Rethinking reactive halogen budgets in the midlatitude

Geophysical Research Letters 26, 1699-1702 DOI: 10.1029/1999gl900309

Citation Report

#	Article	IF	CITATIONS
1	On the composition and optical extinction of particles in the tropopause region. Journal of Geophysical Research, 1999, 104, 27441-27459.	3.3	44
2	Reactive Halogen Species in the Mid-Latitude Troposphere — Recent Discoveries. Water, Air, and Soil Pollution, 2000, 123, 229-244.	1.1	16
3	On temperate sources of bromoform and other reactive organic bromine gases. Journal of Geophysical Research, 2000, 105, 20539-20547.	3.3	229
4	A three-dimensional model calculation of the ozone depletion potential of 1-bromopropane (1-C3H7Br). Journal of Geophysical Research, 2000, 105, 26493-26502.	3.3	39
5	Chlorine: the only green element – towards a wider acceptance of its role in natural cycles. Green Chemistry, 2000, 2, 173-225.	4.6	107
6	Comparison of measured and modeled stratospheric BrO: Implications for the total amount of stratospheric bromine. Geophysical Research Letters, 2000, 27, 3695-3698.	1.5	42
7	Halogen ions and NO+in the mass spectra of aerosols in the upper troposphere and lower stratosphere. Geophysical Research Letters, 2000, 27, 3217-3220.	1.5	56
8	Bromoform as a source of stratospheric bromine. Geophysical Research Letters, 2000, 27, 2081-2084.	1.5	82
9	Lower stratospheric organic and inorganic bromine budget for the Arctic winter 1998/99. Geophysical Research Letters, 2000, 27, 3305-3308.	1.5	90
10	Climate and ozone response to increased stratospheric water vapor. Geophysical Research Letters, 2001, 28, 1551-1554.	1.5	139
11	Spatial and temporal distribution of enhanced boundary layer BrO concentrations measured by the GOME instrument aboard ERS-2. Journal of Geophysical Research, 2001, 106, 24225-24235.	3.3	122
12	Stratosphere-troposphere exchange: Chemical sensitivity to mixing. Journal of Geophysical Research, 2001, 106, 4717-4731.	3.3	30
13	Methyl bromide, other brominated methanes, and methyl iodide in polar firn air. Journal of Geophysical Research, 2001, 106, 1595-1606.	3.3	63
14	A simulation of bromoform's contribution to stratospheric bromine. Journal of Geophysical Research, 2001, 106, 8089-8100.	3.3	54
15	Ultraviolet photodissociation of bromoform at 234 and 267 nm by means of ion velocity imaging. Journal of Chemical Physics, 2002, 117, 2578-2585.	1.2	66
16	Photodissociation of carbonic dibromide at 267 nm: Observation of three-body dissociation and molecular elimination of Br2. Journal of Chemical Physics, 2002, 117, 7483-7490.	1.2	4
17	Should bromoform absorb at wavelengths longer than 300 nm?. Journal of Chemical Physics, 2002, 117, 6103-6107.	1.2	22
18	Separating the influence of halogen and climate changes on ozone recovery in the upper stratosphere. Journal of Geophysical Research, 2002, 107, ACL 3-1.	3.3	21

#	Article	IF	CITATIONS
19	On detection of turnaround and recovery in trend for ozone. Journal of Geophysical Research, 2002, 107, ACH 1-1-ACH 1-12.	3.3	108
20	Comparison of measurements and model calculations of stratospheric bromine monoxide. Journal of Geophysical Research, 2002, 107, ACH 11-1.	3.3	62
21	A Lagrangian analysis of stratospheric ozone variability and long-term trends above Payerne (Switzerland) during 1970–2001. Journal of Geophysical Research, 2002, 107, ACL 2-1.	3.3	33
22	Climatology of the stratospheric BrO vertical distribution by balloon-borne UV–visible spectrometry. Journal of Geophysical Research, 2002, 107, ACH 23-1.	3.3	51
23	Investigation of the Atmospheric Oxidation Pathways of Bromoform:  Initiation via OH/Cl Reactions. Journal of Physical Chemistry A, 2002, 106, 6395-6400.	1.1	17
24	Heats of Formation of CBr, CHBr, and CBr2from Ab Initio Quantum Chemistry. Journal of Physical Chemistry A, 2002, 106, 4725-4728.	1.1	52
25	A study of the kinetics and mechanisms involved in the atmospheric degradation of bromoform by atomic chlorine. Chemical Physics Letters, 2002, 353, 335-344.	1.2	18
26	Energetics for the reaction of CBr2O with water. Chemical Physics Letters, 2002, 363, 275-282.	1.2	5
27	Biogeochemical Cycles and Residence Times. , 0, , 90-123.		0
28	Air-sea flux of bromoform: Controls, rates, and implications. Global Biogeochemical Cycles, 2003, 17, .	1.9	235
29	Marine organohalogens in the atmosphere over the Atlantic and Southern Oceans. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	92
30	Measurements of quantum yields of bromine atoms in the photolysis of bromoform from 266 to 324 nm. Journal of Geophysical Research, 2003, 108, n/a-n/a.	3.3	15
		0.0	
31	The role of halogen species in the troposphere. Chemosphere, 2003, 52, 325-338.	4.2	204
31 32			204 195
	The role of halogen species in the troposphere. Chemosphere, 2003, 52, 325-338. Performance of coupled cluster theory in thermochemical calculations of small halogenated	4.2	
32	The role of halogen species in the troposphere. Chemosphere, 2003, 52, 325-338. Performance of coupled cluster theory in thermochemical calculations of small halogenated compounds. Journal of Chemical Physics, 2003, 118, 3510-3522. Molecular elimination of Br2 in 248 nm photolysis of bromoform probed by using cavity ring-down	4.2 1.2	195
32 33	The role of halogen species in the troposphere. Chemosphere, 2003, 52, 325-338. Performance of coupled cluster theory in thermochemical calculations of small halogenated compounds. Journal of Chemical Physics, 2003, 118, 3510-3522. Molecular elimination of Br2 in 248 nm photolysis of bromoform probed by using cavity ring-down absorption spectroscopy. Journal of Chemical Physics, 2004, 121, 5253-5260.	4.2 1.2 1.2	195 45

#	Article	IF	CITATIONS
37	Atmospheric bromoform at Mace Head, Ireland: seasonality and evidence for a peatland source. Atmospheric Chemistry and Physics, 2005, 5, 2927-2934.	1.9	27
38	Surface Photochemistry of Bromoform on Ice:Â Cross Section and Competing Reaction Pathways. Journal of Physical Chemistry B, 2005, 109, 17574-17578.	1.2	8
39	Kinetics of the Reactions of the CHBr2and CHBr2O2Radicals with O2and NO. Journal of Physical Chemistry A, 2005, 109, 3045-3051.	1.1	7
40	Sensitivity of ozone to bromine in the lower stratosphere. Geophysical Research Letters, 2005, 32, .	1.5	207
41	Oceanic distributions and air-sea fluxes of biogenic halocarbons in the open ocean. Journal of Geophysical Research, 2005, 110, .	3.3	89
42	Nighttime OClO in the winter Arctic vortex. Journal of Geophysical Research, 2005, 110, .	3.3	27
43	Coastal water source of short-lived halocarbons in New England. Journal of Geophysical Research, 2005, 110, .	3.3	78
44	Global observations of stratospheric bromine monoxide from SCIAMACHY. Geophysical Research Letters, 2005, 32, .	1.5	79
45	Tropospheric bromine chemistry and its impacts on ozone: A model study. Journal of Geophysical Research, 2005, 110, .	3.3	234
46	Latitudinal and vertical distribution of bromine monoxide in the lower stratosphere from Scanning Imaging Absorption Spectrometer for Atmospheric Chartography limb scattering measurements. Journal of Geophysical Research, 2006, 111, .	3.3	70
47	Global modeling of biogenic bromocarbons. Journal of Geophysical Research, 2006, 111, .	3.3	138
48	20th century trends and budget implications of chloroform and related tri-and dihalomethanes inferred from firn air. Atmospheric Chemistry and Physics, 2006, 6, 2847-2863.	1.9	43
49	Estimating the contribution of bromoform to stratospheric bromine and its relation to dehydration in the tropical tropopause layer. Atmospheric Chemistry and Physics, 2006, 6, 4755-4761.	1.9	57
50	Clobal Modelling of the Atmospheric Methyl Bromide Budget. Journal of Atmospheric Chemistry, 2006, 54, 133-159.	1.4	49
52	Oceanic distributions and emissions of short-lived halocarbons. Global Biogeochemical Cycles, 2007, 21, .	1.9	173
53	Bromoform and dibromomethane above the Mauritanian upwelling: Atmospheric distributions and oceanic emissions. Journal of Geophysical Research, 2007, 112, .	3.3	55
54	A Lagrangian perspective of the tropopause and the ventilation of the lowermost stratosphere. Journal of Geophysical Research, 2007, 112, .	3.3	76
55	An estimation of the global emission of methyl bromide from rapeseed (Brassica napus) from 1961 to 2003. Atmospheric Environment, 2008, 42, 337-345.	1.9	8

#	Article	IF	CITATIONS
56	Bromoform and dibromomethane measurements in the seacoast region of New Hampshire, 2002–2004. Journal of Geophysical Research, 2008, 113, .	3.3	56
57	Ocean fertilization: a potential means of geoengineering?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3919-3945.	1.6	138
58	Contribution of very short-lived organic substances to stratospheric chlorine and bromine in the tropics – a case study. Atmospheric Chemistry and Physics, 2008, 8, 7325-7334.	1.9	87
59	Consistent simulation of bromine chemistry from the marine boundary layer to the stratosphere – Part 2: Bromocarbons. Atmospheric Chemistry and Physics, 2008, 8, 5919-5939.	1.9	49
60	Relationships of surface bromoform concentrations with mixed layer depth and salinity in the tropical oceans. Global Biogeochemical Cycles, 2009, 23, .	1.9	32
61	The contribution of anthropogenic bromine emissions to past stratospheric ozone trends: a modelling study. Atmospheric Chemistry and Physics, 2009, 9, 2863-2871.	1.9	112
62	Quantifying transport into the lowermost stratosphere using simultaneous in-situ measurements of SF ₆ and CO ₂ . Atmospheric Chemistry and Physics, 2009, 9, 5905-5919.	1.9	94
63	Contrasting the surface ocean distribution of bromoform and methyl iodide; implications for boundary layer physics, chemistry and climate. IOP Conference Series: Earth and Environmental Science, 2010, 13, 012004.	0.2	Ο
64	Vertical transport rates and concentrations of OH and Cl radicals in the Tropical Tropopause Layer from observations of CO ₂ and halocarbons: implications for distributions of long- and short-lived chemical species. Atmospheric Chemistry and Physics, 2010, 10, 6669-6684.	1.9	19
65	Finding the missing stratospheric Br _y : a global modeling study of CHBr ₃ and CH ₂ Br ₂ . Atmospheric Chemistry and Physics. 2010. 10. 2269-2286.	1.9	147
66	Bromoform and dibromomethane in the tropics: a 3-D model study of chemistry and transport. Atmospheric Chemistry and Physics, 2010, 10, 719-735.	1.9	112
67	Planning, implementation, and first results of the Tropical Composition, Cloud and Climate Coupling Experiment (TC4). Journal of Geophysical Research, 2010, 115, .	3.3	120
68	Isomerization as a Key Path to Molecular Products in the Gas-Phase Decomposition of Halons. Journal of Physical Chemistry Letters, 2010, 1, 3090-3095.	2.1	23
69	Multireference Configuration Interaction Study of Bromocarbenes. Journal of Physical Chemistry A, 2011, 115, 1243-1249.	1.1	16
70	CHBr ₃ , CH ₂ Br ₂ , and CHClBr ₂ in U.S. coastal waters during the Gulf of Mexico and East Coast Carbon cruise. Journal of Geophysical Research, 2011, 116, .	3.3	36
71	Sensitivity of stratospheric Br _y to uncertainties in very short lived substance emissions and atmospheric transport. Atmospheric Chemistry and Physics, 2011, 11, 1379-1392.	1.9	27
72	Impact of deep convection and dehydration on bromine loading in the upper troposphere and lower stratosphere. Atmospheric Chemistry and Physics, 2011, 11, 2671-2687.	1.9	52
73	Analysis of reactive bromine production and ozone depletion in the Arctic boundary layer using 3-D simulations with GEM-AQ: inference from synoptic-scale patterns. Atmospheric Chemistry and Physics, 2011, 11, 3949-3979.	1.9	75

#	Article	IF	Citations
74	Spectroscopic and computational studies of matrix-isolated iso-CHBr3: Structure, properties, and photochemistry of iso-bromoform. Journal of Chemical Physics, 2011, 135, 124503.	1.2	24
75	Development of a Simplified, Cost Effective GC-ECD Methodology for the Sensitive Detection of Bromoform in the Troposphere. Sensors, 2012, 12, 13583-13597.	2.1	4
76	Emission and transport of bromocarbons: from the West Pacific ocean into the stratosphere. Atmospheric Chemistry and Physics, 2012, 12, 10633-10648.	1.9	64
77	Bromine and iodine chemistry in a global chemistry-climate model: description and evaluation of very short-lived oceanic sources. Atmospheric Chemistry and Physics, 2012, 12, 1423-1447.	1.9	193
78	Spectroscopic and computational studies of matrix-isolated iso-CXBr3 (X=F, Cl, Br): Structure, properties, and photochemistry of substituted iso-tribromomethanes. Journal of Molecular Structure, 2012, 1025, 61-68.	1.8	6
79	Contribution of very short-lived substances to stratospheric bromine loading: uncertainties and constraints. Atmospheric Chemistry and Physics, 2013, 13, 1203-1219.	1.9	50
80	Convective transport of very short lived bromocarbons to the stratosphere. Atmospheric Chemistry and Physics, 2014, 14, 5781-5792.	1.9	59
81	Estimates of tropical bromoform emissions using an inversion method. Atmospheric Chemistry and Physics, 2014, 14, 979-994.	1.9	21
82	Simulating the impact of emissions of brominated very short lived substances on past stratospheric ozone trends. Geophysical Research Letters, 2015, 42, 2449-2456.	1.5	30
83	Tropospheric Halogen Chemistry: Sources, Cycling, and Impacts. Chemical Reviews, 2015, 115, 4035-4062.	23.0	344
84	Sensitivity of simulated convectionâ€driven stratosphereâ€troposphere exchange in WRFâ€Chem to the choice of physical and chemical parameterization. Earth and Space Science, 2017, 4, 454-471.	1.1	13
85	Computational study on the mechanisms and reaction pathways of the brominated alkyl radical (CHBr) Tj ETQq1	1 0,7843 1.1	14 ₀ gBT /Ove
86	Probing the subtropical lowermost stratosphere and the tropical upper troposphere and tropopause layer for inorganic bromine. Atmospheric Chemistry and Physics, 2017, 17, 1161-1186.	1.9	25
87	Delivery of halogenated very short-lived substances from the west Indian Ocean to the stratosphere during the Asian summer monsoon. Atmospheric Chemistry and Physics, 2017, 17, 6723-6741.	1.9	29
88	Importance of seasonally resolved oceanic emissions for bromoform delivery from the tropical Indian Ocean and west Pacific to the stratosphere. Atmospheric Chemistry and Physics, 2018, 18, 11973-11990.	1.9	13
89	Stratospheric Injection of Brominated Very Short‣ived Substances: Aircraft Observations in the Western Pacific and Representation in Global Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5690-5719.	1.2	36
90	Transport Variability of Very Short Lived Substances From the West Indian Ocean to the Stratosphere. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5720-5738.	1.2	6
91	How marine emissions of bromoform impact the remote atmosphere. Atmospheric Chemistry and Physics, 2019, 19, 11089-11103.	1.9	9

4	#	Article	IF	CITATIONS
ç	92	Atmospheric Chemistry of Organic Bromine and lodine Compounds. Handbook of Environmental Chemistry, 2003, , 253-299.	0.2	4
ç	94	The Impact of Halogen Chemistry on the Oxidation Capacity of the Troposphere. , 2002, , 67-75.		1
Ç	95	Reactive Halogen Species in the Mid-Latitude Troposphere — Recent Discoveries. , 2000, , 229-244.		6
ç	96	Seasonal impact of biogenic very short-lived bromocarbons on lowermost stratospheric ozone between 60ð N and 60° S during the 21stÂcentury. Atmospheric Chemistry and Physics, 2020, 20, 80	8 3 -8102.	11
1	103	Ocean-Atmosphere Exchange and Earth-System Biogeochemistry. , 2003, , 107-129.		1
1	110	Composition and Chemistry 2005 265-442		0