Notes of the COCCON EM27/SUN telephone conference at March 31st 2022

Here are some notes of the discussions and ideas of the telecon.

Please note that these notes are not a complete record. Rather it tries to sum up the most important points of the discussion. Furthermore, no liability is taken in case of any misunderstandings.

However, if you think an important point is missing please email to benedikt.herkommer@kit.edu.

List of participants:

Greg Osterman (JPL), Dave Pollard (NIWA), Katharina Heimerl (Vrije University Amsterdam), Noemi Taquet (UNAM), Wolfgang Stremme (UNAM), Isis Frausto Vincencio (University of California), Wesley Heoneycutt (Oklahoma State University), Elisabeth Spicer (Oklahoma State University), Yao Te(Sorbonne University), Benedikt Hemmer (IUP Heidelberg), Nasrin Pack (University of Toronto), Aaron Meyer (LANL), Michel Grutter (UNAM), Luis Alejandro Hernadez Gutieres (UNAM), Bill Simpson (University of Alaska), Niki Jakobs (University of Alaska), Frank Hase (KIT), Thomas Bluemenstock (KIT), Benedikt Herkommer (KIT)

Presentation of Niki Jacobs and discussion:

- Question: What are the B9 and B10 in the OCO2-Data?
 - o Different versions of retrievals.
- **Question**: Where there some aerosols visible when measuring the high CO peaks, or was it a clear sky? Because PROFFAST does not support the effects of aerosols.
 - There were some aerosols visible.
 - There are AERONET stations nearby the measuring site: One could compare to those.
 - o **Comment by Isis:** She is working on this. Compares EM27 data with AERONET data.
- Question: In the presentation was said that Nasrin is working on correction factors for GGG2020 and EM27/SUN.

What is the current status?

- o A paper is currently in the review process.
- o Comparing EM27/SUN data with low res. TCCON data.
- o For EM27 data different airmass independent correction factors (AICF) are needed