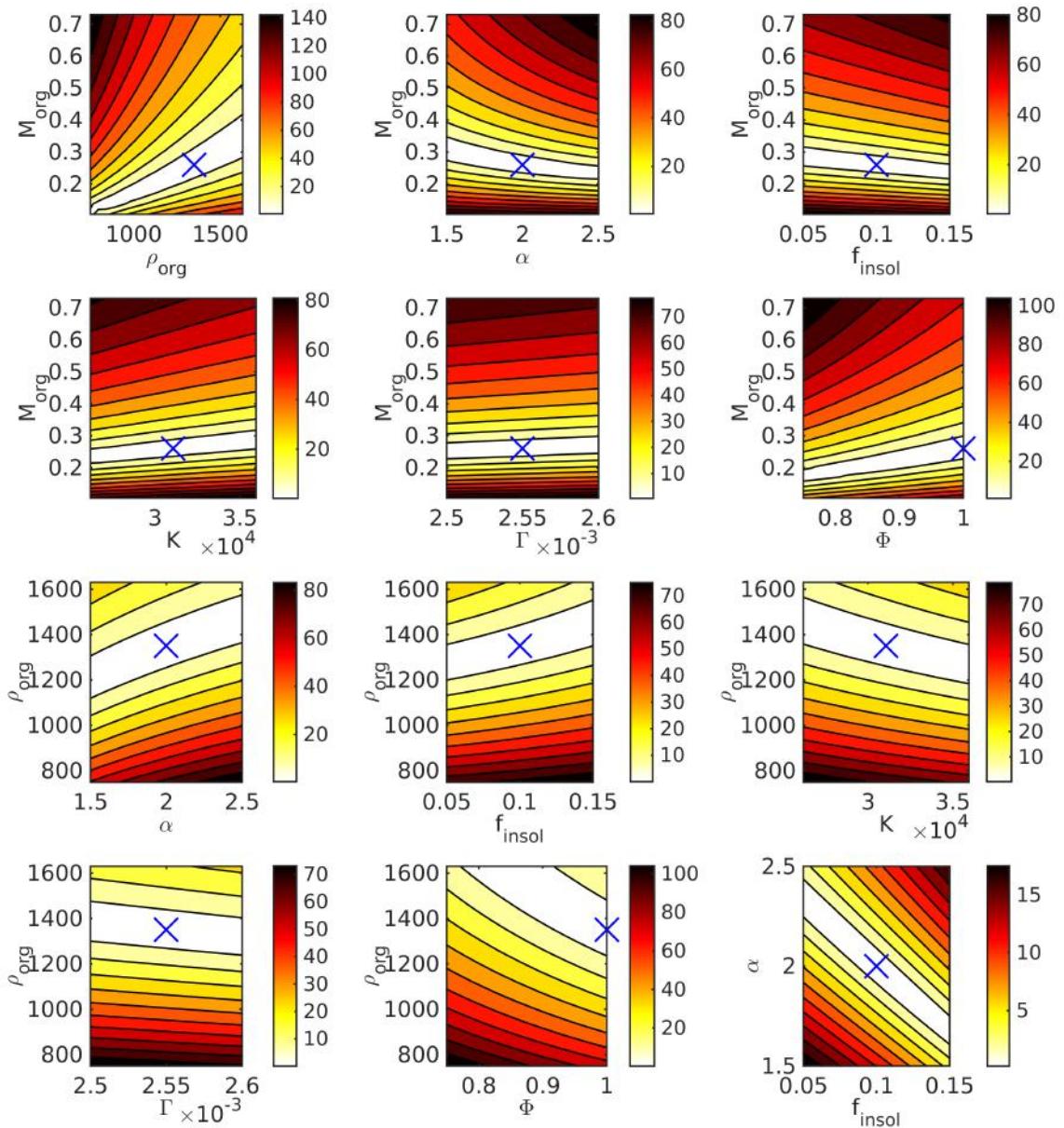


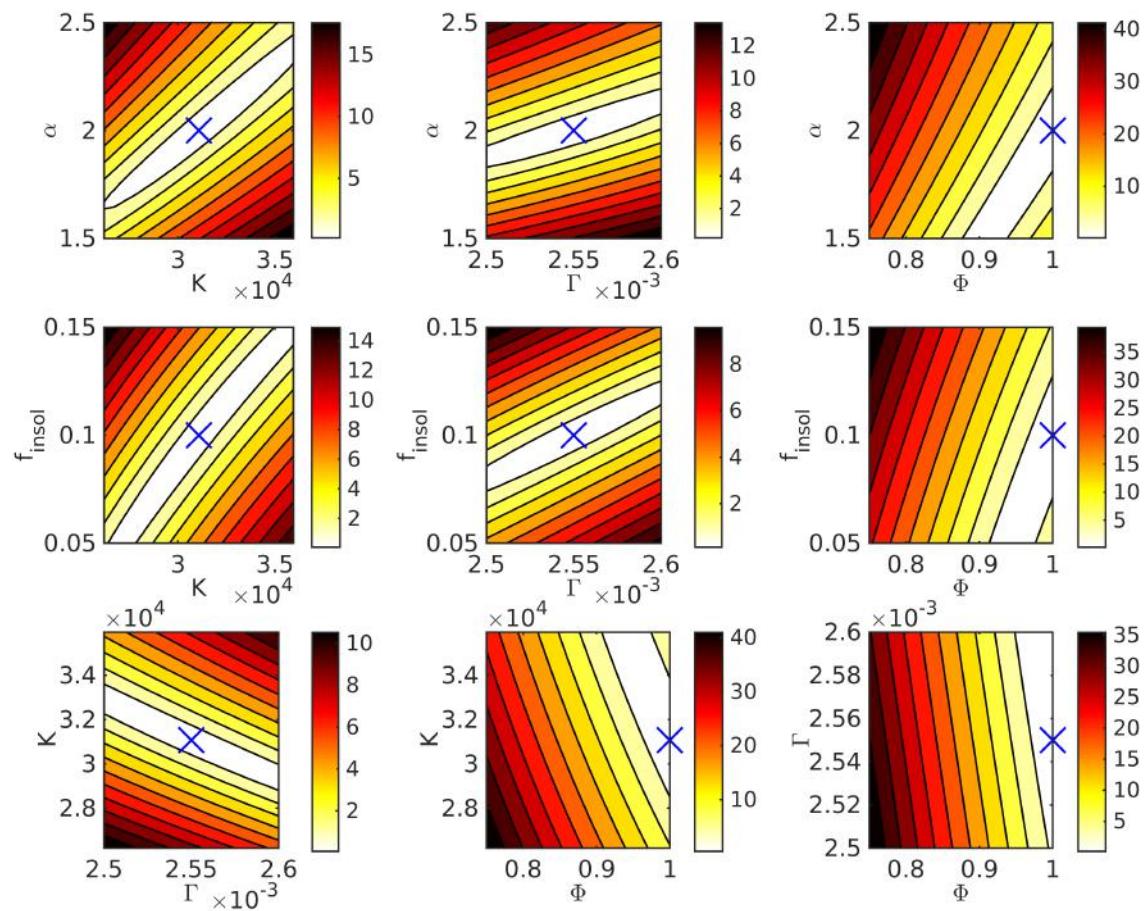


1.2.3 Case 3: $a_w^{np}\sigma^{nf}$

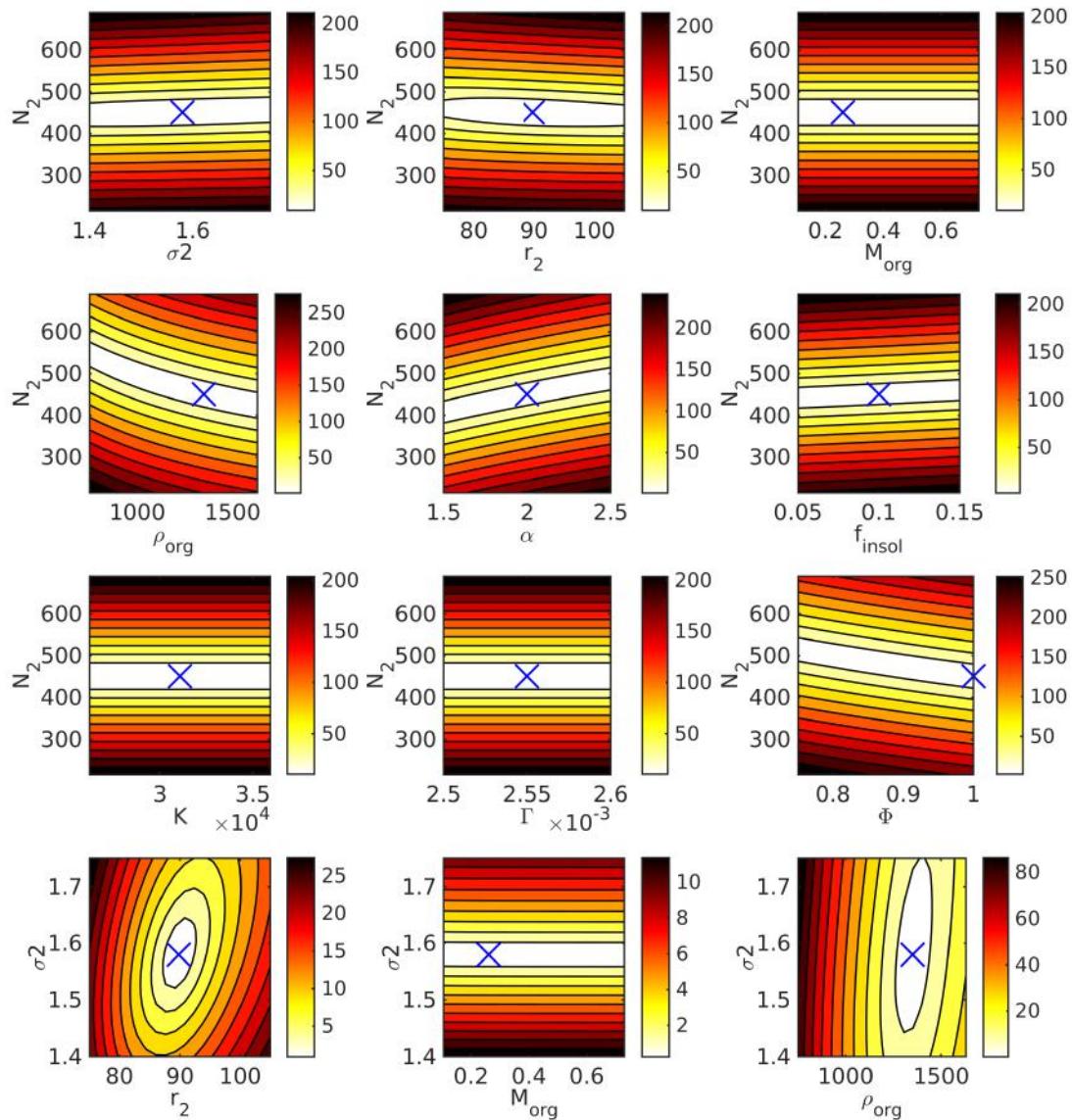


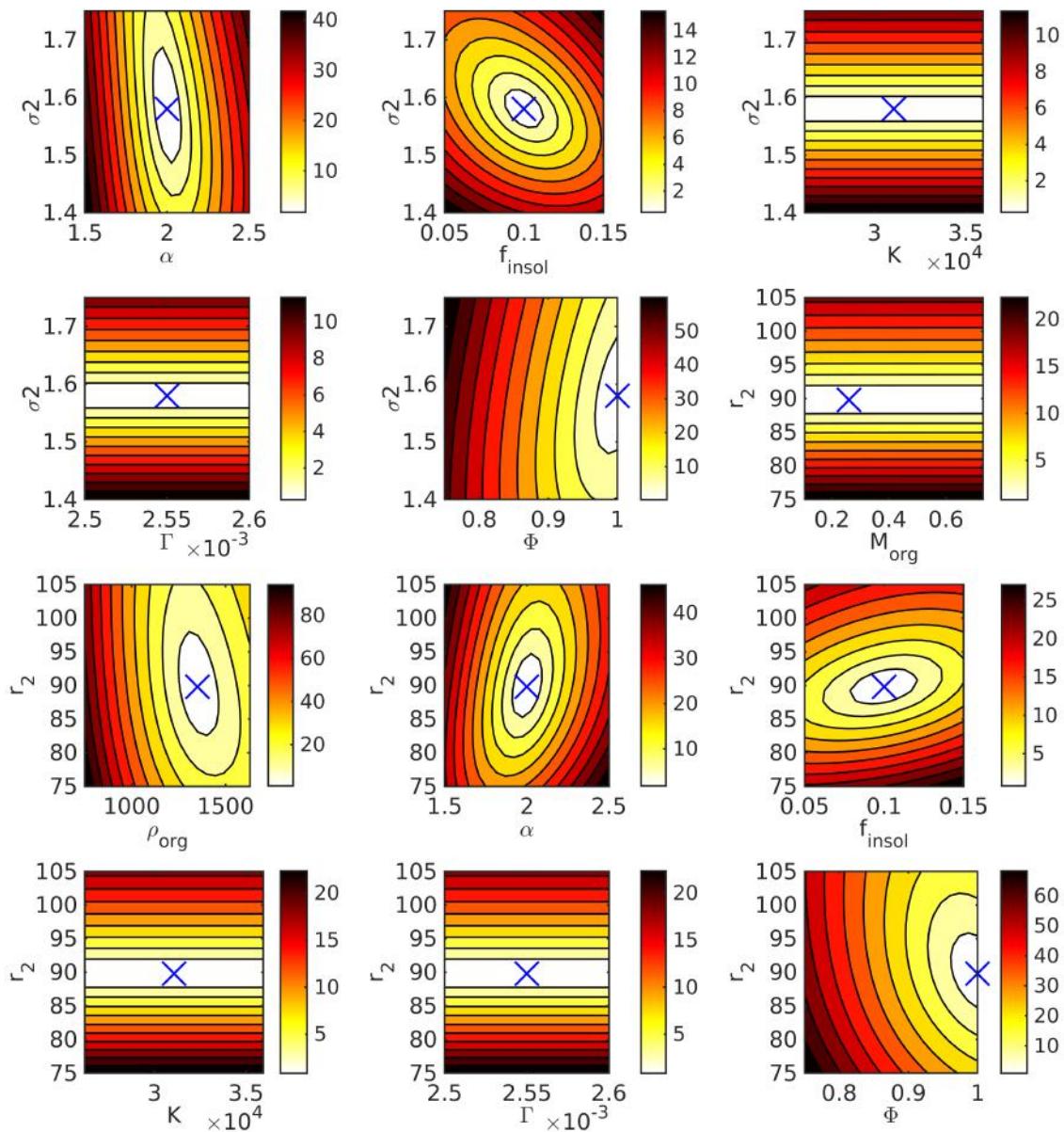


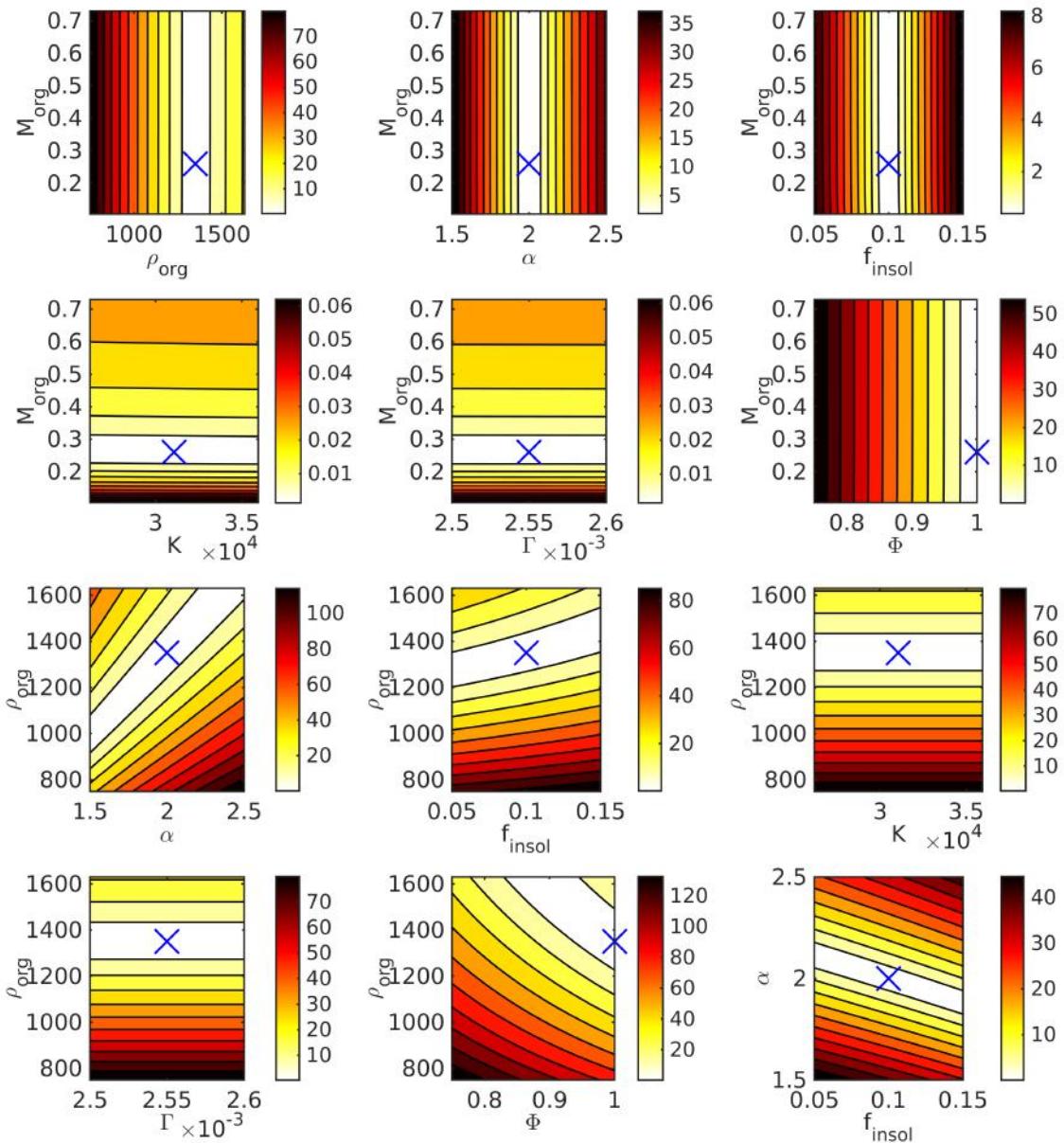


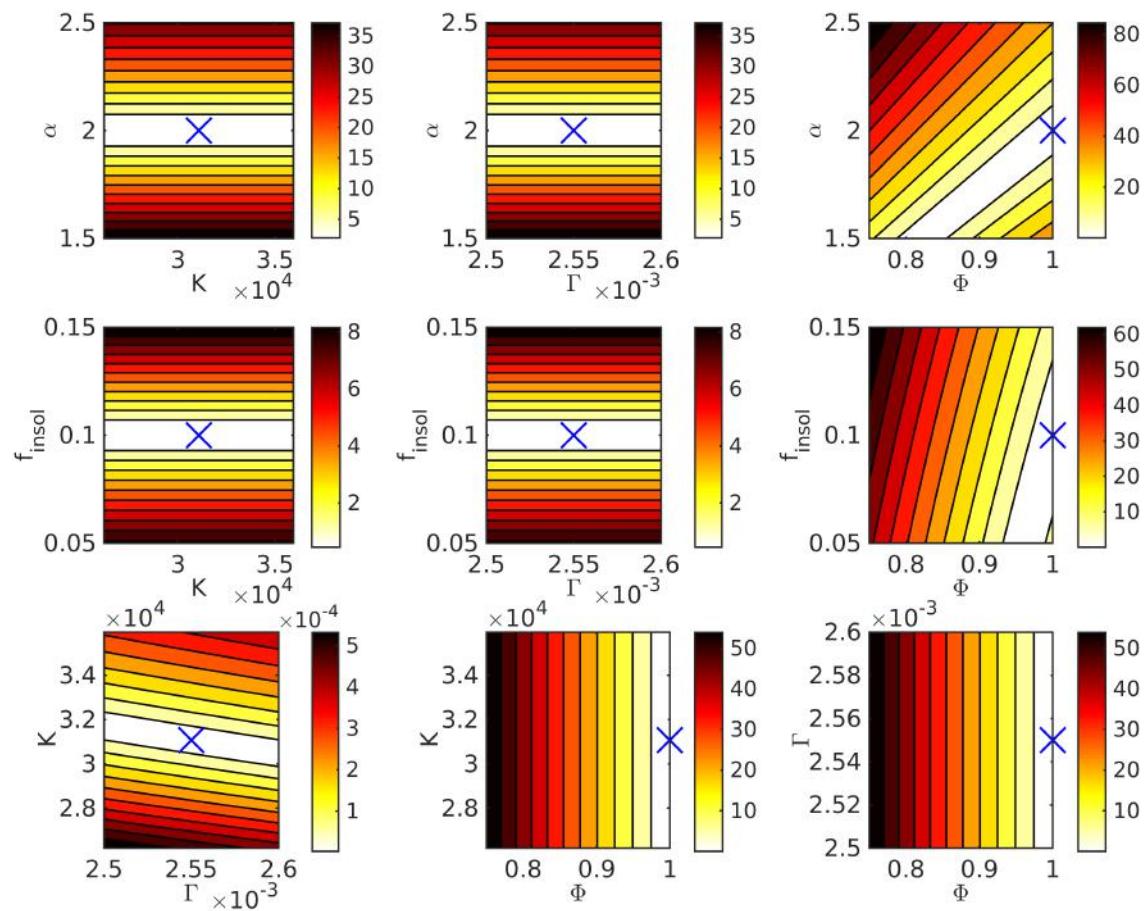


1.2.4 Case 4: $a_w^p \sigma^{nf}$



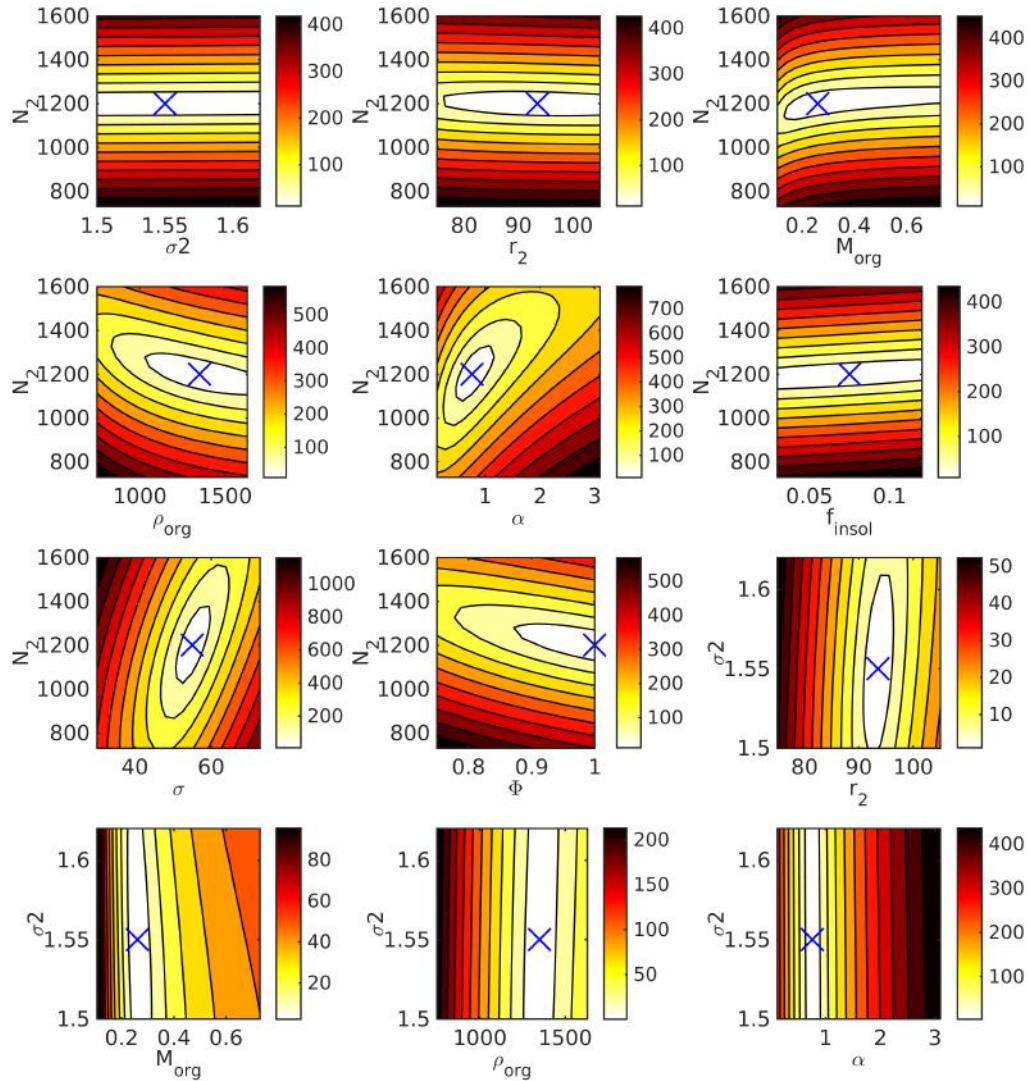


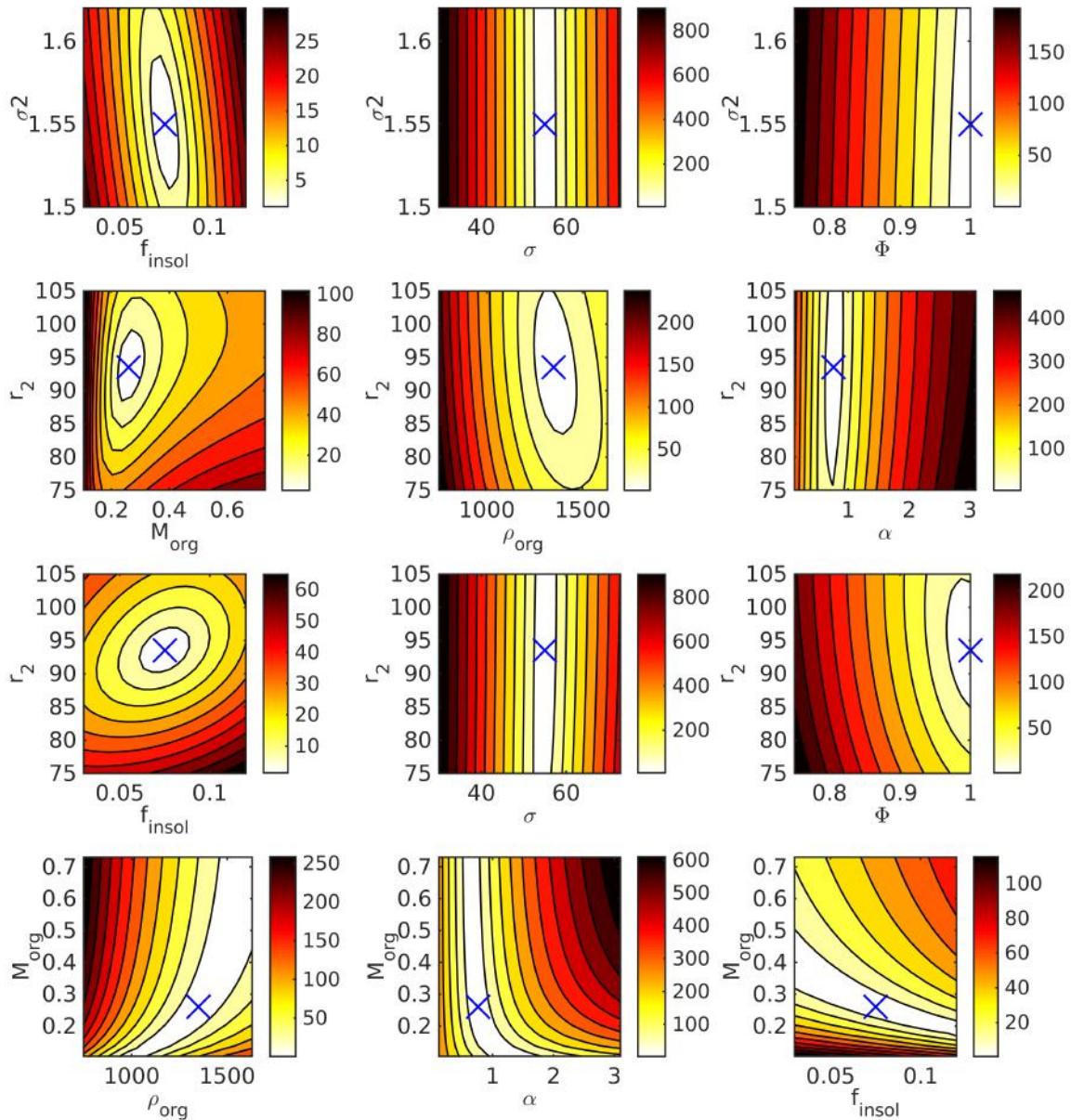


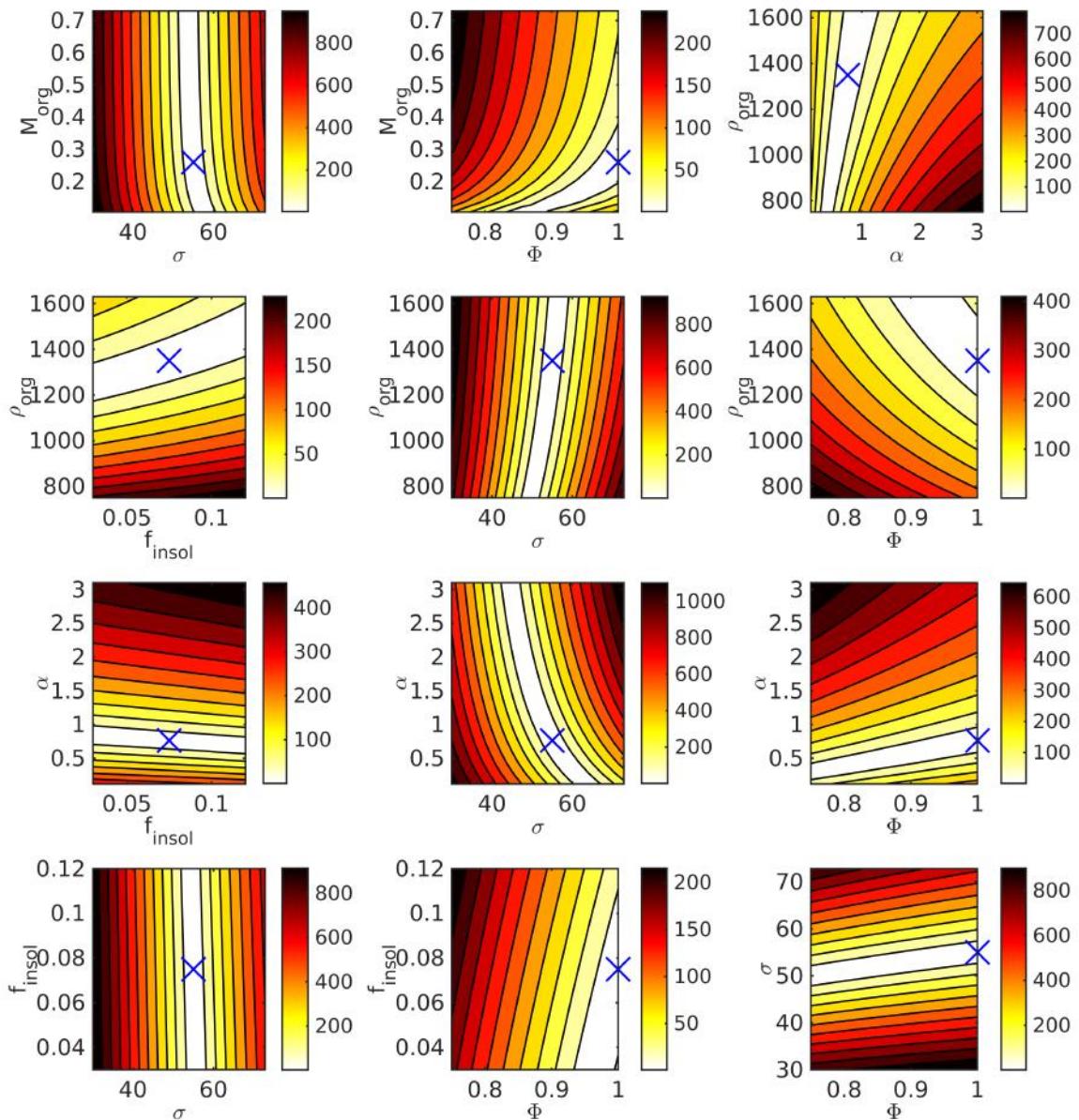


1.3 Polluted continental

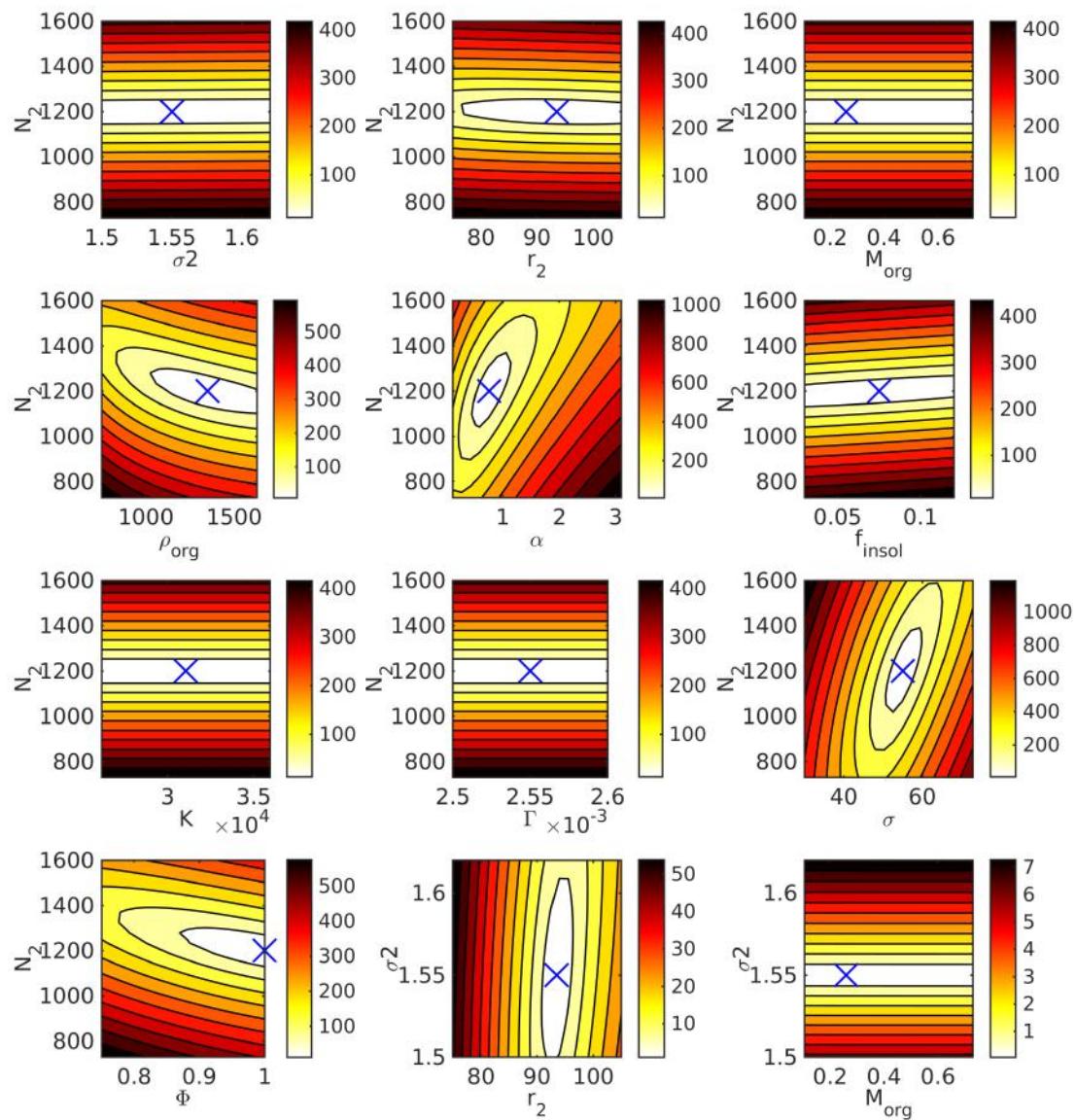
1.3.1 Case 1: $a_w^{np}\sigma^f$

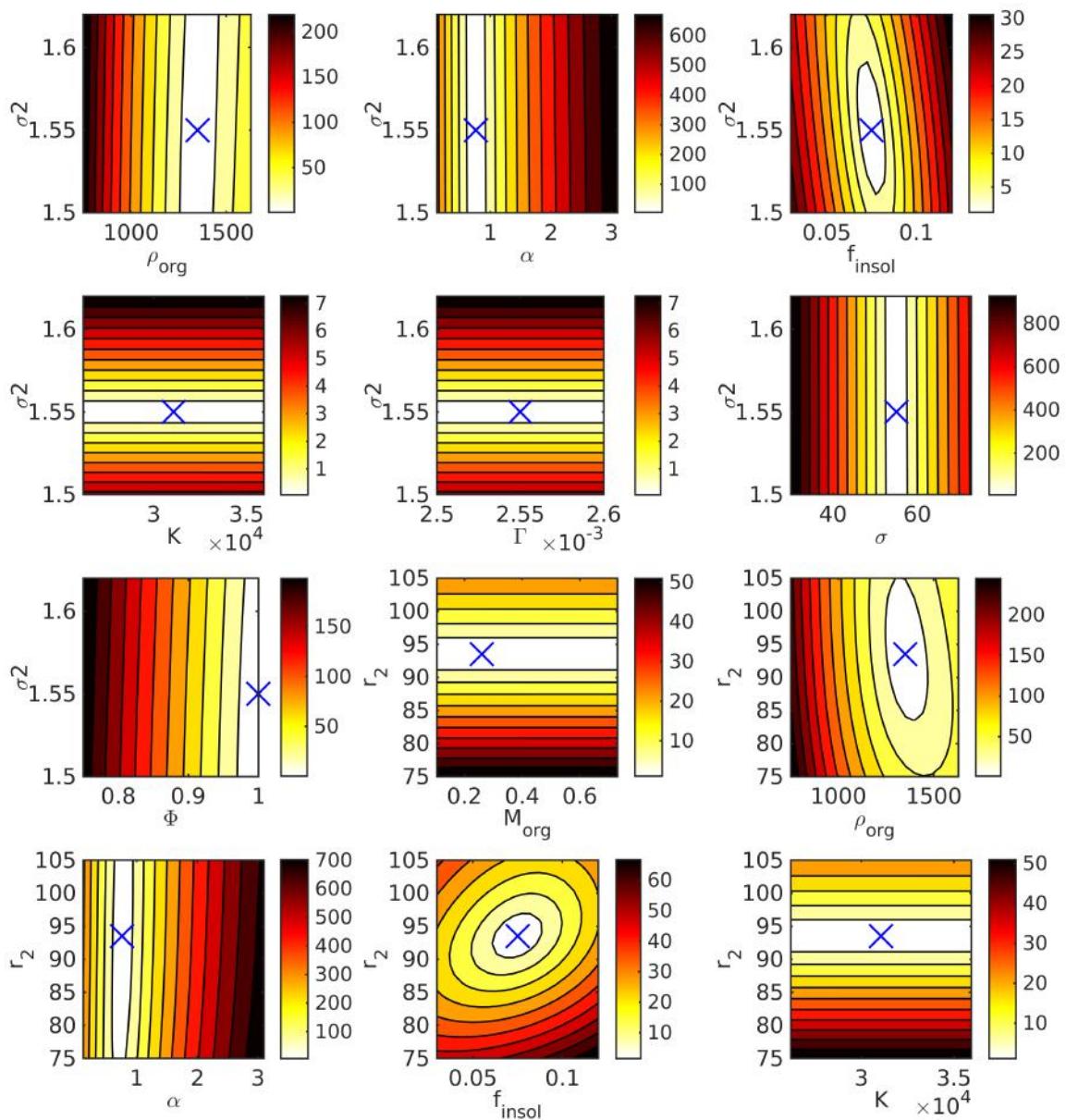


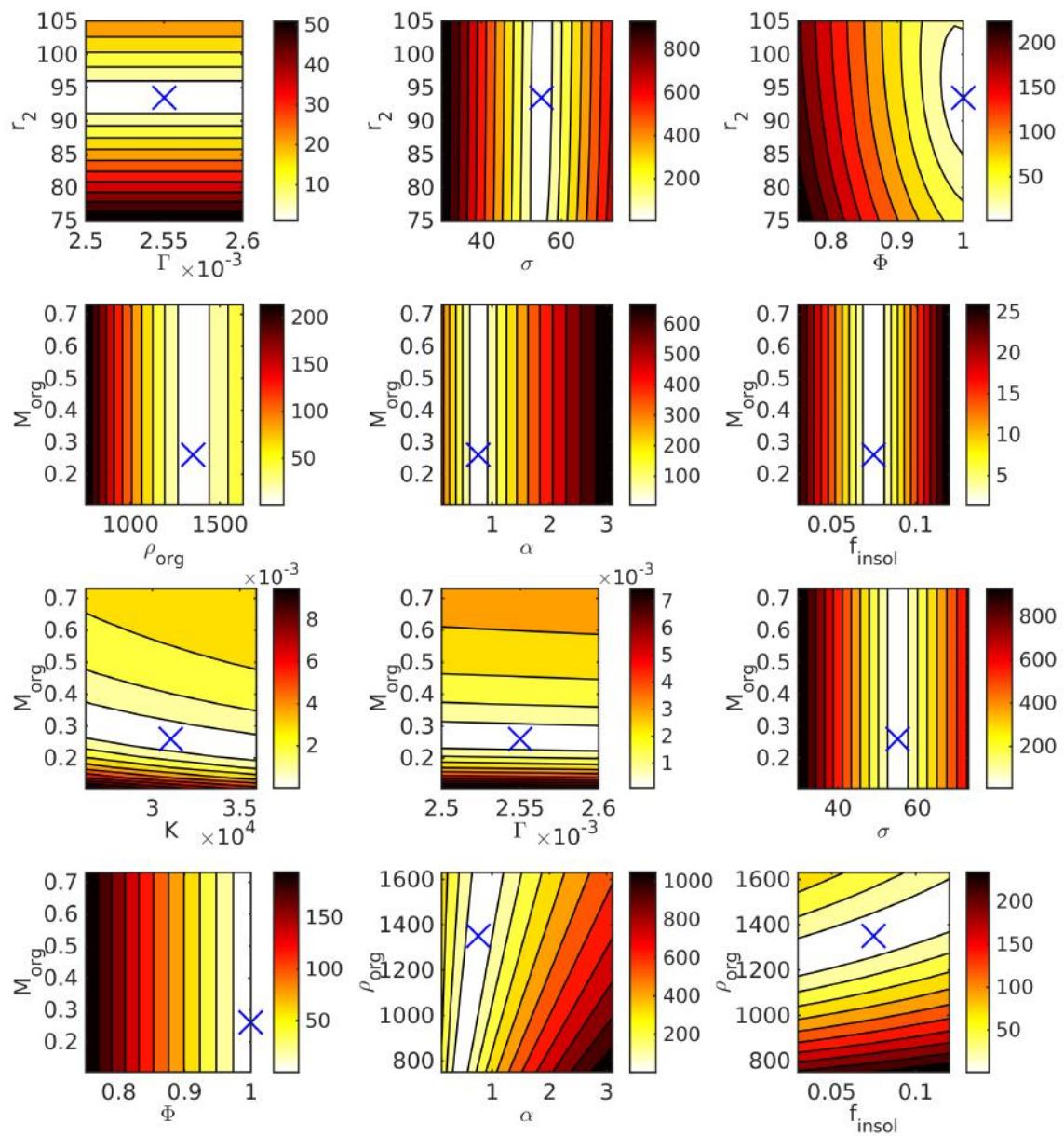


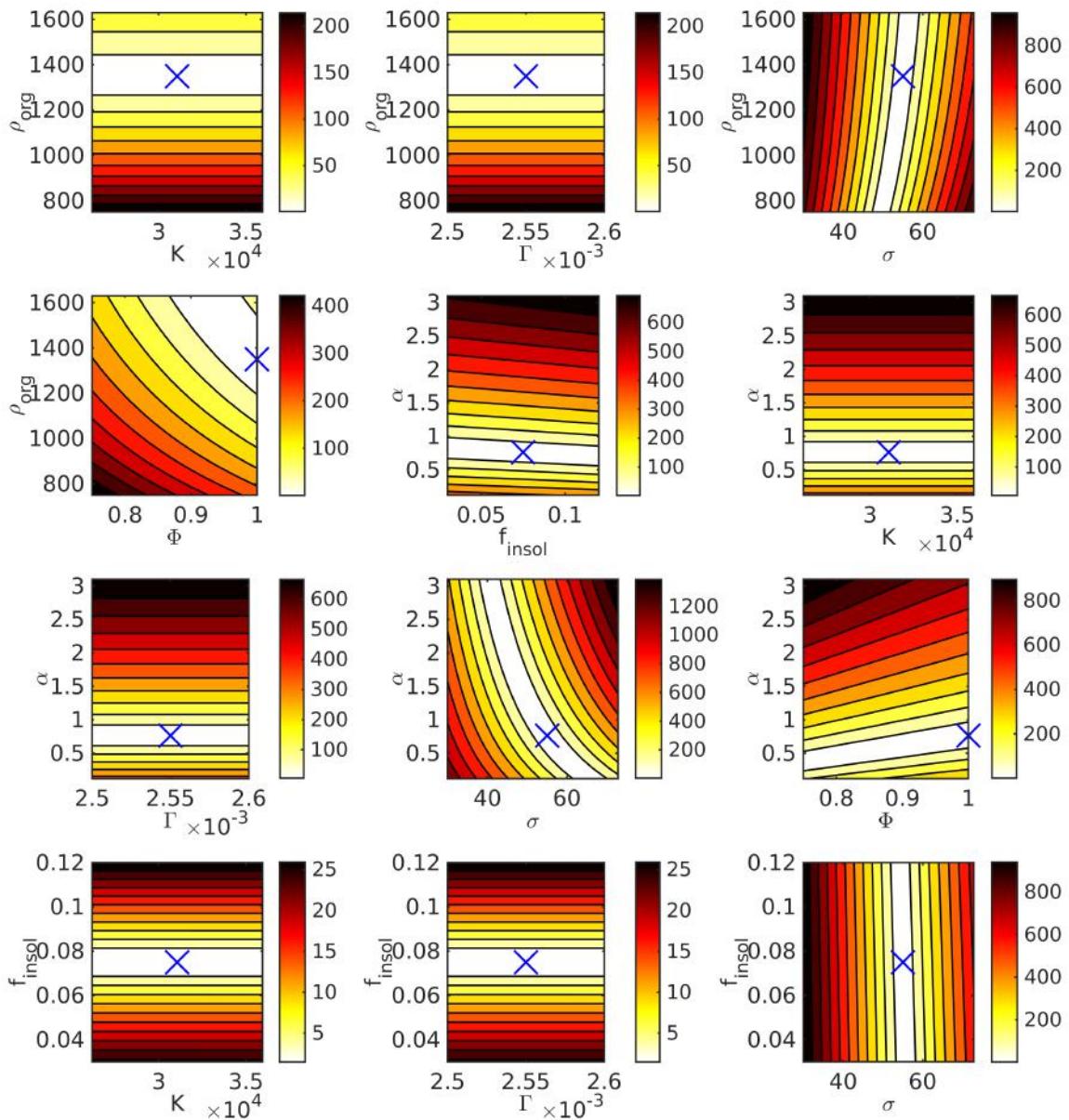


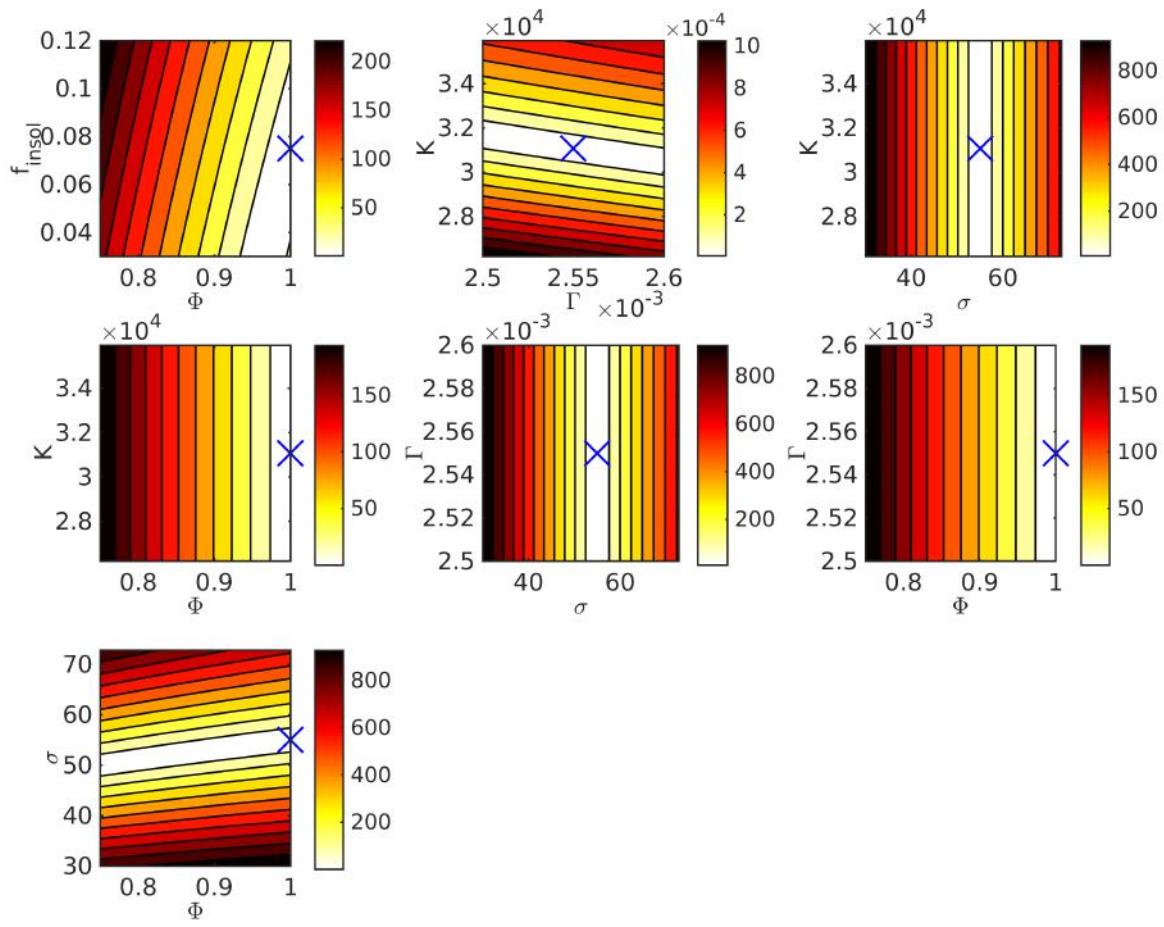
1.3.2 Case 2: $a_w^p \sigma^f$



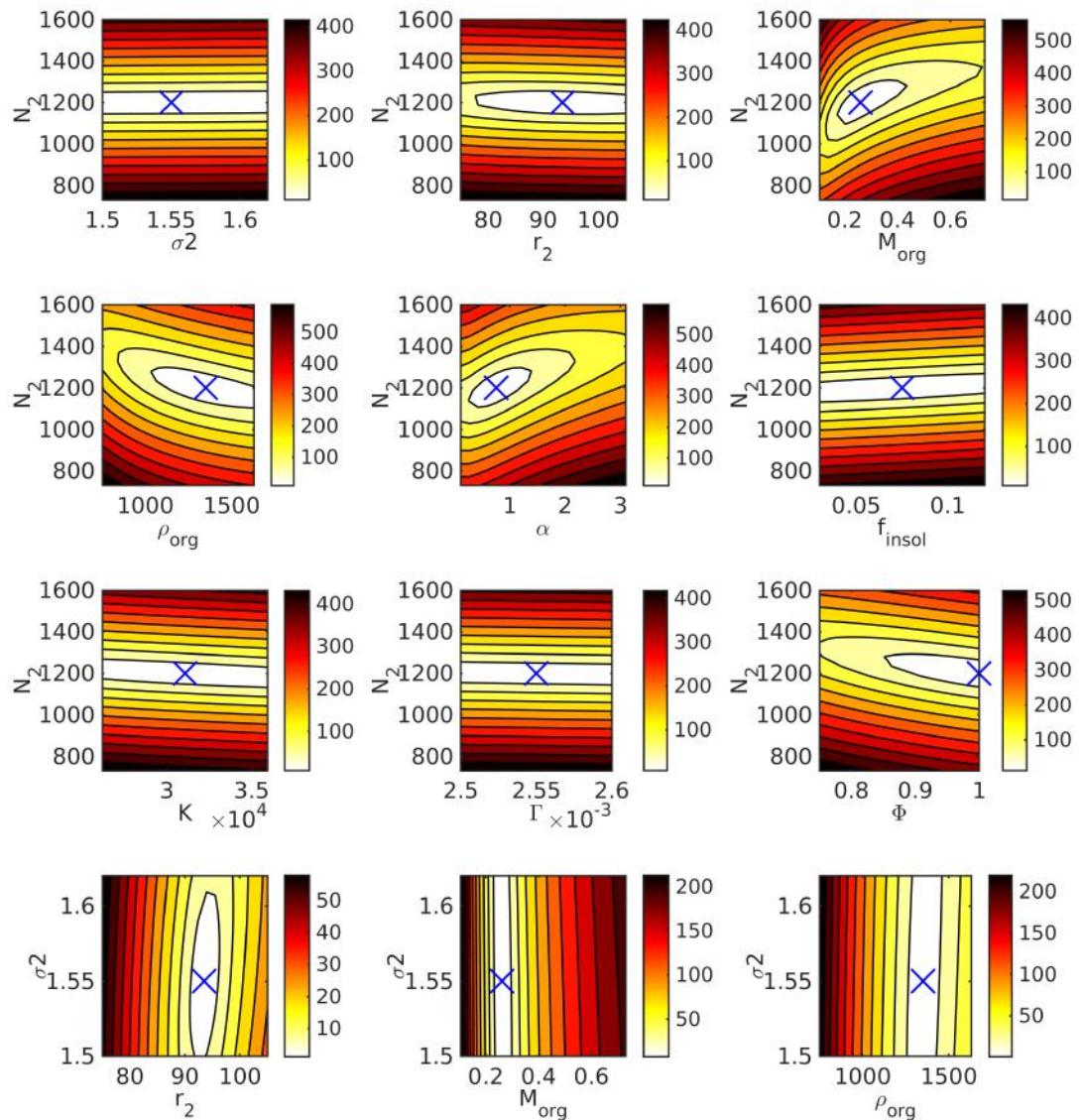


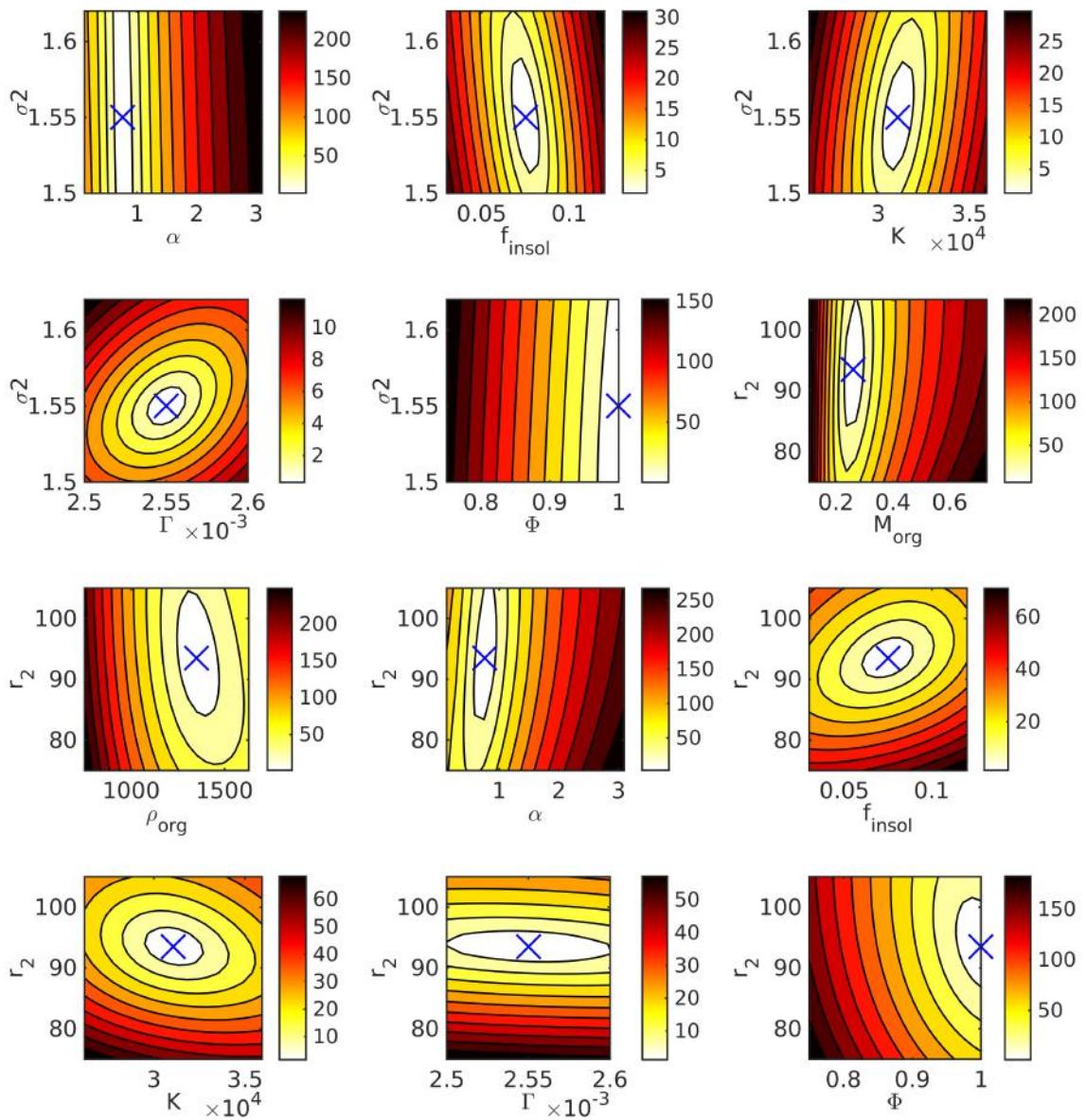


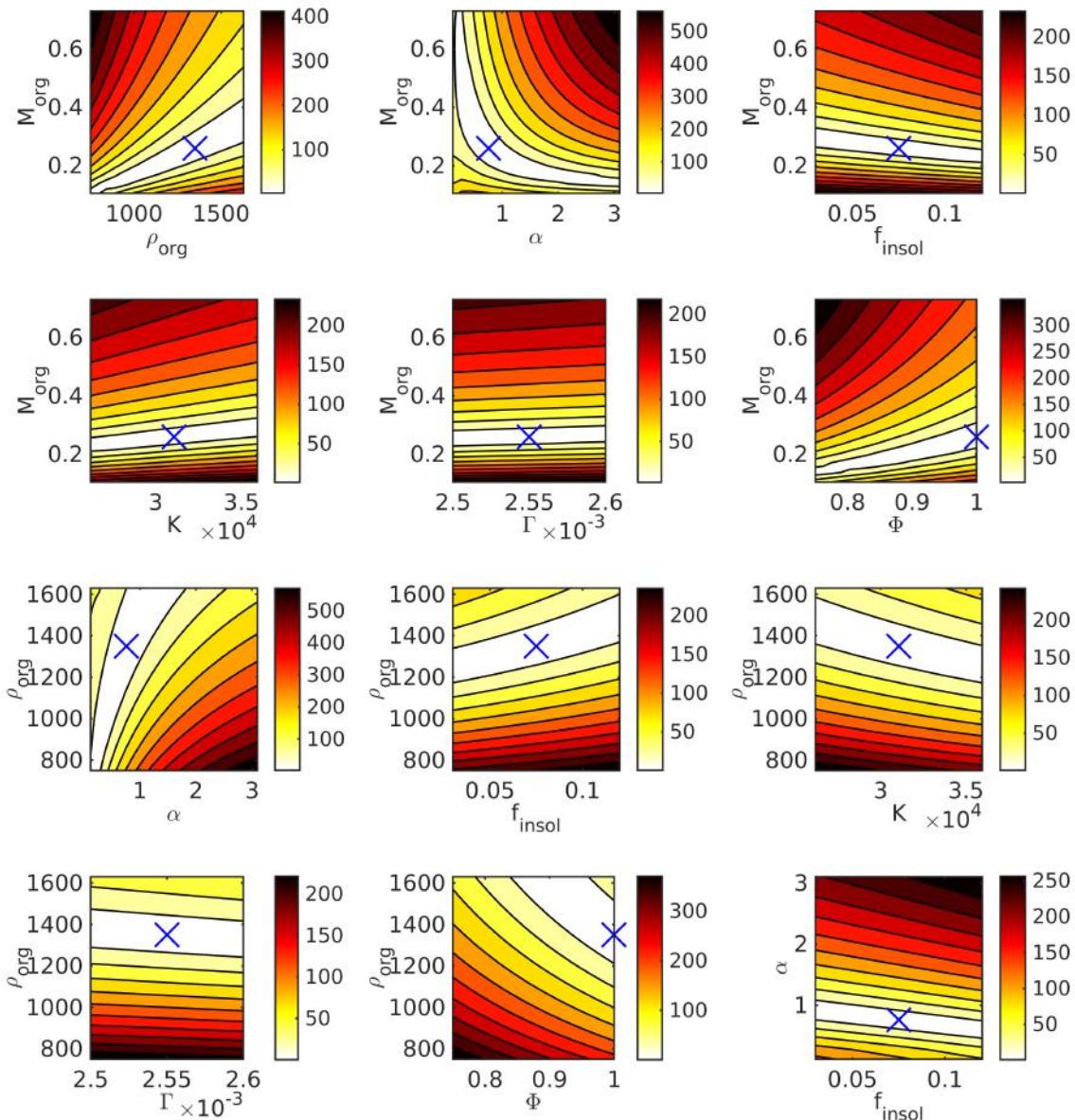


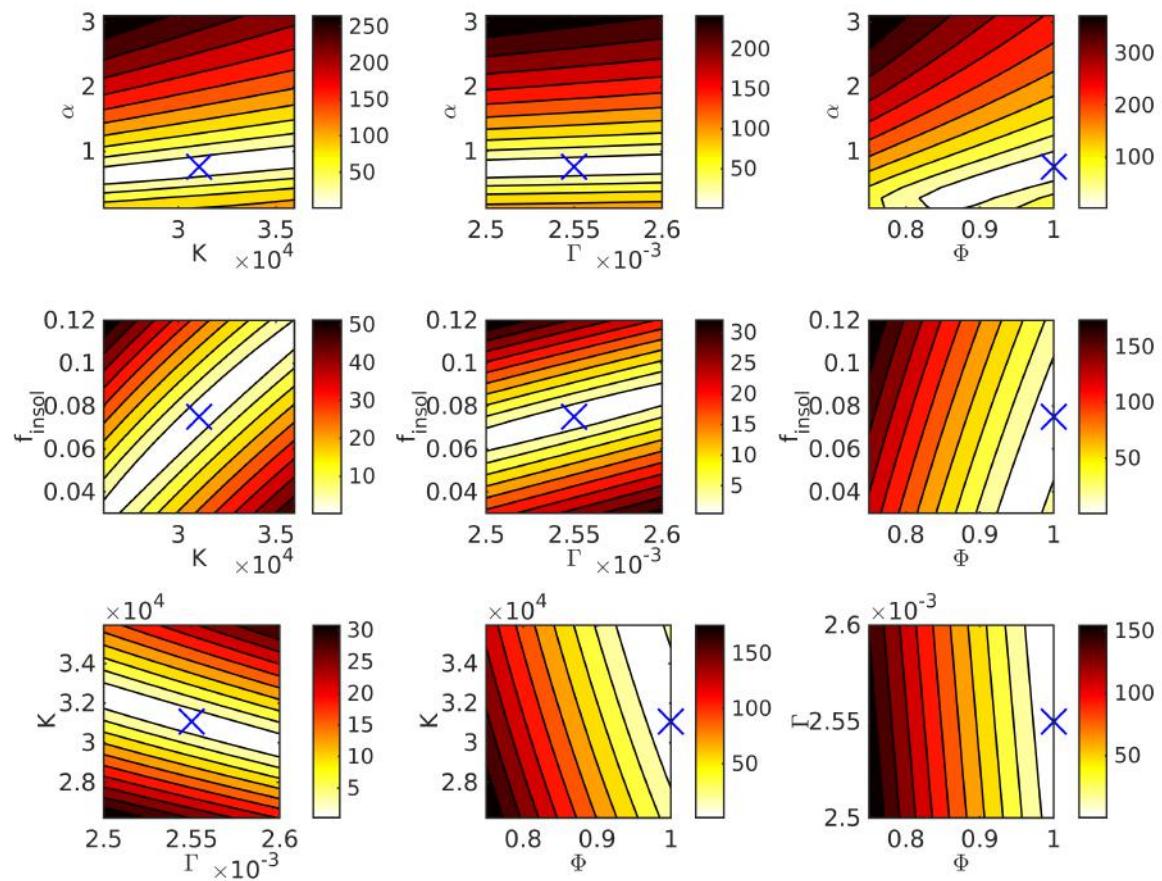


1.3.3 Case 3: $a_w^{np}\sigma^{nf}$









1.3.4 Case 4: $a_w^p \sigma^{nf}$

