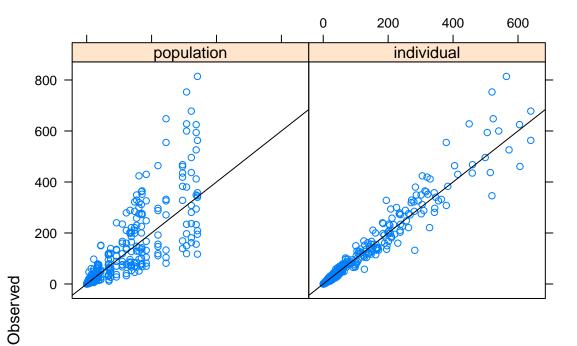
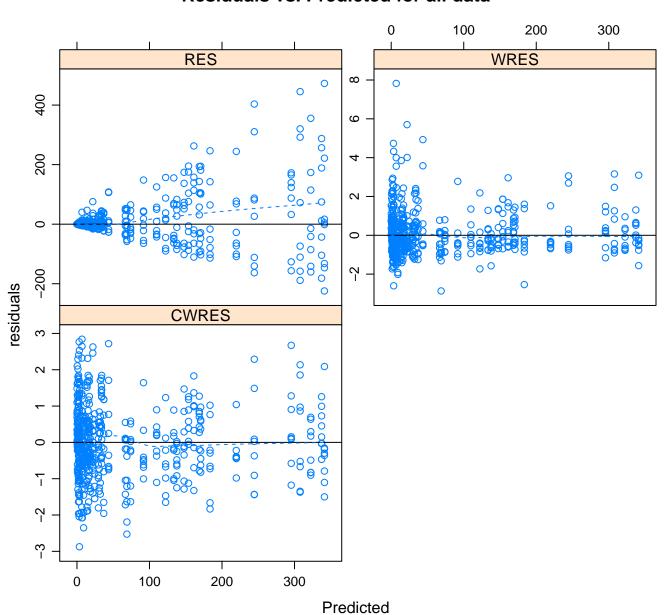
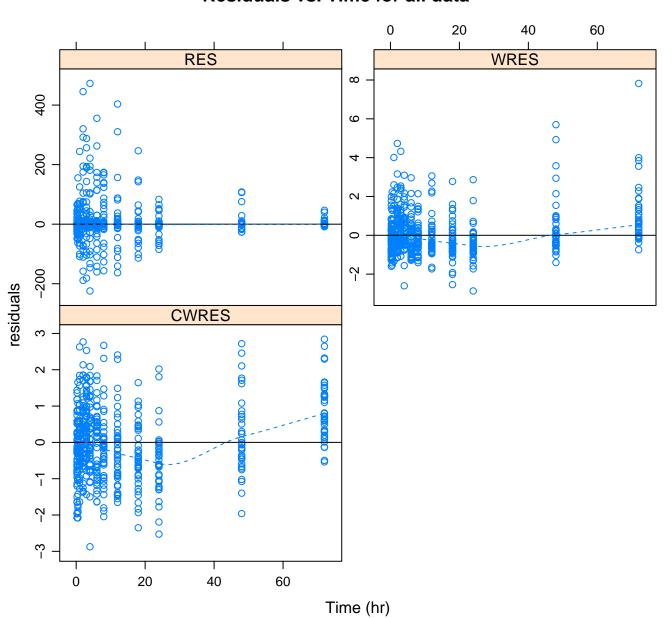
# Model 1001 Observed vs. Predicted for all data



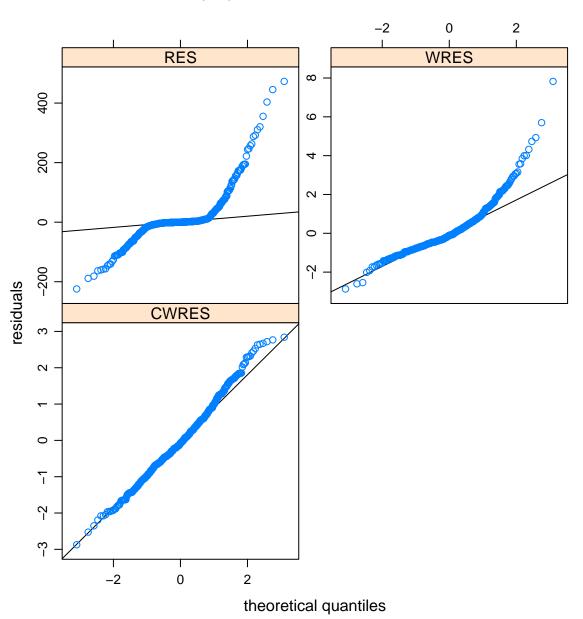
Model 1001
Residuals vs. Predicted for all data



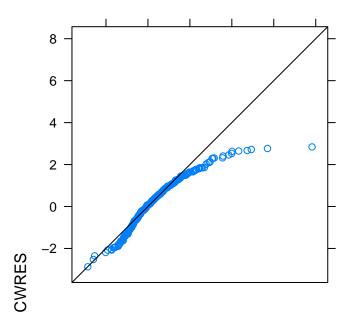
Model 1001 Residuals vs. Time for all data



Model 1001
Normal Q-Q Plot Residuals for all data



### Model 1001 Q-Q Plot of CWRES vs. WRES for all data



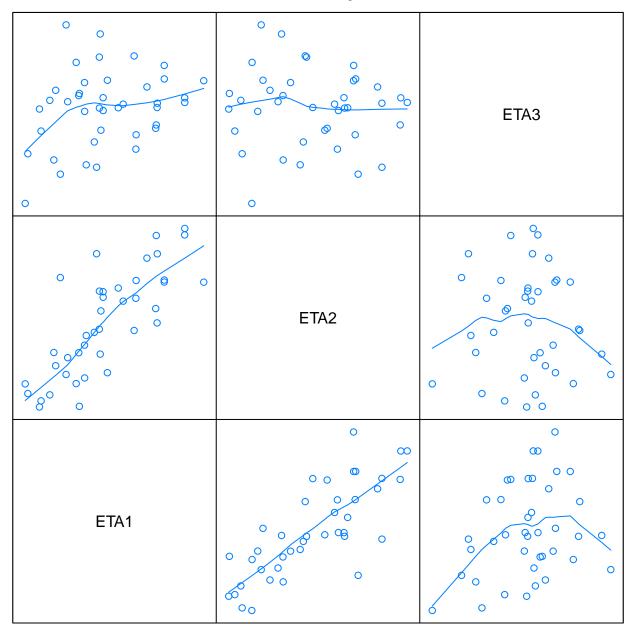
#### **Covariate Scatterplots**



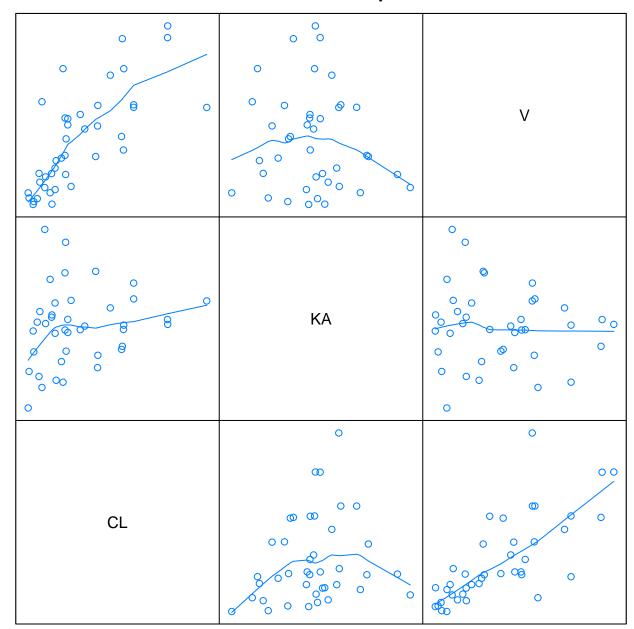
#### **Continuous Covariates vs. Categorical Covariates**



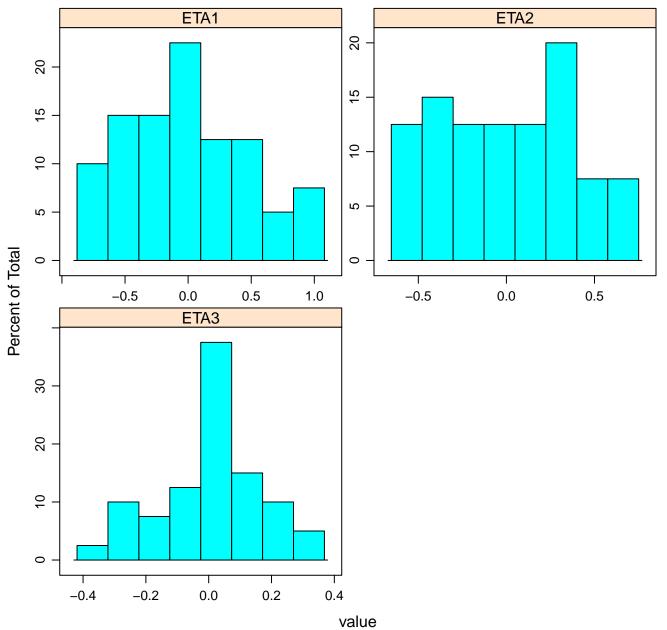
#### **ETA Scatterplots**



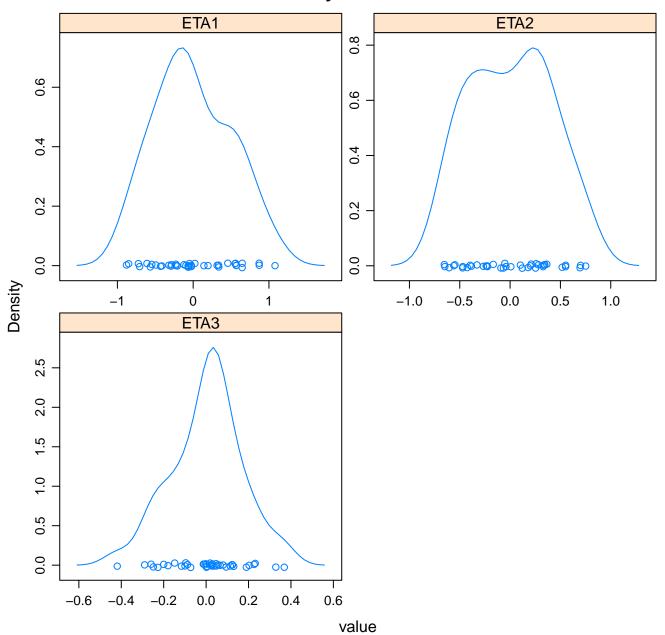
# **Parameter Scatterplots**



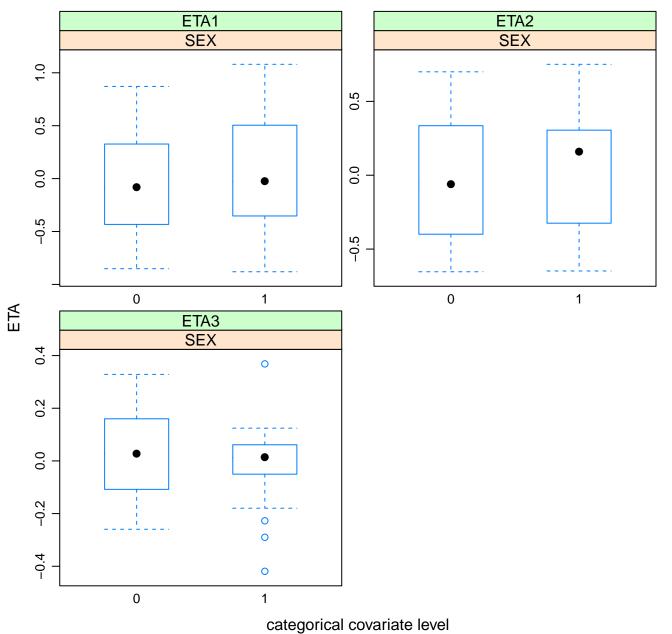
Histograms of Etas



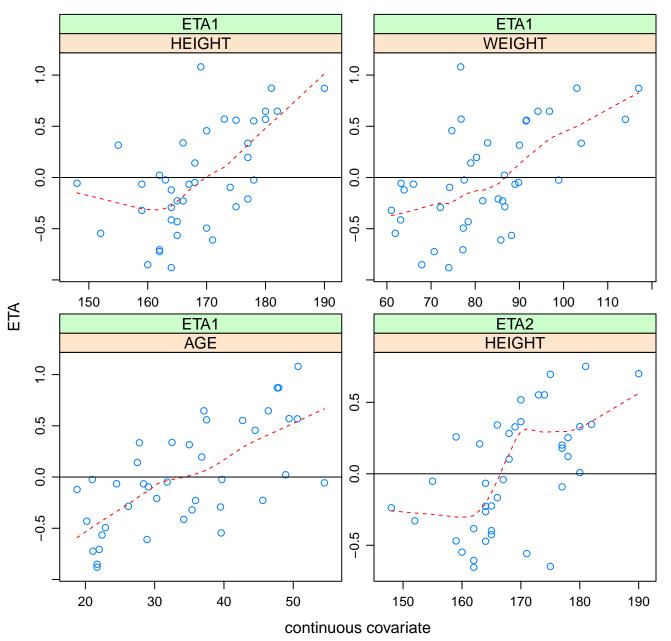
**Density of Etas** 



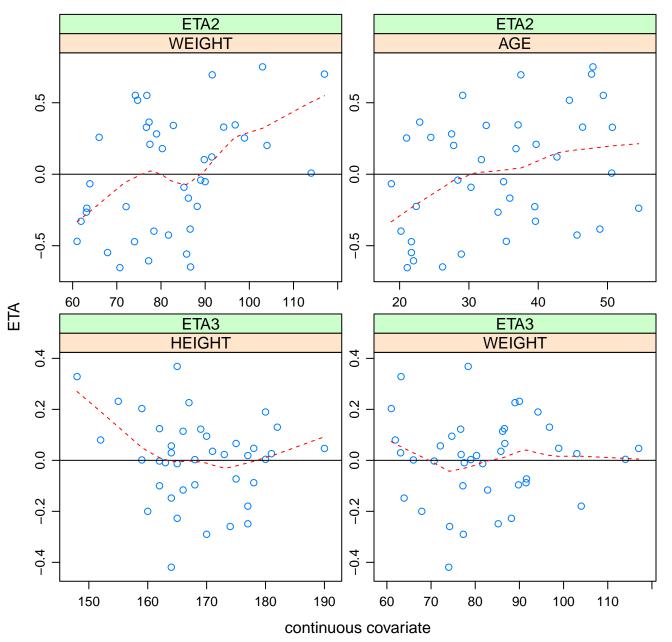
# **Boxplots of Etas by Categorical Covariate**



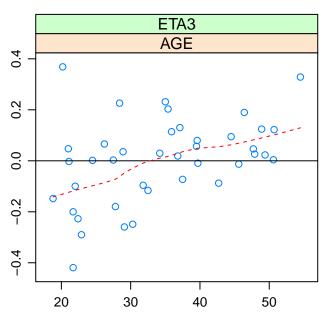
**Etas vs. Continuous Covariates** 



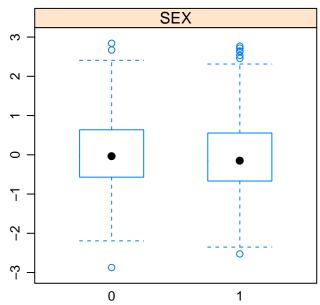
**Etas vs. Continuous Covariates** 



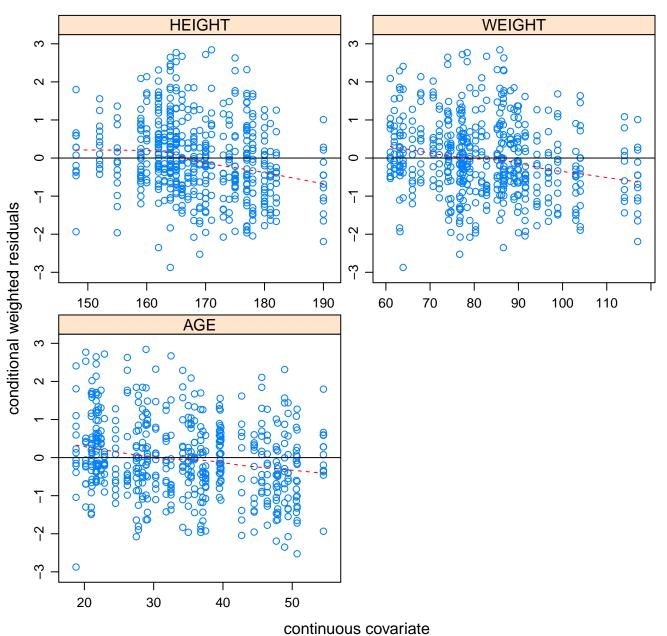
#### **Etas vs. Continuous Covariates**



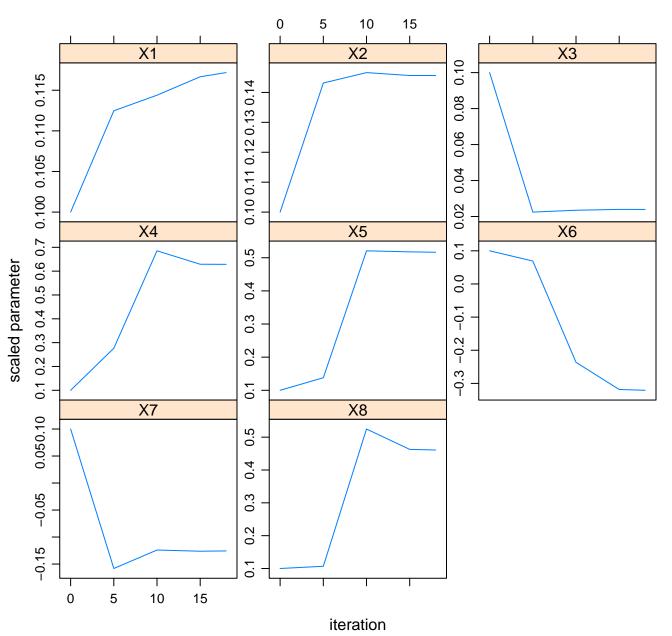
# **CWRES vs. Categorical Covariates**



## **CWRES vs. Continuous Covariates**



## Model 1001 parameter search



# Model 1001 gradient search

