

Heinrich Bovensmann

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Total water vapour columns derived from Sentinel 5P using the AMC-DOAS method. Atmospheric Measurement Techniques, 2022, 15, 297-320.	3.1	5
2	Retrieval of greenhouse gases from GOSAT and GOSAT-2 using the FOCAL algorithm. Atmospheric Measurement Techniques, 2022, 15, 3401-3437.	3.1	10
3	Development of a small unmanned aircraft system to derive CO ₂ emissions of anthropogenic point sources. Atmospheric Measurement Techniques, 2021, 14, 153-172.	3.1	17
4	Detection and quantification of CH ₄ plumes using the WFM-DOAS retrieval on AVIRIS-NG hyperspectral data. Atmospheric Measurement Techniques, 2021, 14, 1267-1291.	3.1	16
5	Can a regional-scale reduction of atmospheric CO ₂ during the COVID-19 pandemic be detected from space? A case study for East China using satellite XCO ₂ retrievals. Atmospheric Measurement Techniques, 2021, 14, 2141-2166.	3.1	28
6	XCO ₂ retrieval for GOSAT and GOSAT-2 based on the FOCAL algorithm. Atmospheric Measurement Techniques, 2021, 14, 3837-3869.	3.1	15
7	Quantification of CH ₄ coal mining emissions in Upper Silesia by passive airborne remote sensing observations with the Methane Airborne MAPper (MAMAP) instrument during the CO ₂ and Methane (CoMet) campaign. Atmospheric Chemistry and Physics, 2021, 21, 17345-17371.	4.9	16
8	Severe Californian wildfires in November 2018 observed from space: the carbon monoxide perspective. Atmospheric Chemistry and Physics, 2020, 20, 3317-3332.	4.9	27
9	Ensemble-based satellite-derived carbon dioxide and methane column-averaged dry-air mole fraction data sets (2003–2018) for carbon and climate applications. Atmospheric Measurement Techniques, 2020, 13, 789-819.	3.1	22
10	Remote sensing of methane leakage from natural gas and petroleum systems revisited. Atmospheric Chemistry and Physics, 2020, 20, 9169-9182.	4.9	74
11	CH ₄ and CO ₂ IPDA Lidar Measurements During the Comet 2018 Airborne Field Campaign. EPJ Web of Conferences, 2020, 237, 03005.	0.3	1
12	Stratospheric aerosol extinction profiles from SCIAMACHY solar occultation. Atmospheric Measurement Techniques, 2020, 13, 5643-5666.	3.1	1
13	Stratospheric aerosol characteristics from space-borne observations: extinction coefficient and Å ⁻¹ exponent. Atmospheric Measurement Techniques, 2019, 12, 3485-3502.	3.1	11
14	Towards monitoring localized CO ₂ emissions from space: co-located regional CO ₂ and NO ₂ enhancements observed by the OCO-2 and S5P satellites. Atmospheric Chemistry and Physics, 2019, 19, 9371-9383.	4.9	107
15	A scientific algorithm to simultaneously retrieve carbon monoxide and methane from TROPOMI onboard Sentinel-5 Precursor. Atmospheric Measurement Techniques, 2019, 12, 6771-6802.	3.1	71
16	Water vapour and methane coupling in the stratosphere observed using SCIAMACHY solar occultation measurements. Atmospheric Chemistry and Physics, 2018, 18, 4463-4476.	4.9	15
17	Copernicus Climate Change Service (C3S) Global Satellite Observations of Atmospheric Carbon Dioxide and Methane. Advances in Astronautics Science and Technology, 2018, 1, 57-60.	0.8	16
18	Computation and analysis of atmospheric carbon dioxide annual mean growth rates from satellite observations during 2003–2016. Atmospheric Chemistry and Physics, 2018, 18, 17355-17370.	4.9	27

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19	CoMet: an airborne mission to simultaneously measure CO ₂ and CH ₄ using lidar, passive remote sensing, and in-situ techniques. EPJ Web of Conferences, 2018, 176, 02003.	0.3	13
20	In-flight calibration of SCIAMACHY's polarization sensitivity. Atmospheric Measurement Techniques, 2018, 11, 265-289.	3.1	7
21	Airborne remote sensing and in situ measurements of atmospheric CO ₂ to quantify point source emissions. Atmospheric Measurement Techniques, 2018, 11, 721-739.	3.1	24
22	Aerosol particle size distribution in the stratosphere retrieved from SCIAMACHY limb measurements. Atmospheric Measurement Techniques, 2018, 11, 2085-2100.	3.1	26
23	The potential of satellite spectro-imagery for monitoring CO ₂ emissions from large cities. Atmospheric Measurement Techniques, 2018, 11, 681-708.	3.1	45
24	CO ₂ emission of Indonesian fires in 2015 estimated from satellite-derived atmospheric CO ₂ concentrations. Geophysical Research Letters, 2017, 44, 1537-1544.	4.0	60
25	Global satellite observations of column-averaged carbon dioxide and methane: The GHG-CCI XCO ₂ and XCH ₄ CRDP3 data set. Remote Sensing of Environment, 2017, 203, 276-295.	11.0	52
26	How Much CO ₂ Is Taken Up by the European Terrestrial Biosphere?. Bulletin of the American Meteorological Society, 2017, 98, 665-671.	3.3	33
27	Satellite-derived methane hotspot emission estimates using a fast data-driven method. Atmospheric Chemistry and Physics, 2017, 17, 5751-5774.	4.9	63
28	Improved pointing information for SCIAMACHY from in-flight measurements of the viewing directions towards sun and moon. Atmospheric Measurement Techniques, 2017, 10, 2413-2423.	3.1	2
29	MERLIN: A French-German Space Lidar Mission Dedicated to Atmospheric Methane. Remote Sensing, 2017, 9, 1052.	4.0	88
30	A Fast Atmospheric Trace Gas Retrieval for Hyperspectral Instruments Approximating Multiple Scattering—Part 1: Radiative Transfer and a Potential OCO-2 XCO ₂ Retrieval Setup. Remote Sensing, 2017, 9, 1159.	4.0	21
31	Reduced Methane Emissions from Santa Barbara Marine Seeps. Remote Sensing, 2017, 9, 1162.	4.0	1
32	Methane emissions from a Californian landfill, determined from airborne remote sensing and in situ measurements. Atmospheric Measurement Techniques, 2017, 10, 3429-3452.	3.1	36
33	A Fast Atmospheric Trace Gas Retrieval for Hyperspectral Instruments Approximating Multiple Scattering—Part 2: Application to XCO ₂ Retrievals from OCO-2. Remote Sensing, 2017, 9, 1102.	4.0	22
34	UTLS water vapour from SCIAMACHY limb measurements V3.01 (2002–2012). Atmospheric Measurement Techniques, 2016, 9, 133-158.	3.1	12
35	Stratospheric CH ₄ and CO ₂ profiles derived from SCIAMACHY solar occultation measurements. Atmospheric Measurement Techniques, 2016, 9, 1485-1503.	3.1	12
36	Global tropospheric ozone variations from 2003 to 2011 as seen by SCIAMACHY. Atmospheric Chemistry and Physics, 2016, 16, 417-436.	4.9	34

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37	Tracking city CO ₂ emissions from space using a high-resolution inverse modelling approach: a case study for Berlin, Germany. Atmospheric Chemistry and Physics, 2016, 16, 9591-9610.	4.9	51
38	Using Passive Remote Sensing in the Short Wave Infrared to Quantify Methane and CO ₂ Point Source Emissions. , 2016, , .		0
39	Geostationary Emission Explorer for Europe (G3E): mission concept and initial performance assessment. Atmospheric Measurement Techniques, 2015, 8, 4719-4734.	3.1	23
40	Real-time remote detection and measurement for airborne imaging spectroscopy: a case study with methane. Atmospheric Measurement Techniques, 2015, 8, 4383-4397.	3.1	111
41	Relative drifts and biases between six ozone limb satellite measurements from the last decade. Atmospheric Measurement Techniques, 2015, 8, 4369-4381.	3.1	13
42	Consistent satellite XCO ₂ retrievals from SCIAMACHY and GOSAT using the BESD algorithm. Atmospheric Measurement Techniques, 2015, 8, 2961-2980.	3.1	45
43	Atmospheric remote sensing constraints on direct sea-air methane flux from the 22/4b North Sea massive blowout bubble plume. Marine and Petroleum Geology, 2015, 68, 824-835.	3.3	16
44	The Greenhouse Gas Climate Change Initiative (GHG-CCI): Comparison and quality assessment of near-surface-sensitive satellite-derived CO ₂ and CH ₄ global data sets. Remote Sensing of Environment, 2015, 162, 344-362.	11.0	112
45	Ten-Year SCIAMACHY Stratospheric Aerosol Data Record: Signature of the Secondary Meridional Circulation Associated with the Quasi-Biennial Oscillation. Springer Earth System Sciences, 2015, , 49-58.	0.2	6
46	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. Biogeosciences, 2014, 11, 3547-3602.	3.3	189
47	Tropospheric column amount of ozone retrieved from SCIAMACHY limb nadir-matching observations. Atmospheric Measurement Techniques, 2014, 7, 2073-2096.	3.1	37
48	Decreasing emissions of NO _x relative to CO ₂ in East Asia inferred from satellite observations. Nature Geoscience, 2014, 7, 792-795.	12.9	99
49	The CarbonSat candidate mission: imaging greenhouse gas concentrations from space. , 2014, , .		2
50	Stratospheric ozone trends and variability as seen by SCIAMACHY from 2002 to 2012. Atmospheric Chemistry and Physics, 2014, 14, 831-846.	4.9	66
51	Terrestrial carbon sink observed from space: variation of growth rates and seasonal cycle amplitudes in response to interannual surface temperature variability. Atmospheric Chemistry and Physics, 2014, 14, 133-141.	4.9	55
52	Satellite-inferred European carbon sink larger than expected. Atmospheric Chemistry and Physics, 2014, 14, 13739-13753.	4.9	83
53	Remote sensing of fugitive methane emissions from oil and gas production in North American tight geologic formations. Earth's Future, 2014, 2, 548-558.	6.3	129
54	Error budget analysis of SCIAMACHY limb ozone profile retrievals using the SCIATRAN model. Atmospheric Measurement Techniques, 2013, 6, 2825-2837.	3.1	16

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55	Polarization data from SCIAMACHY limb backscatter observations compared to vector radiative transfer model simulations. Atmospheric Measurement Techniques, 2013, 6, 1503-1520.	3.1	6
56	Quantification of methane emission rates from coal mine ventilation shafts using airborne remote sensing data. Atmospheric Measurement Techniques, 2013, 6, 151-166.	3.1	67
57	Carbon Monitoring Satellite (CarbonSat): assessment of atmospheric CO ₂ and CH ₄ retrieval errors by error parameterization. Atmospheric Measurement Techniques, 2013, 6, 3477-3500.	3.1	94
58	Anthropogenic carbon dioxide source areas observed from space: assessment of regional enhancements and trends. Atmospheric Chemistry and Physics, 2013, 13, 2445-2454.	4.9	73
59	Chemical ozone losses in Arctic and Antarctic polar winter/spring season derived from SCIAMACHY limb measurements 2002–2009. Atmospheric Chemistry and Physics, 2013, 13, 1809-1835.	4.9	19
60	A joint effort to deliver satellite retrieved atmospheric CO ₂ concentrations for surface flux inversions: the ensemble median algorithm EMMA. Atmospheric Chemistry and Physics, 2013, 13, 1771-1780.	4.9	62
61	Impact of Short-Term Solar Variability on the Polar Summer Mesopause and Noctilucent Clouds. Springer Atmospheric Sciences, 2013, , 365-382.	0.3	2
62	Global and long-term comparison of SCIAMACHY limb ozone profiles with correlative satellite data (2002–2008). Atmospheric Measurement Techniques, 2012, 5, 771-788.	3.1	29
63	SCIAMACHY lunar occultation water vapor measurements: retrieval and validation results. Atmospheric Measurement Techniques, 2012, 5, 2499-2513.	3.1	5
64	Precise pointing knowledge for SCIAMACHY solar occultation measurements. Atmospheric Measurement Techniques, 2012, 5, 2867-2880.	3.1	17
65	Quantification and mitigation of the impact of scene inhomogeneity on Sentinel-4 UVN UV-VIS retrievals. Atmospheric Measurement Techniques, 2012, 5, 1319-1331.	3.1	19
66	A simple empirical model estimating atmospheric CO ₂ background concentrations. Atmospheric Measurement Techniques, 2012, 5, 1349-1357.	3.1	29
67	SCIAMACHY WFM-DOAS X_{CO_2} : reduction of scattering related errors. Atmospheric Measurement Techniques, 2012, 5, 2375-2390.	3.1	23
68	SCIAMACHY WFM-DOAS XCO ₂ : comparison with CarbonTracker XCO ₂ ; focusing on aerosols and thin clouds. Atmospheric Measurement Techniques, 2012, 5, 1935-1952.	3.1	21
69	Validation of SCIAMACHY limb NO ₂ profiles using solar occultation measurements. Atmospheric Measurement Techniques, 2012, 5, 1059-1084.	3.1	19
70	Atmospheric greenhouse gases retrieved from SCIAMACHY: comparison to ground-based FTS measurements and model results. Atmospheric Chemistry and Physics, 2012, 12, 1527-1540.	4.9	86
71	On the potential of the 2041–2047nm spectral region for remote sensing of atmospheric CO ₂ isotopologues. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 2009-2017.	2.3	15
72	Retrieval of atmospheric CO ₂ with enhanced accuracy and precision from SCIAMACHY: Validation with FTS measurements and comparison with model results. Journal of Geophysical Research, 2011, 116, .	3.3	153

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73	From Radiation Fields to Atmospheric Concentrations – Retrieval of Geophysical Parameters. , 2011, , 99-127.		3
74	Long-term analysis of carbon dioxide and methane column-averaged mole fractions retrieved from SCIAMACHY. Atmospheric Chemistry and Physics, 2011, 11, 2863-2880.	4.9	158
75	A feasibility study for the detection of the diurnal variation of tropospheric NO ₂ over Tokyo from a geostationary orbit. Advances in Space Research, 2011, 48, 1551-1564.	2.6	5
76	Nine years of atmospheric remote sensing with sciamachy - atmospheric parameters and data products. , 2011, , .		1
77	Nine years of atmospheric remote sensing with SCIAMACHY - instrument performance. , 2011, , .		0
78	Retrieval of water vapor vertical distributions in the upper troposphere and the lower stratosphere from SCIAMACHY limb measurements. Atmospheric Measurement Techniques, 2011, 4, 933-954.	3.1	32
79	MAMAP – a new spectrometer system for column-averaged methane and carbon dioxide observations from aircraft: instrument description and performance analysis. Atmospheric Measurement Techniques, 2011, 4, 215-243.	3.1	78
80	BrO vertical distributions from SCIAMACHY limb measurements: comparison of algorithms and retrieval results. Atmospheric Measurement Techniques, 2011, 4, 1319-1359.	3.1	45
81	Stratospheric methane profiles from SCIAMACHY solar occultation measurements derived with onion peeling DOAS. Atmospheric Measurement Techniques, 2011, 4, 2567-2577.	3.1	15
82	A New Method for the Comparison of Trend Data with an Application to Water Vapor. Journal of Climate, 2011, 24, 3124-3141.	3.2	2
83	MAMAP – a new spectrometer system for column-averaged methane and carbon dioxide observations from aircraft: retrieval algorithm and first inversions for point source emission rates. Atmospheric Measurement Techniques, 2011, 4, 1735-1758.	3.1	89
84	Towards space based verification of CO ₂ emissions from strong localized sources: fossil fuel power plant emissions as seen by a CarbonSat constellation. Atmospheric Measurement Techniques, 2011, 4, 2809-2822.	3.1	58
85	SCIAMACHY's View of the Changing Earth's Environment. , 2011, , 175-216.		11
86	The Instrument. , 2011, , 29-46.		5
87	A method for improved SCIAMACHY CO ₂ retrieval in the presence of optically thin clouds. Atmospheric Measurement Techniques, 2010, 3, 209-232.	3.1	194
88	Water vapour profiles from SCIAMACHY solar occultation measurements derived with an onion peeling approach. Atmospheric Measurement Techniques, 2010, 3, 523-535.	3.1	23
89	Markov chain analysis of regional climates. Nonlinear Processes in Geophysics, 2010, 17, 651-661.	1.3	10
90	A remote sensing technique for global monitoring of power plant CO ₂ emissions from space and related applications. Atmospheric Measurement Techniques, 2010, 3, 781-811.	3.1	219

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91	First evidence of a 27 day solar signature in noctilucent cloud occurrence frequency. Journal of Geophysical Research, 2010, 115, .	3.3	36
92	Ship track characteristics derived from geostationary satellite observations on the west coast of southern Africa. Atmospheric Research, 2010, 95, 32-39.	4.1	8
93	Cloud sensitivity studies for stratospheric and lower mesospheric ozone profile retrievals from measurements of limb-scattered solar radiation. Atmospheric Measurement Techniques, 2009, 2, 653-678.	3.1	42
94	Comparison of NLC particle sizes derived from SCIAMACHY/Envisat observations with ground-based LIDAR measurements at ALOMAR (69° N). Atmospheric Measurement Techniques, 2009, 2, 523-531.	3.1	8
95	Multi-year comparison of stratospheric BrO vertical profiles retrieved from SCIAMACHY limb and ground-based UV-visible measurements. Atmospheric Measurement Techniques, 2009, 2, 273-285.	3.1	14
96	Carbon monoxide spatial gradients over source regions as observed by SCIAMACHY: A case study for the United Kingdom. Advances in Space Research, 2009, 43, 923-929.	2.6	3
97	Validation of ozone measurements from the Atmospheric Chemistry Experiment (ACE). Atmospheric Chemistry and Physics, 2009, 9, 287-343.	4.9	134
98	Three years of greenhouse gas column-averaged dry air mole fractions retrieved from satellite – Part 2: Methane. Atmospheric Chemistry and Physics, 2009, 9, 443-465.	4.9	119
99	Evolution of stratospheric ozone and water vapour time series studied with satellite measurements. Atmospheric Chemistry and Physics, 2009, 9, 6055-6075.	4.9	98
100	Ship emitted NO ₂ in the Indian Ocean: comparison of model results with satellite data. Atmospheric Chemistry and Physics, 2009, 9, 7289-7301.	4.9	47
101	SCIAMACHY Solar Occultation: Ozone and NO ₂ Profiles 2002–2007. , 2009, , 79-86.		2
102	Towards validation of SCIAMACHY lunar occultation NO ₂ vertical profiles. Advances in Space Research, 2008, 41, 1921-1932.	2.6	5
103	Preliminary results of GOME-2 water vapour retrievals and first applications in polar regions. Atmospheric Chemistry and Physics, 2008, 8, 1519-1529.	4.9	46
104	Ozone profile retrieval from limb scatter measurements in the HARTLEY bands: further retrieval details and profile comparisons. Atmospheric Chemistry and Physics, 2008, 8, 2509-2517.	4.9	6
105	Three years of greenhouse gas column-averaged dry air mole fractions retrieved from satellite – Part 1: Carbon dioxide. Atmospheric Chemistry and Physics, 2008, 8, 3827-3853.	4.9	146
106	Analysis of global water vapour trends from satellite measurements in the visible spectral range. Atmospheric Chemistry and Physics, 2008, 8, 491-504.	4.9	90
107	Sounding The Troposphere From Space: A New Era For Global Atmospheric Chemistry. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 173-200.	0.2	2
108	Three years of global carbon monoxide from SCIAMACHY: comparison with MOPITT and first results related to the detection of enhanced CO over cities. Atmospheric Chemistry and Physics, 2007, 7, 2399-2411.	4.9	84

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109	Corrigendum to "First direct observation of the atmospheric CO ₂ year-to-year increase from space" published in Atmos. Chem. Phys., 7, 4249–4256, 2007. Atmospheric Chemistry and Physics, 2007, 7, 5341-5342.	4.9	9
110	First direct observation of the atmospheric CO ₂ year-to-year increase from space. Atmospheric Chemistry and Physics, 2007, 7, 4249-4256.	4.9	108
111	Comparison of the inversion algorithms applied to the ozone vertical profile retrieval from SCIAMACHY limb measurements. Atmospheric Chemistry and Physics, 2007, 7, 4763-4779.	4.9	35
112	Global cloud top height and thermodynamic phase distributions as obtained by SCIAMACHY on ENVISAT. International Journal of Remote Sensing, 2007, 28, 4499-4507.	2.9	13
113	On the disappearance of noctilucent clouds during the January 2005 solar proton events. Geophysical Research Letters, 2007, 34, .	4.0	53
114	Global ship track distribution and radiative forcing from 1 year of AATSR data. Geophysical Research Letters, 2007, 34, .	4.0	61
115	Satellite observations of the quasi 5-day wave in noctilucent clouds and mesopause temperatures. Geophysical Research Letters, 2007, 34, .	4.0	45
116	Towards Operational Monitoring of the Chemical Composition of the Atmosphere Using Solar Backscatter Imaging Techniques. , 2007, , .		0
117	SCIAMACHY on ENVISAT: 4 Years in Space: A Status Report. , 2006, , .		0
118	Atmospheric carbon gases retrieved from SCIAMACHY by WFM-DOAS: version 0.5 CO and CH ₄ and impact of calibration improvements on CO ₂ retrieval. Atmospheric Chemistry and Physics, 2006, 6, 2727-2751.	4.9	143
119	Impact of ship emissions on the microphysical, optical and radiative properties of marine stratus: a case study. Atmospheric Chemistry and Physics, 2006, 6, 4925-4942.	4.9	33
120	The semianalytical cloud retrieval algorithm for SCIAMACHY II. The application to MERIS and SCIAMACHY data. Atmospheric Chemistry and Physics, 2006, 6, 4129-4136.	4.9	22
121	SCIAMACHY Level 1 data: calibration concept and in-flight calibration. Atmospheric Chemistry and Physics, 2006, 6, 5347-5367.	4.9	57
122	First results of ozone profiles between 35 and 65km retrieved from SCIAMACHY limb spectra and observations of ozone depletion during the solar proton events in October/November 2003. Advances in Space Research, 2006, 37, 2263-2268.	2.6	10
123	Retrieval And Monitoring of Atmospheric Trace Gas Concentrations in Nadir and Limb Geometry Using the Space-Borne Sciamachy Instrument. Environmental Monitoring and Assessment, 2006, 120, 65-77.	2.7	23
124	Solar occultation with SCIAMACHY: algorithm description and first validation. Atmospheric Chemistry and Physics, 2005, 5, 1589-1604.	4.9	22
125	Validation of SCIAMACHY AMC-DOAS water vapour columns. Atmospheric Chemistry and Physics, 2005, 5, 1835-1841.	4.9	42
126	Spatial and temporal characterization of SCIAMACHY limb pointing errors during the first three years of the mission. Atmospheric Chemistry and Physics, 2005, 5, 2593-2602.	4.9	57

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127	Detection and mapping of polar stratospheric clouds using limb scattering observations. Atmospheric Chemistry and Physics, 2005, 5, 3071-3079.	4.9	40
128	Balloon-borne limb profiling of UV/vis skylight radiances, O ₃ , NO ₂ , and BrO: technical set-up and validation of the method. Atmospheric Chemistry and Physics, 2005, 5, 1409-1422.	4.9	36
129	The UV-A and visible solar irradiance spectrum: inter-comparison of absolutely calibrated, spectrally medium resolution solar irradiance spectra from balloon- and satellite-borne measurements. Atmospheric Chemistry and Physics, 2005, 5, 1879-1890.	4.9	21
130	Atmospheric methane and carbon dioxide from SCIAMACHY satellite data: initial comparison with chemistry and transport models. Atmospheric Chemistry and Physics, 2005, 5, 941-962.	4.9	238
131	Carbon monoxide, methane and carbon dioxide columns retrieved from SCIAMACHY by WFM-DOAS: year 2003 initial data set. Atmospheric Chemistry and Physics, 2005, 5, 3313-3329.	4.9	162
132	The Ozone Hole Breakup in September 2002 as Seen by SCIAMACHY on ENVISAT. Journals of the Atmospheric Sciences, 2005, 62, 721-734.	1.7	66
133	Lunar occultation with SCIAMACHY: First retrieval results. Advances in Space Research, 2005, 36, 906-914.	2.6	9
134	NO ₂ and BrO vertical profile retrieval from SCIAMACHY limb measurements: Sensitivity studies. Advances in Space Research, 2005, 36, 846-854.	2.6	93
135	SCIAMACHY solar irradiance observation in the spectral range from 240 to 2380nm. Advances in Space Research, 2005, 35, 370-375.	2.6	48
136	Cross comparisons of O ₃ and NO ₂ measured by the atmospheric ENVISAT instruments GOMOS, MIPAS, and SCIAMACHY. Advances in Space Research, 2005, 36, 855-867.	2.6	34
137	Ozone depletion during the solar proton events of October/November 2003 as seen by SCIAMACHY. Journal of Geophysical Research, 2005, 110, .	3.3	90
138	Retrieval of stratospheric NO ₃ vertical profiles from SCIAMACHY lunar occultation measurement over the Antarctic. Journal of Geophysical Research, 2005, 110, .	3.3	14
139	SCIAMACHY on ENVISAT: in-flight optical performance and first results. , 2004, , .		18
140	The Determination of Cloud Altitudes Using SCIAMACHY Onboard ENVISAT. IEEE Geoscience and Remote Sensing Letters, 2004, 1, 211-214.	3.1	14
141	The determination of the atmospheric optical thickness over Western Europe using SeaWiFS imagery. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 824-832.	6.3	11
142	SCIAMACHY limb measurements in the UV/Vis spectral region: first results. Advances in Space Research, 2004, 34, 775-779.	2.6	20
143	NLC detection and particle size determination: first results from SCIAMACHY on ENVISAT. Advances in Space Research, 2004, 34, 851-856.	2.6	42
144	Retrieval of trace gas vertical columns from SCIAMACHY/ENVISAT near-infrared nadir spectra: first preliminary results. Advances in Space Research, 2004, 34, 809-814.	2.6	18

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145	The Geostationary Fourier Imaging Spectrometer (GeoFIS) as part of the Geostationary Tropospheric Pollution Explorer (GeoTROPE) mission: objectives and capabilities. <i>Advances in Space Research</i> , 2004, 34, 688-693.	2.6	14
146	Nonmigrating tides in the thermosphere of Mars: a quasi-empirical description. <i>Advances in Space Research</i> , 2004, 34, 1690-1695.	2.6	12
147	SCIAMACHY limb spectra. <i>Advances in Space Research</i> , 2004, 34, 715-720.	2.6	5
148	Towards O3 and NO2 vertical profile retrieval from SCIAMACHY solar occultation measurements: first results. <i>Advances in Space Research</i> , 2004, 34, 744-748.	2.6	8
149	The geostationary tropospheric pollution explorer (GeoTROPE) mission: objectives, requirements and mission concept. <i>Advances in Space Research</i> , 2004, 34, 682-687.	2.6	28
150	The geostationary scanning imaging absorption spectrometer (GeoSCIA) as part of the geostationary tropospheric pollution explorer (GeoTROPE) mission: requirements, concepts and capabilities. <i>Advances in Space Research</i> , 2004, 34, 694-699.	2.6	17
151	Satellite-pointing retrieval from atmospheric limb-scattering of solar UV-B radiation. <i>Canadian Journal of Physics</i> , 2004, 82, 1041-1052.	1.1	44
152	Retrieval of trace gas vertical columns from SCIAMACHY/ENVISAT near-infrared nadir spectra: first preliminary results. <i>Advances in Space Research</i> , 2004, 34, 809-809.	2.6	1
153	First near-global retrievals of OH rotational temperatures from satellite-based Meinel band emission measurements. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	42
154	Satellite measurements of NO2 from international shipping emissions. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	144
155	Global carbon monoxide as retrieved from SCIAMACHY by WFM-DOAS. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1945-1960.	4.9	84
156	SCIAMACHY on ENVISAT: instrument monitoring and calibration two years after launch. , 2004, , .		0
157	Intercomparison of Stratospheric Chemistry Models under Polar Vortex Conditions. <i>Journal of Atmospheric Chemistry</i> , 2003, 45, 51-77.	3.2	18
158	Impact of Accurate Photolysis Calculations on the Simulation of Stratospheric Chemistry. <i>Journal of Atmospheric Chemistry</i> , 2003, 44, 225-240.	3.2	6
159	The SCIAMACHY calibration/monitoring concept and first results. <i>Advances in Space Research</i> , 2003, 32, 2123-2128.	2.6	11
160	In-flight calibration of the SCIAMACHY solar irradiance spectrum. <i>Advances in Space Research</i> , 2003, 32, 2129-2134.	2.6	6
161	Measurements of molecular absorption spectra with the SCIAMACHY pre-flight model: instrument characterization and reference data for atmospheric remote-sensing in the 230-2380 nm region. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003, 157, 167-184.	3.9	605
162	A semianalytical cloud retrieval algorithm using backscattered radiation in 0.4-2.4 µm spectral region. <i>Journal of Geophysical Research</i> , 2003, 108, AAC 4-1.	3.3	88

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