

Validation of CH₄ model data with ACE-FTS

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Within InGOS Work Package 15 (task 15.4) new CH₄ model inversion data has been created for TM5-4DVAR (JRC), LMDZ (LSCE) and TM3 (BGC-JENA). These global CH₄ datasets have been compared with Remote sensing data from ACE-FTS, a solar occultation mode FTS-spectrometer on board the Canadian SCISAT-1 satellite. ACE-FTS delivers CH₄ profile measurements between ~6 and 75 km above sea level. The comparison yields information on how well the models manage to capture the upper troposphere and stratosphere and whether there is a dependence on season or latitude.