**Why do we need atmospheric correction?**

To remove the contribution of the atmosphere from the total top of atmosphere reflectance measured by the remote sensors. Basically, we need to get exact reflectance given by our object. So we apply mathematical model on the reflectance we got at sensor to get corrected reflectance.

**How much effect it will make on each band in terms of value?**

([Link](https://www.sciencedirect.com/science/article/pii/S0034425721000845?ref=pdf_download&fr=RR-2&rr=7e2529dbf8c2f2ff)) where, derived aquatic reflectance’s (Rw), the median errors in Rw 560 and Rw 664 were found to range from 20 to 30% for best-performing processors. Using the AERONET-OC matchups, our performance assessments showed that median errors within the 15–30% range in these spectral bands may be achieved. The largest uncertainties were associated with the blue bands (25 to 60%) for best-performing processors considering both CVD and AERONET-OC assessments. We further assessed uncertainty propagation to the downstream products such as near-surface concentration of chlorophyll-a (Chla) and Total Suspended Solids (TSS). Using satellite matchups from the CVD along with in situ Chla and TSS, we found that 20–30% uncertainties in Rw(490nm<wavelengths<743nm) yielded 25–70% uncertainties in derived Chla and TSS products

**Sentinel -2 are atmospherically corrected but still we have to do It more , y?**

**How can we do it for sentinel2 data?**