

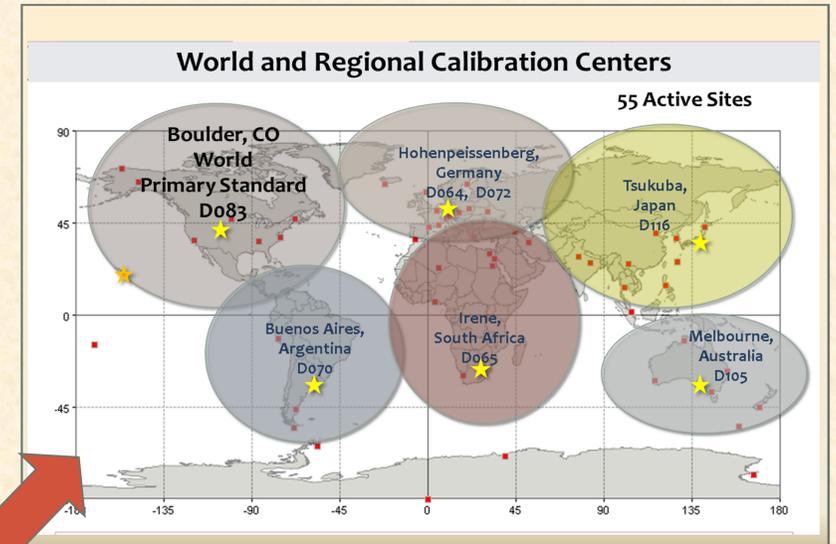
The WMO calibration scheme is based on the Primary Standard Dobson instrument (**GMD's D083**). All the other WMO instruments are optically aligned to be similar to D083.

The calibration for the Primary Standard is determined by the **“Langley Plot Method”** at GMD's Mauna Loa Observatory.

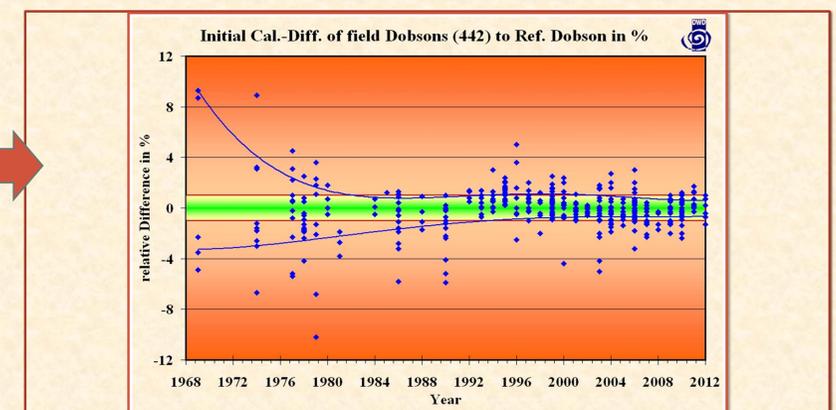
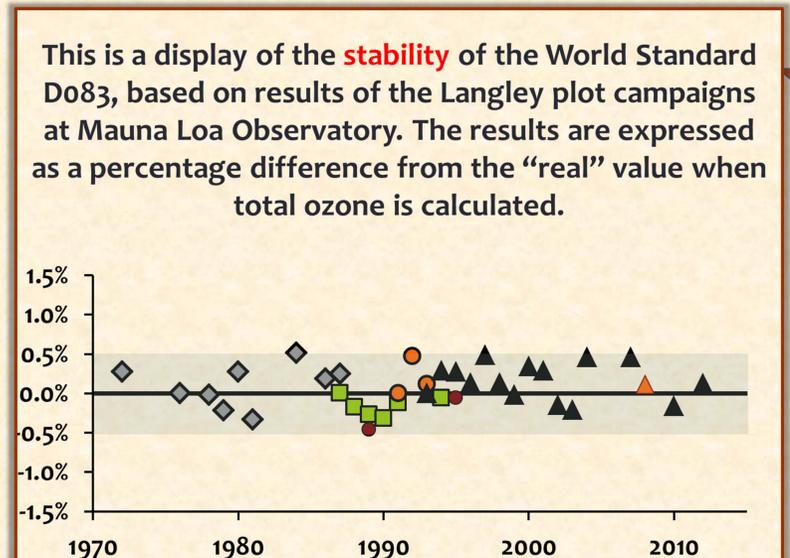
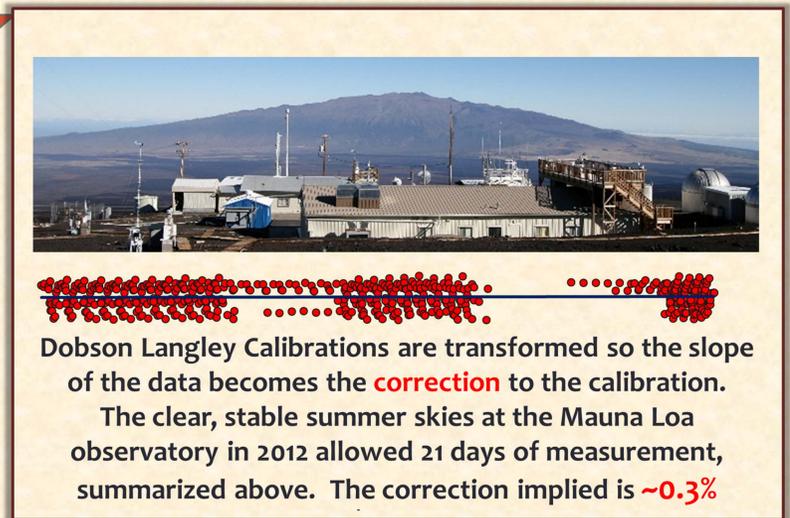
This calibration is **transferred** to the world network through regional calibration centers (Fig. 4) by direct comparison with the Primary Standard.

These centers conduct **intercomparison campaigns** to apply the various station instruments in their region by direct comparison with the regional standards (Fig.5)

The **improvement** over time. The centers also supply **assistance** (repairs, and training) to the stations in their region.



Intercomparison on all South American instruments, held at Buenos Aires Observatory, the Dobson regional calibration center for South America, December 2010.



The record of **initial** calibrations of field Dobson instruments versus the network standards. The improvement through time includes optical component replacement to more stable types.