

Site report - Harestua - 2015

60.2°N, 10.8°E, 596 m.a.s.l.

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- ❑ Bruker 120 M, remotely controlled through internet
- ❑ Instrument installed in May 1994 and upgraded in Aug. 2008 (Brault acquisition)
- ❑ Home made solar tracker (since 2006), before solar coelostat of solar observ.
- ❑ Remote LN2 filling and meteorological parameters (p, T and RH), 2008
- ❑ New beamsplitter and laser and new aperture plate, Nov. 2009,

Time series 20 years in Nov 2014 !!



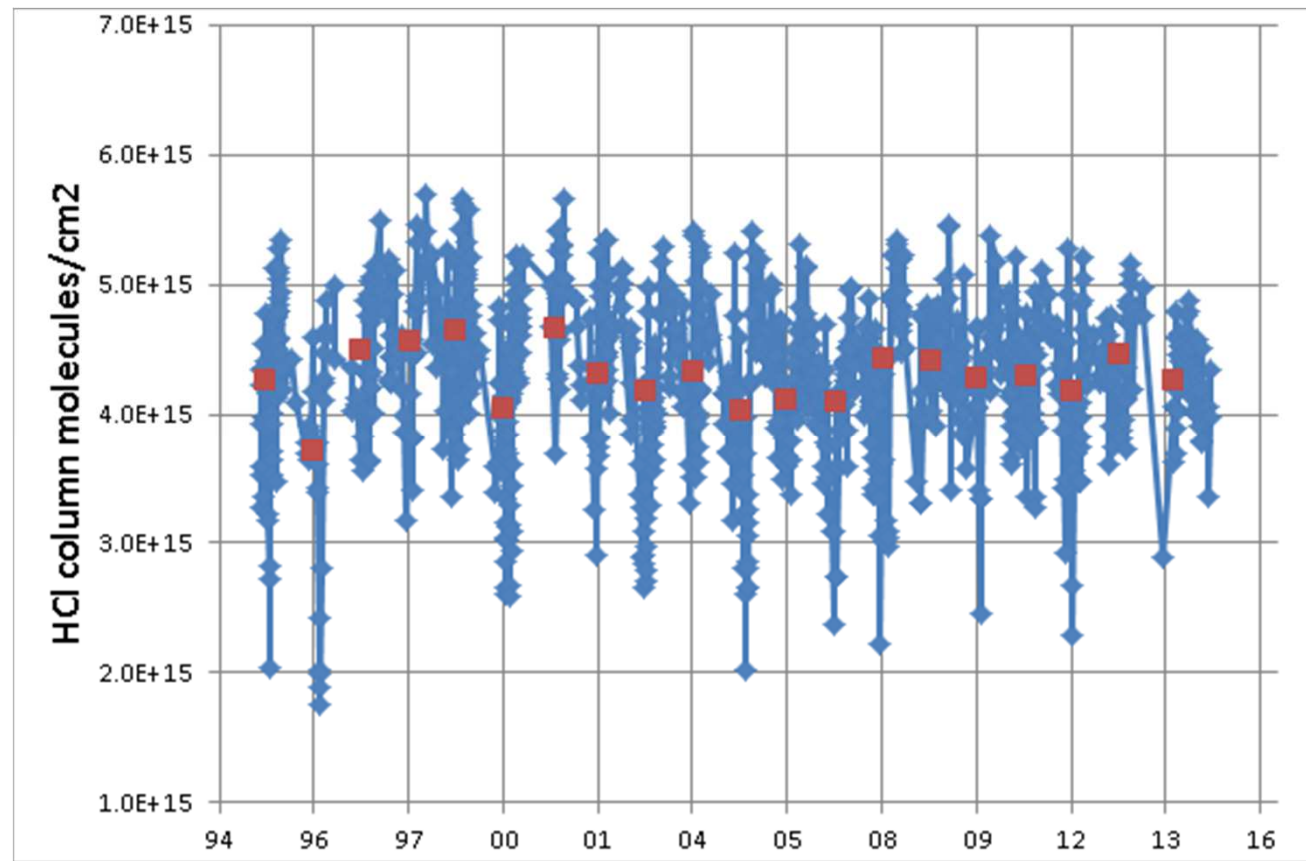
Spectroscopic retrieval details

- SFIT2 v3.94 algorithm, (CH₄, CO, HCL, HCN, HNO₃, N₂O, O₃). SFIT2 v3.81, other NDACC species
- Hitran 2004/Hitran 2008 linelist
- NCEP data for pressure and temperature profiles
- ILS using HBr cell and Linefit, ver. 9
- Apriori EMEP profiles (update to WAACM)

Measurements at Harestua

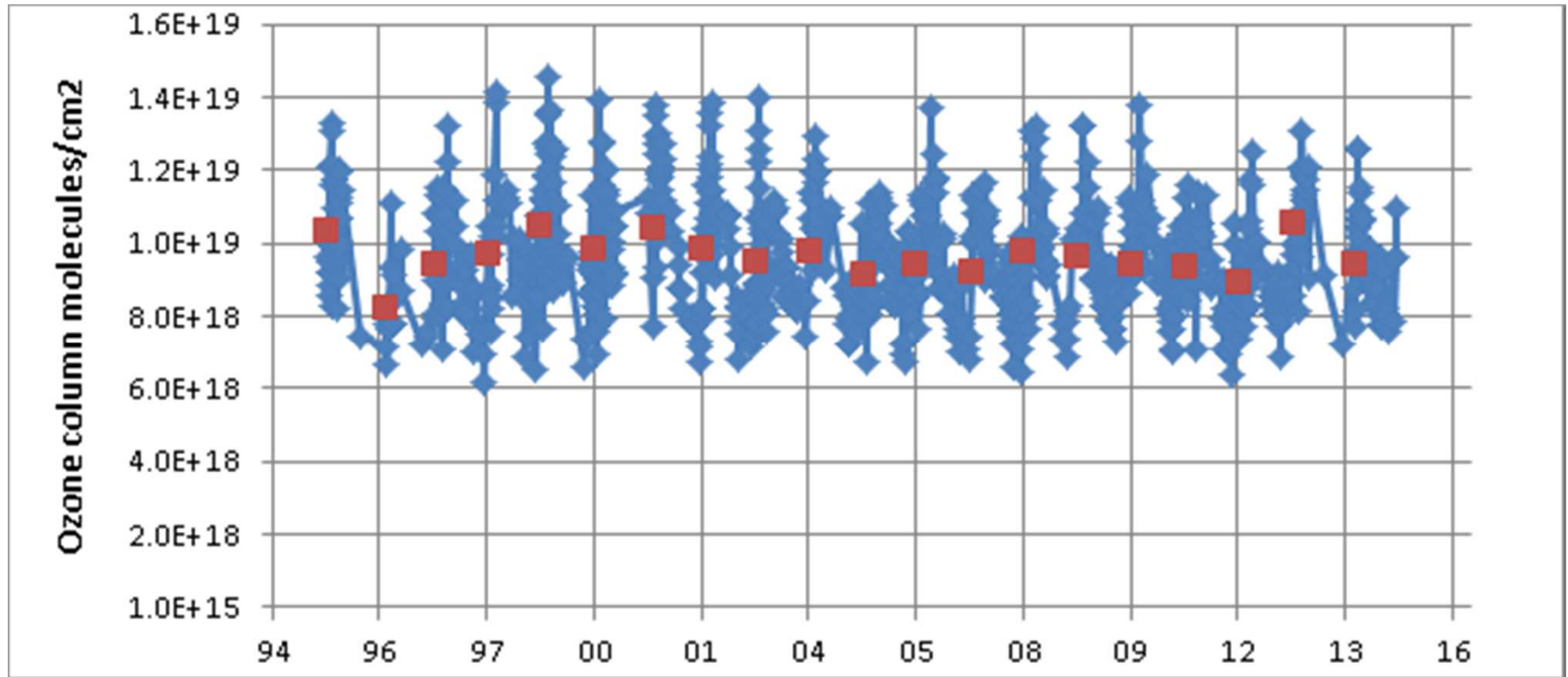
- 984 measurement days since Nov 1994
- 50 measurement days in 2014 (normally +50)
- HBR cell measurements shows good quality at present
- Data in AMES format reported to the NDACC archive up to the end of December 2013. HDF 4 Geoms soon available
 - Species reported are C₂H₆, CCl₂F₂, CH₄, ClONO₂, CO, COF₂, HCFC22, HCl, HF, HNO₃, N₂O, NO₂ and O₃.
- Funding from Swedish EPA on an annual basis, (semi secure).
- Limited funding for science but participated as reviewer in WMO assessment and (Vigoroux, 2014) paper.

HCl

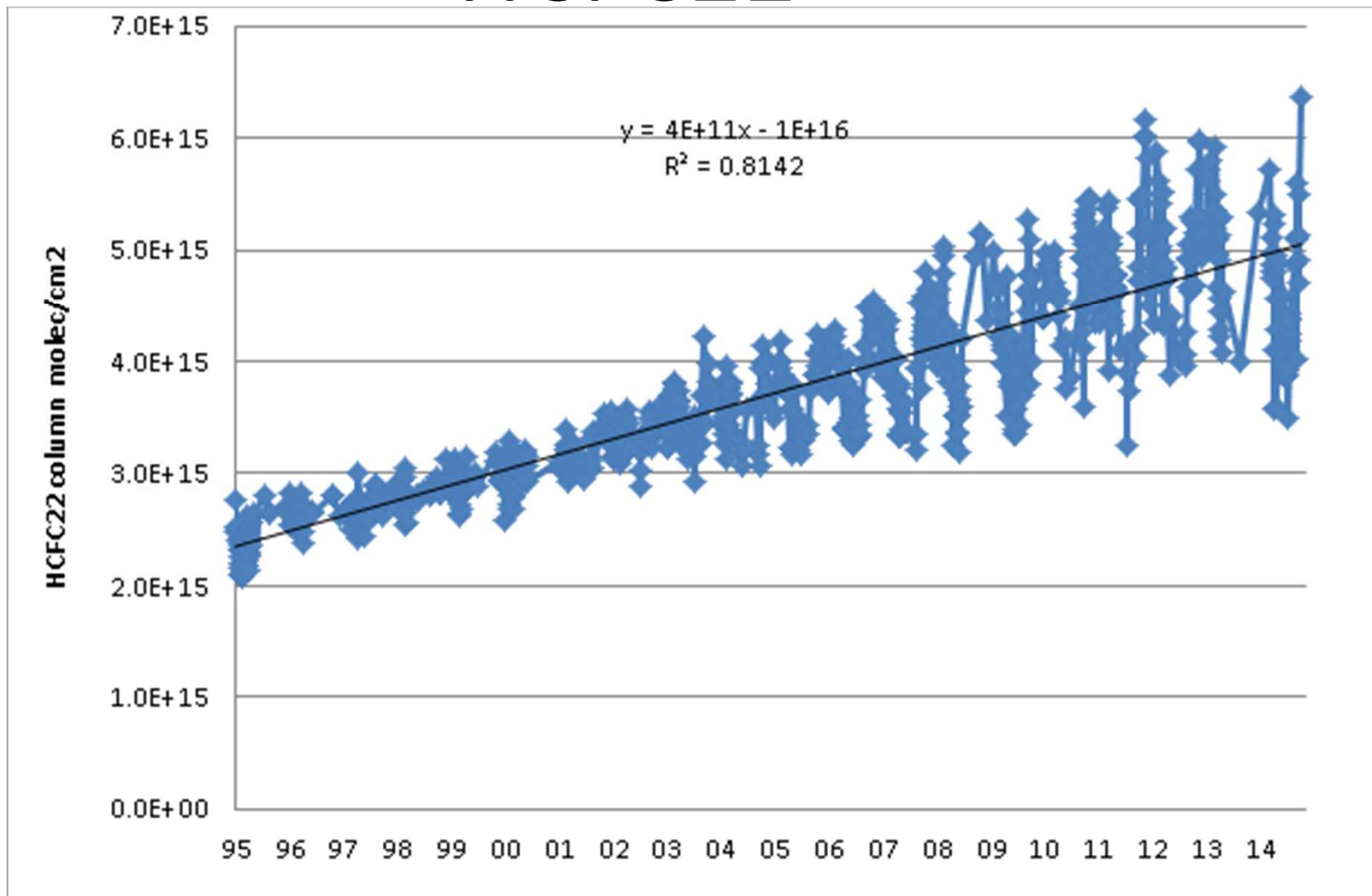


HCl

Ozone above Harestua



HCFC22



(3.% increase per year, interference with methane or similar causes oscillation)

Future Next year

- Continued measurements (once week)
- Archiving in HDF GEOMS (completed)
- Joint paper ethane and CO
- Use of WAACM
- Hitran 2008
- SFIT 2.94 all species, (than SFIT 4)