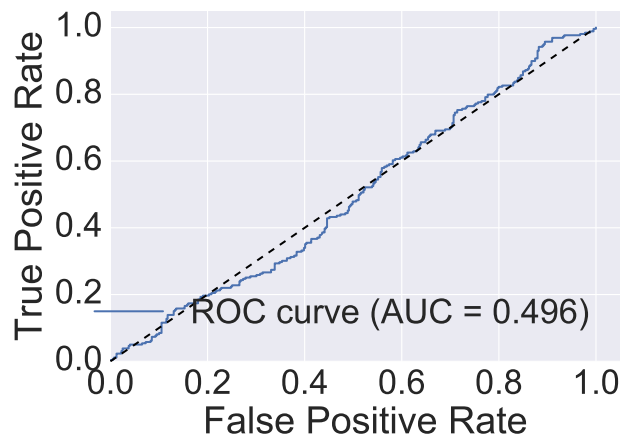
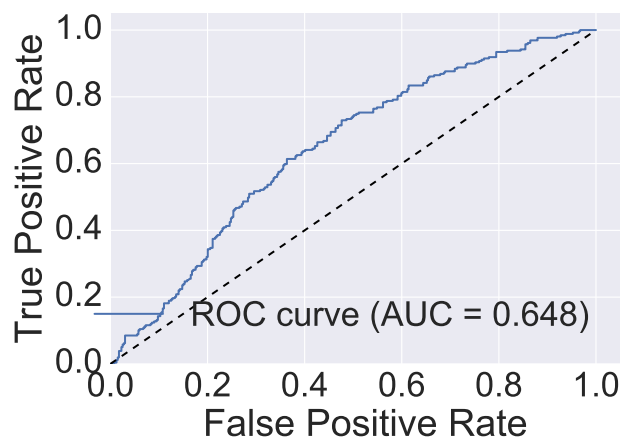


(a) Well-fit: $z_1 = 20, z_2 = 45$

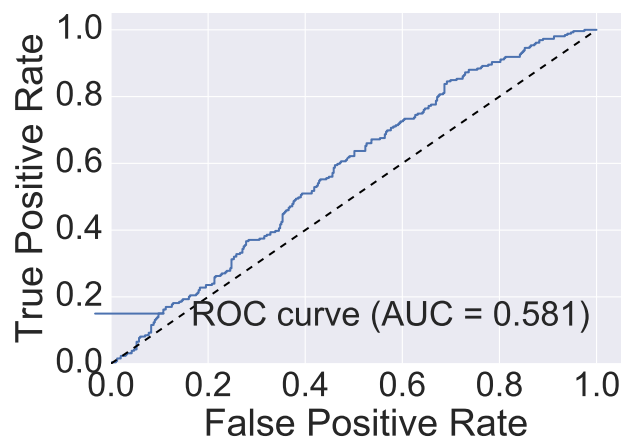


(b) Under-fit: $z_1 = 2, z_2 = 3$

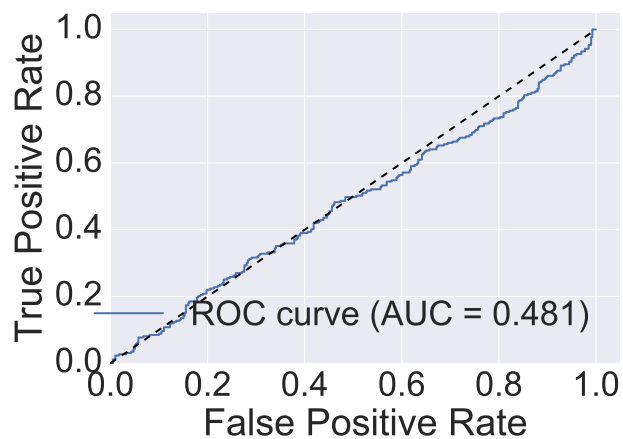


(c) Over-fit: $z_1 = 62, z_2 = 65$

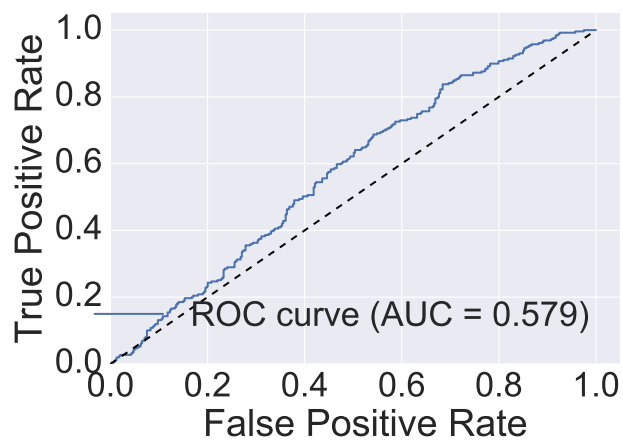
Figure 1: HFAM ROC curves for different levels of model complexity



(a) Well-fit: $C = 1 \times 10^5$

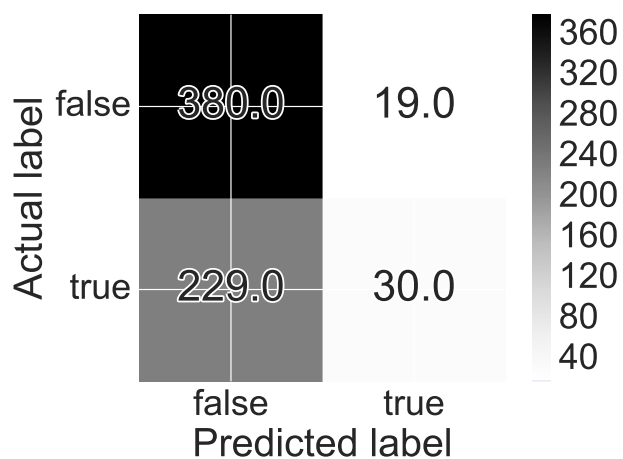


(b) Under-fit: $C = 1 \times 10^{-5}$

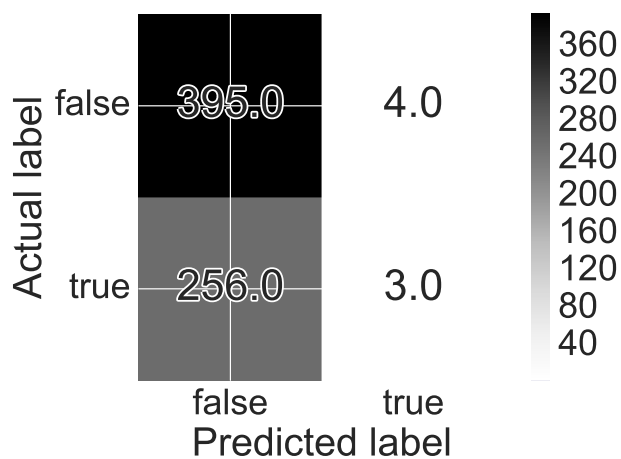


(c) Over-fit: $C = 1 \times 10^{15}$

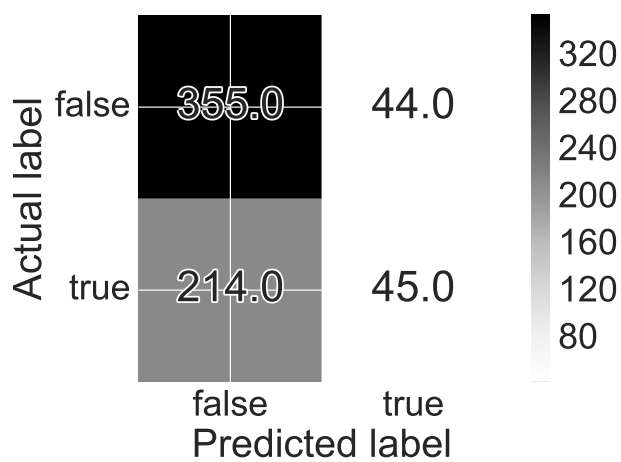
Figure 2: Logistic regression ROC curves for different levels of model complexity



(a) Well-fit: $z_1 = 20, z_2 = 45$

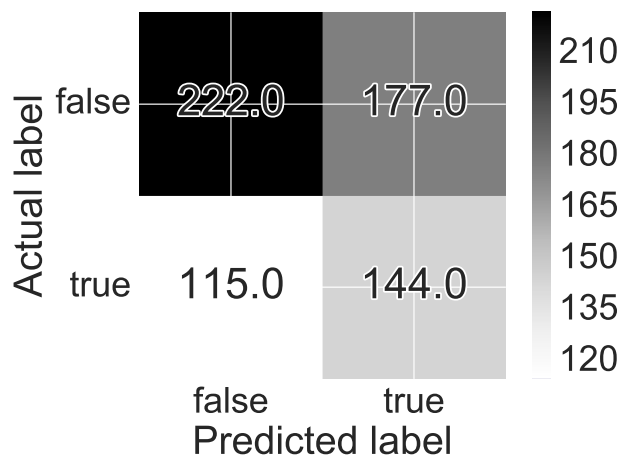


(b) Under-fit: $z_1 = 2, z_2 = 3$

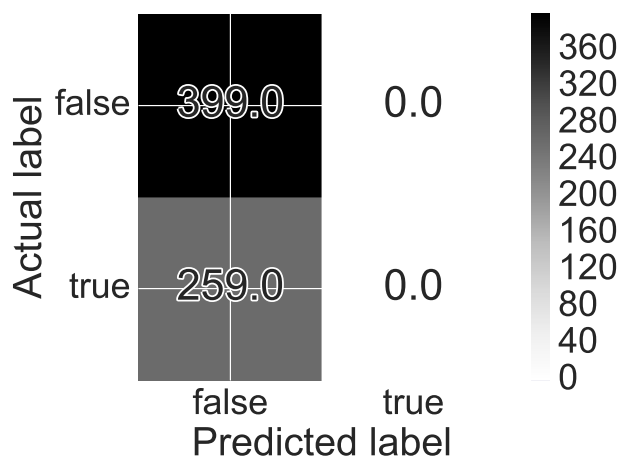


(c) Over-fit: $z_1 = 62, z_2 = 65$

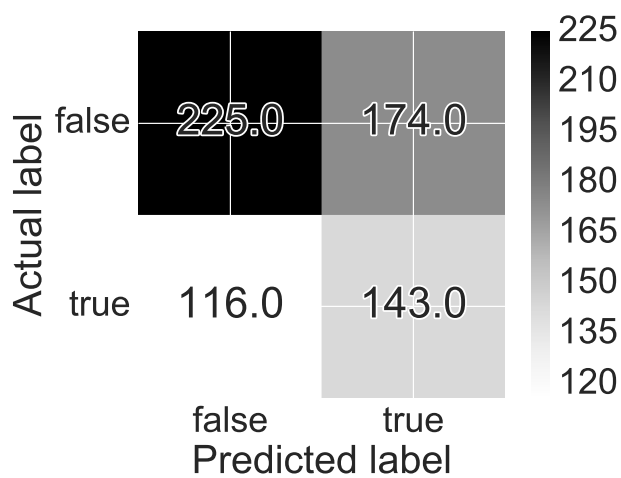
Figure 3: HFAM confusion matrices for different levels of model complexity



(a) Well-fit: $C = 1 \times 10^5$



(b) Under-fit: $C = 1 \times 10^{-5}$



(c) Over-fit: $C = 1 \times 10^{15}$

Figure 4: Logistic regression confusion matrices for different levels of model complexity