



Figure 4. Densities for annual NEE for inversion results and inventory (2007). Top panel shows results for entire MCI region while bottom panel shows results for the intersection of the PSU inversion model domain and MCI domain. PSU inversion is based on SiB3-CROP offline prior. CSU inversion is also based on SiB3-CROP offline prior with GV-bias corrected CT inflow. These results include explicit variability estimates that were constructed for the inventory using a Monte Carlo analysis and variability estimates that arise naturally from the matrix-based atmospheric inversion procedure. Due to difficulty in obtaining covariances for the CarbonTracker ecoregion estimates, only marginal ecoregion specific variances were used in the figure for NEE. The variability induced by varying inflow CO_2 or underlying transport model characteristics is not implicitly included here but can be seen in Table 2.