

# Gravitino dark matter and lepton cosmic rays

Fit to the leptonic cosmic ray data using parametrised background and gravitino decay products.

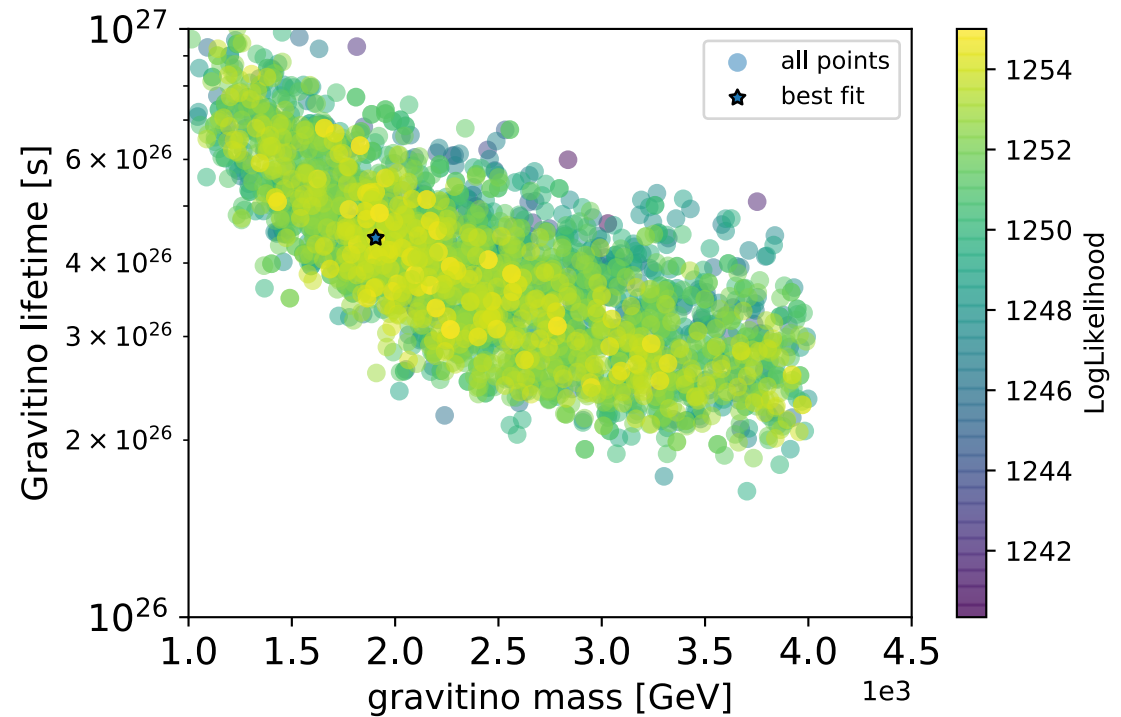
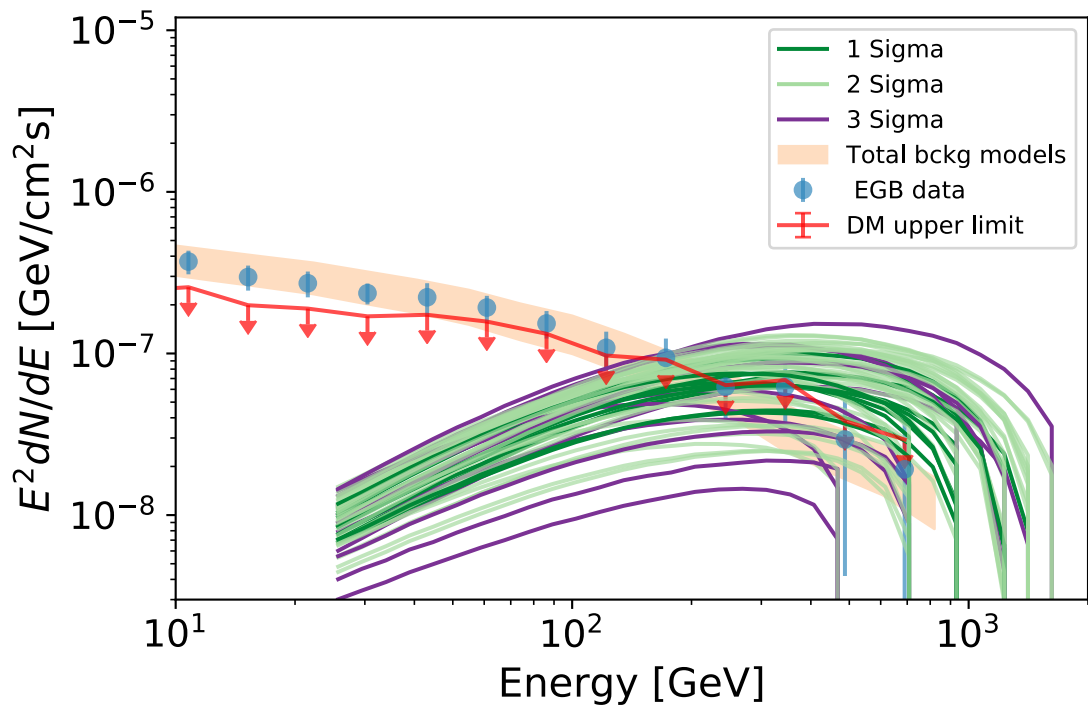
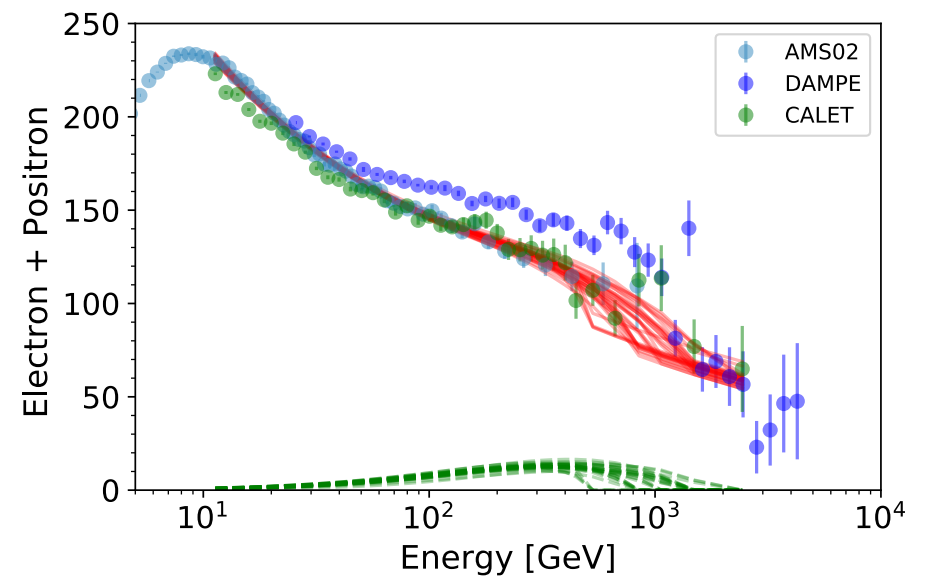
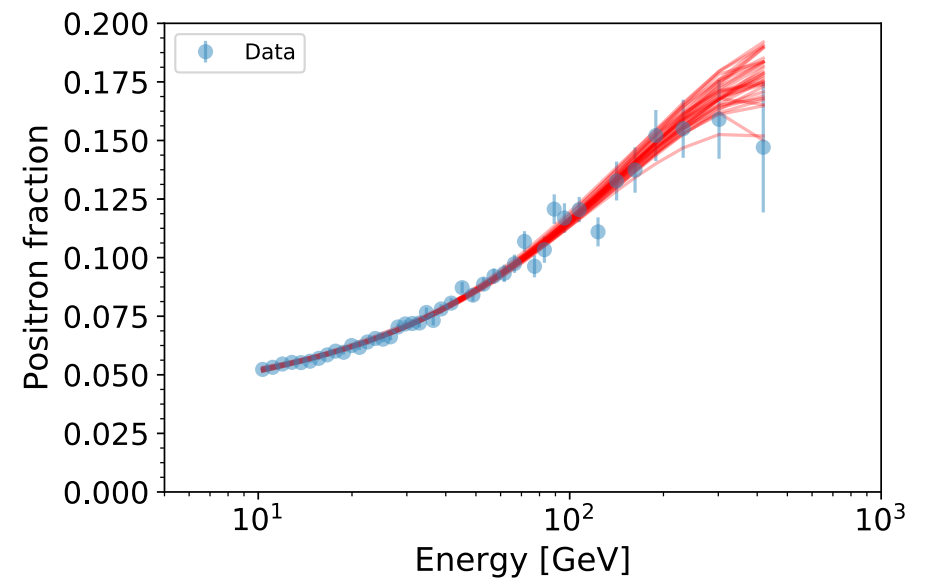
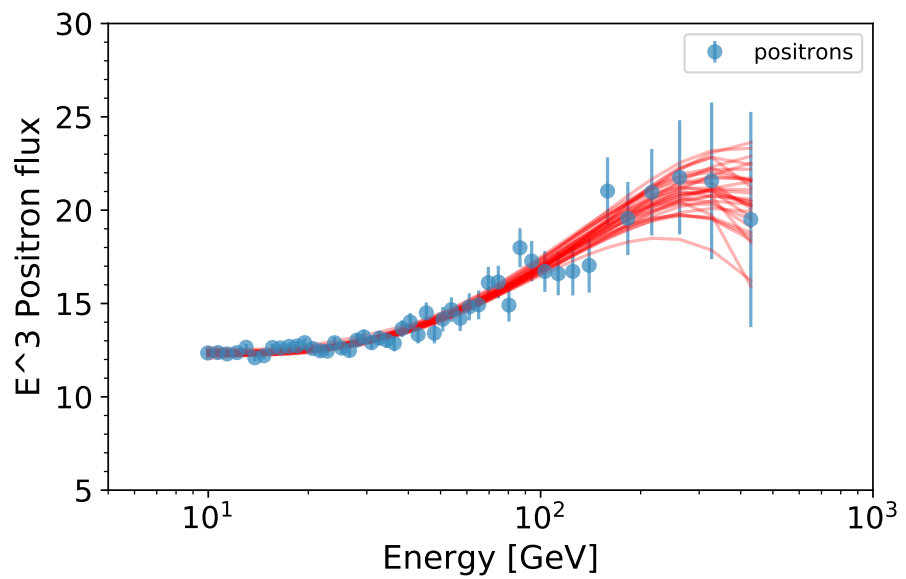
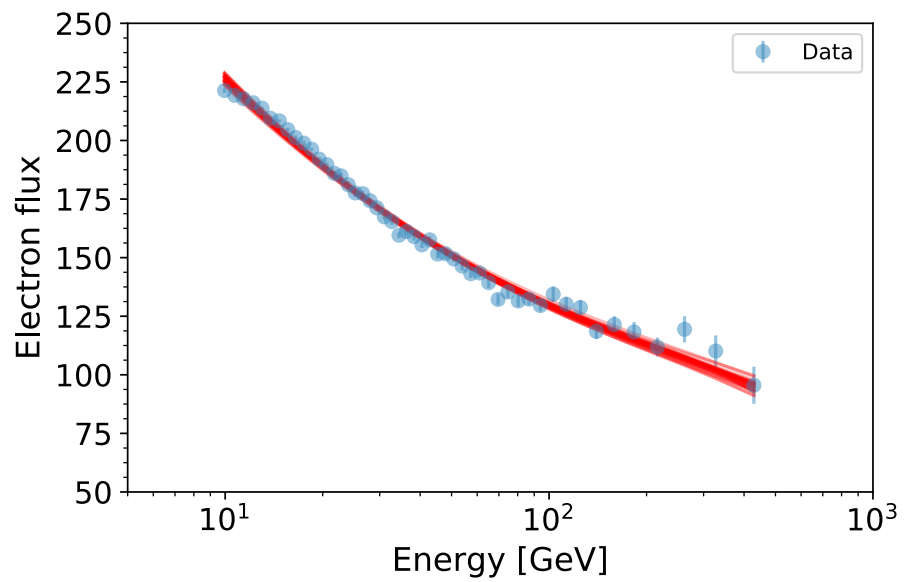
Then comparison of the good fit points to the gamma-ray background.

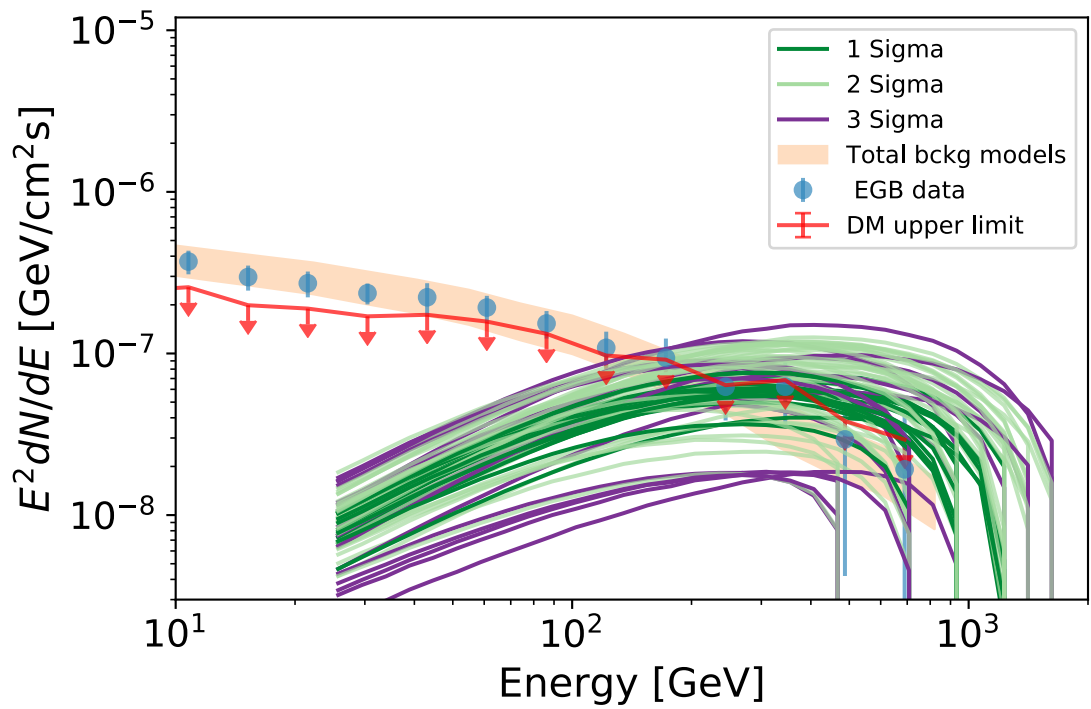
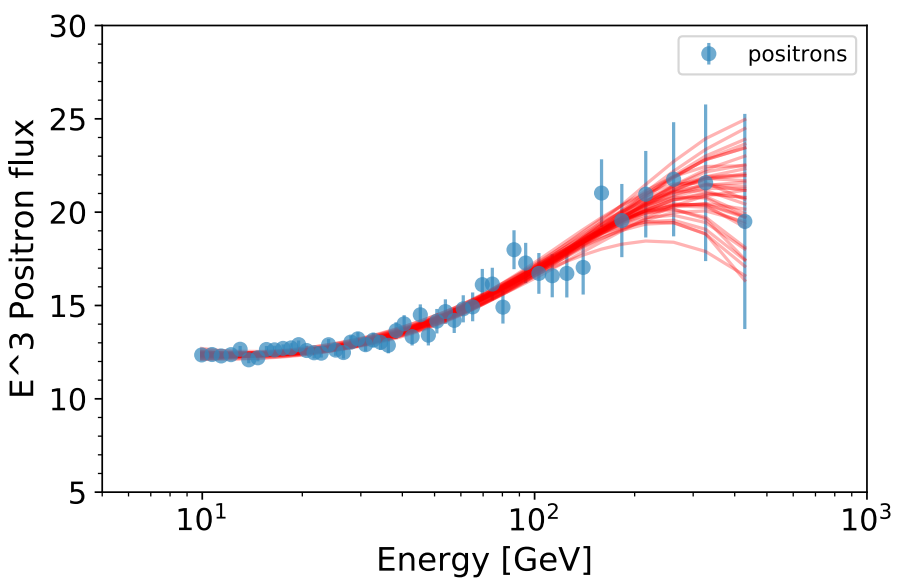
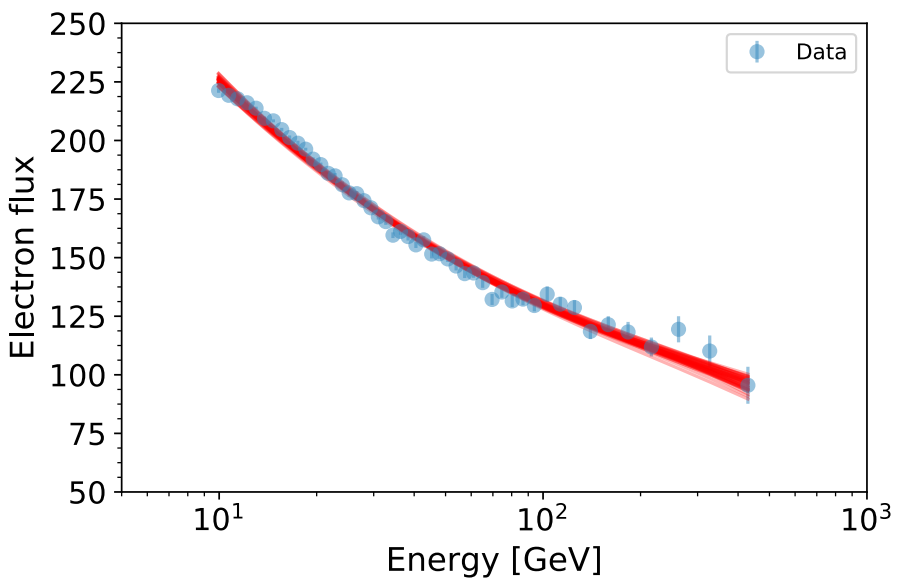
If the gravitino-induced gamma-ray emission is below the red line the point is not excluded as the main source of cosmic ray electrons and positrons at high energy.

D1

Fit to e, p, fraction

2

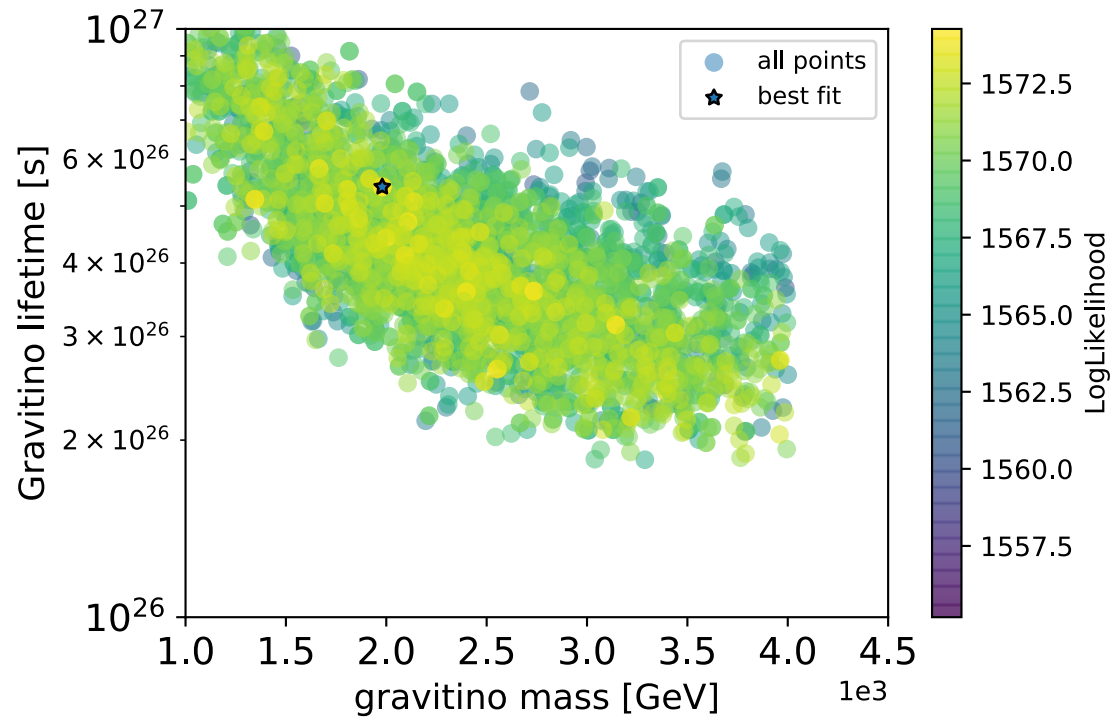
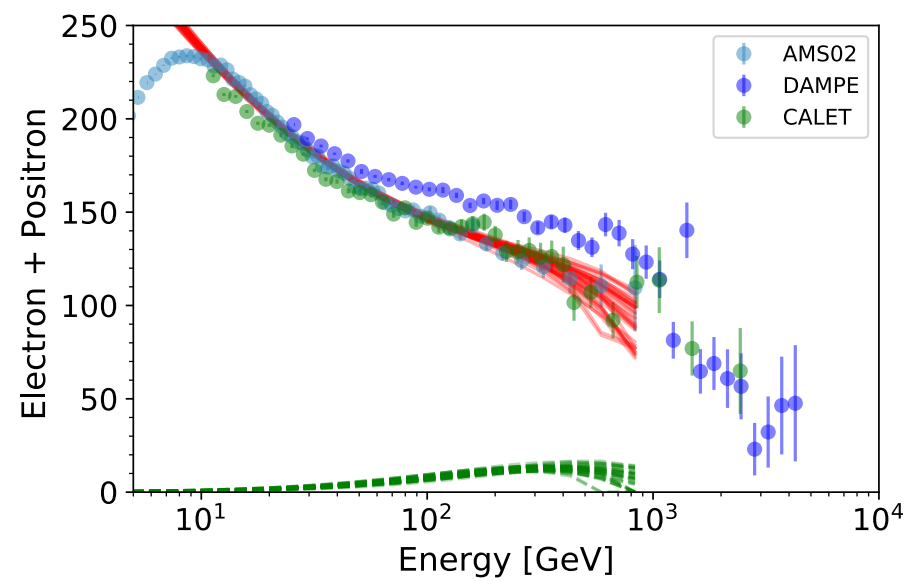
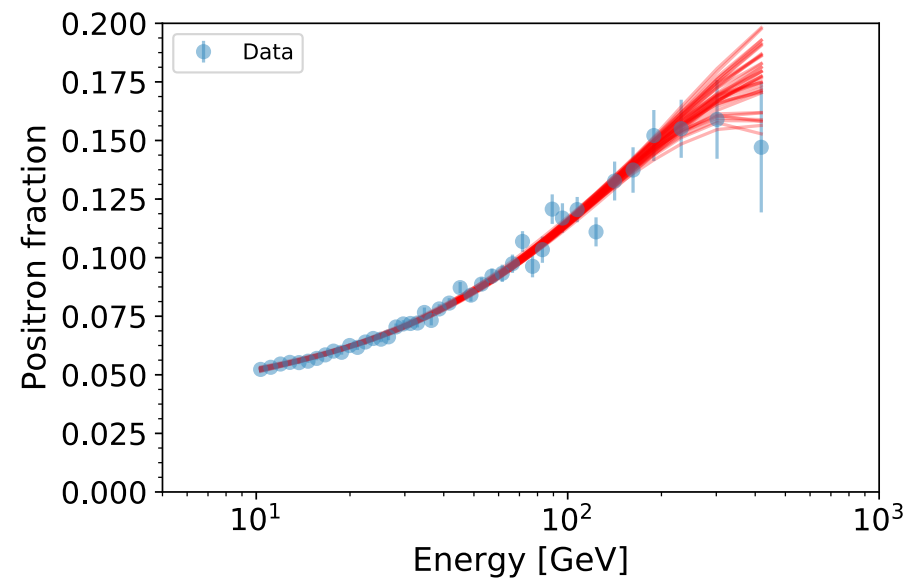


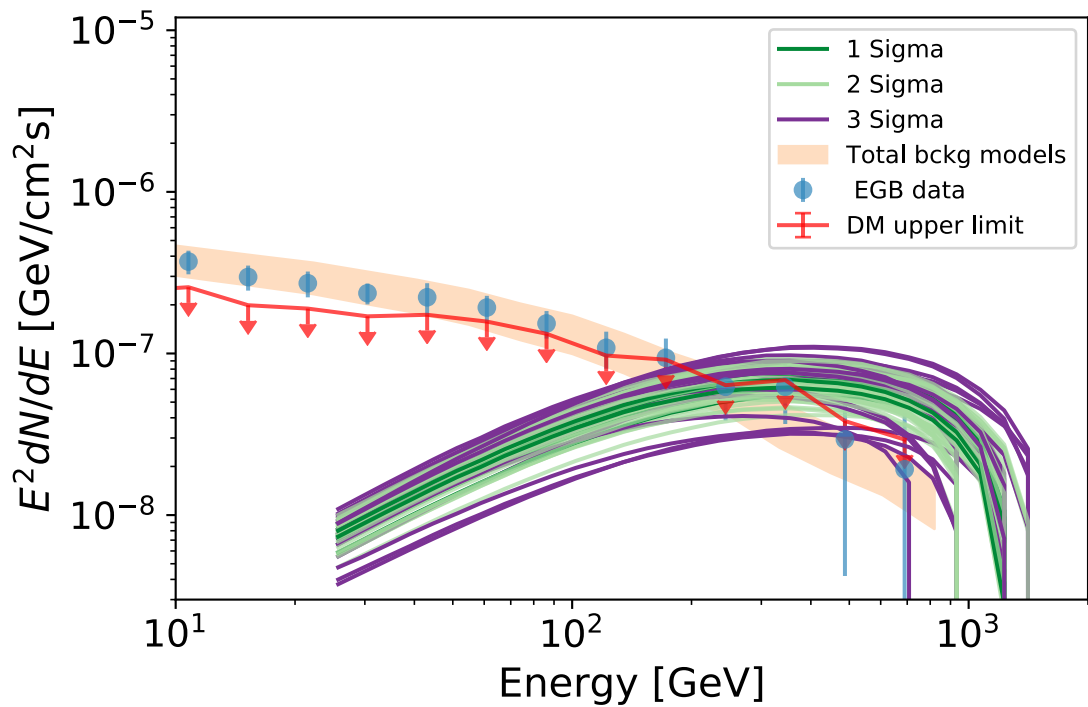
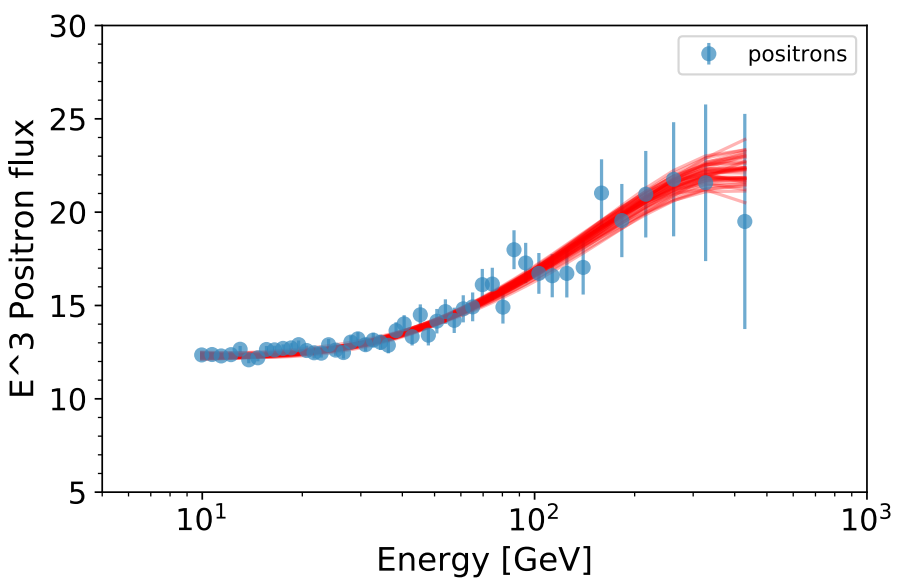
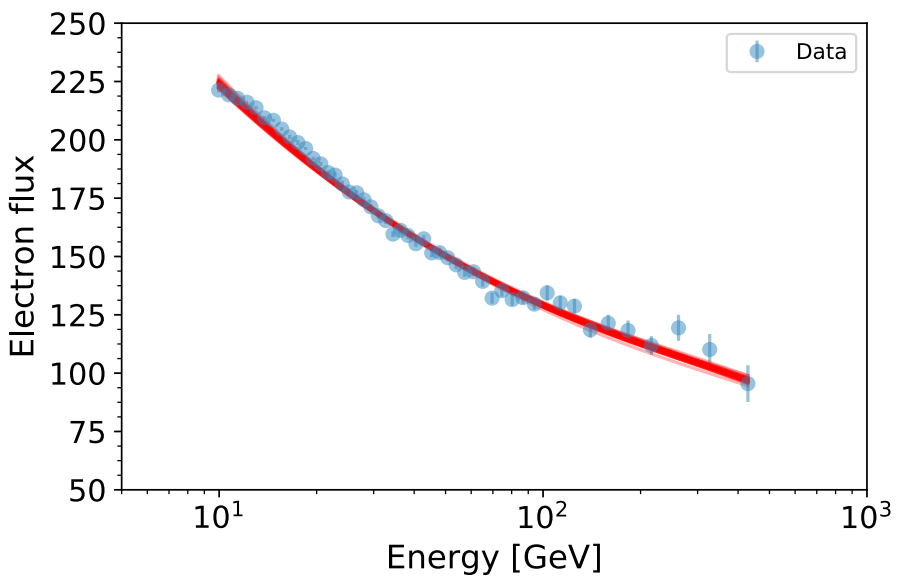


D2

Fit to e, p, fraction, sum(AMS02)

3

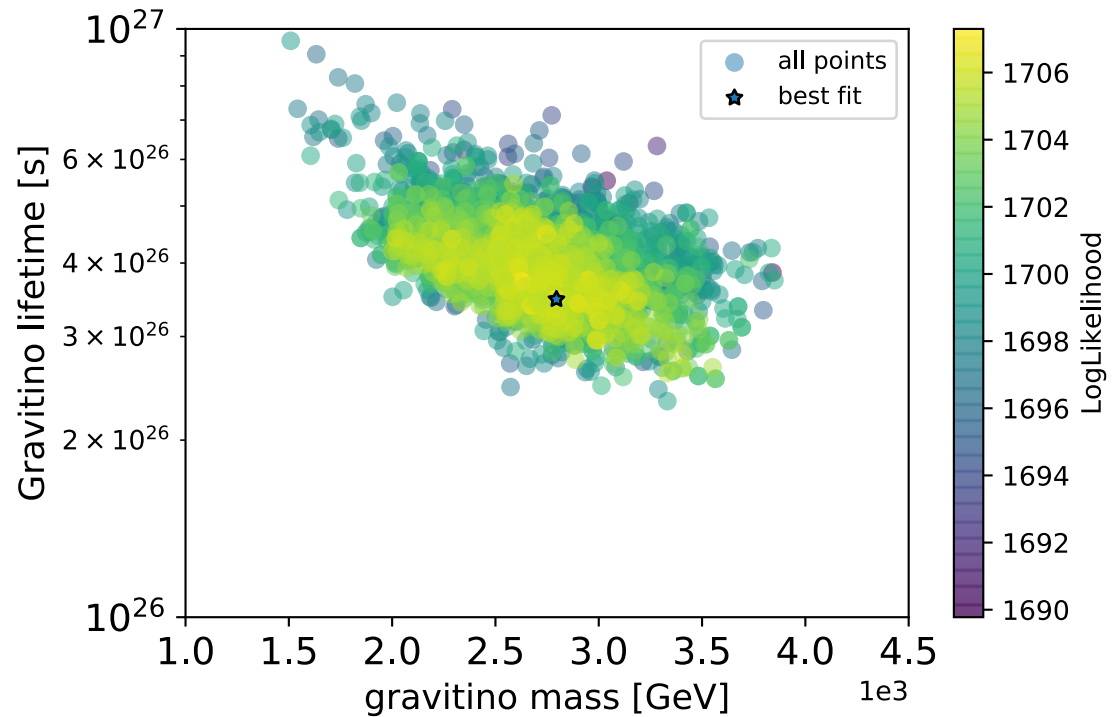
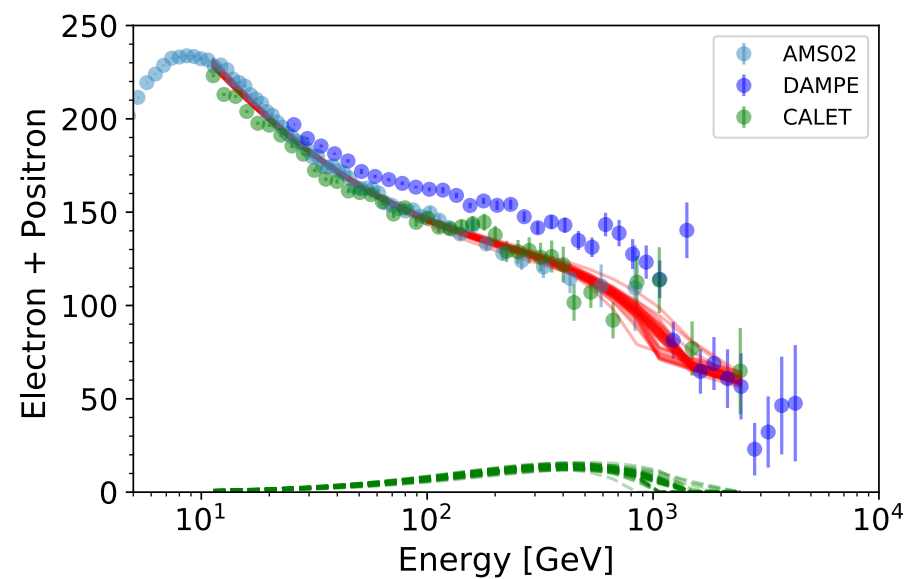
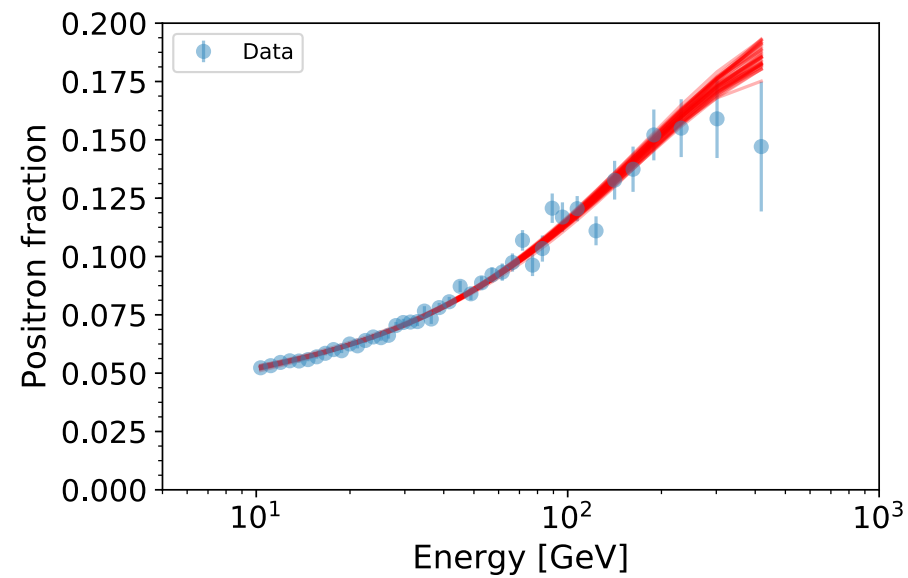




D3

Fit to e, p, fraction, sum(CALET)

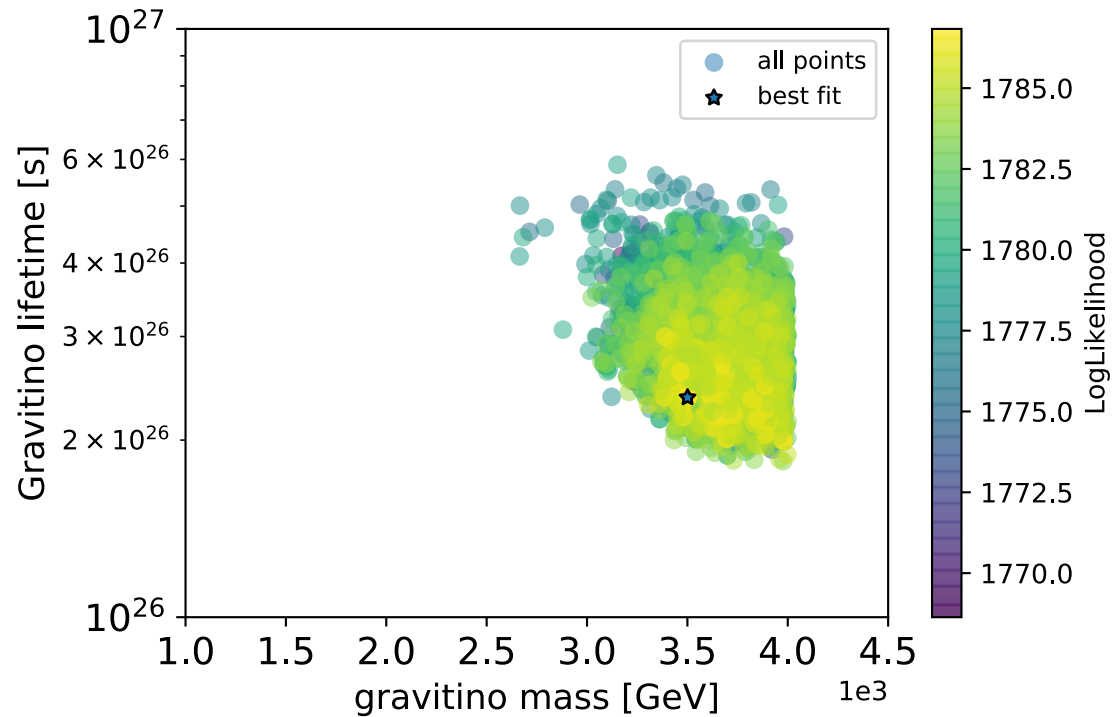
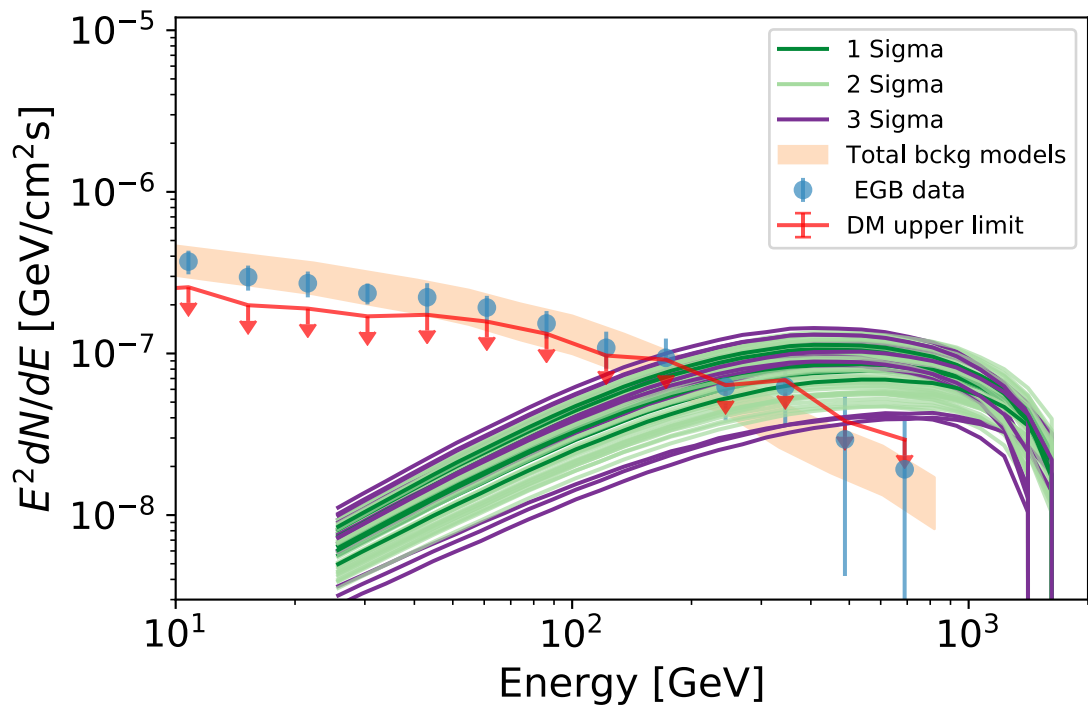
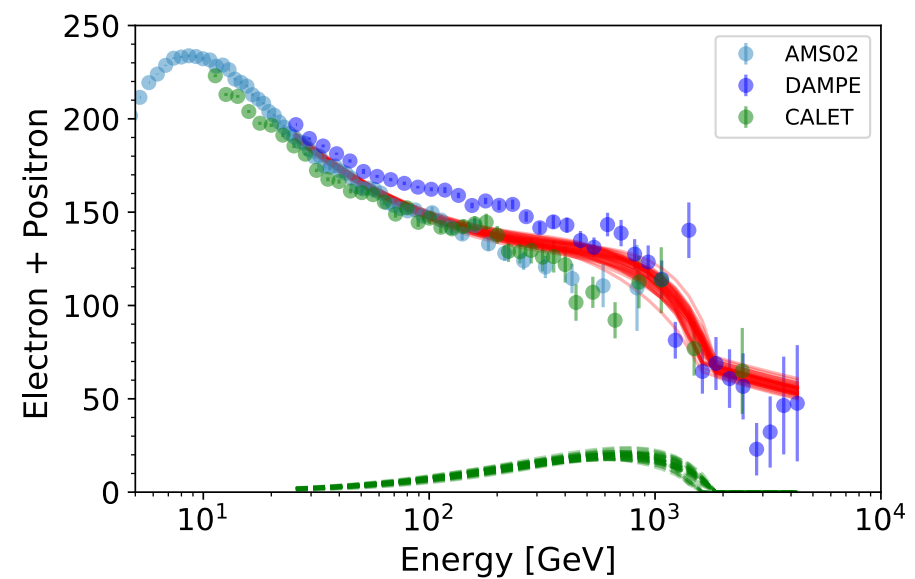
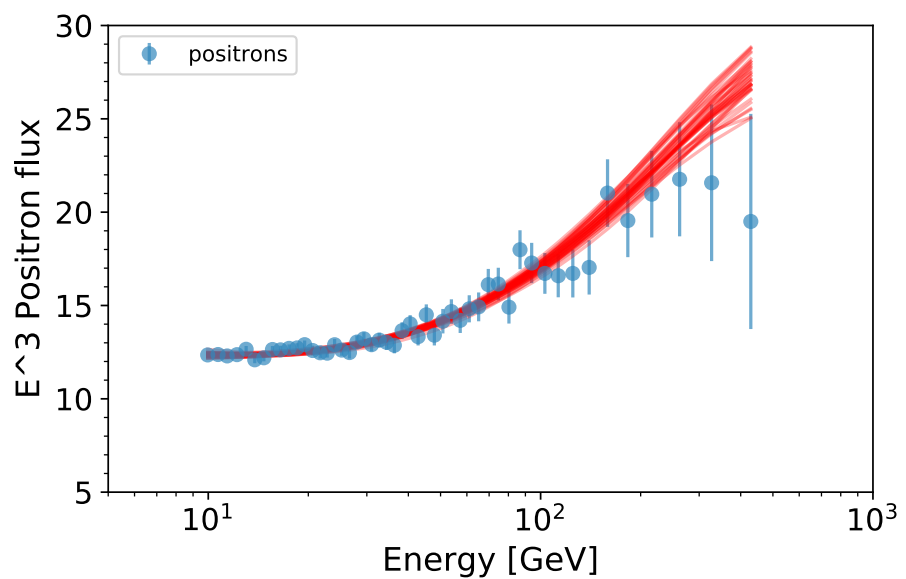
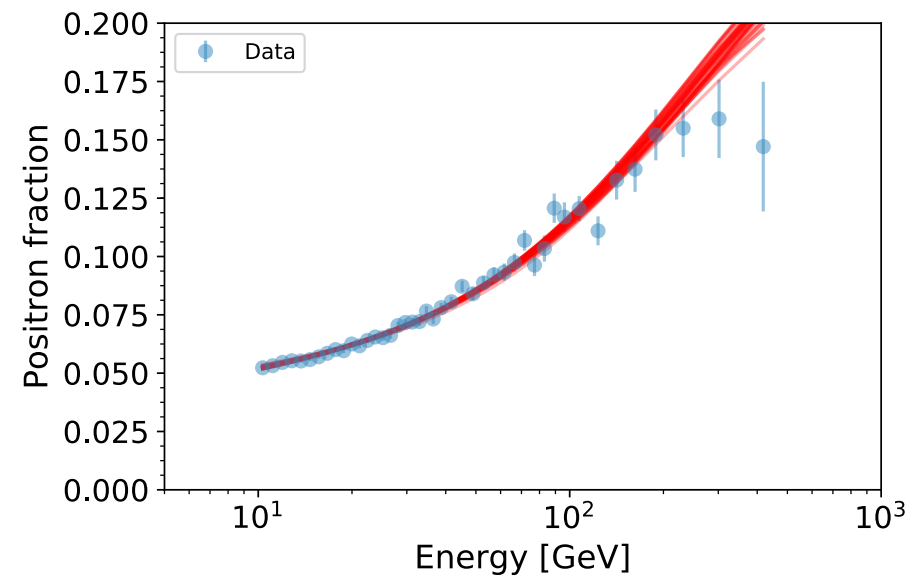
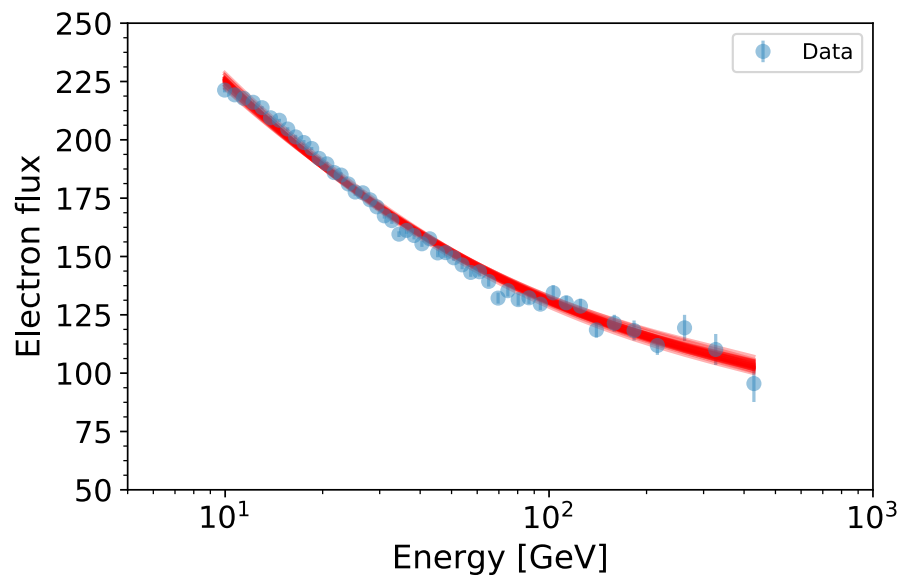
4



D4

Fit to e, p, fraction, sum(CALET)

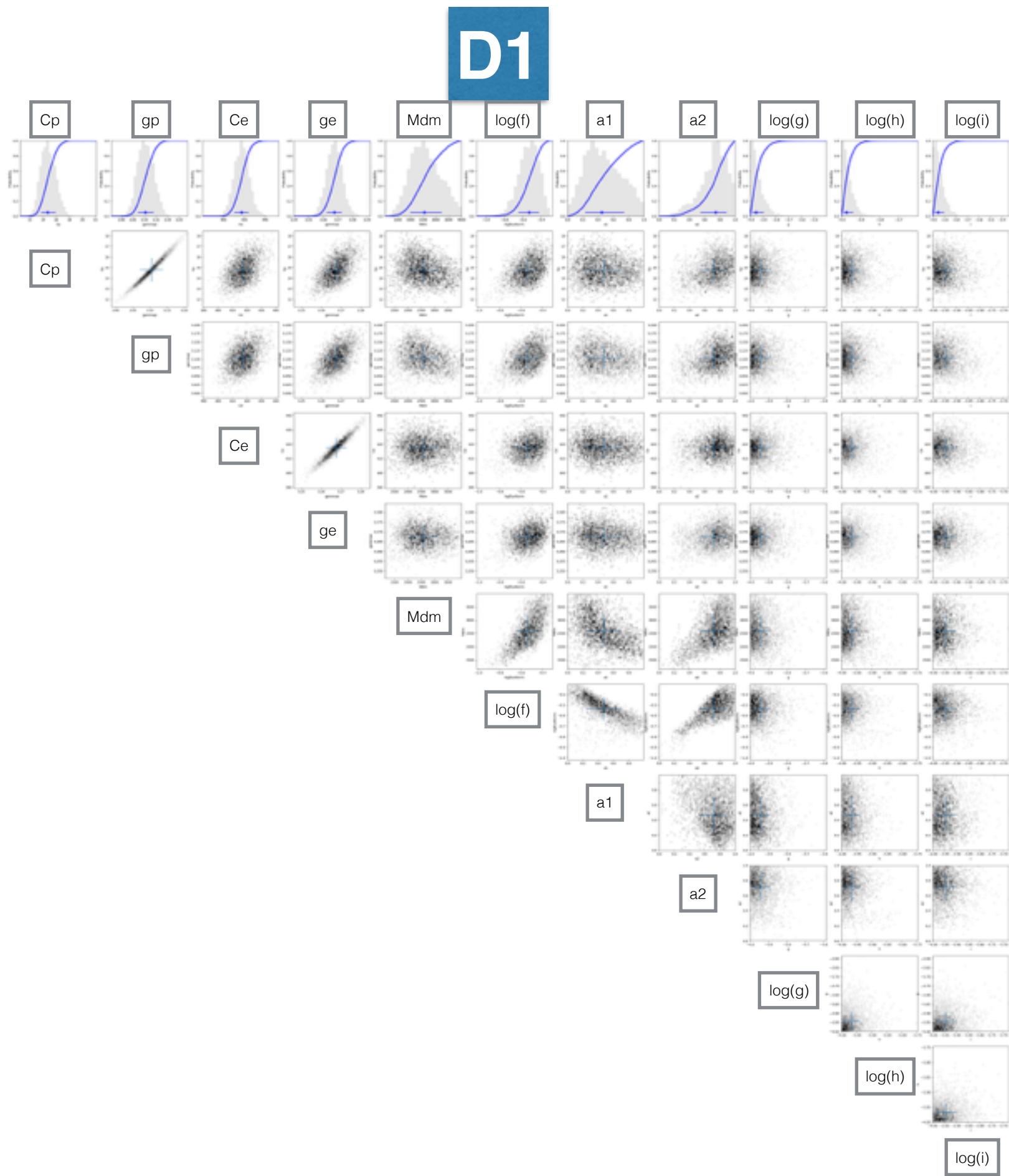
5



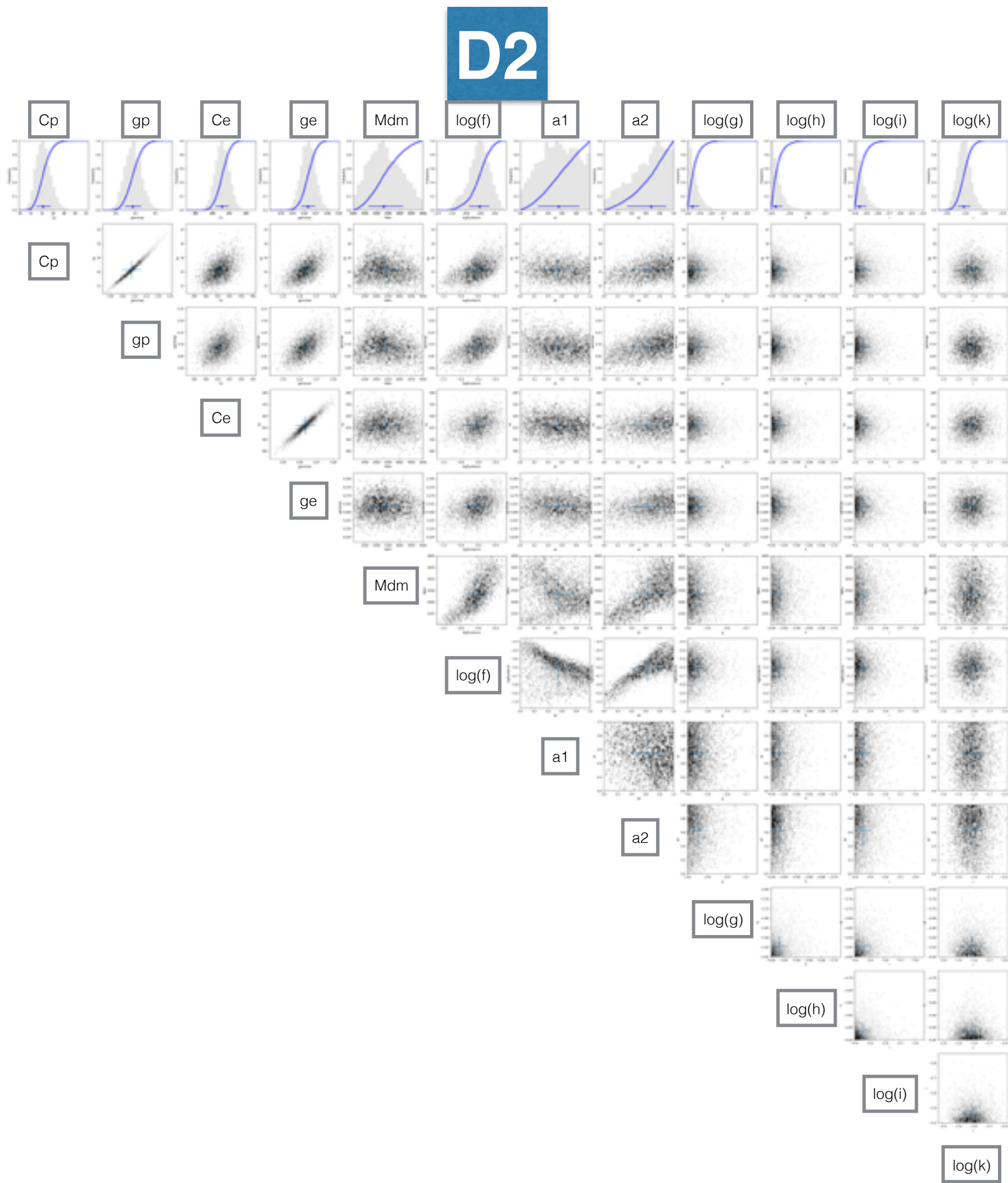
# Marginalisation



# Fit to e, p, fraction



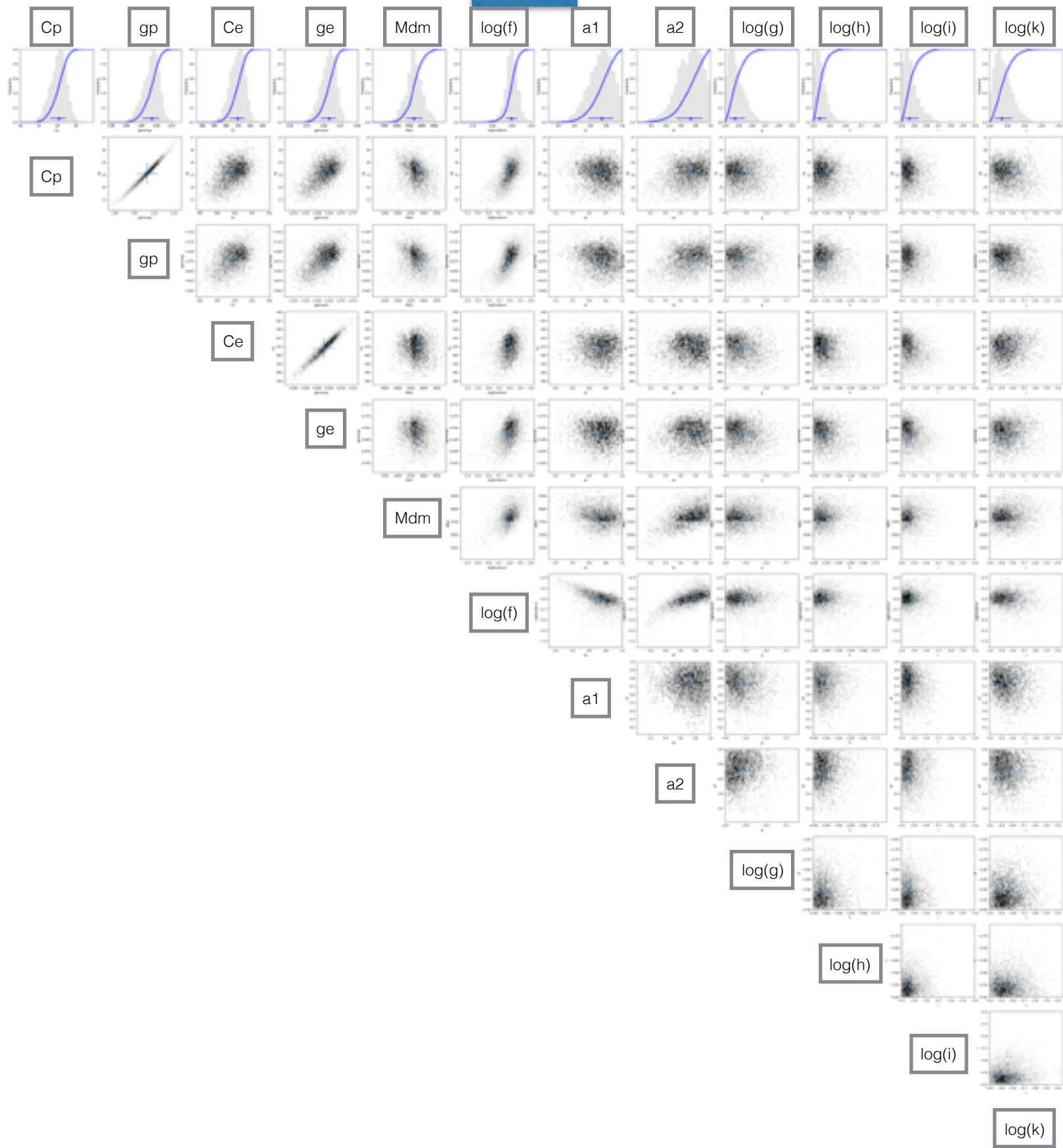
Fit to e, p, fraction, sum(AMSO2)





Fit to e, p, fraction, sum(CALET)

D3



Fit to e, p, fraction, sum(DAMPE)

D4

