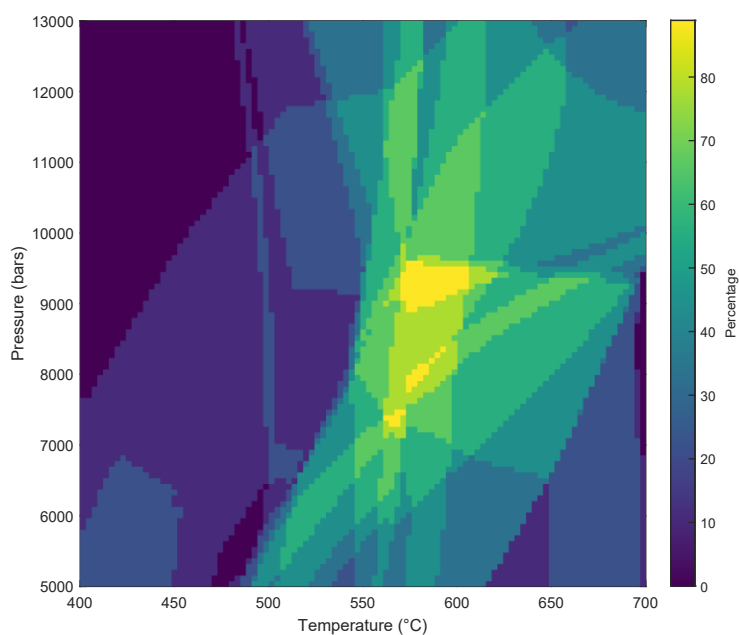INPUT: raw = 0, sd = 2

L0_fig1: isopleth fields % overlap heatmap

Parameters displayed:
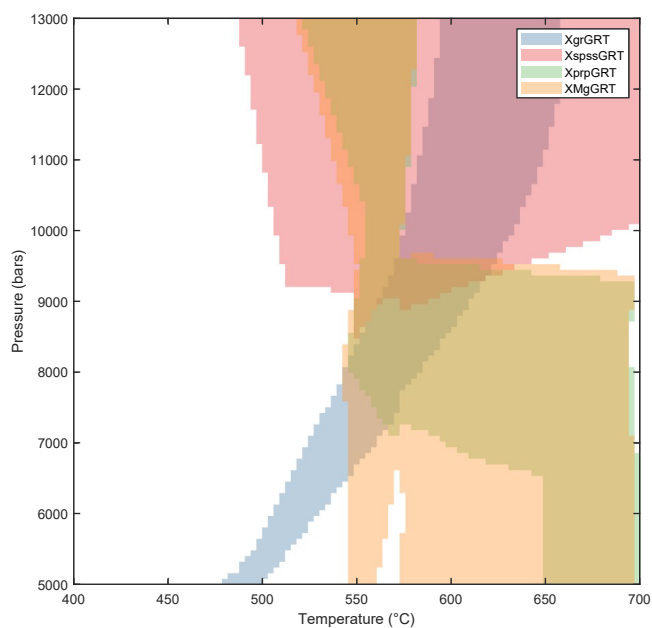X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
Si in Mu
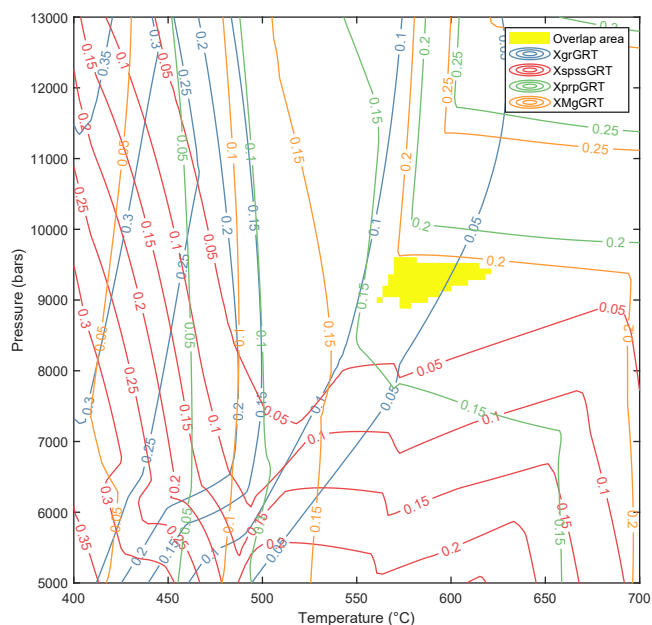X_{Ab} in Na-Fsp

Max = 88.9% (8/9 fields)

L0_fig2: isopleth fields
INPUT:
sd = 2

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt

L0_fig3: isopleth contours
INPUT:
sd = 2

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt

INPUT: raw = 0, n = 500

575 ± 40 °C

XgrGRT

605 ± 55 °C

XspssGRT

630 ± 50 °C

XprpGRT

620 ± 45 °C

XMgGRT

615 ± 55 °C

SiBT

585 ± 15 °C

xTiBT

545 ± 55 °C

XMgBT

555 ± 80 °C

SiMU

600 ± 70 °C

XabPLAG

L1_fig1: boxplots of parameter temperature uncertainty
data: median and IQ-range

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
Si in Mu
X_{Ab} in Na-Fsp

9.345 ± 2.185 kbar

XgrGRT

11.155 ± 1.09 kbar

XspssGRT

8.205 ± 1.715 kbar

XprpGRT

8.065 ± 1.925 kbar

XMgGRT

9.22 ± 1.93 kbar

SiBT

9.565 ± 2.415 kbar

xTiBT

7.31 ± 1.805 kbar

XMgBT

8.595 ± 2.02 kbar

SiMU

9.6 ± 2.23 kbar

XabPLAG
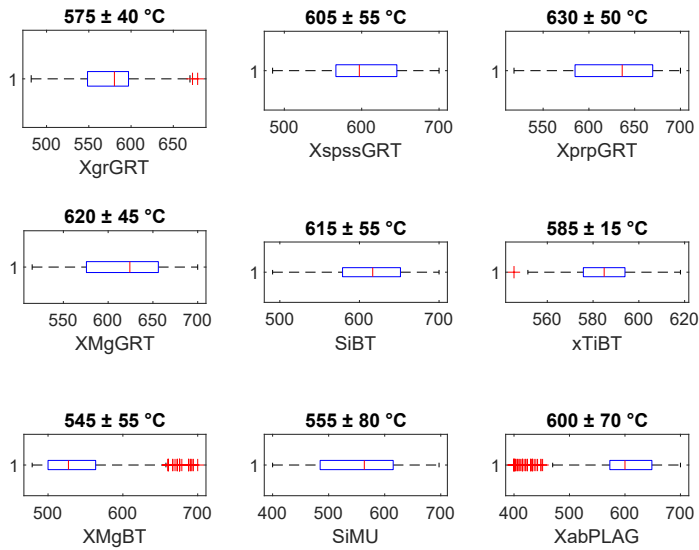
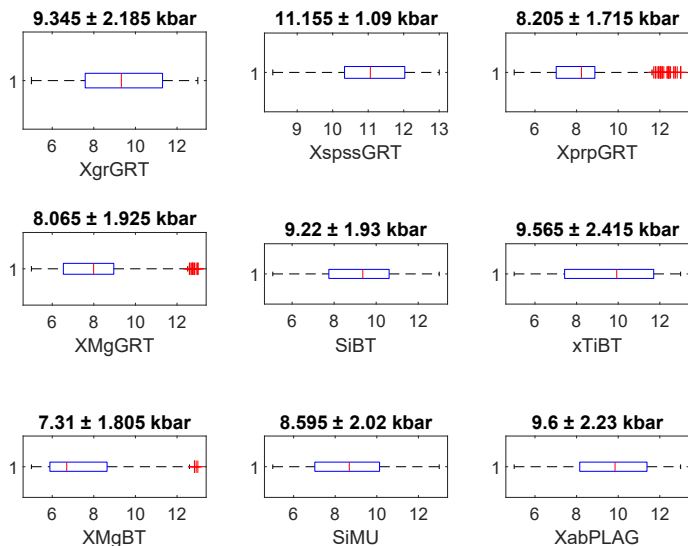**L1_fig2: boxplots of parameter pressure uncertainty**
data: median and IQ-range

Parameters displayed:
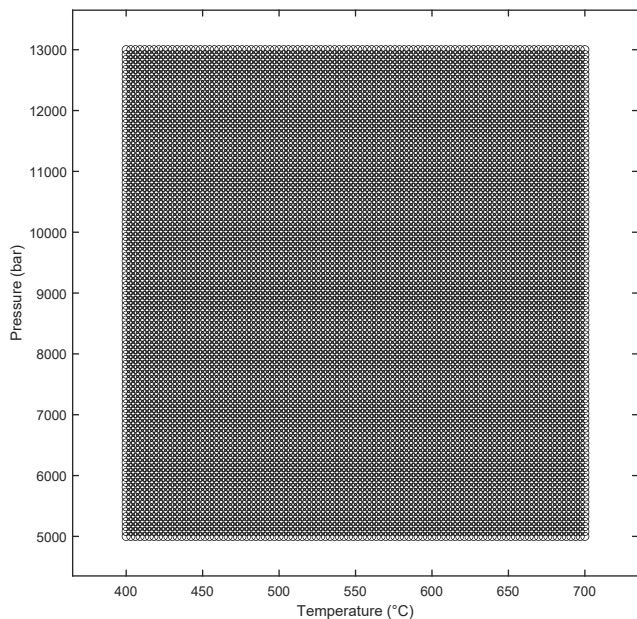X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
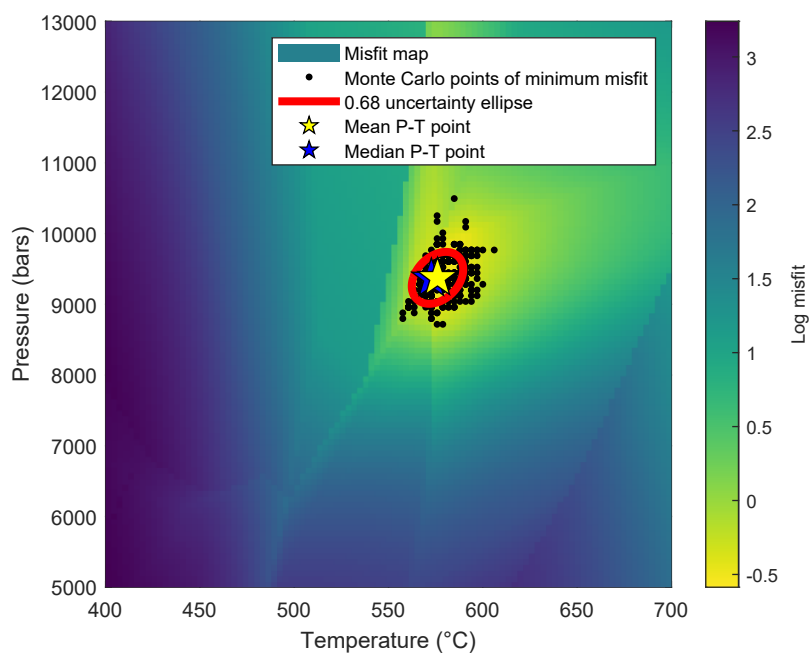Si in Mu
X_{Ab} in Na-Fsp

INPUT: raw = 0, bootstrap = 1, iterations = 500, confidence_level = 0.68, boxplots = 0,
plot_type = 0, T_bins = 10, P_bins = 10

## L2_fig1: model grid

100x100 grid (ensure sufficient overlap)

L2_fig2: grid search best-fit solutions

Data: mean ± 1 s.d. or median and IQ range

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
Si in Mu
X_{Ab} in Na-Fsp

N.b. best-fit results available for separate
processing in
output_variables/PT_solutions.csv

580 ± 10 °C (1 s.d.)
$\bar{x}$ = 575 °C (IQR = 570-585)

9375 ± 245 bar (1 s.d.)
$\bar{x}$ = 9365 bar (IQR = 9205-9445)
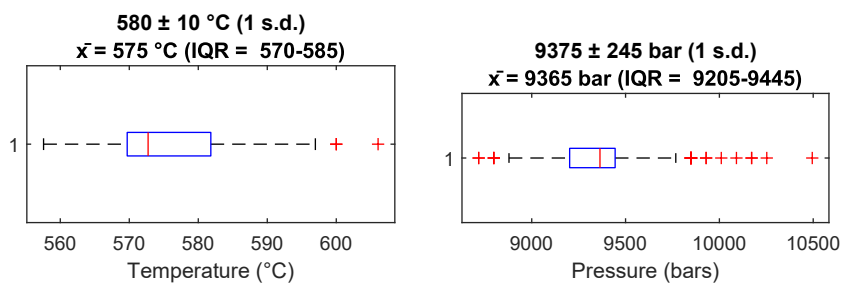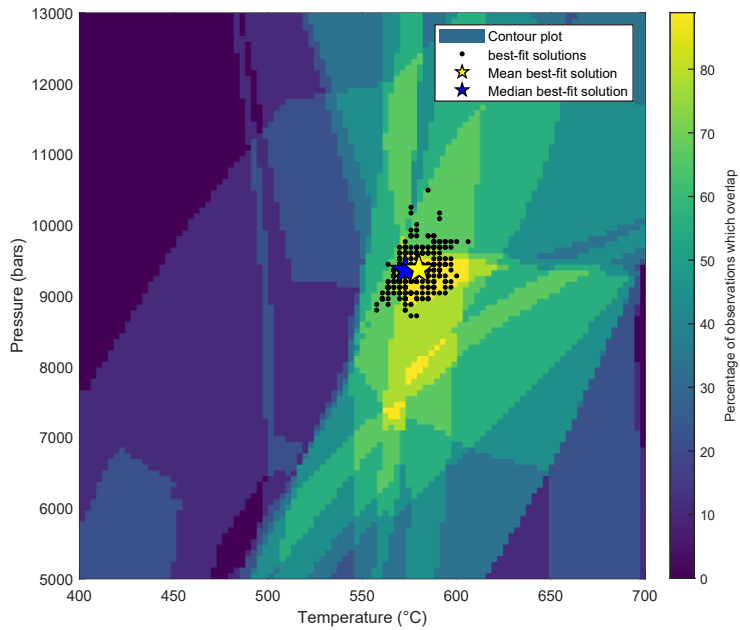
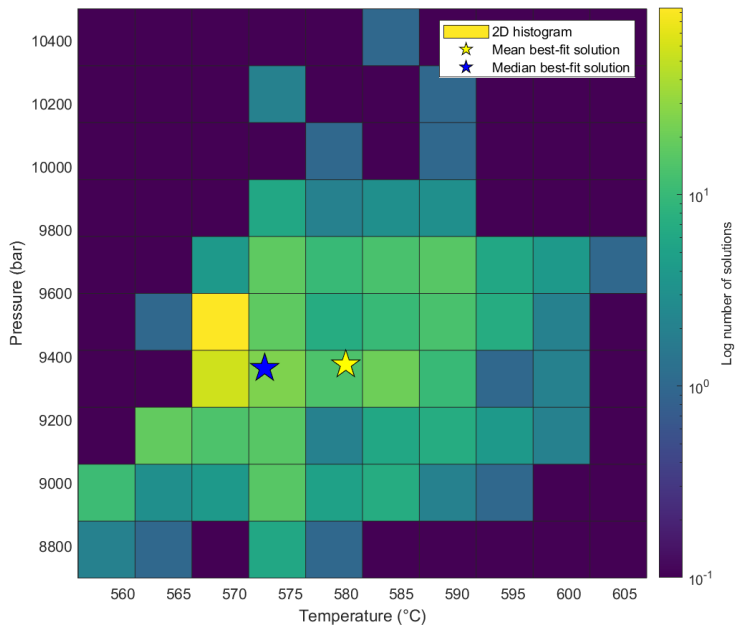## L2_fig3: best-fit solutions and % overlap heatmap

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
Si in Mu
X_{Ab} in Na-Fsp

Max = 88.9% (8/9 fields)

L2_fig4: 2D histogram and best-fit solutions

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
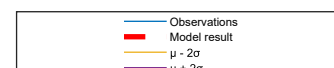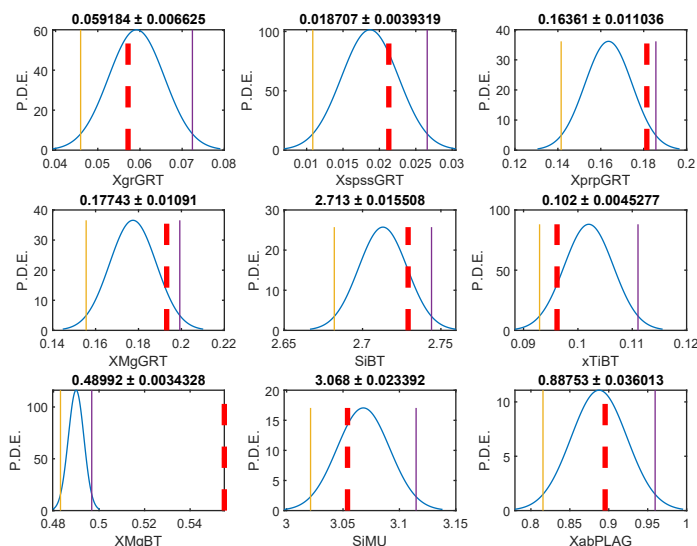Si in Mu
X_{Ab} in Na-Fsp

L3_residuals

INPUT: raw = 0, T_best = 575, P_best = 9365
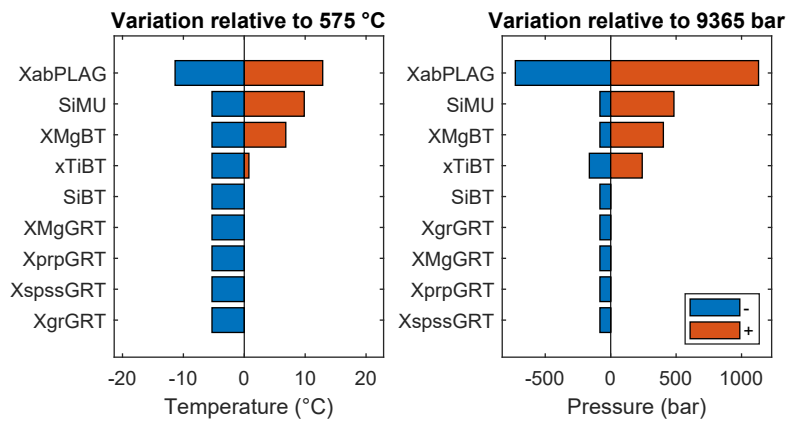

L3_fig1: residuals at given P-T point

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
Si in Mu
X_{Ab} in Na-Fsp

INPUT: raw = 0, bootstrap = 1, iterations = 500, T_best = 575, P_best = 9365

L4_fig1: parameter sensitivity
Tornado plot of parameter sensitivity to mean result

Parameters displayed:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
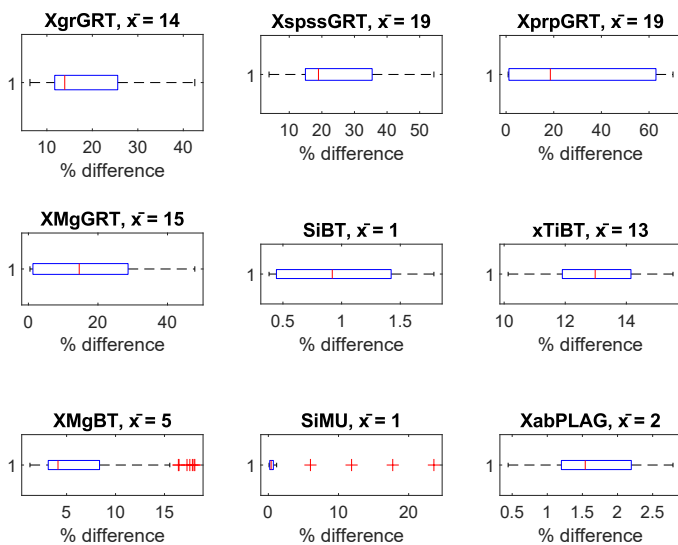Si, X_{Ti}, X_{Mg} in Bt
Si in Mu
X_{Ab} in Na-Fsp

$\bar{x}$ = median % difference

EXTRA_synthetic_variation

INPUT: threshold = 50, pressure_of_interest = 9000

X_fig1: predicted uncertainty

Parameters included:
X_{Grs}, X_{Spss}, X_{Prp}, X_{Mg} in Grt
Si, X_{Ti}, X_{Mg} in Bt
Si in Mu
X_{Ab} in Na-Fsp

$\bar{x}$ = median % difference