This paper uses a flux-divergence method to estimate monthly SO2 emissions in India based on satellite observations. The paper is well organized but I have a little concern about the calculation of SO2 lifetimes, which is crucial to the final emission estimation. The authors declaimed that the satellite overpasses at noon time and they used SO2 under cloud-free conditions, so they considered only the gas phase loss of SO2. It may be true that SO2 is mainly removed through the reaction with OH as the satellite overpasses, but SO2 lifetime is as long as tens of hours, during this time, SO2 is removed mostly by the liquid phase or the heterogeneous reactions, both of which is faster and more efficient than the gas phase reaction. So I'm not sure if it is appropriate to consider only gas phase loss of SO2 in the SO2 lifetime estimation. The SO2 emission estimated here is much less (even 50%) than other datasets, does this indicate that the SO2 lifetime calculated in this study is too long?
And a minor comment, line 213: 'the SO2 monthly dry deposition lifetime within the PBL height is calculated by dividing the PBL height by 0.4 cm s^{-1}', shouldn't it be '… dividing half the PBL height by 0.4 cm s^{-1}'?

Concerning these, I'd like to recommend a major revision about the SO2 lifetime estimation.