Figure 4.5: A contour plot of the central oxygen mass fraction (X_O) versus the fractional mass location of the change in the oxygen gradient (q), with M_*, T_{eff}, and M_{He}/M_* fixed at their best-fit values. The model with the absolute minimum residuals (identical to the best-fit found by the GA) is marked with an X. The contours are drawn at 1, 3, 10, 25 and 40 times the observational noise.