

# **Daniele Biron: my status update for LIMAG**

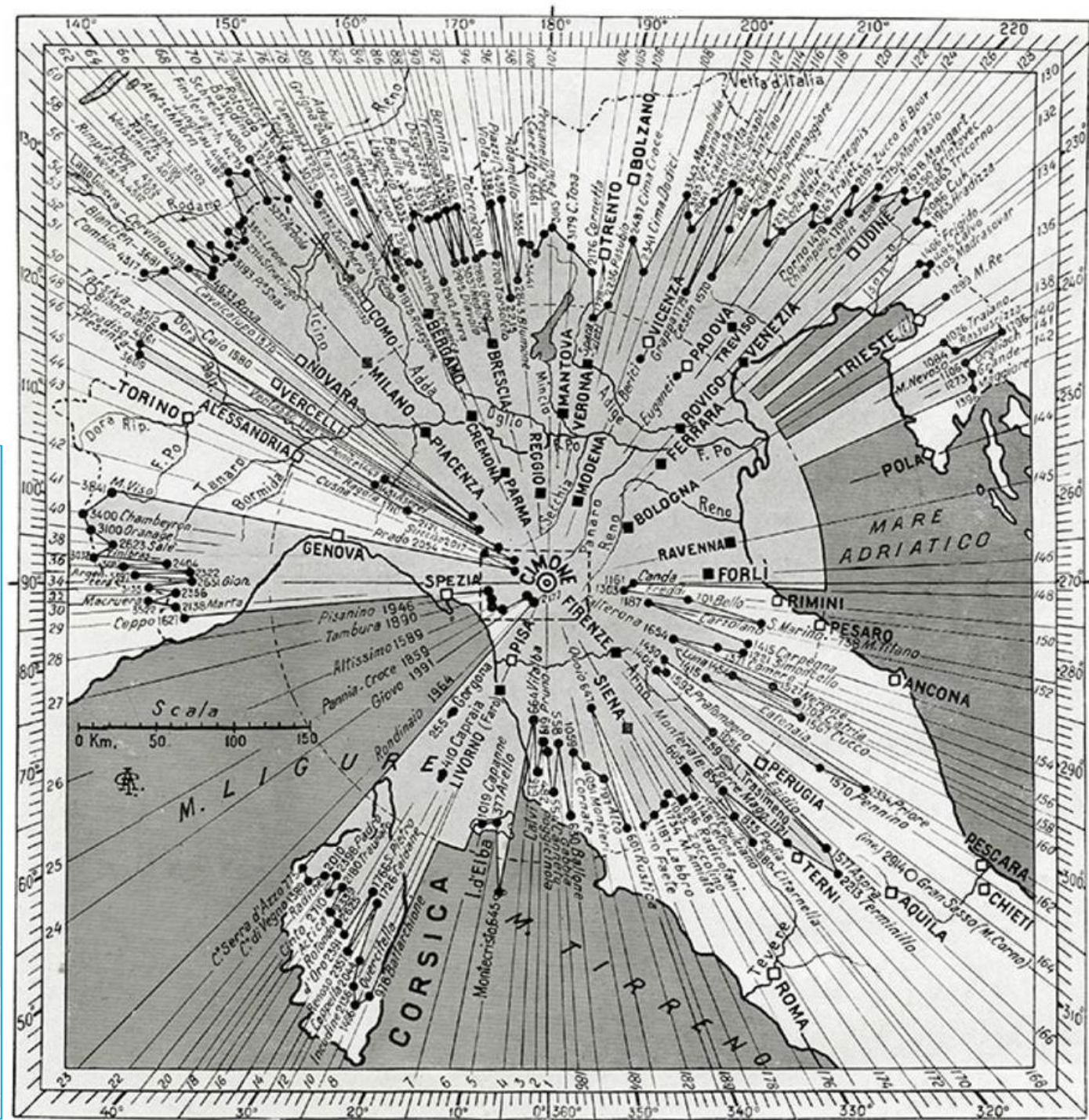
## **9-10/FEB/2021**



**C.A.M.M. - Monte Cimone**  
**Centro Aeronautica Militare di Montagna**

My actual position (2020-2022):  
I'm currently the Director of C.A.M.M. - Monte Cimone, the high altitude Italian Air Force Centre dedicated to meteorological and atmospheric observations, together with radio links station operations and air navigation. It is on top of Mount Cimone (2165 m asl), in the northern sector of Apennines.

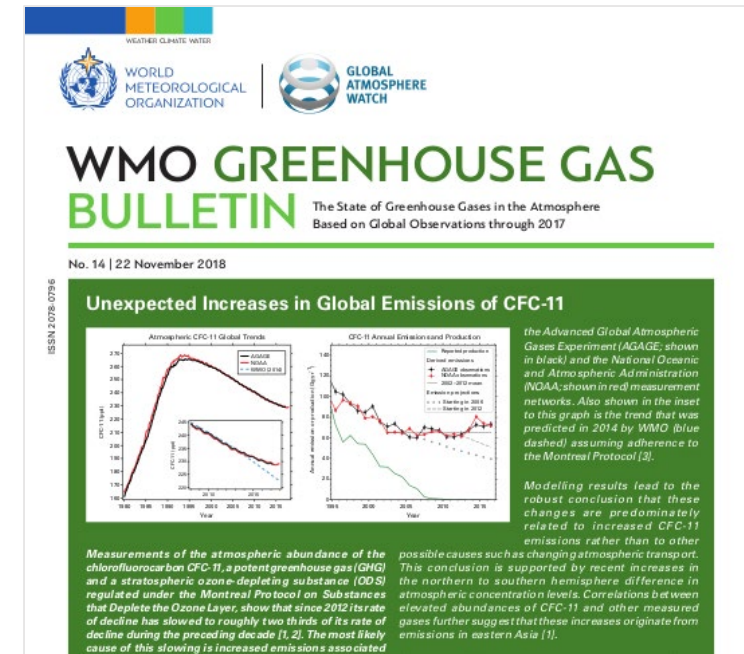
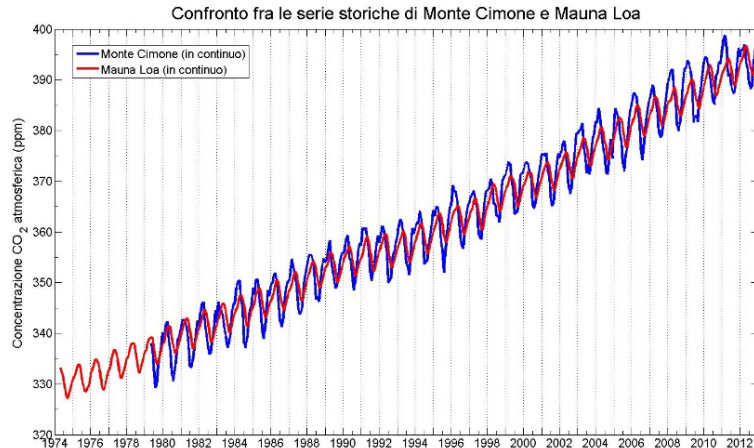
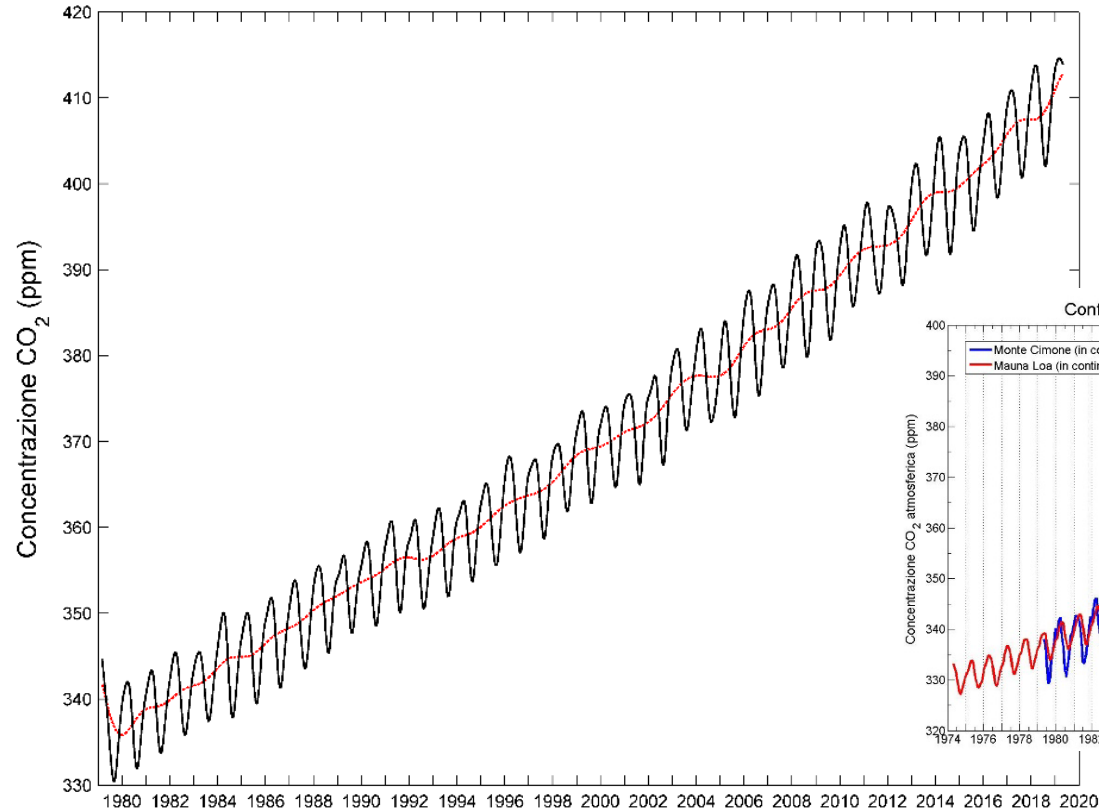
From the top of Mount Cimone an observer has line of sight over around 40% on Italian territories, an ideal site to record optical lightning emission, as other useful parameters.





The measurements of carbon dioxide (**CO<sub>2</sub>**) began in 1979 and constitute the longest time series in Europe (second in the world after Manua Loa, Hawaii - USA). Measurements of ozone (**O<sub>3</sub>**) since 1975 and methane (**CH<sub>4</sub>**) since 2015 are also done for greenhouse gases global monitoring, within the WMO Global Atmosphere Watch programme.

Serie storica concentrazione di fondo di CO<sub>2</sub> in atmosfera presso stazione di Monte Cimone (16134).





The Mount Cimone Mount Observatory has an excellent position to perform lightning optical detection, in particular for bolts over the Alps and the central Padana plain. With my colleagues, we are designing a suite of small low cost instruments, as cameras ecc., to study the feasibility and opportunity to create future continuity in automatic optical confirmation of LAMPINET detections, in a challenging environment.



The LAMPINET network is the Italian Air Force lightning detection network. It is based on VAISALA technology, the central facility has been updated recently while for the sensors there is the planning for the upgrade in the coming years.

International cooperation is in agenda, we look forward to create robust alliances with similar capabilities in Europe, also in the framework of exploitation of MTG-LI data.

