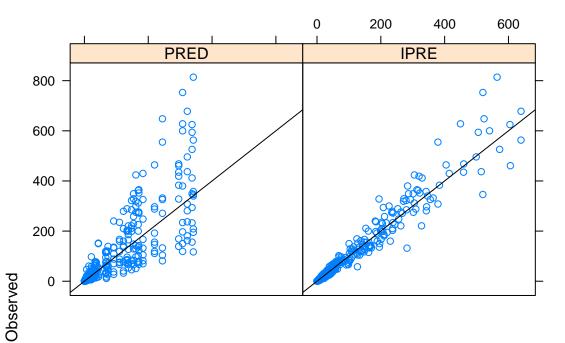
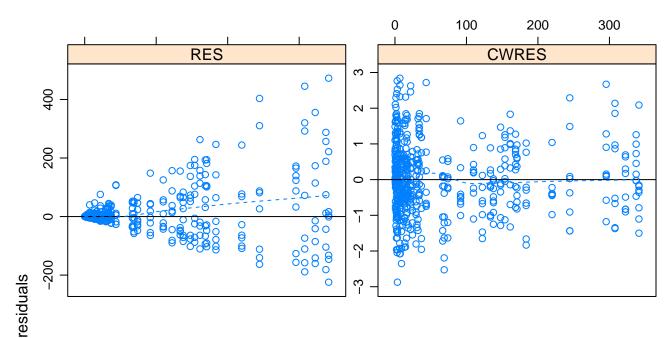
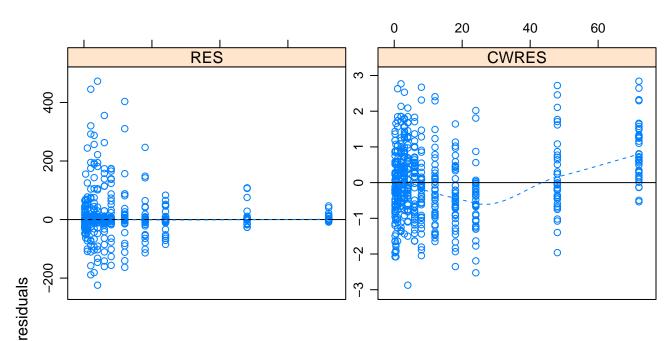
Model 1001
Observed vs. Predicted for all data



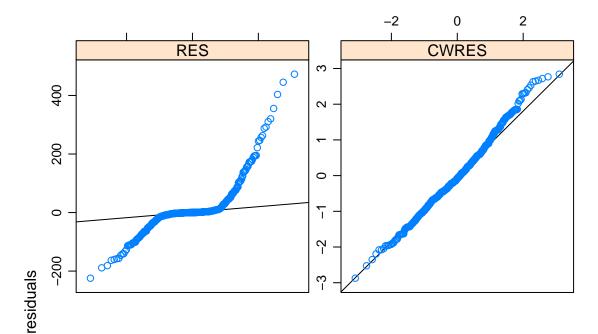
## Model 1001 Residuals vs. Predicted for all data



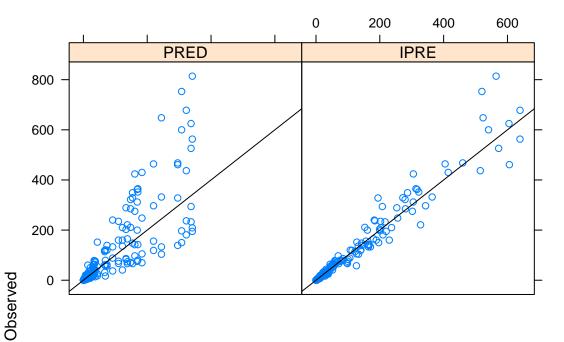
### Model 1001 Residuals vs. Time for all data



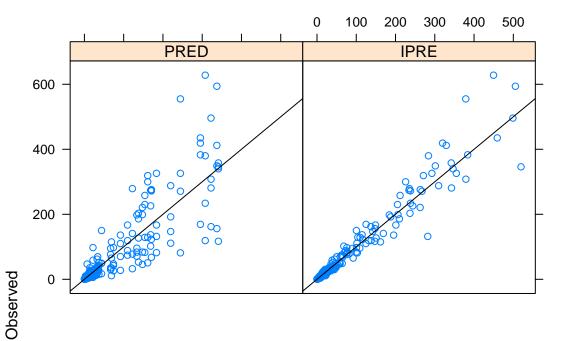
# Model 1001 Normal Q-Q Plot Residuals for all data



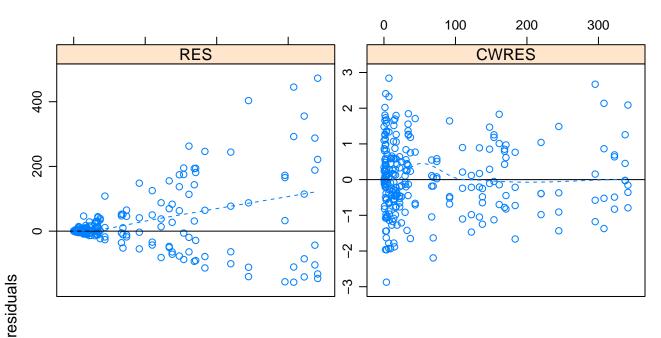
Model 1001
Observed vs. Predicted for female data



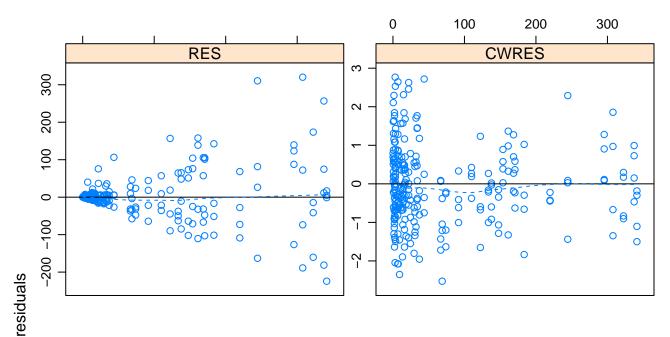
# Model 1001 Observed vs. Predicted for male data



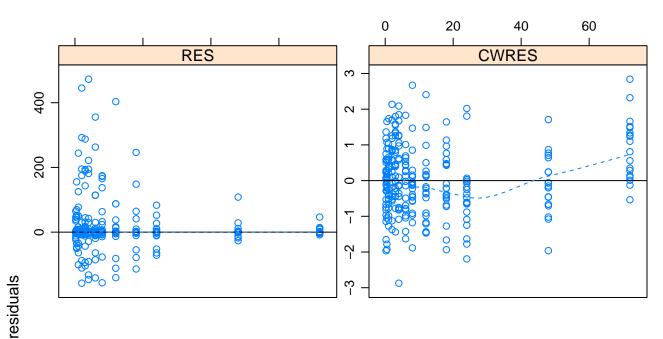
Model 1001
Residuals vs. Predicted for female data



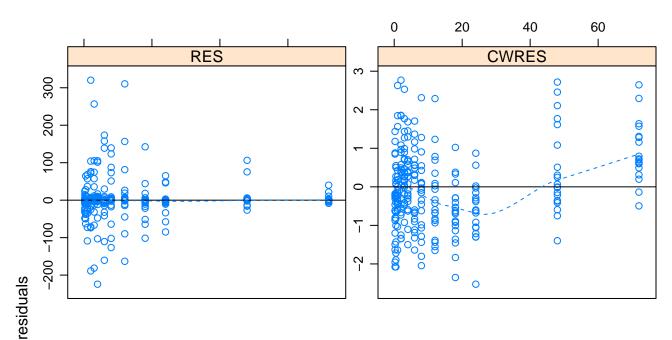
# Model 1001 Residuals vs. Predicted for male data



### Model 1001 Residuals vs. Time for female data

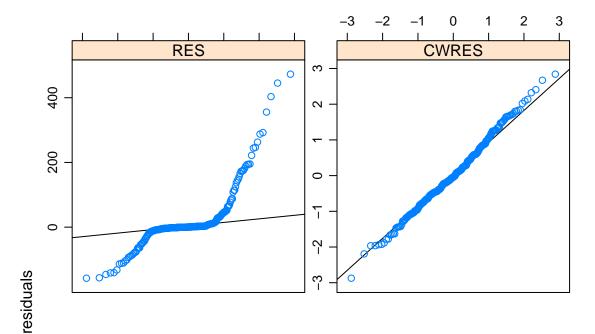


### Model 1001 Residuals vs. Time for male data

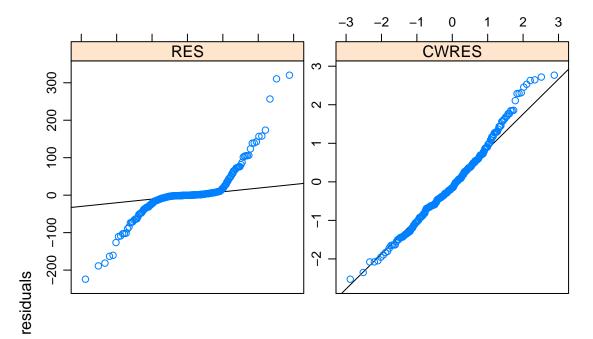


Model 1001

Normal Q-Q Plot Residuals for female data



# Model 1001 Normal Q-Q Plot Residuals for male data



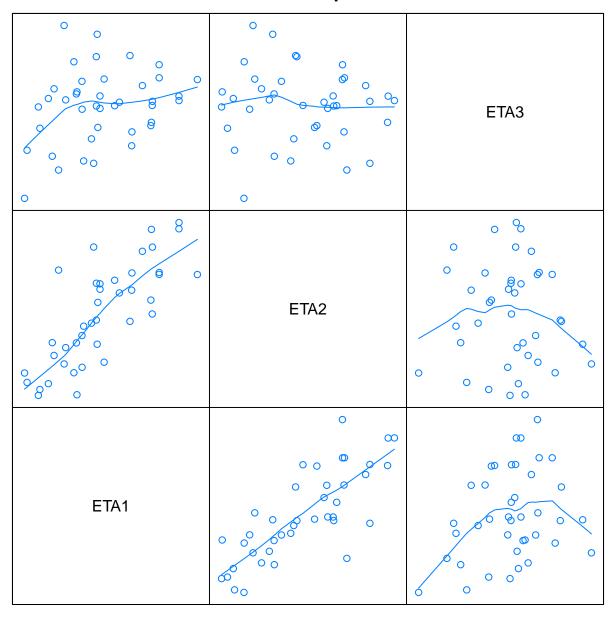
#### **Covariate Scatterplots**



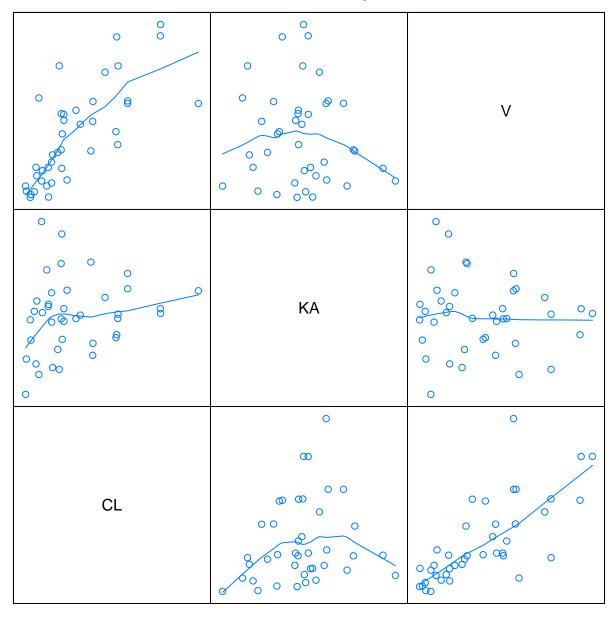
### **Continuous Covariates vs. Categorical Covariates**



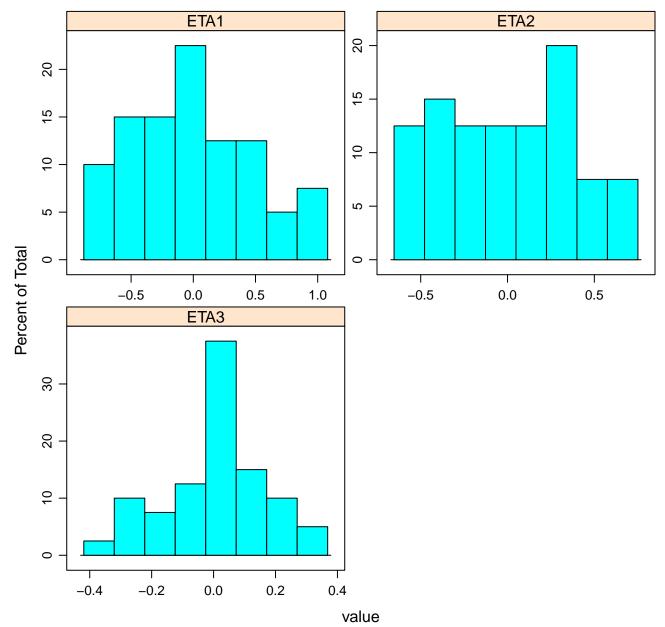
#### **ETA Scatterplots**



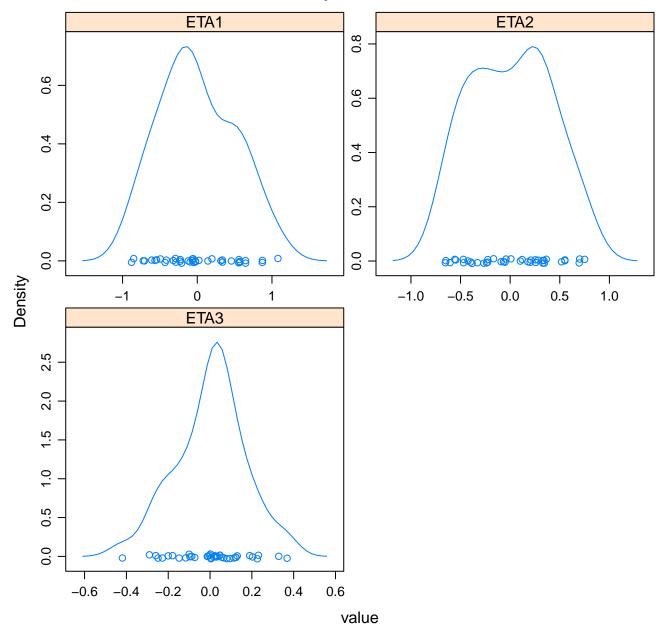
### **Parameter Scatterplots**



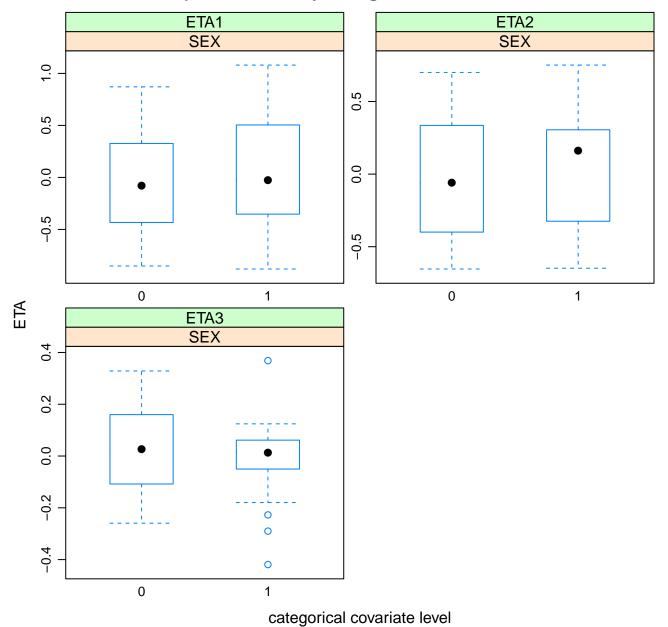
**Histograms of Etas** 



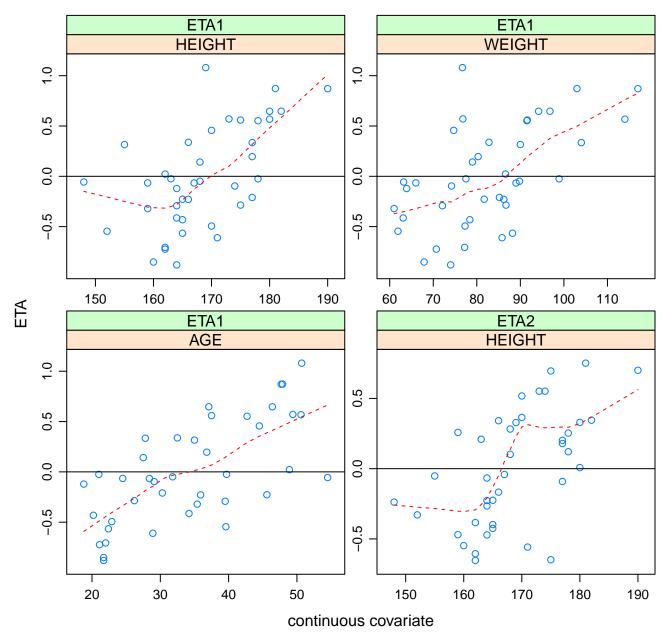
**Density of Etas** 



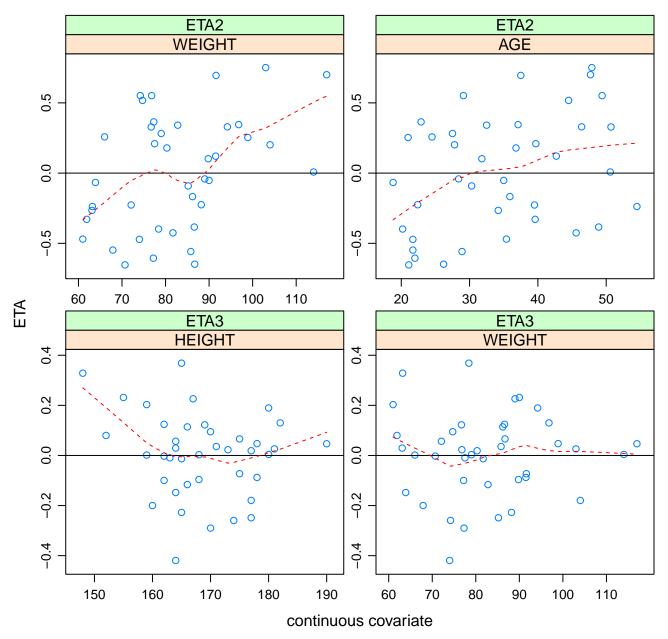
## **Boxplots of Etas by Categorical Covariate**



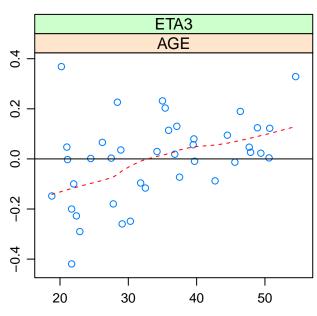
**Etas vs. Continuous Covariates** 



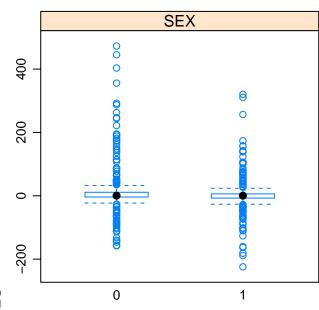
**Etas vs. Continuous Covariates** 



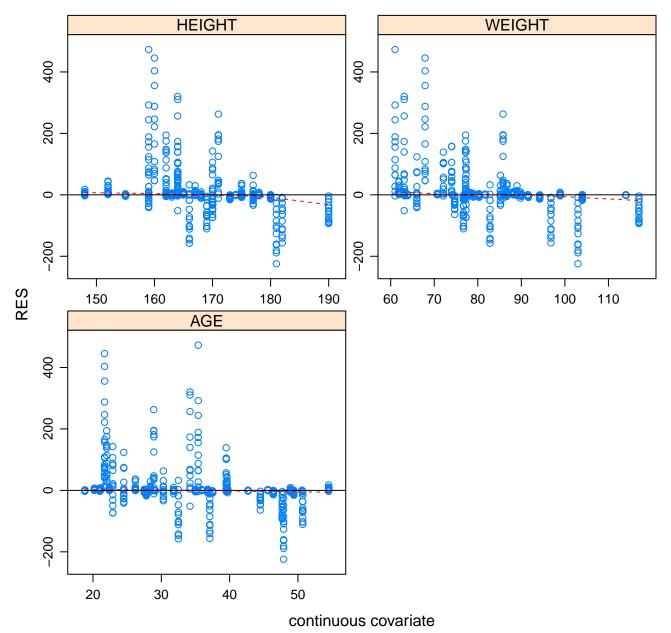
### **Etas vs. Continuous Covariates**



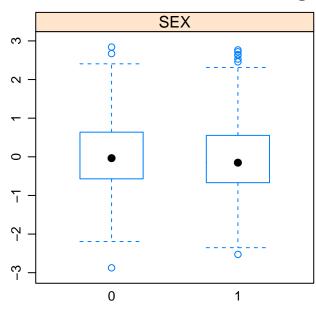
## **RES vs. Categorical Covariates**



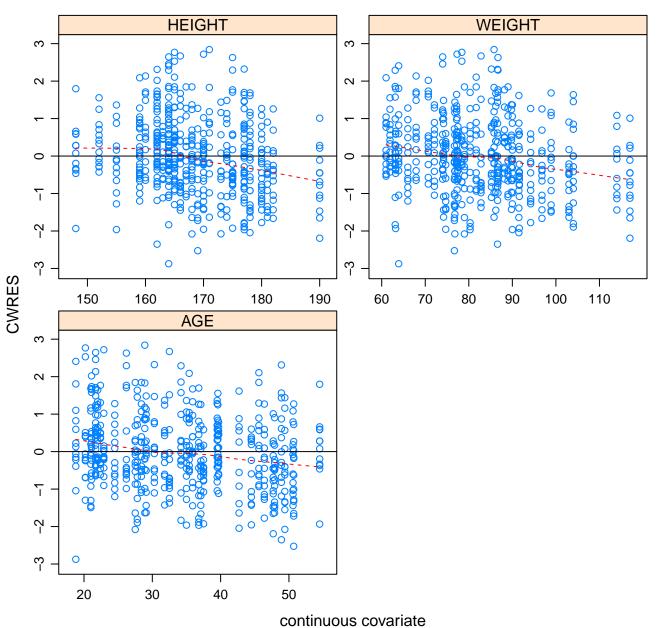
**RES vs. Continuous Covariates** 



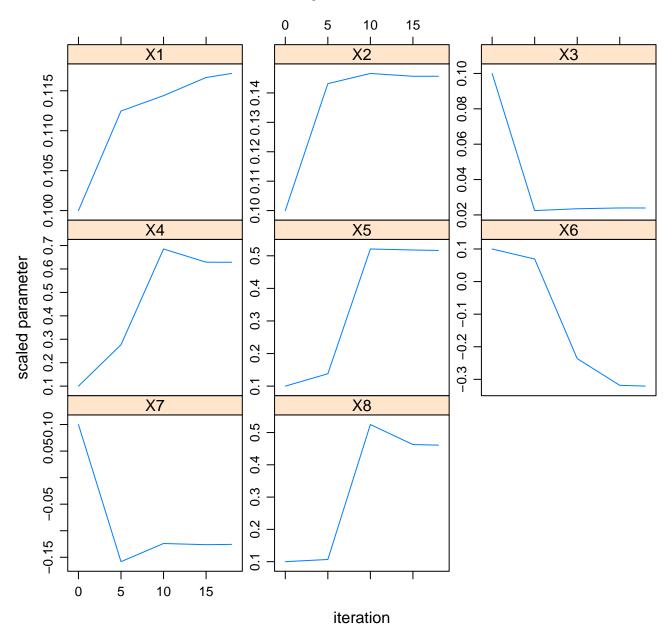
## **CWRES vs. Categorical Covariates**



#### **CWRES vs. Continuous Covariates**



#### Model 1001 parameter search



## Model 1001 gradient search

