Intercomparison Tables of Water Vapour Measurements

Klemens Hocke, Lorenz Martin, and Niklaus Kämpfer
Institute of Applied Physics and Oeschger Centre for Climate Change Research
University of Bern, Bern, Switzerland

Table 1.1: Part I: Explanation of abbreviation

abbreviation	explanation
ACE/FTS	Atmospheric Chemistry Experiment, Fourier Transform Spectrometer
AIRS	Atmospheric Infrared Sounder (Aqua satellite)
ALIAS	Aircraft Laser Infrared Absorption Spectrometer
AMIP	Atmospheric Model Intercomparison Project (14 GCMs)
AMSU	Advanced Microwave Sounding Unit (NOAA satellite)
AMSOS	Airborne Microwave Stratospheric Observing System (lear jet)
ATMOS	Infrared Fourier transform spectrometer (Spacelab 3)
ATOVS	Advanced TIROS Operational Vertical Sounder
Aura/MLS	Microwave Limb Sounder (Aura satellite)
Aura/TES	Tropospheric Emission Sounder (Aura satellite)
CAM	Community Atmosphere Model (NCAR)
CCGCM	Coupled Chemistry General Circulation Model
CFH	Cryogenic Frostpoint Hygrometer (Univ. of Colorado)
COSMO-EU	Consortium for Small-scale Modeling, European Union
CRISTA	Cryogenic Infrared Spectrometers and Telescopes for the Atmosphere
DIAL	Differential Absorption Lidar
ECMWF-Re	European Center for Medium-range Weather Forecast, Reanalysis
FISH	Fast In situ Stratospheric Hygrometer (Lyman-α fluorescence)
FLASH-B	Fluorescent Advanced Stratospheric Hygrometer, Balloon
FLASH-R	Fluorescent Advanced Stratospheric Hygrometer, Rocket
FPH	Frost Point Hygrometer
FTIR	Fourier Transform Infrared Spectrometer (ground-based)
FTV	Fourier Transform Visible Spectrometer (ground-based)
GCMs	Set of General Circulation Models
GFDL	Geophys. Fluid Dyn. Lab. General Circulation model
GOES	Geostationary Operational Environmental Satellite
GOME	Global Ozone Monitoring Experiment (ERS, Metop)
GPS-Col	ground-based GPS receiver (water vapour column)
GPS-RO	GPS Radio Occultation (water vapour profile)
HALOE	Halogen Occultation Experiment (UARS satellite)
Hammonia	Hamburg Model of the neutral and ionized atmosphere
Harv.Ly-α	Harvard Lyman-α fluorescence hygrometer
HIRS	downlooking High-Resolution Infrared Radiation Sounder

Table 1.1: Part II: Explanation of abbreviation

abbreviation	explanation
IASI	Infrared Atmosphering Sounding Interferometer
ILAS-II	Improved Limb Atmosphere Spectrometer
IMG/ADEOS	Interferometric Monitor for Greenhouse Gases (ADEOS satellite)
Lagrange	Lagrangian advection-condensation model
LIMS	Limb Infrared Monitor of the Stratosphere (Nimbus-7 satellite)
MAS	Millimeter-Wave Atmospheric Sounder (Space Shuttle)
Meisei	Radiosonde RS2-91 Meisei Electric
METEOSAT	meteorological geostationary satellite
MIPAS	Michelson Interferometer for Passive Atmospheric Sounding (ENVISAT)
MM5	Mesoscale weather prediction model
MOZAIC	Measurement of OZone and water vapour by Airbus In-service airCraft)
MWR-S	Microwave radiometer, stratospheric profile
MWR-T	Microwave radiometer, tropospheric profile and column
NCEP-Re	National Centers for Environmental Prediction, Reanalysis (NCEP/NCAR)
Odin/SMR	Odin Sub-Millimetre Receiver (satellite experiment)
POAM	Polar Ozone and Aerosol Measurement (sun occultation, satellite)
Raman	Raman Lidar
REMO	Regional Model (MPI for Meteorology)
RS80	Vaisala Radiosonde RS80
RS92	Vaisala Radiosonde RS92
SAGE-II	Stratospheric Aerosol and Gas Experiment II (ERBS satellite)
SAW	Surface Acoustic Wave Dew Point Hygrometer
SCIAMACHY	Scanning Imaging Absorption Spectrometer (ENVISAT)
SEVIRI	Spinning Enhanced Visible and InfraRed Imager (Meteosat satellite)
SnowWhite	Meteolabor chilled-mirror hygrometer
SPM	Sun photometer
SPURT	Spurenstoff (trace gas) transport in the tropopause region (aircraft)
Sippican	Sippican (VIZ) resistive hygristor
SSM/I	Special Sensor Microwave Imager
TDL	tunable diode laser hygrometer
tmt	trajectory mapping technique
TRMM/TMI	Tropical Rainfall Meas. Mission / Tropical Microwave Imager
UARS/MLS	Microwave Limb Sounder (UARS satellite)
UM	Unified Model (MetOffice and Hadley Centre)
WACCM	Whole Atmosphere Community Climate Model
WALES	Water Vapour Lidar Experiment in Space

Table 1.2: Part I of Intercomparisons of H_2O measurements with respect to *in situ* techniques (field number 1.2(3) stands for 3 publications in row 1 and column 2). A click on the hyperlink leads to the references.

	RS80	RS90	RS92	Sippican	FPH	CFH	SnowWhite
RS80	1.1(2)	1.2(3)	1.3(1)	1.4(1)	1.5(2)	1.6(2)	1.7(4)
RS90	2.1(2)	[]	2.3(1)	2.4(2)	[]	2.6(2)	2.7(2)
RS92	[]	[]	[]	3.4(1)	[]	3.6(3)	3.7(2)
Sippican	4.1(1)	4.2(2)	4.3(1)	[]	[]	4.6(1)	4.7(3)
FPH	5.1(3)	[]	[]	[]	[]	5.6(1)	5.7(2)
CFH	6.1(1)	[]	6.3(3)	[]	6.5(1)	6.6(1)	6.7(4)
SnowWhite	7.1(5)	7.2(4)	7.3(3)	7.4(3)	7.5(1)	7.6(3)	7.7(1)
Harv.Ly-a	[]	[]	[]	[]	8.5(1)	8.6(1)	[]
FLASH-B	[]	[]	[]	[]	9.5(1)	9.6(1)	[]
absorption[d]	[]	[]	[]	[]	10.5(1)	[]	[]
Raman	11.1(4)	11.2(1)	11.3(2)	[]	11.5(1)	11.6(2)	11.7(2)
DIAL	12.1(7)	[]	12.3(1)	[]	12.5(2)	[]	[]
FTIR	13.1(1)	[]	[]	[]	[]	[]	[]
FTV	[]	14.2(1)	[]	[]	[]	[]	[]
MWR-T	15.1(2)	15.1(1)	15.3(2)	15.4(4)	[]	[]	[]
SPM	16.1(1)	[]	[]	16.4(1)	[]	[]	[]
GPS-Col	17.1(2)	17.2(3)	17.3(1)	17.4(1)	[]	[]	[]
GPS-RO	18.1(1)[b]	[]	18.3(1)	[]	[]	[]	[]
Aura/MLS	[]	19.2(1)	19.3(1)	[]	[]	19.6(3)	[]
UARS/MLS	20.1(1)	[]	[]	[]	20.5(4)	[]	[]
LIMS	[]	[]	[]	[]	21.5(1)	[]	[]
Aura/TES	[]	22.2(1)	22.3(1)	[]	[]	22.6(1)	[]
HALOE	[]	[]	[]	[]	23.5(3)	[]	[]
SAGE-II	24.1(2)	[]	[]	24.4(1)	[]	24.6(1)	[]
ACE/FTS	[]	[]	[]	[]	25.5(1)	25.6(1)	[]
MIPAS	[]	[]	[]	[]	26.5(1)	[]	[]
Odin/SMR	[]	[]	[]	[]	[]	[]	[]
POAM	[]	[]	[]	[]	28.5(2)	[]	[]
AMSU	29.1(1)[a]	[]	[]	[]	[]	[]	[]
AIRS	30.1(1)	30.2(1)	30.3(1)	30.4(1)	[]	30.6(1)	30.7(1)
GOES	31.1(1)	2.31(1)	[]	[]	[]	[]	[]
SEVIRI	32.1(1)[c]	[]	[]	[]	[]	[]	[]
MOZAIC	33.1(1)	[]	[]	[]	33.5(2)	[]	[]
AMSOS	[]	[]	[]	[]	[]	[]	[]
ECMWF-Re	35.1(1)	[]	[]	35.4(1)	35.5(1)	[]	35.7(1)
Dropsonde	36.1(2)	36.2(1)	[]	[]	[]	[]	36.7(1)
ATOVS	37.1(1)	[]	[]	[]	[]	[]	[]
TRMM/TMI	38.1(1)	38.2(1)	38.3(1)	[]	[]	[]	[]
IMG/ADEOS	39.1(1)	[]	[]	[]	[]	[]	[]
TDL	[]	[]	[]	[]	40.5(1)	40.6(1)	[]
METEOSAT	41.1(1)	[]	[]	[]	[]	[]	[]
CCGCM	42.1(1)	[]	[]	[]	42.5(1)	[]	[]
SAW	43.1(1)	[]	[]	[]	43.5(2)	[]	[]

[a] upper tropospheric humidity (UTH)
[b] various radiosondes from worldwide network
[c] IWV of various radiosondes

Table 1.3: Part II of Intercomparisons of H_2O measurements with respect to *in situ* techniques (field number 6.1(2) stands for 2 publications in row 6 and column 1)

	Harv. Ly-α	FLASH-B	FISH	NOAA Ly-α	TDL
RS80		1.2(1)			
RS90		2.2(2)			
RS92		3.2(2)			
Sippican					
FPH			5.3(2)	5.4(1)	
CFH	6.1(2)	6.2(4)			
SnowWhite		7.2(1)			
Harv.Ly-a					8.5(3)
FLASH-B			9.3(1)		
TDL	10.1(3)				
Raman					
DIAL					
FTIR					
MWR-T					
SPM	15.1(1)				
GPS-Col					
GPS-RO					
Aura/MLS	18.1(1)				
UARS/MLS	19.1(1)				
LIMS				20.4(1)	
Aura/TES					
ATMOS	22.1(1)			22.4(1)	
HALOE	23.1(1)		23.3(1)		
SAGE-II				24.4(1)	
ACE/FTS					
CRISTA			26.3(1)		
MIPAS		27.2(1)	27.3(1)		
Odin/SMR					
POAM	29.1(2)		29.3(1)		29.5(1)
AMSU					
AIRS	31.1(1)				
SEVIRI					
MOZAIC			33.3(2)	33.4(1)	
AMSOS		34.2(1)	34.3(2)		
ECMWF-Re		35.2(1)			
FLASH-R		36.2(1)			
GOME			37.3(1)		
SAW					38.5(1)

Table 1.4: Intercomparisons of H_2O measurements with respect to ground and airborne remote sensing

	Raman	DIAL	FTIR	MWR-T	MWR-S	limb occult.[a]	limb emiss.[a]	emission[a]
RS80	1.1(9)	1.2(5)	1.3(5)	1.4(3)	[]	[]	1.7(1)	[]
RS90	2.1(1)	2.2(1)	2.3(1)	[]	[]	[]	[]	[]
RS92	3.1(3)	3.2(2)	3.3(4)	3.4(2)	[]	[]	[]	[]
Sippican	4.1(1)	4.2(1)	[]	4.4(8)	[]	[]	[]	[]
FPH	5.1(1)	5.2(3)	[]	[]	5.5(1)	[]	5.7(1)	[]
CFH	6.1(2)	[]	[]	[]	6.5(1)	[]	[]	[]
SnowWhite	7.1(2)	7.2(1)	[]	[]	[]	[]	[]	[]
Harv.Ly-a	[]	[]	[]	[]	[]	[]	[]	[]
FLASH-B	[]	9.2(1)	[]	[]	9.5(1)	[]	[]	[]
FISH	[]	10.2(1)	[]	[]	[]	[]	[]	[]
Dropsonde	[]	11.2(1)	[]	[]	[]	[]	[]	[]
Raman	12.1(3)	12.2(4)	12.3(1)	12.4(2)	[]	[]	[]	[]
DIAL	13.1(1)	13.2(2)	[]	13.4(2)	[]	[]	[]	[]
FTIR	14.1(1)	[]	14.3(1)	14.4(2)	[]	[]	[]	[]
MWR-T	15.1(3)	15.2(1)	15.3(1)	15.4(2)	15.5(1)	[]	[]	[]
SPM	[]	16.2(2)	16.3(4)	16.4(3)	[]	[]	[]	[]
GPS-Col	17.1(2)	[]	17.3(1)	17.4(7)	[]	[]	[]	[]
GPS-RO	[]	[]	[]	[]	[]	[]	[]	[]
Aura/MLS	19.1(1)	[]	19.3(1)	[]	19.5(4)	[]	[]	[]
UARS/MLS	[]	[]	[]	[]	20.5(3)	[]	20.7(1)	[]
Aura/TES	[]	[]	[]	[]	[]	[]	[]	[]
ATMOS	[]	[]	[]	[]	22.5(1)	22.6(1)	[]	[]
LIMS	[]	[]	[]	[]	[]	23.6(1)	23.7(1)	23.8(2)
HALOE	[]	[]	[]	[]	24.5(8)	[]	[]	24.8(1)
SAGE-II	[]	[]	[]	[]	[]	[]	[]	[]
ACE/FTS	26.1(1)	[]	[]	[]	26.5(1)	[]	[]	[]
MIPAS	[]	27.2(1)	[]	[]	27.5(2)	[]	27.7(1)	[]
Odin/SMR	[]	[]	[]	[]	[]	[]	[]	[]
POAM	[]	[]	[]	[]	29.5(2)	[]	[]	[]
AMSU	[]	[]	30.3(1)	[]	[]	[]	[]	[]
AIRS	31.1(1)	[]	[]	31.4(1)	[]	[]	[]	[]
GOES	32.1(1)	[]	[]	[]	[]	[]	[]	[]
SEVIRI	[]	[]	[]	[]	[]	[]	[]	[]
MOZAIC	[]	[]	[]	[]	[]	[]	[]	[]
AMSOS	[]	35.2(1)	[]	[]	35.5(1)	[]	[]	[]
ECMWF-Re	[]	36.2(2)	[]	36.4(1)	[]	[]	[]	[]
REMO	[]	37.2(1)	[]	[]	[]	[]	[]	[]
limb emiss.[a]	[]	[]	[]	[]	[]	38.6(1)	38.7(1)	38.8(1)
emission[a]	[]	[]	[]	[]	[]	39.6(1)	39.7(1)	39.8(1)
absorption[a]	[]	[]	[]	[]	[]	40.6(1)	40.7(1)	40.8(1)
MWR-S	[]	[]	[]	[]	41.5(3)	[]	[]	[]
SCIAMACHY	[]	[]	42.3(1)	[]	[]	[]	[]	[]
MM5	[]	43.2(1)	[]	[]	[]	[]	[]	[]

[a] balloon-borne

Table 1.5: Part I of intercomparisons of H_2O measurements with respect to airborne and spaceborne instruments

	MOZAIC	AMSOS	GPS-RO	GPS-Col	Aura/MLS	UARS/MLS	IASI	MAS	GOME	SCIAMACHY
MOZAIC	[]	[]	[]	[]	1.5(1)	1.6(2)	[]	[]	[]	[]
SPURT	2.1(1)	[]	[]	[]	[]	[]	[]	[]	[]	[]
AMSOS	[]	[]	[]	[]	3.5(1)	[]	[]	[]	[]	[]
GPS-RO	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]
GPS-Col	[]	[]	[]	5.4(1)	[]	[]	[]	[]	[]	[]
MWR-T	[]	[]	[]	[]	[]	6.6(2)	[]	[]	[]	[]
Aura/MLS	[]	[]	[]	[]	7.5(1)	[]	[]	[]	[]	[]
Aura/TES	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]
HALOE	9.1(1)	9.2(1)	[]	[]	9.5(2)	9.6(2)	[]	[]	[]	[]
SAGE-II	[]	[]	[]	[]	10.5(1)	10.6(1)	[]	[]	[]	[]
ACE/FTS	[]	[]	[]	[]	11.5(1)	[]	[]	[]	[]	[]
CRISTA	[]	[]	[]	[]	[]	12.6(1)	[]	[]	[]	[]
MIPAS	13.1(1)	13.2(2)	[]	[]	13.5(4)	[]	[]	[]	[]	[]
Odin/SMR	14.1(2)	14.2(1)	[]	[]	14.5(2)	[]	[]	[]	[]	[]
POAM	[]	15.2(1)	[]	[]	15.5(1)	[]	[]	[]	[]	[]
AIRS	[]	[]	16.3(1)	16.4(2)	16.5(3)	[]	[]	[]	[]	[]
HIRS	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]
LIMS	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]
ATMOS	[]	[]	[]	[]	[]	19.6(2)	[]	19.8(1)	[]	[]
ECMWF-Re	20.1(2)	20.2(2)	20.3(1)	20.4(1)	20.5(1)	20.6(1)	[]	[]	20.9(2)	20.10(3)
NCEP-Re	[]	[]	21.3(1)	21.4(1)	[]	[]	[]	[]	[]	[]
COSMO-EU	[]	[]	[]	[]	[]	22.6(1)	[]	[]	[]	[]
Meisei	[]	[]	[]	23.4(1)	[]	[]	[]	[]	[]	[]
tmt	[]	[]	[]	[]	[]	24.6(1)	[]	[]	[]	[]
GOME	[]	[]	[]	[]	[]	[]	[]	[]	[]	25.10(1)
ALIAS	[]	[]	[]	[]	26.5(1)	[]	[]	[]	[]	[]
WALES	[]	[]	[]	[]	[]	[]	27.7(1)	[]	[]	[]
SPM	[]	[]	[]	28.4(1)	[]	[]	[]	[]	[]	[]
SSM/I	[]	[]	[]	[]	[]	[]	[]	[]	29.9(1)	29.10(2)

Table 1.6: Part II of intercomparisons of H_2O measurements with respect to airborne and spaceborne instruments

	HALOE	SAGE-II	ACE/FTS	MIPAS	Odin/SMR	POAM
MOZAIC	6-1.1(1)	[]	[]	6-1.4(1)	6-1.5(2)	[]
SPURT	[]	[]	6-2.3(1)	[]	[]	[]
AMSOS	6-3.1(1)	[]	[]	6-3.4(2)	6-3.5(1)	6-3.6(1)
GPS-RO	[]	[]	[]	[]	[]	[]
GPS-Col	[]	[]	[]	[]	[]	[]
Aura/MLS	6-6.1(2)	6-6.2(1)	6-6.3(1)	6-6.4(4)	6-6.5(2)	6-6.6(1)
UARS/MLS	6-7.1(3)	6-7.2(1)	[]	[]	6-7.5(1)	[]
Aura/TES	[]	[]	[]	[]	[]	[]
HALOE	[]	6-9.2(1)	6-9.3(2)	6-9.4(1)	6-9.5(2)	6-9.6(3)
SAGE-II	6-10.1(1)	[]	6-10.3(1)	[]	6-10.5(1)	6-10.6(1)
ACE/FTS	6-11.1(2)	6-11.2(1)	[]	6-11.4(2)	6-11.5(3)	6-11.6(1)
MIPAS	6-12.1(1)	[]	6-12.3(1)	[]	6-12.5(1)	[]
Odin/SMR	6-13.1(1)	[]	6-13.3(2)	[]	[]	[]
POAM	6-14.1(4)	6-14.2(1)	6-14.3(1)	6-14.4(1)	[]	[]
AIRS	[]	[]	[]	[]	[]	[]
HIRS	[]	[]	[]	[]	[]	[]
LIMS	[]	6-17.2(2)	[]	[]	[]	[]
ATMOS	6-18.1(2)	6-18.2(2)	[]	[]	[]	[]
ECMWF-Re	6-19.1(1)	6-19.2(1)	[]	[]	[]	[]
NCEP-Re	[]	[]	[]	[]	[]	[]
ILAS-II	[]	[]	[]	6-21.4(2)	[]	[]
Hammonia	[]	[]	[]	[]	6-22.5(1)	[]
WACCM	[]	[]	[]	[]	6-23.5(1)	[]
CAM	[]	[]	[]	[]	[]	[]
GCMs	[]	[]	[]	[]	[]	[]
Lagrange	[]	[]	[]	[]	[]	[]
GFDL	[]	[]	[]	[]	[]	[]
UM	6-28.1(1)	[]	[]	[]	[]	[]
1-D model	[]	6-29.2(1)	[]	[]	[]	[]

Table 1.7: Part III of intercomparisons of H_2O measurements with respect to airborne and spaceborne instruments

	AIRS	AMSU	SSM/I	METEOSAT	LIMS
MOZAIC	[]	[]	[]	[]	[]
SPURT	[]	[]	[]	[]	[]
AMSOS	[]	[]	[]	[]	[]
GPS-RO	[]	[]	[]	[]	[]
GPS-Col	7-5.1(1)	7-5.2(1)	[]	[]	[]
Aura/MLS	7-6.1(3)	[]	[]	[]	[]
UARS/MLS	[]	[]	[]	[]	[]
Aura/TES	[]	[]	[]	[]	[]
HALOE	[]	[]	[]	[]	[]
SAGE-II	[]	[]	[]	[]	[]
ACE/FTS	[]	[]	[]	[]	[]
MIPAS	[]	[]	[]	[]	[]
Odin/SMR	[]	[]	[]	[]	[]
POAM	[]	[]	[]	[]	[]
AIRS	[]	7-15.2(2)	[]	[]	[]
HIRS	[]	7-16.2(1)	7-16.3(1)	7-16.4(1)	[]
LIMS	[]	[]	[]	[]	[]
ATMOS	[]	[]	[]	[]	7-18.5(1)
ECMWF-Re	7-19.1(2)	7-19.2(1)	[]	[]	[]
NCEP-Re	[]	7-20.2(1)	[]	[]	[]
ILAS-II	[]	[]	[]	[]	[]
Hammonia	[]	[]	[]	[]	[]
WACCM	[]	[]	[]	[]	[]
CAM	7-24.1(2)	[]	[]	[]	[]
GCMs	[]	7-25.2(1)	[]	[]	[]
Lagrange	[]	7-26.2(1)	[]	[]	[]
GFDL	[]	[]	7-27.3(1)	[]	[]
AMIP	[]	[]	[]	7-28.4(1)	[]

1.1 Reference tables

Now the columns of the tables 1.2 to 1.6 are listed, and literature references are given for each table field. The field is indexed by (table number - row.column), e.g., (2-18.6) refers to the field at row 18 and column 6 of table 1.2.

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RS80:

field	versus	article	field	versus	article
2-1.1	RS80	Wang *et al.* [2002]	2-1.1	RS80	Elliott and Gaffen [1993]
2-2.1	RS90	Miloshevich *et al.* [2006]	2-2.1	RS90	Vance *et al.* [2004]
2-2.1	RS90	Sapucci *et al.* [2005]	2-4.1	Sippican	Sapucci *et al.* [2005]
2-5.1	FPH	Vömel *et al.* [2003]	2-5.1	FPH	Miloshevich *et al.* [2004]
2-5.1	FPH	Kley *et al.* [1997]	2-6.1	CFH	Whiteman *et al.* [2006]
2-7.1	SnowWhite	Miloshevich *et al.* [2006]	2-7.1	SnowWhite	Fujiwara *et al.* [2003]
2-7.1	SnowWhite	Whiteman *et al.* [2006]	2-7.1	SnowWhite	Wang *et al.* [2003]
2-7.1	SnowWhite	Sapucci *et al.* [2005]	2-11.1	Raman	Ferrare *et al.* [1995]
2-11.1	Raman	Ferrare *et al.* [2000a]	2-11.1	Raman	Turner *et al.* [2000]
2-11.1	Raman	Sherlock *et al.* [1999]	2-11.1	Raman	Whiteman *et al.* [2006]
2-12.1	DIAL	Ferrare *et al.* [2000b]	2-12.1	DIAL	Vogelmann [2006]
2-12.1	DIAL	Browell *et al.* [1979]	2-12.1	DIAL	Machol *et al.* [2004]
2-12.1	DIAL	Vogelmann and Trickl [2008]	2-12.1	DIAL	Steinhagen *et al.* [1998]
2-12.1	DIAL	Wulfmeyer and Bösenberg [1998]	2-12.1	DIAL	Browell *et al.* [1998]
2-13.1	FTIR	Turner *et al.* [2000]	2-15.1	MWR-T	Turner *et al.* [2000]
2-15.1	MWR-T	Solheim and Godwin [1998]	2-16.1	SPM	Steinhagen *et al.* [1998]
2-17.1	GPS-Col	Wang and Zhang [2008]	2-17.1	GPS-Col	Wang and Zhang [2008]
2-18.1	GPS-RO	Heise *et al.* [2006]	2-20.1	UARS/MLS	Read *et al.* [2001]
2-24.1	SAGE-II	Larsen *et al.* [1993]	2-24.1	SAGE-II	Rind *et al.* [1993]
2-29.1	AMSU	Buehler *et al.* [2008]	2-30.1	AIRS	Miloshevich *et al.* [2006]
2-31.1	GOES	Soden *et al.* [2004]	2-32.1	SEVIRI	Schroedter-Homscheidt *et al.* [2008]
2-33.1	MOZAIC	Vaughan *et al.* [2005]	2-35.1	ECMWF-Re	Spichtinger *et al.* [2005]
2-36.1	Dropsonde	Vance *et al.* [2004]	2-36.1	Dropsonde	Kley *et al.* [1997]
2-37.1	ATOVS	Schulz *et al.* [2009]	2-38.1	TRMM/TMI	Holloway and Neelin [2009]
2-39.1	IMG/ADEOS	Herbin *et al.* [2007]	2-41.1	METEOSAT	Brogniez *et al.* [2006]
2-42.1	CCGCM	Sun and Held [1996]	2-43.1	SAW	Cardell *et al.* [2001]

.

RS90:

field	versus	article	field	versus	article
2-1.2	RS80	Suortti *et al.* [2008]	2-1.2	RS80	Vance *et al.* [2004]
2-1.2	RS80	Sapucci *et al.* [2005]	2-4.2	Sippican	Sapucci *et al.* [2005]
2-4.2	Sippican	Mattioli *et al.* [2007]	2-7.2	SnowWhite	Miloshevich *et al.* [2006]
2-7.2	SnowWhite	Vance *et al.* [2004]	2-7.2	SnowWhite	Mattioli *et al.* [2007]
2-7.2	SnowWhite	Sapucci *et al.* [2005]	2-11.2	Raman	Soden *et al.* [2004]
2-14.2	FTV	Coheur *et al.* [2003]	2-15.2	MWR-T	Mattioli *et al.* [2007]
2-17.2	GPS-Col	Wang *et al.* [2007]	2-17.2	GPS-Col	Wang and Zhang [2008]
2-17.2	GPS-Col	Mattioli *et al.* [2007]	2-19.2	Aura/MLS	Read *et al.* [2007]
2-22.2	Aura/TES	Shephard *et al.* [2008]	2-30.2	AIRS	Miloshevich *et al.* [2006]
2-31.2	GOES	Soden *et al.* [2004]	2-36.2	Dropsonde	Vance *et al.* [2004]
2-38.2	TRMM/TMI	Holloway and Neelin [2009]			

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RS92:

field	versus	article	field	versus	article
2-1.3	RS80	Suortti *et al.* [2008]	2-2.3	RS90	Suortti *et al.* [2008]
2-4.3	Sippican	Nash *et al.* [2006]	2-6.3	CFH	Vömel *et al.* [2007c]
2-6.3	CFH	Miloshevich *et al.* [2009]	2-6.3	CFH	Whiteman *et al.* [2006]
2-7.3	SnowWhite	Miloshevich *et al.* [2006]	2-7.3	SnowWhite	Whiteman *et al.* [2006]
2-7.3	SnowWhite	Nash *et al.* [2006]	2-11.3	Raman	Leblanc *et al.* [2008]
2-11.3	Raman	Whiteman *et al.* [2006]	2-12.3	DIAL	Vogelmann and Trickl [2008]
2-15.3	MWR-T	Fiorucci *et al.* [2008]	2-15.3	MWR-T	Miloshevich *et al.* [2009]
2-17.3	GPS-Col	Wang and Zhang [2008]	2-18.3	GPS-RO	Chou *et al.* [2009]
2-19.3	Aura/MLS	Read *et al.* [2007]	2-22.3	Aura/TES	Shephard *et al.* [2008]
2-30.3	AIRS	Miloshevich *et al.* [2006]	2-38.3	TRMM/TMI	Holloway and Neelin [2009]

.

Sippican:

field	versus	article	field	versus	article
2-1.4	RS80	Sapucci *et al.* [2005]	2-2.4	RS90	Suortti *et al.* [2008]
2-2.4	RS90	Sapucci *et al.* [2005]	2-3.4	RS92	Miloshevich *et al.* [2006]
2-7.4	SnowWhite	Nash *et al.* [2006]	2-7.4	SnowWhite	Miloshevich *et al.* [2006]
2-7.4	SnowWhite	Sapucci *et al.* [2005]	2-15.4	MWR-T	Morland *et al.* [2009]
2-15.4	MWR-T	Martin *et al.* [2006a]	2-15.4	MWR-T	Cimini *et al.* [2006]
2-15.4	MWR-T	Ingold *et al.* [1998]	2-16.4	SPM	Morland *et al.* [2009]
2-17.4	GPS-Col	Guerova *et al.* [2006]	2-24.4	SAGE-II	Larsen *et al.* [1993]
2-30.4	AIRS	Miloshevich *et al.* [2006]	2-35.4	ECMWF-Re	Morland *et al.* [2009]

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FPH:

field	versus	article	field	versus	article
2-1.5	RS80	Miloshevich *et al.* [2004]	2-1.5	RS80	Kley *et al.* [1997]
2-6.5	CFH	Vömel *et al.* [2007a]	2-7.5	SnowWhite	Vömel *et al.* [2003]
2-8.5	Harv. Ly-α	Vömel *et al.* [2007b]	2-9.5	FLASH-B	Vömel *et al.* [2007b]
2-10.5	absorption	Ellsaesser *et al.* [1980]	2-11.5	Raman	Ferrare *et al.* [1995]
2-12.5	DIAL	Ferrare *et al.* [2000b]	2-12.5	DIAL	Ehret *et al.* [1993]
2-20.5	UARS/MLS	Lahoz *et al.* [1996]	2-20.5	UARS/MLS	Pumphrey [1999]
2-20.5	UARS/MLS	Pumphrey [1999]	2-20.5	UARS/MLS	Read *et al.* [2001]
2-21.5	LIMS	Remsberg *et al.* [1984]	2-23.5	HALOE	Harries *et al.* [1996]
2-23.5	HALOE	Scherer *et al.* [2008]	2-23.5	HALOE	Randel *et al.* [2006]
2-25.5	ACE/FTS	Carleer *et al.* [2008]	2-26.5	MIPAS	Milz *et al.* [2009b]
2-28.5	POAM	Lumpe *et al.* [2006]	2-28.5	POAM	Randel *et al.* [2006]
2-33.5	MOZAIC	Helten *et al.* [1998]	2-33.5	MOZAIC	Helten *et al.* [1999]
2-35.5	ECMWF-Re	Ovarlez and van Velthoven [1997]	2-40.5	TDL	Read *et al.* [2007]
2-42.5	CCGCM	Stenke and Grewe [2005]	2-43.5	SAW	Cardell *et al.* [2001]

.

CFH:

field	versus	article	field	versus	article
2-1.6	RS80	Suortti *et al.* [2008]	2-1.6	RS80	Miloshevich *et al.* [2001]
2-1.6	RS80	Whiteman *et al.* [2006]	2-2.6	RS90	Haefele [2005]
2-2.6	RS90	Suortti *et al.* [2008]	2-3.6	RS92	Haefele [2005]
2-3.6	RS92	Suortti *et al.* [2008]	2-3.6	RS92	Whiteman *et al.* [2006]
2-3.6	RS92	Miloshevich *et al.* [2009]	2-4.6	Sippican	Miloshevich *et al.* [2006]
2-5.6	FPH	Vömel *et al.* [2007a]	2-6.6	CFH	Vömel *et al.* [2007a]
2-7.6	SnowWhite	Miloshevich *et al.* [2006]	2-7.6	SnowWhite	Hasebe *et al.* [2007]
2-8.6	Harv. Ly-a	Read *et al.* [2007]	2-9.6	FLASH-B	Vömel *et al.* [2007b]
2-11.6	Raman	Ferrare *et al.* [1995]	2-19.6	Aura/MLS	Vömel *et al.* [2007a]
2-19.6	Aura/MLS	Vömel *et al.* [2007d]	2-22.6	Aura/TES	Shephard *et al.* [2008]
2-24.6	SAGE-II	Pruvost *et al.* [1993]	2-25.6	ACE/FTS	Carleer *et al.* [2008]
2-30.6	AIRS	Miloshevich *et al.* [2006]	2-40.6	TDL	Read *et al.* [2007]

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SnowWhite:

field	versus	article	field	versus	article
2-1.7	RS80	Vaughan *et al.* [2005]	2-1.7	RS80	Suortti *et al.* [2008]
2-1.7	RS80	Wang *et al.* [2003]	2-1.7	RS80	Sapucci *et al.* [2005]
2-2.7	RS90	Suortti *et al.* [2008]	2-2.7	RS90	Sapucci *et al.* [2005]
2-3.7	RS92	Suortti *et al.* [2008]	2-3.7	RS92	Nash *et al.* [2006]
2-4.7	Sippican	Wang *et al.* [2003]	2-3.7	Sippican	Nash *et al.* [2006]
2-3.7	Sippican	Sapucci *et al.* [2005]	2-5.7	FPH	Suortti *et al.* [2008]
2-5.7	FPH	Vömel *et al.* [2003]	2-6.7	CFH	Suortti *et al.* [2008]
2-6.7	CFH	Vömel *et al.* [2007a]	2-6.7	CFH	Whiteman *et al.* [2006]
2-6.7	CFH	Hasebe *et al.* [2007]	2-7.7	SnowWhite	Miloshevich *et al.* [2006]
2-11.7	Raman	Behrendt *et al.* [2007a]	2-11.7	Raman	Whiteman *et al.* [2006]
2-30.7	AIRS	Miloshevich *et al.* [2006]	2-35.7	ECMWF-Re	Fortuin *et al.* [2007]
2-36.7	Dropsonde	Vance *et al.* [2004]			

.

Harv. Ly-α:

field	versus	article	field	versus	article
3-6.1	CFH	Vömel *et al.* [2007a]	3-6.1	CFH	Read *et al.* [2007]
3-10.1	TDL	Hintsa *et al.* [1999]	3-10.1	TDL	Danilin *et al.* [2002]
3-10.1	TDL	Herman *et al.* [2002]	3-15.1	SPM	Halthore *et al.* [1997]
3-18.1	Aura/MLS	Read *et al.* [2007]	3-19.1	UARS/MLS	Fueglistaler *et al.* [2009]
3-22.1	ATMOS	Michelsen *et al.* [2002]	3-23.1	HALOE	Fueglistaler *et al.* [2009]
3-29.1	POAM	Lumpe *et al.* [2006]	3-29.1	POAM	Danilin *et al.* [2002]
3-31.1	AIRS	Gettelman *et al.* [2004]			

.

FLASH-B:

field	versus	article	field	versus	article
3-1.2	RS80	Suortti *et al.* [2008]	3-2.2	RS90	Suortti *et al.* [2008]
3-2.2	RS90	Haefele [2005]	3-3.2	RS92	Suortti *et al.* [2008]
3-3.2	RS92	Haefele [2005]	3-6.2	CFH	Haefele [2005]
3-6.2	CFH	Suortti *et al.* [2008]	3-6.2	CFH	Vömel *et al.* [2007a]
3-6.2	CFH	Vömel *et al.* [2007b]	3-7.2	SnowWhite	Suortti *et al.* [2008]
3-27.2	MIPAS	Milz *et al.* [2009b]	3-34.2	AMSOS	Müller *et al.* [2008]
3-35.2	ECMWF-Re	Maturilli *et al.* [2006]	3-36.2	FLASH-R	Lossow *et al.* [2008a]

.

FISH:

field	versus	article	field	versus	article
3-5.3	FPH	Zöger *et al.* [1999b]	3-5.3	FPH	Busen *et al.* [1995]
3-9.3	FLASH-B	Sitnikov *et al.* [2007]	3-23.3	HALOE	Zöger *et al.* [1999a]
3-26.3	CRISTA	Offermann *et al.* [2002]	3-27.3	MIPAS	Milz *et al.* [2009b]
3-29.3	POAM	Lumpe *et al.* [2006]	3-33.3	MOZAIC	Helten *et al.* [1998]
3-33.3	MOZAIC	Kunz *et al.* [2008]	3-34.3	AMSOS	Müller *et al.* [2008]
3-37.3	ECMWF-Re	Wagner *et al.* [2003]			

.

NOAA Ly-α:

field	versus	article	field	versus	article
3-5.4	FPH	Friehe *et al.* [1986]	3-20.4	LIMS	Russell III *et al.* [1984]
3-22.4	ATMOS	Michelsen *et al.* [2002]	3-24.4	SAGE-II	Schwab *et al.* [1996]
3-33.4	MOZAIC	Helten *et al.* [1998]			

.

TDL:

field	versus	article	field	versus	article
3-8.5	Harv. Ly-α	Hintsa *et al.* [1999]	3-8.5	Harv. Ly-α	Danilin *et al.* [2002]
3-8.5	Harv. Ly-α	Herman *et al.* [2002]	3-29.5	POAM	Danilin *et al.* [2002]
3-38.5	SAW	Cardell *et al.* [2001]			

.

Raman:

field	versus	article	field	versus	article
4-1.1	RS80	Turner *et al.* [2000]	4-1.1	RS80	Whiteman *et al.* [1992]
4-1.1	RS80	Whiteman [2003]	4-1.1	RS80	Turner *et al.* [1999]
4-1.1	RS80	Han *et al.* [1994]	4-1.1	RS80	Vaughan *et al.* [1988]
4-1.1	RS80	Goldsmith *et al.* [1994]	4-1.1	RS80	Behrendt *et al.* [2008]
4-2.1	RS90	Whiteman *et al.* [2006]	4-3.1	RS92	Leblanc *et al.* [2008]
4-3.1	RS92	Leblanc T. et al [2008]	4-3.1	RS92	Whiteman *et al.* [2006]
4-4.1	Sippican	Gerber *et al.* [2004]	4-5.1	FPH	Turner *et al.* [1999]
4-6.1	CFH	Whiteman *et al.* [2006]	4-6.1	CFH	Leblanc T. et al [2008]
4-7.1	SnowWhite	Behrendt *et al.* [2007a]	4-7.1	SnowWhite	Whiteman *et al.* [2006]
4-12.1	Raman	Turner *et al.* [2002]	4-12.1	Raman	Leblanc T. et al [2008]
4-12.1	Raman	Goldsmith *et al.* [1994]	4-13.1	DIAL	Ferrare *et al.* [2004]
4-14.1	FTIR	Turner *et al.* [2000]	4-15.1	MWR-T	Turner *et al.* [2000]
4-15.1	MWR-T	Turner *et al.* [1999]	4-17.1	GPS-Col	Barnes *et al.* [2008]
4-17.1	GPS-Col	Whiteman *et al.* [2006]	4-19.1	Aura/MLS	Barnes *et al.* [2008]
4-26.1	ACE/FTS	Carleer *et al.* [2008]	4-31.1	AIRS	Whiteman *et al.* [2006]
4-32.1	GOES	Soden *et al.* [2004]			

.

DIAL:

field	versus	article	field	versus	article
4-1.2	RS80	Ehret *et al.* [1993]	4-1.2	RS80	Wulfmeyer and Bösenberg [1998]
4-1.2	RS80	Machol *et al.* [2004]	4-1.2	RS80	Ferrare *et al.* [2004]
4-1.2	RS80	Browell *et al.* [1998]	4-1.2	RS80	Higdon *et al.* [1994]
4-1.2	RS80	Cahen *et al.* [1982]	4-2.2	RS90	Vogelmann and Trickl [2008]
4-3.2	RS92	Vogelmann and Trickl [2008]	4-4.2	Sippican	Ferrare *et al.* [2004]
4-5.2	FPH	Ferrare *et al.* [2004]	4-5.2	FPH	Bruneau *et al.* [2001]
4-5.2	FPH	Higdon *et al.* [1994]	4-7.2	SnowWhite	Ferrare *et al.* [2004]
4-9.2	FLASH-B	Kiemle *et al.* [2008]	4-10.2	FISH	Kiemle *et al.* [2008]
4-11.2	Dropsonde	Poberaj *et al.* [2002]	4-12.2	Raman	Behrendt *et al.* [2007a]
4-12.2	Raman	Behrendt *et al.* [2008]	4-12.2	Raman	Ferrare *et al.* [2004]
4-13.2	DIAL	Behrendt *et al.* [2007a]	4-13.2	DIAL	Behrendt *et al.* [2007b]
4-15.2	MWR-T	Ferrare *et al.* [2004]	4-16.2	SPM	Ferrare *et al.* [2000b]
4-16.2	SPM	Ferrare *et al.* [2000a]	4-27.2	MIPAS	Kiemle *et al.* [2008]
4-35.2	AMSOS	Müller *et al.* [2008]	4-36.2	ECMWF-Re	Flentje *et al.* [2007]
4-36.2	ECMWF-Re	Ehret *et al.* [1999]	4-36.2	REMO	Hennemuth *et al.* [2008]
4-43.2	MM5	Flentje *et al.* [2005]			

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FTIR:

field	versus	article	field	versus	article
4-1.3	RS80	Schneider *et al.* [2006a]	4-1.3	RS80	Schneider *et al.* [2006b]
4-1.3	RS80	Sussmann *et al.* [2009]	4-1.3	RS80	Palm *et al.* [2008]
4-2.3	RS90	Palm *et al.* [2008]	4-3.3	RS92	Palm *et al.* [2008]
4-3.3	RS92	Schneider and Hase [2009a]	4-3.3	RS92	Schneider and Hase [2009b]
4-3.3	RS92	Schneider *et al.* [2009]	4-12.3	Raman	Turner *et al.* [2000]
4-14.3	FTIR	Sussmann *et al.* [2009]	4-15.3	MWR-T	Turner *et al.* [2000]
4-16.3	SPM	Schmid *et al.* [1996]	4-16.3	SPM	Ingold *et al.* [2000]
4-16.3	SPM	Schneider *et al.* [2009]	4-16.3	SPM	Demoulin *et al.* [1996]
4-17.3	GPS-Col	Schneider *et al.* [2009]	4-19.3	Aura/MLS	Lambert *et al.* [2007]
4-30.3	AMSU	Palm *et al.* [2008]	4-42.3	SCIAMACHY	Palm *et al.* [2008]

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MWR-T:

field	versus	article	field	versus	article
4-1.4	RS80	Solheim and Godwin [1998]	4-1.4	RS80	Han *et al.* [1994]
4-1.4	RS80	Westwater *et al.* [1989]	4-3.4	RS92	Fiorucci *et al.* [2008]
4-3.4	RS92	Miloshevich *et al.* [2009]	4-4.4	Sippican	Martin *et al.* [2006a]
4-4.4	Sippican	Mätzler and Morland [2008]	4-4.4	Sippican	Morland *et al.* [2009]
4-4.4	Sippican	Martin *et al.* [2006a]	4-4.4	Sippican	Martin *et al.* [2006b]
4-4.4	Sippican	Cimini *et al.* [2006]	4-4.4	Sippican	Ingold *et al.* [1998]
4-4.4	Sippican	Westwater *et al.* [1989]	4-12.4	Raman	Fiorucci *et al.* [2008]
4-12.4	Raman	Whiteman *et al.* [2006]	4-13.4	DIAL	Steinhagen *et al.* [1998]
4-13.4	DIAL	Wang *et al.* [2002]	4-14.4	FTIR	Fiorucci *et al.* [2008]
4-14.4	FTIR	Turner *et al.* [2000]	4-15.4	MWR-T	Cimini *et al.* [2006]
4-15.4	MWR-T	Deuber *et al.* [2005a]	4-16.4	SPM	Halthore *et al.* [1997]
4-16.4	SPM	Morland *et al.* [2009]	4-16.4	SPM	Mätzler *et al.* [2002]
4-17.4	GPS-Col	Martin *et al.* [2006a]	4-17.4	GPS-Col	Mätzler *et al.* [2002]
4-17.4	GPS-Col	Wang *et al.* [2007]	4-17.4	GPS-Col	Whiteman *et al.* [2006]
4-17.4	GPS-Col	Duan *et al.* [1996]	4-17.4	GPS-Col	Bevis *et al.* [1992]
4-17.4	GPS-Col	Deuber *et al.* [2005a]	4-31.4	AIRS	Whiteman *et al.* [2006]
4-36.4	ECMWF-Re	Morland *et al.* [2009]			

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MWR-S:

field	versus	article	field	versus	article
4-5.5	FPH	Deuber *et al.* [2005b]	4-6.5	CFH	Deuber *et al.* [2005b]
4-9.5	FLASH-B	Deuber *et al.* [2005b]	4-15.5	MWR-T	Deuber *et al.* [2005b]
4-19.5	Aura/MLS	Nedoluha *et al.* [2007]	4-19.5	Aura/MLS	Lambert *et al.* [2007]
4-19.5	Aura/MLS	Hocke *et al.* [2006]	4-19.5	Aura/MLS	Haefele *et al.* [2009]
4-20.5	UARS/MLS	Lahoz *et al.* [1996]	4-20.5	UARS/MLS	Nedoluha *et al.* [1997]
4-20.5	UARS/MLS	Pumphrey [1999]	4-22.5	ATMOS	Nedoluha *et al.* [1997]
4-24.5	HALOE	Nedoluha *et al.* [1997]	4-24.5	HALOE	Nedoluha *et al.* [2007]
4-24.5	HALOE	Deuber *et al.* [2005b]	4-24.5	HALOE	Harries *et al.* [1996]
4-24.5	HALOE	Deuber *et al.* [2004]	4-24.5	HALOE	Nedoluha *et al.* [2003]
4-24.5	HALOE	Nedoluha *et al.* [1999]	4-24.5	HALOE	Nedoluha *et al.* [1998]
4-26.5	ACE/FTS	Hocke *et al.* [2006]	4-27.5	MIPAS	Hocke *et al.* [2006]
4-27.5	MIPAS	Milz *et al.* [2009b]	4-29.5	POAM	Deuber *et al.* [2005b]
4-29.5	POAM	Nedoluha *et al.* [2003]	4-35.5	AMSOS	Müller *et al.* [2008]
4-41.5	MWR-S	Haefele *et al.* [2009]	4-41.5	MWR-S	Nedoluha *et al.* [1999]
4-41.5	MWR-S	Nedoluha *et al.* [1995]			

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balloon limb occultation:

field	versus	article	field	versus	article
4-22.6	ATMOS	Michelsen *et al.* [2002]	4-23.6	LIMS	Russell III *et al.* [1984]
4-38.6	limb emiss.	Murcray *et al.* [1990]	4-39.6	emission	Ellsaesser *et al.* [1980]
4-40.6	absorption	Ellsaesser *et al.* [1980]			

.

balloon limb emission:

field	versus	article	field	versus	article
4-1.7	RS80	Wetzel *et al.* [1995]	4-5.7	FPH	Wetzel *et al.* [1995]
4-20.7	UARS/MLS	Lahoz *et al.* [1996]	4-23.7	LIMS	Russell III *et al.* [1984]
4-27.7	MIPAS	Milz *et al.* [2009b]	4-38.7	limb emiss.	Murcray *et al.* [1990]
4-39.7	emission	Murcray *et al.* [1990]	4-40.7	absorption	Murcray *et al.* [1990]

.

balloon-borne emission:

field	versus	article	field	versus	article
4-23.8	LIMS	Russell III *et al.* [1984]	4-23.8	LIMS	Remsberg *et al.* [1984]
4-24.8	HALOE	Harries *et al.* [1996]	4-38.8	limb emission	Murcray *et al.* [1990]
4-39.8	emission	Murcray *et al.* [1990]	4-40.8	absorption	Murcray *et al.* [1990]

.

MOZAIC:

field	versus	article	field	versus	article
5-2.1	SPURT	Kunz *et al.* [2008]	5-9.1	HALOE	Oikonomou and O'Neill [2006]
5-13.1	MIPAS	Ekström *et al.* [2008]	5-14.1	Odin/SMR	Ekström *et al.* [2007]
5-14.1	Odin/SMR	Ekström *et al.* [2008]	5-20.1	ECMWF-Re	Luo *et al.* [2008]
5-20.1	ECMWF-Re	Oikonomou and O'Neill [2006]			

.

AMSOS:

field	versus	article	field	versus	article
5-9.2	HALOE	Oikonomou and O'Neill [2006]	5-13.2	MIPAS	Müller *et al.* [2008]
5-13.2	MIPAS	Milz *et al.* [2009b]	5-14.2	Odin/SMR	Müller *et al.* [2008]
5-15.2	POAM	Müller *et al.* [2008]	5-20.2	ECMWF-Re	Feist *et al.* [2007]
5-20.2	ECMWF-Re	Müller *et al.* [2008]			

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GPS-RO:

field	versus	article	field	versus	article
5-16.3	AIRS	Chou *et al.* [2009]	5-20.3	ECMWF-Re	Heise *et al.* [2006]
5-21.3	NCEP-Re	Chou *et al.* [2009]			

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GPS-Col:

field	versus	article	field	versus	article
5-5.4	GPS-Col	Vey *et al.* [2009]	5-6.4	MWR-T	Deuber *et al.* [2005a]
5-16.4	AIRS	Rama Varma Raja *et al.* [2008]	5-16.4	AIRS	Whiteman *et al.* [2006]
5-20.4	ECMWF-Re	Morland *et al.* [2006]	5-21.4	NCEP-Re	Vey *et al.* [2009]
5-23.4	Meisei	Shoji [2009]	5-28.4	SPM	Nyeki *et al.* [2005]

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Aura/MLS:

field	versus	article	field	versus	article
5-1.5	MOZAIC	Ekström *et al.* [2008]	5-3.5	AMSOS	Müller *et al.* [2008]
5-7.5	Aura/MLS	Fetzer *et al.* [2008]	5-9.5	HALOE	Lambert *et al.* [2007]
5-9.5	HALOE	Nedoluha *et al.* [2007]	5-10.5	SAGE-II	Lambert *et al.* [2007]
5-11.5	ACE/FTS	Lambert *et al.* [2007]	5-13.5	MIPAS	Hocke *et al.* [2006]
5-13.5	MIPAS	Chauhan *et al.* [2009]	5-13.5	MIPAS	Ekström *et al.* [2008]
5-13.5	MIPAS	Lambert *et al.* [2007]	5-14.5	Odin/SMR	Ekström *et al.* [2008]
5-14.5	Odin/SMR	Lambert *et al.* [2007]	5-15.5	POAM	Lambert *et al.* [2007]
5-16.5	AIRS	Fetzer *et al.* [2008]	5-16.5	AIRS	Ray and Rosenlof [2007]
5-16.5	AIRS	Read *et al.* [2007]	5-20.5	ECMWF-Re	James *et al.* [2008]
5-26.5	ALIAS	Read *et al.* [2007]			

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UARS/MLS:

field	versus	article	field	versus	article
5-1.6	MOZAIC	Spichtinger *et al.* [2002]	5-1.6	MOZAIC	Read *et al.* [2001]
5-6.6	MWR-T	Bender *et al.* [2008]	5-9.6	HALOE	Pumphrey [1999]
5-9.6	HALOE	Read *et al.* [2004]	5-10.6	SAGE-II	Read *et al.* [2001]
5-12.6	CRISTA	Offermann *et al.* [2002]	5-19.6	ATMOS	Pumphrey [1999]
5-19.6	ATMOS	Michelsen *et al.* [2002]	5-20.6	ECMWF-Re	Oikonomou and O'Neill [2006]
5-22.6	COSMO-EU	Bender *et al.* [2008]	5-24.6	tmt	Morris *et al.* [2000]

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IASI:

field	versus	article
5-27.7	WALES	Wulfmeyer *et al.* [2005]

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MAS:

field	versus	article
5-19.8	ATMOS	Michelsen *et al.* [2002]

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GOME:

field	versus	article	field	versus	article
5-20.9	ECMWF-Re	Noel *et al.* [2008]	5-20.9	ECMWF-Re	Wagner *et al.* [2003]
5-29.9	SSM/I	Wagner *et al.* [2005]			

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SCIAMACHY:

field	versus	article	field	versus	article
5-20.10	ECMWF-Re	Noel *et al.* [2008]	5-20.10	ECMWF-Re	Noel *et al.* [2005]
5-20.10	ECMWF-Re	Noel *et al.* [2004]	5-25.10	GOME	Noel *et al.* [2008]
5-29.10	SSM/I	Noel *et al.* [2005]	5-29.10	SSM/I	Noel *et al.* [2004]

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HALOE:

field	versus	article	field	versus	article
6-1.1	MOZAIC	Oikonomou and O'Neill [2006]	6-3.1	AMSOS	Müller *et al.* [2008]
6-6.1	Aura/MLS	Lambert *et al.* [2007]	6-6.1	Aura/MLS	Nedoluha *et al.* [2007]
6-7.1	UARS/MLS	Lahoz *et al.* [1996]	6-7.1	UARS/MLS	Fueglistaler *et al.* [2009]
6-10.1	SAGE-II	Thomason *et al.* [2004]	6-10.1	SAGE-II	Read *et al.* [2004]
6-11.1	ACE/FTS	McHugh *et al.* [2005]	6-11.1	ACE/FTS	Carleer *et al.* [2008]
6-12.1	MIPAS	Milz *et al.* [2005]	6-13.1	Odin/SMR	Lossow *et al.* [2008b]
6-14.1	POAM	Lumpe *et al.* [2006]	6-14.1	POAM	Lucke *et al.* [2008]
6-14.1	POAM	Randel *et al.* [2006]	6-18.1	ATMOS	Harries *et al.* [1996]
6-18.1	ATMOS	Michelsen *et al.* [2002]	6-19.1	ECMWF-Re	Thornton *et al.* [2009]
6-28.1	UM	Harries [1997]			

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SAGE-II:

field	versus	article	field	versus	article
6-6.2	Aura/MLS	Lambert *et al.* [2007]	6-7.2	UARS/MLS	Read *et al.* [2001]
6-9.2	HALOE	Thomason *et al.* [2004]	6-11.2	ACE/FTS	Carleer *et al.* [2008]
6-14.2	POAM	Lumpe *et al.* [2006]	6-17.2	LIMS	Chiou *et al.* [1993]
6-17.2	LIMS	Rind *et al.* [1993]	6-18.2	ATMOS	Chiou *et al.* [1993]
6-18.2	ATMOS	Michelsen *et al.* [2002]	6-19.2	ECMWF-Re	Thornton *et al.* [2009]
6-29.2	1-D model	Boering *et al.* [1995]			

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ACE/FTS:

field	versus	article	field	versus	article
6-2.3	SPURT	Hegglin *et al.* [2008]	6-6.3	Aura/MLS	Lambert *et al.* [2007]
6-9.3	HALOE	Carleer *et al.* [2008]	6-9.3	HALOE	McHugh *et al.* [2005]
6-10.3	SAGE-II	Carleer *et al.* [2008]	6-12.3	MIPAS	Carleer *et al.* [2008]
6-13.3	Odin	Carleer *et al.* [2008]	6-13.3	Odin/SMR	Lossow *et al.* [2008b]
6-14.3	POAM	Carleer *et al.* [2008]			

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MIPAS:

field	versus	article	field	versus	article
6-1.4	MOZAIC	Ekström *et al.* [2008]	6-3.4	AMSOS	Müller *et al.* [2008]
6-3.4	AMSOS	Milz *et al.* [2009b]	6-6.4	Aura/MLS	Hocke *et al.* [2006]
6-6.4	Aura/MLS	Ekström *et al.* [2008]	6-6.4	Aura/MLS	Lambert *et al.* [2007]
6-6.4	Aura/MLS	Chauhan *et al.* [2009]	6-9.4	HALOE	Milz *et al.* [2009b]
6-11.4	ACE/FTS	Carleer *et al.* [2008]	6-11.4	ACE/FTS	Milz *et al.* [2009b]
6-14.4	POAM	Milz *et al.* [2009b]	6-21.4	ILAS-II	Milz *et al.* [2009b]
6-21.4	ILAS-II	Griesfeller *et al.* [2008]			

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Odin/SMR:

field	versus	article	field	versus	article
6-1.5	MOZAIC	Ekström *et al.* [2008]	6-1.5	MOZAIC	Ekström *et al.* [2007]
6-3.5	AMSOS	Müller *et al.* [2008]	6-6.5	Aura/MLS	Ekström *et al.* [2008]
6-6.5	Aura/MLS	Jones *et al.* [2009]	6-7.5	UARS/MLS	Ekström *et al.* [2008]
6-9.5	HALOE	Lossow *et al.* [2008b]	6-9.5	HALOE	Jones *et al.* [2009]
6-10.5	SAGE-II	Jones *et al.* [2009]	6-11.5	ACE/FTS	Carleer *et al.* [2008]
6-11.5	ACE/FTS	Lossow *et al.* [2008b]	6-11.5	ACE/FTS	Lossow *et al.* [2007]
6-12.5	MIPAS	Ekström *et al.* [2008]	6-22.5	Hammonia	Lossow *et al.* [2009]
6-23.5	WACCM	Lossow *et al.* [2009]			

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POAM:

field	versus	article	field	versus	article
6-3.6	AMSOS	Müller *et al.* [2008]	6-6.6	Aura/MLS	Lambert *et al.* [2007]
6-9.6	HALOE	Lumpe *et al.* [2006]	6-9.6	HALOE	Lucke *et al.* [2008]
6-9.6	HALOE	Randel *et al.* [2006]	6-10.6	SAGE-II	Lumpe *et al.* [2006]
6-11.6	ACE/FTS	Carleer *et al.* [2008]			

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AIRS:

field	versus	article	field	versus	article
7-5.1	GPS-Col	Rama Varma Raja *et al.* [2008]	7-6.1	Aura/MLS	Fetzer *et al.* [2008]
7-6.1	Aura/MLS	Ray and Rosenlof [2007]	7-6.1	Aura/MLS	Read *et al.* [2007]
7-19.1	ECMWF-Re	Hocke *et al.* [2007]	7-19.1	ECMWF-Re	Lamquin *et al.* [2009]
7-24.1	CAM	Gettelman and Fu [2008]	7-24.1	CAM	Gettelman *et al.* [2006]

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AMSU:

field	versus	article	field	versus	article
7-5.2	GPS-Col	Johnsen *et al.* [2004]	7-15.2	AIRS	Milz *et al.* [2009a]
7-15.2	AIRS	Fetzer *et al.* [2003]	7-16.2	HIRS	Buehler *et al.* [2008]
7-19.2	ECMWF-Re	Brogniez and Pierrehumbert [2007]	7-20.2	NCEP-Re	Brogniez and Pierrehumbert [2007]
7-25.2	GCMs	Brogniez and Pierrehumbert [2007]	7-26.2	Lagrange	Brogniez and Pierrehumbert [2006]

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SSM/I:

field	versus	article	field	versus	article
7-16.3	HIRS	Soden *et al.* [2005]	7-27.3	GFDL	Soden *et al.* [2005]

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METEOSAT:

field	versus	article	field	versus	article
7-28.4	AMIP	Brogniez *et al.* [2005]	7-17.4	HIRS	Brogniez [2004]

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LIMS:

field	versus	article
7-18.5	ATMOS	Gunson *et al.* [1990]

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