Isopene Chemistry

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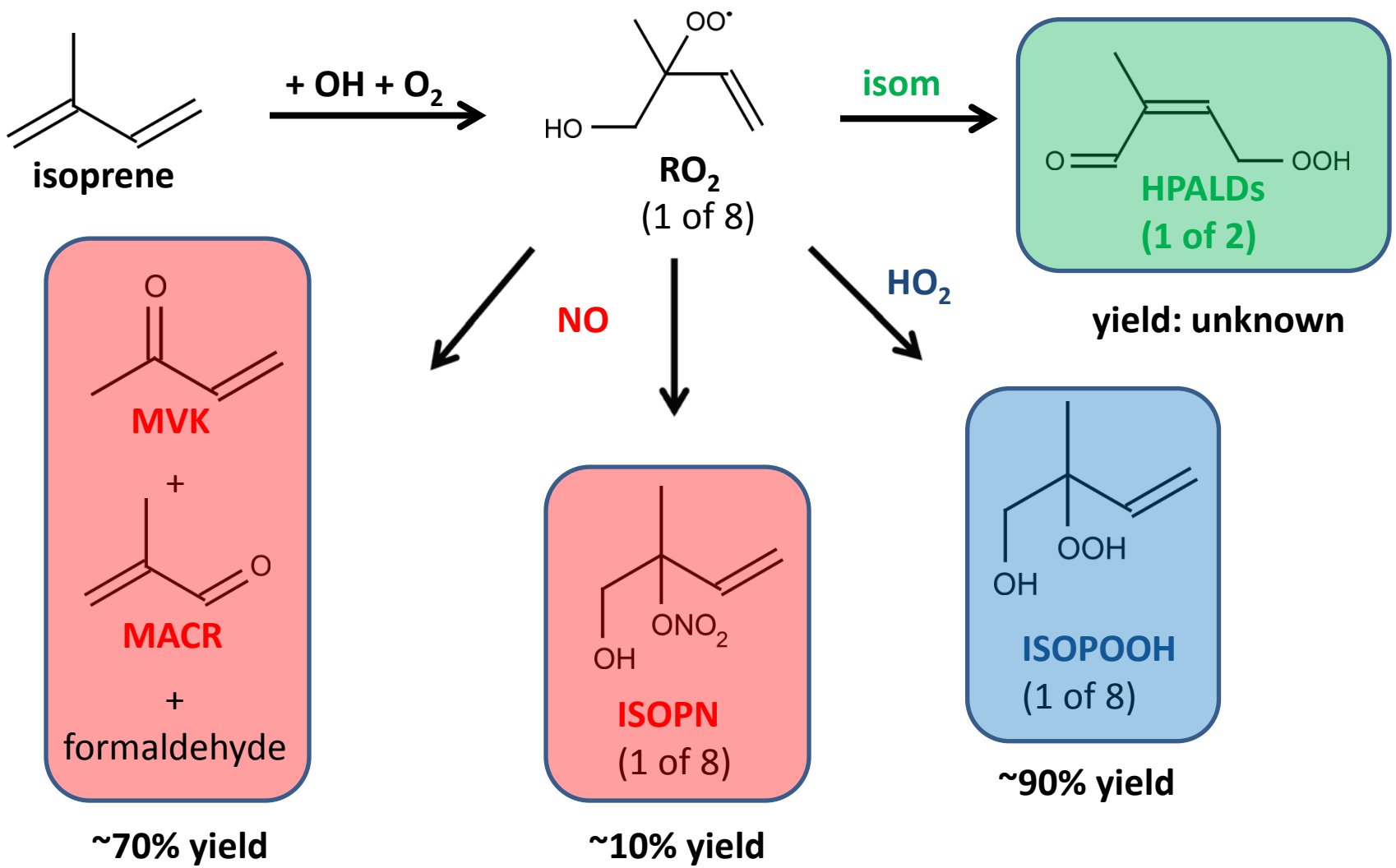
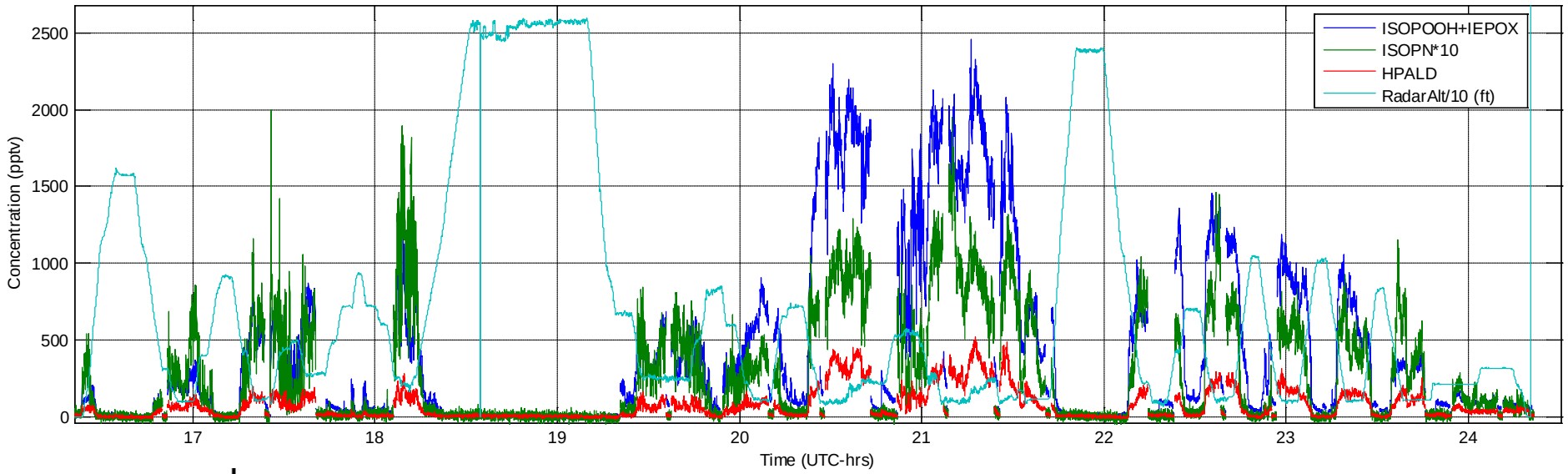
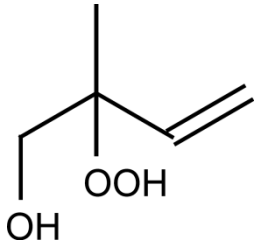
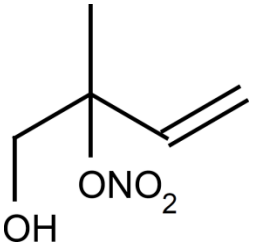


CIT-CIMS Isoprene products 8/30:

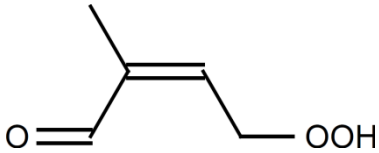




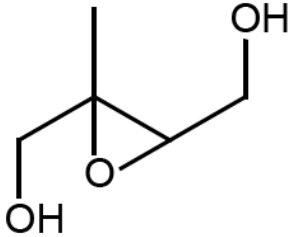
Isoprene hydroxy Hydroperoxide (ISOPOOH)



Isoprene hydroxy Nitrate (ISOPN)

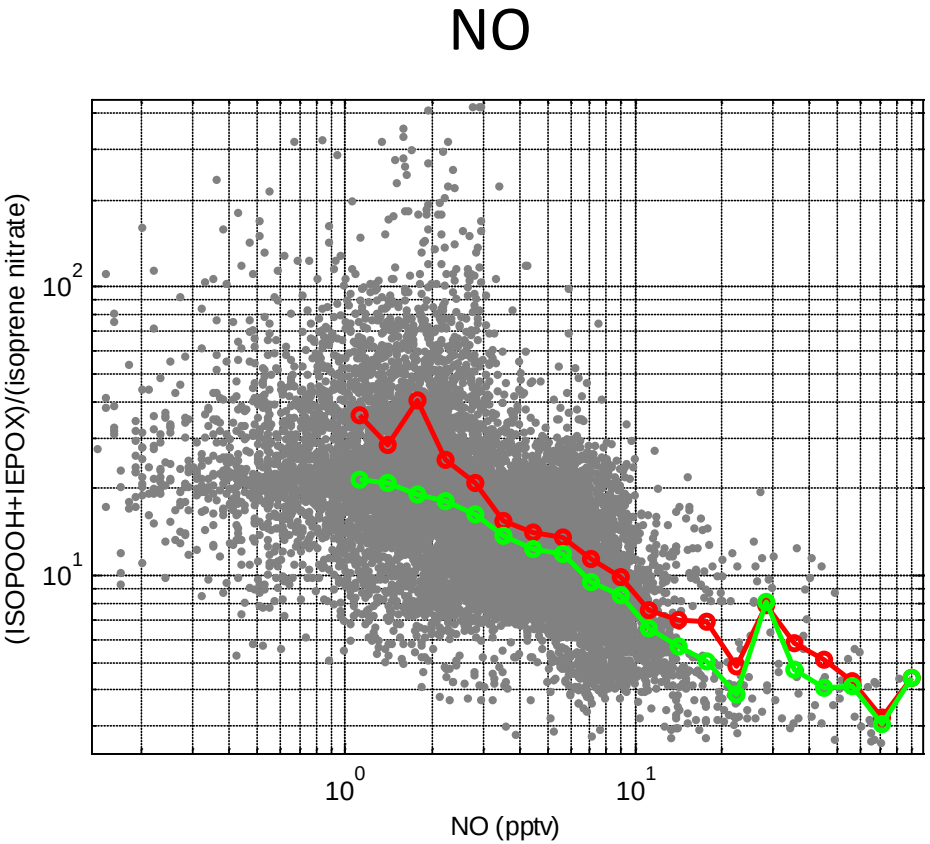


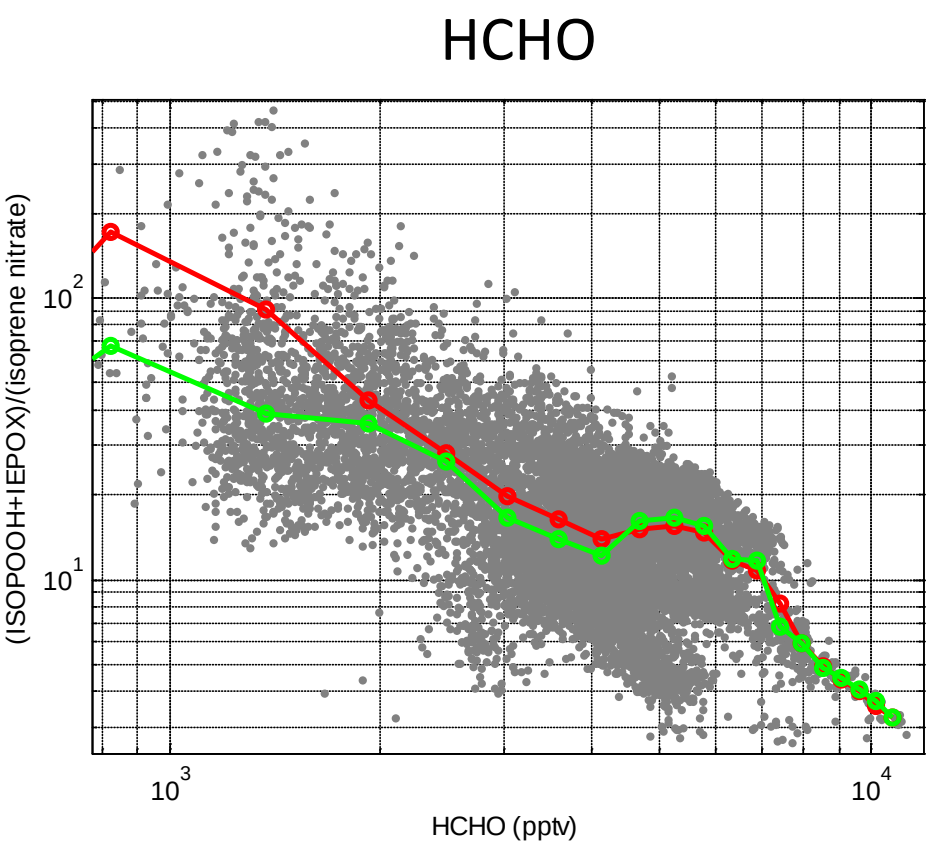
Isoprene hydroperoxy aldehyde (HPALD)



Isoprene epoxydiol (IEPOX)

8/30/2013: (ISOPOOH+IEPOX) / ISOPN versus:





ISOPOOH+IEPOX > 100 pptv; NO from Ryerson; HCHO from Hanisco

Conclusions

- Additional data from areas with high isoprene will better constrain the relationship of observed HCHO to isoprene emission over a range of NOx conditions.
- Extensive characterization of B.L. air in conjunction with convection study will help to constrain the cloud processing of many biogenic species.
- Targeting areas with higher terpene emissions would help to better distinguish these environments.