



Mount Chacaltaya Regional GAW Station in the Central Andes

Francesco Zaratti (1), Ricardo N. Forno (1), and Simone Lolli (2)

(1) Atmospheric Physics Laboratory, Institute of Physical Research, University of San Andrés, La Paz, Bolivia, (2) LEOSPHERE, 76 rue Monceau, 75008, Paris, France

The Mount Chacaltaya Laboratory (MCL), located 30 km from the city of La Paz, at 5300 m asl, is well known as a cosmic ray laboratory that made important contributions to the Elementary Particles Physics in the 40's and 50's of the last century.

Since its beginnings, the MCL has also hosted instruments and experiments devoted to atmospheric research and health studies at high altitude locations. In addition, the Chacaltaya glacier has attracted the interest of worldwide climatologists, due to its dramatic retreat. In fact, this glacier does not exist almost anymore.

Recently, the Atmospheric Physics Laboratory (LFA-UMSA) has begun to take permanent and field measurements of some relevant atmospheric parameters at MCL, such as carbon dioxide, aerosols and ultraviolet irradiance.

In this work we show some characteristics that made Chacaltaya a Regional GAW Station (CHC), recently nominated by WMO. In addition we show some pioneering steps of this project, supported by research institutes from France, Italy, Switzerland and USA.

Finally, thanks to the vigorous co-operation of the Raman lidar group at Goddard Space Flight Center, a new YAG Laser is being installed, to be operated together with the "old" Alexandrite Lidar in the study of aerosols at La Paz.