

Update case includes the updates in the develop_anthro_emiss_racm branch

Default case includes the develop branch code.

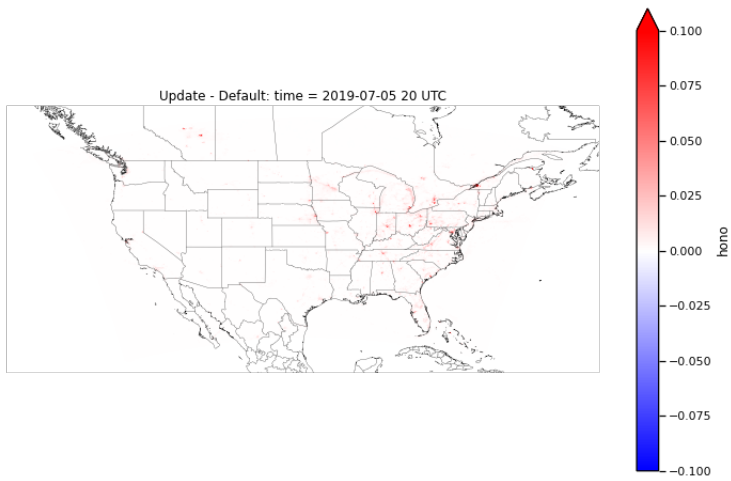
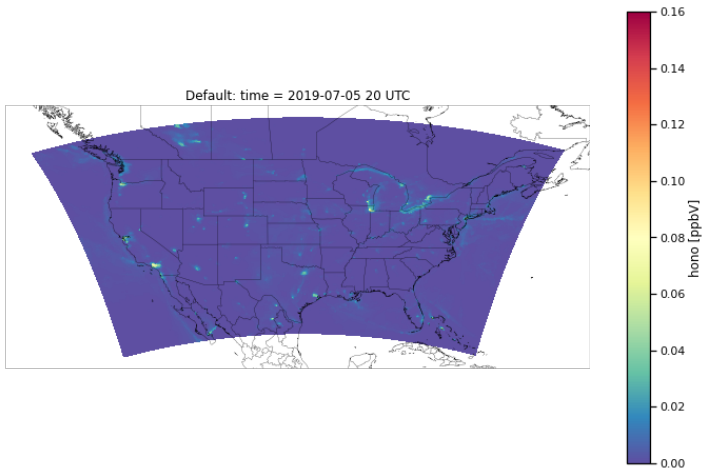
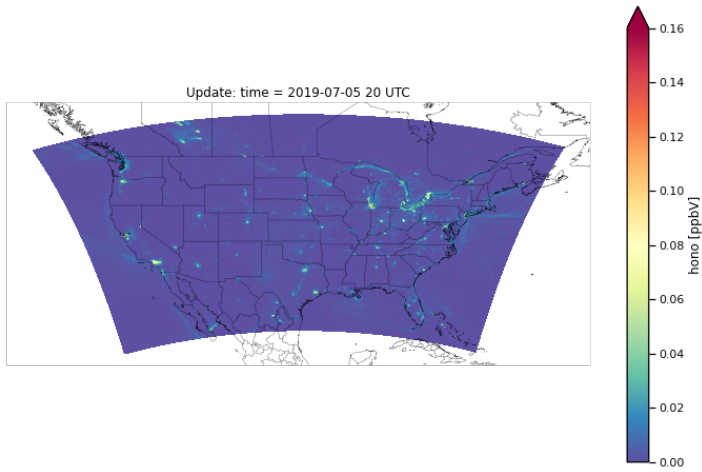
Anthropogenic emission inputs into the model are identical between the cases.

Right now even if anthropogenic emissions for hono, co2, and terp (which are split to api and lim chemical species) are included in the emissions file they will not be included in the RACM mechanisms including the RACM_SOA_VBS mechanism. We update this such that if hono, co2, and terp are in the emissions file they will be included in the simulation.

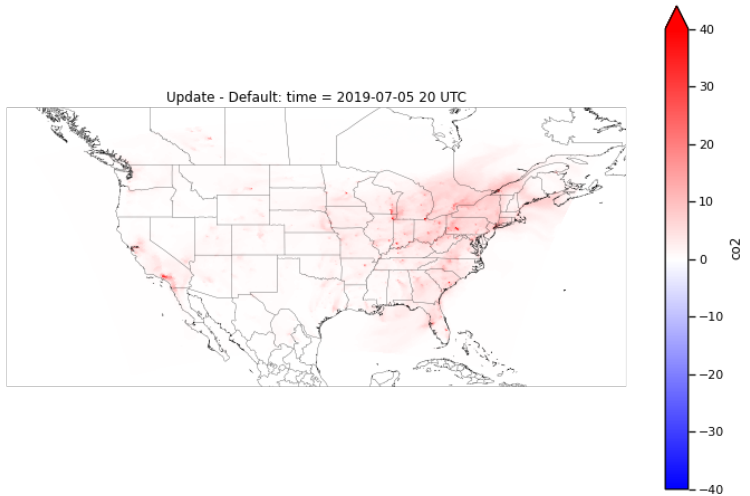
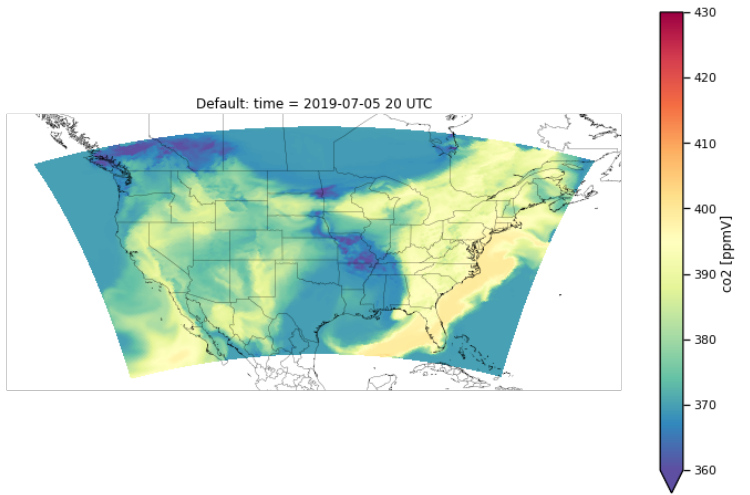
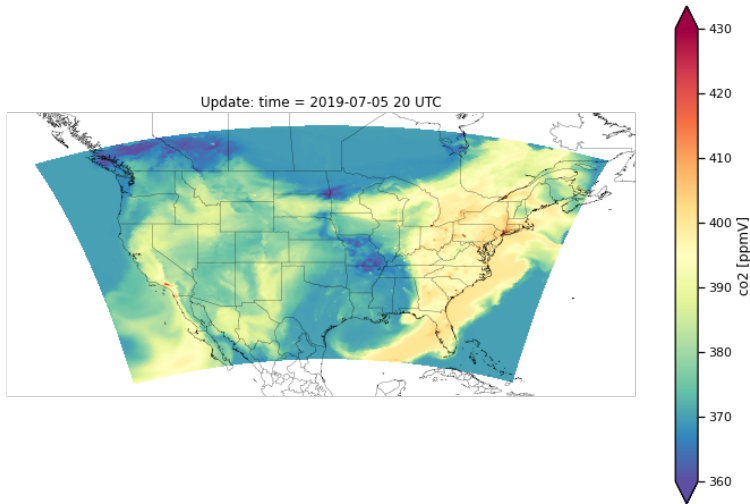
As shown by the plots below hono, co2, api, and lim increase with the update case compared to the default case in regions where anthropogenic emissions are important (i.e. urban hotspots are clearly shown).

The plots below are all surface values for just a snapshot of time (2019-07-05 20 UTC). Both cases were spun up 5 days.

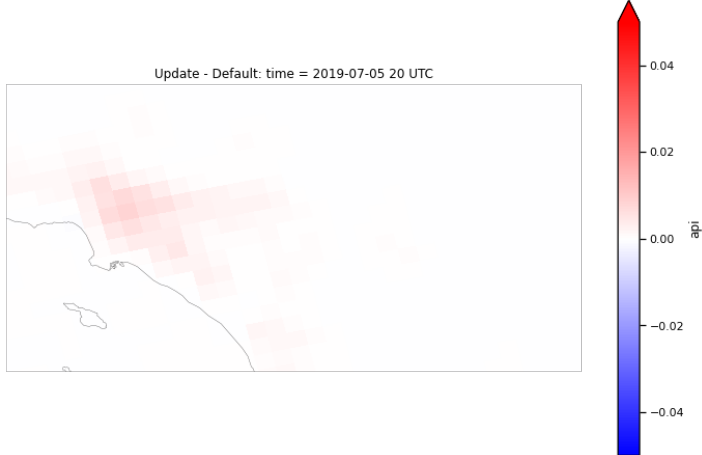
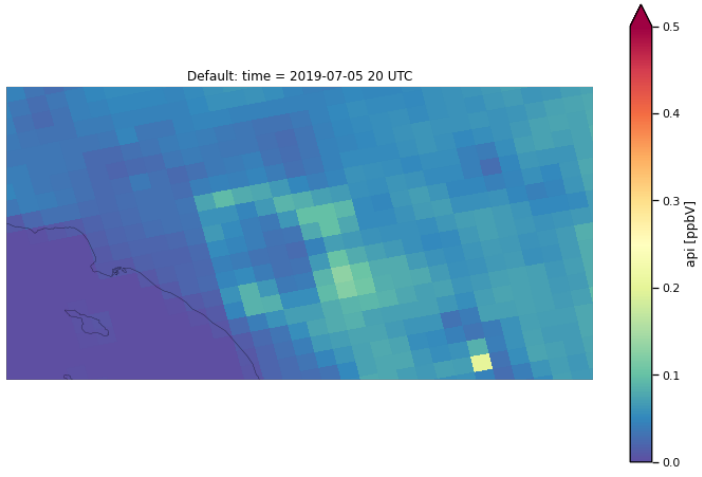
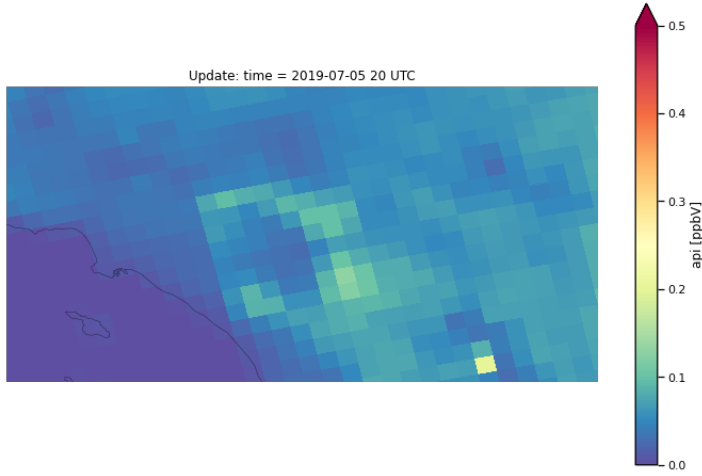
HONO



CO2



API (Note for API and LIM, which are alpha-pinene and limonene due to the high abundance of biogenic emissions, we zoom into the Los Angeles Region where you can see changes in the anthropogenic emissions more easily).



LIM

