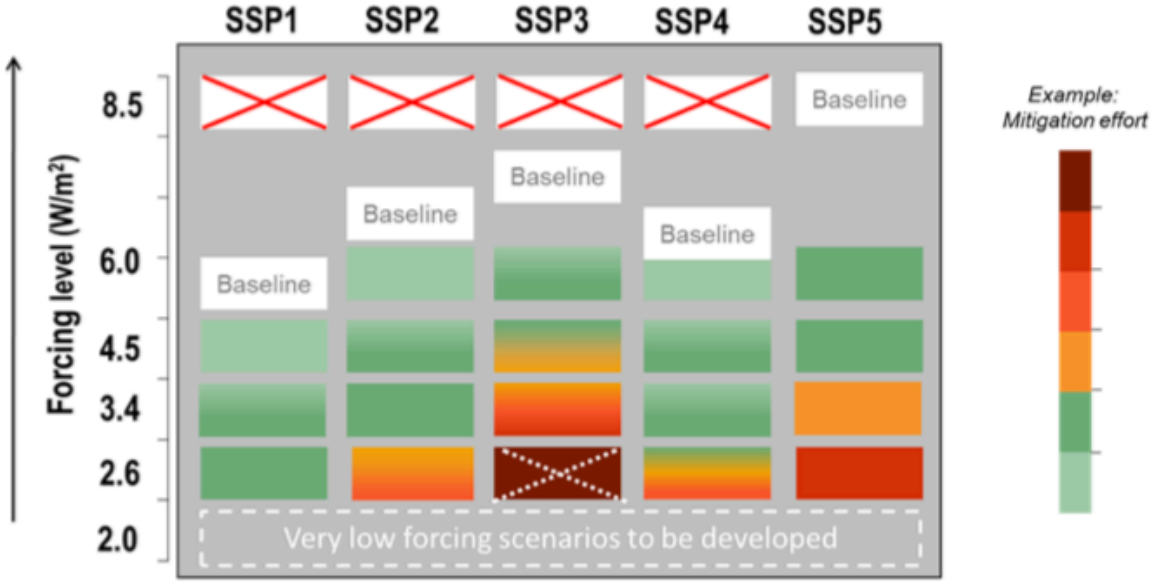
Due to its substantial energy demand and huge population, China's future air pollutants and greenhouse gas emissions are of great importance both locally and internationally. This work developed a dynamic projection model to predict future emissions under various SSP-RCP scenarios, with a particular focus to integrate local policies. This is an important contribution, and will help to fill the missing gap from those global-scale studies. I suggest minor revisions for acceptance.

1. SSP and RCP scenarios can interact in different combinations. I understand it is impractical to simulate all scenario combinations, but maybe the author could consider adding some justifications of why choosing SSP1-26, SSP2-45, SSP3-70, SSP4-60, and SSP5-85 scenarios? Also, it would be could to add a few sentences about the implications due to such choices?



2. The author compared their predicted emissions with CMIP6 results, which reveal notable differences. Could the author provide some relevant guidance/instructions for CMIP6 and future DPEC users? For instance, which model is more reliable/useful under which circumstances? How to interpret the results from these different methods, respectively, in China's context?