Apogee-Colors-Giants TEFF LOGG 3.5 5400 3.5 5400 3.0 5200 3.0 5200 2.5 5000 2.5 5000 Lue Logg 2.0 Hamber 12 4800 4600 - 2.0 4800 - 1.5 4600 4400 1.0 4400 - 1.0 4200 4200 - 0.5 4000 0.0 4200 4400 2.5 4600 4800 1.5 2.0 5000 1.0 3.0 **Predicted TEFF Predicted LOGG** FE_H ALPHA_M 0.5 0.4 0.0 0.0 0.2 0.2 -0.5 -0.5True ALPHA_M Hue FE H = 1.0 0.0 -1.0-1.5-0.2-0.2-2.0-0.4-2.0-0.75 -0.500.15 -1.75-1.50-1.25 -1.00-0.25 0.00 -0.05 0.00 0.05 0.10 0.20 0.25 Predicted ALPHA_M Predicted FE_H C_FE CA_FE 0.50 0.8 0.50 0.6 0.25 0.6 0.25 0.4 0.00 0.4 0.00 -0.25 의 -0.50 0.2 True CA_FE -0.250.0 0.0 -0.50 -0.2-0.75-0.75-0.4-1.00-1.00-0.6-1.25-0.6-1.25-0.8-0.7-0.6-0.5-0.3 -0.2 -0.10.0 0.1 0.00 0.05 0.10 0.15 0.20 0.25 Predicted C_FE Predicted CA_FE N_FE NI_FE 2.0 0.4 0.4 - 1.5 1.5 0.2 0.2 - 1.0 True N_FE 1.0 True NI_FE 0.0 0.0 0.5 0.5 0.0 0.0 -0.4-0.5 -0.60.2 Predicted N_FE 0.3 -0.15-0.10-0.050.00 0.0 0.1 0.4 -0.25 -0.20 0.05 Predicted NI_FE MG_FE SI_FE 0.6 0.6 0.6 0.4 0.4 0.4 True MG_FE True SI_FE 0.2 0.2 0.2 0.2 0.0 0.0 -0.2-0.2-0.2 -0.2

-0.4

-0.05

0.00

5 0.10 Predicted SI_FE

0.15

0.25

0.20

0.05

-0.4

-0.1

0.1 Predicted MG_FE

0.0

0.2

0.3