

Figure 1. Cross correlations (in blue; scale: -0.4 - 0.4 except seed electrons) and ARMAX lag coefficients (in green; scale: -0.02 - 0.02 except seed electrons) of parameters with electron flux. Cross correlations are up to 10 times greater than ARMAX coefficients, reflecting that most simple correlation is due to co-cycling of parameters with flux. ARMAX coefficients (with co-cycling removed) may not peak in the same hour nor in the same direction as the cross correlations. (Note the different scale for seed electron flux correlations and coefficients.)

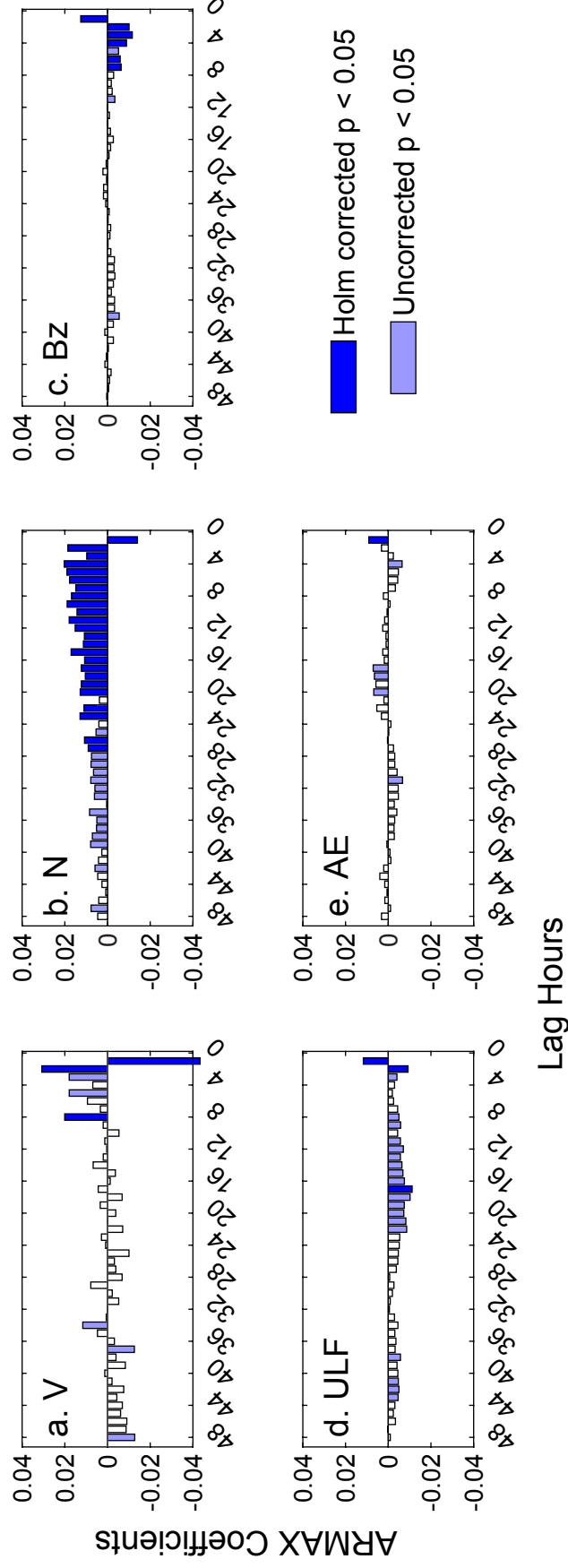


Figure 2. Coefficients of the lagged predictors (over 48 h) when all lags are included in a simultaneous ARMAX multiple regression including V, N, Bz, ULF, and AE. Nonsignificant coefficients are white bars. Those with $p < 0.05$ are in light blue. Dark blue are those coefficients that are still statistically significant when the Holm correction for multiple comparisons is applied.

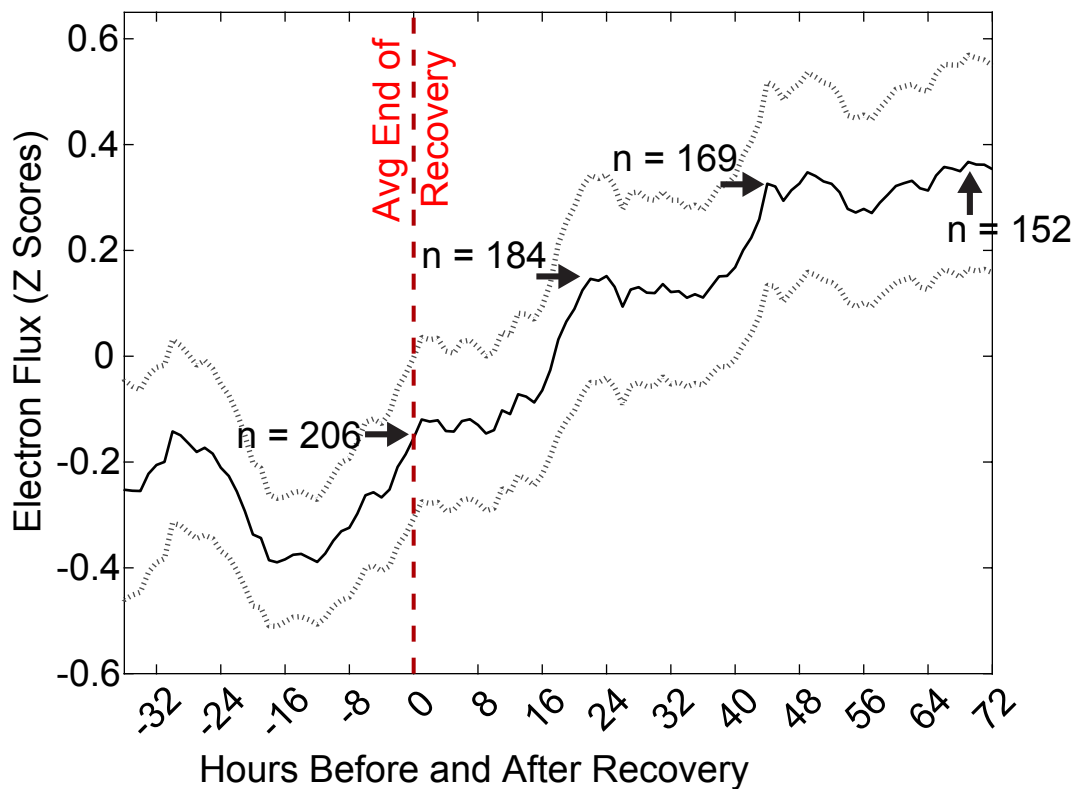


Figure 3. Relativistic electron flux (Z scores; black line) superposed at end of recovery and averaged over available storms. Number of storms showing end of recovery marker (> -30 nT following main phase Dst drop) is $n=206$. 95% confidence interval shown as dashed lines.

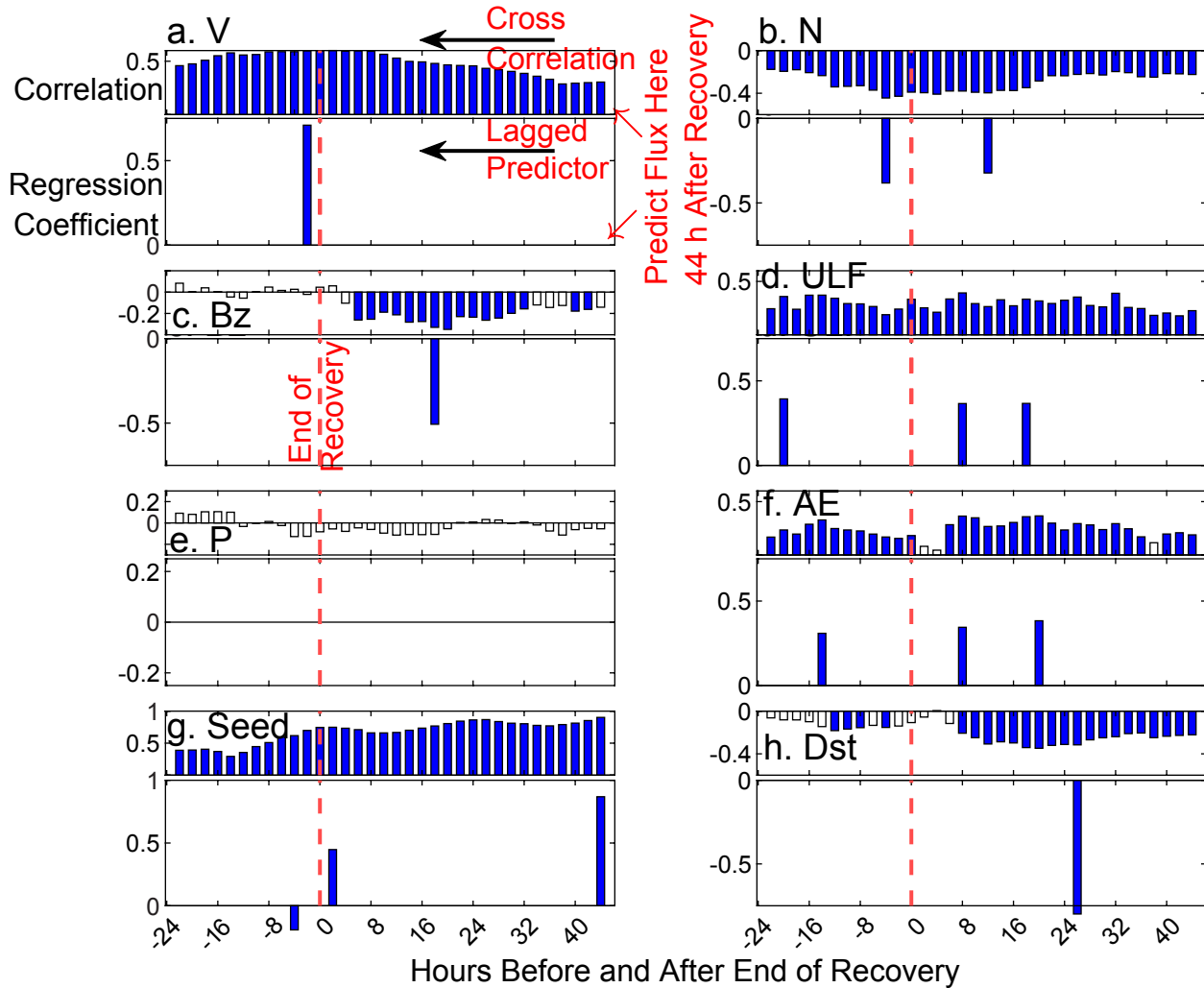


Figure 4. Coefficients from individual analyses of lagged parameters used to predict relativistic electron flux 44 h after the end of storm recovery. Top plot of each panel are the cross correlations; bottom plot of each panel are the significant lags chosen by stepwise regression. Significant coefficients ($p < 0.05$) are blue bars.

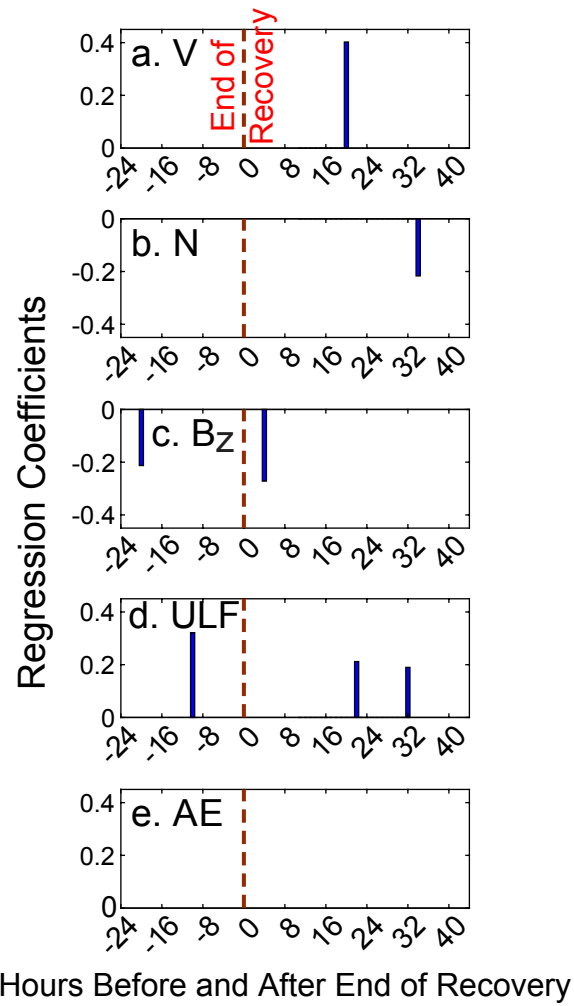


Figure 5. Coefficients from a combined multiple regression analysis of lagged parameters predicting relativistic electron flux 44 h after the end of storm recovery. Significant lags chosen by stepwise regression.