

## Inter-model comparison of carbon flux inversions from simulated column XCO<sub>2</sub>

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A ground-based solar spectral XCO<sub>2</sub> observation network with <0.2 ppmv precision is currently under deployment. To predict the improvement that will be introduced by this new type of observation to global carbon flux inversions, we used a CTM model to simulate the outputs from the planned network and then did inversions using 15 TransCom models and compared the results with same inversions using measurements only at the surface. The comparison indicates that using column CO<sub>2</sub> in inversion reduces the influences of the rectifier effect in transport models.