

Curriculum Vitae



Personal info.

First name(s) **Konstantinos (Costas)**
Surname **Varotsos**
Address Deanship of the School of Science, University Campus, Ilissia (Zografou) 157 84, Athens GR
Telephone, E-mail (s) +30 210 7276838; covar@phys.uoa.gr, covarots@yahoo.com
Nationality, Gender Greek, Male

Work experience

Dates 1985
Position held **Visiting Research Assistant** Clarendon Laboratory Department of Atmospheric Physics, Oxford University, UK.
Main activities Research on Atmospheric Physics and Climate Change
Employer **Clarendon Laboratory Department of Atmospheric Physics, Oxford University, UK.**
Institution University

Dates 1986-88
Position held **Assistant. Professor**
Main activities Teaching on Atmospheric Physics and Climate Change
Employer **Hellenic Naval Academy**
Institution Academy

Dates 1989-98
Position held **Assistant Professor in Atmospheric Physics**
Main activities Research and Teaching on Atmospheric Physics and Climate Change
Employer **Physics Dept. of the National and Kapodistrian University of Athens.**
Institution University

Dates 1993-94, 1995-96, 1998-99
Position held **Visiting Professor**
Main activities Research and Teaching in ARW and ASI
Employer **University of Dundee, UK**
Institutions University

Dates 1989-today
Position held **Director of the Laboratory of the Atmospheric Physics**
Main activities Research and Training on Atmospheric Physics and Climate Change
Employer **Physics Dept. of the National and Kapodistrian University of Athens**
Institution University

Dates 1999-2008
Position held **Associate Professor in Atmospheric Physics**
Main activities **Res & Teach on Atmos Phys & Clim Change; Coord Lab Rem Sens Observ:**
Employer Physics Dept. of the **National and Kapodistrian University of Athens**
Institution University

Dates 2005
Position held **Visiting Professor**
Main activities Research on Atmospheric Physics and Climate Change
Employer **University of Maryland, Dept. of Atmospheric and Oceanic Science, USA.**
Institution University

Dates 2008
Position held **Full Professor in Atmospheric Physics**
Main activities Research and Teaching on Atmospheric Physics and Climate Change
Coordinator of the Laboratory of Balloon Ascents
Employer Laboratory of Meteorology of the Physics Dept. of the **National and Kapodistrian University of Athens.**
Institution University

Dates 2011-2013
Main activities **Head of the Section of Environmental Physics and Meteorology of the National and Kapodistrian University of Athens. Coordinator of the Laboratory of Climate Dynamics Research**
Employer Dept. of Physics of the **National and Kapodistrian University of Athens**
Institution University

Dates 2014 -today
Main activities **Dean of the School of Science of the National and Kapodistrian University of Athens**
Employer **National and Kapodistrian University of Athens (University of Athens)**
Institution University

Dates 2016 -2019
Main activities **Visiting Professor (Honorary)**
Employer **Institute of Remote Sensing and Digital Earth**
Institution **Chinese Academy of Sciences**

Education

Dates 1980
Qualification awarded **B.Sc. in Physics**
Principal subjects Physics / Physics, Chemistry and Mathematics
Organisation **National and Kapodistrian University of Athens**

Dates 1984
Qualification awarded **PhD in Atmospheric Physics**
Principal subjects Atmospheric Physics and Chemistry/ Applied Atmospheric Physics and Chemistry
Organisation **Aristotle University of Thessaloniki**

Personal skills & competences See please the Additional Information just below

1. In Brief

Professor Varotsos Costas is a Full Professor in Atmospheric Physics at the Dept. of Environmental Physics and Meteorology of the Faculty of Physics and **Dean of the School of Science** of the National and Kapodistrian University of Athens (UoA). Since 1989 he teaches Atmospheric and Environmental Physics and Chemistry, which are also the main topics of his research interests (e.g., Remote Sensing, Climate Dynamics, Atmospheric Physics & Chemistry, Environmental Change, Non-linear Processes). He has established **four international research Laboratories in the Department of Environmental Physics of UoA**. He has published **11 Books-monographs of SPRINGER**, more than **270 research papers** and contributed with specific chapters to 6 more international books in the fields of Remote Sensing, Atmospheric Physics & Chemistry, and Environmental Change. Also, he has published 5 university books in Greek in the field of Atmospheric Physics and Chemistry.

He is Honorary Professor of the Russian Academy of Natural Sciences, Fellow (elected) of the Royal Meteorological Society (Oxford, UK) and full Member (elected) of the European Academy of Natural Sciences (Hanover, Germany). He is a member or complimentary member of several scientific societies including the American Meteorological Society, the American Geophysical Union and the European Geophysical Union.

He has **coordinated or participated in more than 50 large international research competitive projects**, funded by International Organizations (e.g. European Commission, NATO, WMO).

He has been appointed as **Specialty Chief Editor of "Frontiers in Environmental Science" of the NATURE Publishing Group (since 2013)**, **Editor of the "International Journal of Remote Sensing" of T&F (since 2006)**, **Editor of the "Remote Sensing Letters" of T&F (since 2013)**, **Editor of "The Scientific World Journal" of Hindawi Publ. Co. (since 2013)**, **Editor of the "International Journal of Environmental Research and Public Health" - Section Environmental Engineering and Public Health of MDPI (since 2017)**, **Editor of the "Big Earth Data", sister journal of "Int J Dig Earth" (Chin. Acad. Sci.) (T&F) (since 2017)**, **Adviser of the "Environmental Science and Pollution Research" (2007-2009)**, **Guest Editor of a number of Journals and member of the Editorial board in several International Journals indexed in Web of Science**. He is also a reviewer of various Journals, EU, UN, US Scientific Proposals and Reports.

His papers have received **more than 7,000 citations** from other scientists, with **H-index = 62** in **Google Scholar** and **H-index=54** in the **Web of Science, Thomson-ISI**.

In particular, his contribution to the understanding of the Antarctic ozone hole split in 2002 **has been reported as highlight by the United Nations Environmental Programme (UNEP)** (<http://www.unep.ch/ozone/pdf/the-southern-hemisphere-ozone-hole-split-2002.pdf>) and by Thomson ISI as **"Hot Paper"** (<http://www.esi-topics.com/nhp/2006/march-06-CostasVarotsos.html>) **in the field of Ecology / Environment**.

The above-mentioned work has been announced by **Press Release of Thomson Scientific** and has also been cited by the *Polar Icebreakers in a Changing World: An Assessment of U.S. Needs* (2006), National Research Council of the National Academies, Washington DC (<http://books.nap.edu/openbook/0309103215/html/R1.html>).

Additionally, his contribution to the exploration of the scaling dynamics in global atmospheric temperature and ozone has been identified by Thomson-ISI (<http://archive.sciencewatch.com/dr/erf/2011/11augerf/11augerfVaro/>) (August 1, 2011) as **"Emerging Research Fronts Paper"** in the field of **Geosciences**

He has been awarded the **gold A.S. Popov medal of the Russian A.S. Popov Society**, the **RADI Award of Chinese Academy of Sciences** and the **MOST/ESA Award**

More details are given in:

<http://www.researcherid.com/AuthorizeWorkspace.action>

<http://orcid.org/0000-0001-7215-3610>

https://www.researchgate.net/profile/Costas_Varotsos/citations?sorting=citationCount

<http://scholar.google.com/citations?user=hiPffWoAAAAJ&hl=en>

2. In Detail

Professor Varotsos Costas has established four international experimental research activities in the Department of the Environmental Physics and Meteorology of the Faculty of Physics of the National and Kapodistrian University of Athens and supervises the corresponding research groups, notably:

- **Laboratory of Middle and Upper Atmosphere** (The leading scientist is *Director*).
- **Laboratory of Remote Sensing Observations**: e.g. columnar concentrations of various atmospheric constituents, operating under the auspices of the World Meteorological Organisation (*Co-ordinator*).
- **Laboratory of Balloon Ascents** for observations of the vertical distribution of various atmospheric species content and meteorological parameters, operating under the auspices of the World Meteorological Organisation (The leading scientist is *Co-ordinator*).
- **Laboratory of Climate Dynamics Research** (The leading scientist is *Coordinator*).

He has published **more than 270 research papers and 11 books - monographs** (published by **SPRINGER** and furthermore he has contributed **with specific chapters to 6 more books** as described in paragraph 2) in the fields of Remote Sensing, Atmospheric Physics & Chemistry, and Environmental Change.

He is / has been a member or fellow of several scientific societies including the American Meteorological Society, the Royal Meteorological Society, the American Geophysical Union, several scientific societies in Greece and abroad. He has coordinated or participated in **more than 50 large international research competitive projects**, funded by International Organizations (e.g. European Commission, NATO, WMO). He has been appointed **Editor of the "International Journal of Remote Sensing"** (since January, 2006), **Editor of the Remote Sensing Letters (since 2010)**, **Advisor of the "Environmental Science and Pollution Research"** (2007-2009), **Editor of "The Scientific World Journal"** (since 2013), **Editor of the "International Journal of Environmental Research and Public Health" - Section Environmental Engineering and Public Health of MDPI (since 2017)**, **Editor of the "Big Earth Data", sister journal of "Int J Dig Earth" (Chin. Acad. Sci.) (T&F) (since 2017)**, **Guest Editor** of a number of Journals with peer-reviewing system and **member of the Editorial board** in a few International Journals (e.g. Current Chemical Research, Atmospheric Pollution Research). He has been a reviewer for several international journals, including the Journal of Geophysical Research, Geophysical Research Letters, Atmospheric Environment, and several other scientific journals. He also served as reviewer of various EU, UN and US Scientific Proposals and Reports.

His papers and books have received more than 7,000 and 2,500 citations, respectively from other scientists. His contribution to the understanding of the Antarctic ozone hole split in 2002 has been identified by Thomson-ISI as **one of the most cited** (<http://www.esi-topics.com/nhp/2006/march-06-CostasVarotsos.html>) **recent papers in the field of Environment/Ecology**. His contribution to the exploration of the **scaling dynamics in global atmospheric ozone and temperature** has been identified by Thomson-ISI as **one of the most cited recent papers in the field of Geosciences** (Thomson Reuters ScienceWatch® website on Monday, August 1, 2011, at the following link: <http://www.sciencewatch.com/>).

He has been **invited from more than 50 International Conferences, Workshops and European Conferences to give talks** on the disciplines of his research activity

In the last 15 years, he has participated in 18 competitive Large Research Projects funded by International and European Organizations (i.e., UN, EU, NATO, WMO), e.g.:

- Model for multi-pollutant impact and assessment of threshold levels for cultural heritage. Fifth Framework Programme, City of Tomorrow and Cultural Heritage within the Energy, 2001-2004.
- UN ECE ICP (Convention on Long-Range Transboundary Air Pollution) Materials (Trend Exposure) International co-operative Programme on Effects on Materials 2005-2018.
- ESA MOST China Dragon Cooperation: Non-linear Dynamics of the Remotely Sensed Atmospheric Data and Modelling; Implications to Climate & Earth System Science; Case studies for Athens (Greece) and Beijing (China), Project Id.10529, (2013-2016).

2.1. Research Publications

His research publications could be categorized as follows:

Number of Papers

<i>In refereed Journals (reported by SCI-Web of Science)</i>	234
<i>In referred Proceedings of Conferences</i>	202

Number of other Publications

<i>Review Articles, Editorials, Commentaries, Features (Web of Science)</i>	20
<i>Papers in refereed Journals (not reported by SCI)</i>	32
<i>Papers in refereed Russian Journals</i>	26
<i>Abstracts in Conferences</i>	189
<i>Reports, etc</i>	92

His H-index in Scopus is 55, in Thomson-ISI (Web of Science) is 54, and in Google Scholar H-index = 65

2.2. Review Articles, Editorials, Commentaries

1. Kondratyev K.Y. and Varotsos C.A.: **Global total ozone dynamics. Impact on surface solar ultraviolet radiation variability and ecosystems. Part I: Global ozone dynamics and environmental safety.** ESPR - Environ. Sci. & Pollut. Res., 3, No. 3, 153-157, 1996.
2. Kondratyev K.Y. and Varotsos C.A.: **Global total ozone dynamics, its impact on surface solar ultraviolet radiation variability and ecosystems. Part II: Dynamics of Atmospheric Chemical Composition: The Role of Remote Sensing.** ESPR - Environ. Sci. & Pollut. Res., 3, No. 4, 205-209, 1996.
3. Kondratyev K.Y. and Varotsos C.: **A Review on Greenhouse Effect and Ozone Dynamics over Greece.** NATO ASI Series, Vol. I, 53. Atmospheric Ozone Dynamics Observations in the Mediterranean Region. Springer-Verlag Berlin Heidelberg, 175-228, 1997.

4. Kondratyev K.Y. and Varotsos C.: **Global Tropospheric Ozone Dynamics, Part I: Tropospheric Ozone Precursors**. *ESPR - Environ. Sci. & Pollut. Res*, 8, No.1, 57-62, 2001.
5. Kondratyev K.Y. and Varotsos C.: **Global Tropospheric Ozone Dynamics, Part II: Numerical Modelling of Tropospheric Ozone Variability**. *ESPR - Environ. Sci. & Pollut. Res*, 8, No.2, 113-120, 2001.
6. Kondratyev K. Y. and Varotsos C.: **Remote sensing and global tropospheric ozone observed dynamics**. *Int. J. of Remote Sensing*, 23, N.1, 159-178, 2002.
7. Varotsos C.: **The Extraordinary Events of the Major, Sudden Stratospheric Warming, the Diminutive Antarctic Ozone Hole, and its Split in 2002**. *Environ Sci & Pollut Res*, 11 No.6, 405-411, 2004.
8. Varotsos C.: **News on the Antarctic Ozone Hole**, *ESPR - Environ. Sci. & Pollut. Res.*, 12 (6), 322-322, 2005.
9. Cracknell A.P. and Varotsos C.A.: **Fifty years after the first artificial satellite: from Sputnik 1 to ENVISAT**. *Int. J. of Remote Sensing*, 28 Issue: 10, 2071-2072, 2007.
10. Cracknell A.P. and Varotsos C.A.: **The Antarctic 2006 ozone hole**. *Int. J. Remote Sens.* 28: 1-2, 2007.
11. Cracknell A.P. and Varotsos C.A.: **The IPCC Fourth Assessment Report and the fiftieth anniversary of Sputnik**. *Environ Sci & Pollut Res.*, 14 Issue: 6, 384-387, 2007.
12. Varotsos C. A.: **The 20th anniversary of the Montreal Protocol and the unexplainable 60% of ozone loss**. *Environ Sci & Pollut Res*, 15, Issue: 6, 448-449, 2008.
13. Cracknell A.P. and Varotsos C.A.: **Editorial comment - the Montreal Protocol** *International Journal of Remote Sensing* 29 Issue: 19, 5455-5459, 2008.
14. Varotsos C., Tzani C. and Cracknell A.P.: **The enhanced deterioration of the cultural heritage monuments due to air pollution**. *ESPR - Environ. Sci. & Pollut. Res*, 16 Issue: 5, 590-592, 2009.
15. Cracknell A.P. and Varotsos C.A.: **The contribution of remote sensing to the implementation of the Montreal Protocol and the monitoring of its success**. *Int. J. Remote Sens.*, 30: 15-16, 3853-3873, 2009.
16. Tzani C.; Theodorakopoulou, K. Theodorakopoulos, P. and Varotsos C.: **Tsunamis among the natural disasters**. *Fresenius Environmental Bulletin*, 19 (8), 1385-1403, 2010.
17. Cracknell A.P. and Varotsos C.A.: **New aspects of global climate-dynamics research and remote sensing**. *International Journal of Remote Sensing* 32, Issue: 3, 579-600, 2011.
18. Varotsos C., Melnikova I. Efstathiou M. And Tzani C.: **On the 1/f noise in the UV solar spectral irradiance** *Theoretical and Applied Climatology* 114, 3-4, 725-727, 2013.
19. Cracknell A.P. and Varotsos C.A.: **Satellite systems for atmospheric ozone observations**. *International Journal of Remote Sensing* 35, Issue: 15, 5566-5597, 2014.
20. Cracknell A.P. and Varotsos C.A.: **Remote sensing of atmospheric radiation and dynamics**, *International Journal of Remote Sensing* 35, Issue: 15, 5563-5565, 2014.

2.3. Invited Papers in International Journals

1. Varotsos C.: **Climate Change problems and carbon Dioxide Emissions: Expecting 'Rio+10'**. Editorial in *ESPR - Environ Sci & Pollut Res* 9 (2), 97-98, 2002. ("Feature").
2. Varotsos C.: **Why did a "no-ozone-hole" episode occur in Antarctica?** *EOS Transactions*, 84(19), 183, 2003 ("Section News, Atmospheric Sciences"). (EOS Transactions is the high peer-review and official journal of the American Geophysical Union).
3. Varotsos C.: **Major sudden warming and strange twist of the ozone hole over Antarctica in 2002**. *Europhysics News* 34/2, 66-67, 2003 ("Feature").
4. Varotsos C.: **On the unprecedented event of the Antarctic ozone hole split in 2002**. *World Resource Review* 15:2, 176-184, 2003.
5. Varotsos C.: **News on the Antarctic Ozone Hole**. *ESPR - Environ. Sci. & Pollut. Res* 12 (6): 322-322 NOV 2005 (Commentary).

Note: The invitations to write the above-mentioned articles 2, 3, 4, 5 reached him after the publication of the first article of the next paragraph. The article 5 was recently accommodated in EU News Alert (DG Environment).

2.4. Distinctive contributions to the Atmospheric Science

His publications that triggered a large interest of the international community are the following:

1. Varotsos C.: **The southern hemisphere ozone hole split in 2002** *ENVIRONMENTAL SCIENCE AND POLLUTION RES* 9 (6): 375-376 Nov. 2002.

It was thought, prior to September 2002 that a major stratospheric sudden warming could happen only in the Northern Hemisphere. This paper suggested that both the smaller-sized ozone hole over Antarctica and its splitting into two holes took place due to an unprecedented major stratospheric sudden warming caused by very strong planetary waves propagated in the Southern Hemisphere.

This paper was included (after invitation-permission) as the first highlight in **Highlights of United Nations**

Environmental Programme: <http://www.unep.ch/ozone/pdf/the-southern-hemisphere-ozone-hole-split-2002.pdf>.

2. Varotsos C.: **What is the lesson from the unprecedented event over Antarctica in 2002?** ENVIRONMENTAL SCIENCE AND POLLUTION RES 10 (2): 80-81 2003

The analysis performed in this paper showed that the ozone hole split in 2002 occurred not only in the stratosphere but that it has also been extended into the lower altitudes (upper troposphere)

3. Varotsos C.: **The extraordinary events of the major, sudden stratospheric warming, the diminutive Antarctic ozone hole, and its split in 2002** ENVIRON SCIENCE & POLLUT RES 11 (6): 405-411, 2004.

This follow-up paper on this subject has been recently identified by Thomson-ISI to be one of the most cited recent papers in the field of Environment/Ecology (see his commentary at: <http://esi-topics.com/> and <http://esi-topics.com/nhp/2006/march-06-CostasVarotsos.html>).

4. Varotsos C.: **Power-law correlations in column ozone over Antarctica.** International Journal of Remote Sensing, 26, pp. 3333–3342, 2005.

This paper shows that processes based on the nonlinear nature of the atmospheric dynamics could probably address the question “What caused the southern hemisphere to exhibit very strong planetary waves in 2002?” The evidence is based on the new finding that the fluctuations of the total ozone content over Antarctica exhibit long-range correlations

5. Varotsos C., Ondov J., Efstathiou M.: **Scaling properties of air pollution in Athens, Greece and Baltimore, Maryland.** Atmos. Environ. 39 (22): 4041-4047, 2005.

This paper suggests that air pollution exhibits scaling effect. More precisely, persistent long-range power-law correlations in the fluctuations of daytime and nighttime ozone and nitrogen oxide concentrations with lag times ranging from 4 days to 5 years were detected with more intense correlations (“stronger memory”) during daytime. In addition, persistent long-range power-law correlations were also detected for PM10 and PM2.5 fluctuations in Athens and East Baltimore.

6. **“Weather” (journal of the Royal Meteorological Society) commented on the papers:**

- Cracknell A.P., Varotsos C.A.: **New aspects of global climate-dynamics research and remote sensing.** International Journal of Remote Sensing, Vol. 32, 579-600, 2011.

This paper describes how new research tools in physics may be used to achieve a better understanding of the variability of the climate system. (“New tools for global climate-dynamics research”, Weather – October 2011, Vol. 66, No. 10, doi:10.1002/wea.712).

- Varotsos, C.A., Tzanis, C.: **A new tool for the study of the ozone hole dynamics over Antarctica** Atmospheric Environment, 47, 428-434, 2012.

This paper has tackled what is described as the truism that time poses one of the greatest challenges to climate evolution. It suggests that rather than analyzing various climate parameters in the conventional time domain, a new not-continuous time domain termed natural time should be used. Then novel dynamical features hidden behind time series can emerge and impending major events in climate system can be predicted. (“A new time domain for prediction of impending major climate events”, Weather – February 2012, Vol. 67, No. 2, doi:10.1002/wea.1848).

In addition, among his other publications, the following papers have mostly attracted the interest of the international community:

1. Von der Gathen P., et al: **Observational evidence for chemical ozone depletion over the Arctic in winter 1991-92.** Nature, Vol. 375, 131-134, 1995.
2. Chandra S., Varotsos C. and Flynn L.E.: **The mid-latitude total ozone trends in the northern hemisphere.** Geophysical Research Letters, Vol. 23, No. 5, 555-558, 1996.
3. M. Rex, P., et al: **In-situ measurements of stratospheric ozone depletion rates in the Arctic Winter 1991/92: A Lagrangian Approach.** J. Geophys. Res., V 103, D5, 5843-5853, 1998.
4. Ziemke J.R., Chandra S., Herman J. and Varotsos C.: **Erythemally weighted UV trends over northern latitudes derived from Nimbus 7 TOMS measurements.** J. Geophys. Res., 105, D6, 7373-7382, 2000.
5. Schulz A., et al: **Match observations in the Arctic winter 1996/97: High stratospheric ozone loss rates correlate with low temperatures deep inside the polar vortex.** Geophys. Res. Let., Vol. 27, No 02, p.205-208, 2000.
6. Schulz A., et al: **Arctic ozone loss in threshold conditions: Match observations in 97/98 and 98/99.** J. Geophys. Res. 106, D 7495-7503, 2001.
7. Varotsos C., Kondratyev K.Y. and Efstathiou M.: **On the seasonal variation of the surface ozone in Athens, Greece.** Atmospheric Environment, Vol. 35, 315-320, 2001.
8. Varotsos C., Cartalis C., Vlamakis A., Tzanis C. and Keramitsoglou I.: **The long-term coupling between column ozone and tropopause properties.** J Climate 17 (19): 3843-3854, 2004.
9. Varotsos C.: **Atmospheric pollution and remote sensing: implications for the Southern hemisphere ozone hole split in 2002 and the Northern mid-latitude ozone trend.** Adv. Space Res. 33 249-253 2004.

10. Varotsos C. and Kirk-Davidoff D.: **Long-memory processes in ozone and temperature variations at the region 60 degrees S-60 degrees N.** Atmospheric Chemistry and Physics, 6 Pages: 4093-4100, 2006.
11. Varotsos, C.; Ondov, J.; Tzanis, C.; et al. **An observational study of the atmospheric ultra-fine particle dynamics (vol 59, pg 312, 2012)**, ATMOSPHERIC ENVIRONMENT Volume: 94: 817-817 2014.
12. Varotsos, C. A.; Lovejoy, S.; Sarlis, N. V.; et al. **On the scaling of the solar incident flux**, ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 15 Issue: 13 Pages: 7301-7306 Published: 2015.
13. Varotsos, C. A.; Efstathiou, M. N.; Cracknell, A. P. **Sharp rise in hurricane and cyclone count during the last century**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 119 Issue: 3-4.; 629-638, 2015.
14. Varotsos, Costas A.; Efstathiou, Maria N. **Symmetric scaling properties in global surface air temperature anomalies**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 121 Issue: 3-4, 767-773, 2015.
15. Varotsos, C A.; Tzanis, C G.; Sarlis, N V. **On the progress of the 2015-2016 El Nino event**, ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 16 Issue: 4 Pages: 2007-2011, 2016

2.5. Participation in Large Research Projects

An indicative list of major projects, illustrating the thematic research topics, is as follows:

1. **Tropospheric Ozone Research (TOR) - EUROTRAC I** (PI), 1989-1995
2. **Vertical ozone profile over Athens.** (Project leader) Athens, Greece - Jülich, Germany 1990-1992
3. **Stratosphere-Troposphere Ozone Exchange (TOASTE I).** (Member) EU, 1990-1992
4. **Intercomparison of Dobson ozone spectrophotometers.** (Member) World Meteorological Organisation, Arosa, Switzerland 7-8/1990
5. **Global Atmosphere Watch (World Ozone Data Centre)** (Member) Canada 1990-2000
6. **Remote Sensing and Global Climate Change.** (Member), NATO, 1991-1995
7. **European Arctic Stratospheric Ozone Experiment (EASOE).** (Member) EU, 1991-1992
8. **Remote Sensing and Global Climate Change.** (Member), NATO, Dundee, Scotland 1991-1995
9. **CFC's and ozone depletion.** (Project leader) EU, Athens, 1992-1994
10. **Second European Stratospheric Arctic and Mid-latitude Experiment (SESAME).** (PI), EU, 1993-95
11. **Transport of O₃ and Stratosphere-Troposphere exchange at the south Europe** (PI), Greece - Italy 1994-95.
12. **Special Evaluation of the vertical ozone distribution.** (PI) Greece (UoA)-Germany (AWI) Bilateral Research Programme, 1994-1995.
13. **Remote Sensing, Image Processing and Applications.** (Member), EU, 1993-1995
14. **Surface ultraviolet radiation and ozone content as indicators of environmental quality: case studies of Athens, Hamburg, Dundee and St. Petersburg.** (Project leader), INTAS, EU, 1995-1998.
15. **OSDOC (Quality Control and Homogeneous Ozone Sonde Database),** (Member) 1996-1999
16. **STAAARTE** (Member) Athens 1997
17. **Radiation Field in the Troposphere (RAFT).** EU (Project leader) Athens 1997-1998
18. **WMO Int. Intercomparison of the Dobson Spectrophotometers.** (Project leader) Greece 1997
19. **MATCH** (PI) EU, 1994-2006.
20. **THESEO-O₃LOSS** (PI), EU, 1997-2000
21. **Tropospheric Ozone Research (TOR-2, EUROTRAC),** (PI) 1998-2002.
22. **EURASER-EUFAR** project (EUropean Fleet for Airborne Research) Infrastructure Cooperation Network of the European Commission HPRI programme under FP5/FP6 (2000-2005)
23. **Bio-dosimeter and biologically-effective solar ultraviolet radiation.** Bilateral Research Programme (Greece-Ukraine), 2001-2003 (Project leader).
24. **Model for multi-pollutant impact and assessment of threshold levels for cultural heritage (MULTI-ASSESS).** Fifth Framework Programme Key Action City of Tomorrow and Cultural Heritage within the Energy, Environment and Sustainable Development 2001-2004 (PI)
25. **Quantitative Understanding of Ozone losses by Bipolar Investigations (QUOBI),** funded by the European Commission as part of the Stratospheric Ozone Loss (SOLO) cluster coordinated by the European Ozone Research Coordinating Unit (EORCU), 2002-2004 (PI)
26. **Validation of International Satellites and Study of Ozone Loss (WINTERSOL)** funded by the European Commission 2002-2004 (PI).
27. **Stratospheric-Climate Links with Emphasis on the Upper Troposphere and Lower Stratosphere (SCOUT-O3).** EU (PI)
28. **ENVISAT/ SCIAMACHY/ SCIAVAL** EU, (PI), 2001-2007
29. **International Polar Year 2007-2008 (Ozone Layer and UVB Radiation) (ORACLE-O3)** (PI).
30. **UN ECE ICP (Convention on Long-Range Transboundary Air Pollution) Materials (Trend Exposure) International co-operative Programme on Effects on Materials, including Historic and Cultural Monuments,** (PI), 2005-2011.

Note: The new findings derived from the SCOUT-O3 Project have been commented on by NATURE in section "News" (NATURE|VOL 435, p6 | 5 MAY 2005 | www.nature.com/nature)

2.6. International scientific positions of responsibility

- **Specialty Chief Editor** of the international journal "Frontiers in Environmental Science" - NATURE Publishing Group (since 2013).
- **Editor** of the "International Journal of Remote Sensing" (Taylor & Francis) (2006 - today).
- **Editor** of the international journal "Remote Sensing Letters" (Taylor & Francis) (2010 - today).
- **Editor** of the "International Journal of Environmental Research and Public Health" - Section Environmental Engineering and Public Health (MDPI) (2017-2020).
- **Editor** of the "The Scientific World Journal" (Hindawi) (2006 - today)
- **Editor** of the "Big Earth Data", sister journal of "Int J Dig Earth" (Chin. Acad. Sci.) (Taylor & Francis) (since 2017)
- **Adviser** of the international journal "Environmental Science and Pollution Research" (2007-2009),
- **Member of the Editorial boards** of several International Journals with peer-reviewing system (Web of Sci.).
- **Guest Editor in 5 Special Issues** of peer-reviewing International Journals indexed in Web of Science.
- **Visiting Research Assistance at the Clarendon Laboratory** Dept. of Atmospheric Physics, Oxford University, UK.
- **Visiting Professor at the University of Dundee**, Dundee, UK
- **Visiting Professor at the University of Maryland**, Dept. of Atmospheric and Oceanic Science, USA.
- **Visiting Professor at the Inst. Remote Sens. & Digital Earth, Chinese Academy of Sciences** (Honorary) China.
- **Convener and co-Convener in International Conferences (e.g. European Geosciences Union Assembly** in 2015: Scale, scaling and uncertainty in the climate, climate & climate models, in the ocean, atmosphere & hydrosphere).
- **Personal invitations for talks-seminars** from more than **40** International Conferences.
- **Coordination or participation in more than 45 large research competitive projects**, funded by UN, EU, NATO, WMO, etc.
- **Member of International Scientific Societies, Groups and Panels** (e.g., IGBP, EGU, AGU, AAAS, RSS, GAW, RMS, MATCH)
- **Organizer of several International Symposia, Conferences, Advanced Study Institutes, Advanced Research Workshops** delivering lectures on the topics of Remote Sensing, Climate Change, Atmospheric Physics & Chemistry and Global Change

2.7. Teaching experience

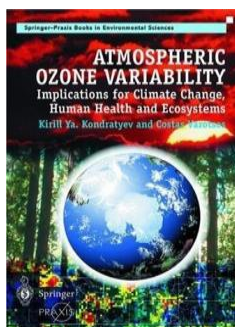
No	Name of the university	Job title	Name of the course taught by the leading scientist	Period of employment
1.	Greek Naval Academy	Professor	<ul style="list-style-type: none"> ● Dynamics of Meteorology ● Selective Chapters in Physics 	1986-1988
2.	University of Athens	Professor	<ul style="list-style-type: none"> ● Physical Climatology 	1989-1993 1996-1998
3.	University of Athens	Professor	<ul style="list-style-type: none"> ● Physical Meteorology 	1989-1998 2008 - today
4.	University of Athens	Professor	<ul style="list-style-type: none"> ● Physics of the Upper Atmosphere 	1989-today
5.	European Association for Environmental. Management & Education Master's Degree	Professor	<ul style="list-style-type: none"> ● The Physics of the Atmospheric Ozone ● Remote Sensing and Climate 	1992-1994
6.	Dundee University UK	Visiting Professor	<ul style="list-style-type: none"> ● Remote Sensing and Global Climate Change 	1993-1994
7.	Dundee University UK	Visiting Professor	<ul style="list-style-type: none"> ● The determination of Geophysical Parameters from Space 	1995-1996
8.	Dundee University UK	Visiting Professor	<ul style="list-style-type: none"> ● Dynamics of Trace Gases, Solar Radiation and the Earth's Radiation Budget 	1998-1999
9.	University of Athens Master's Degree	Professor	<ul style="list-style-type: none"> ● Environmental Chemistry 	1996-1998 2000-2003
10.	University of Athens Master's Degree	Professor	<ul style="list-style-type: none"> ● Physico-Chemistry of the Atmosphere 	1997-2003
11.	University of Athens	Professor	<ul style="list-style-type: none"> ● Introduction to Atmospheric. Physics 	1997-2013

He has also participated in several *Advanced Study Institutes, Seminars* etc. delivering lectures on the topics of Atmospheric Physics, Atmospheric Chemistry & Environmental Physics and Chemistry

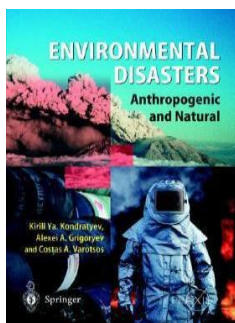
2.8. International Books - Monographs

2.8.1. International Monographs published by SPRINGER

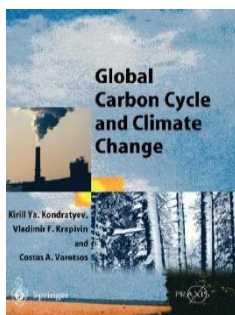
1. Kondratyev, K.Ya. & Varotsos, C.A. (2000). **ATMOSPHERIC OZONE VARIABILITY: IMPLICATIONS FOR CLIMATE CHANGE, HUMAN HEALTH AND ECOSYSTEMS**. London: Springer-Praxis. 624 pages, ISBN: 1-85233 635-8
(7 editions published in 2000 in English and held by 180 WorldCat member libraries worldwide)



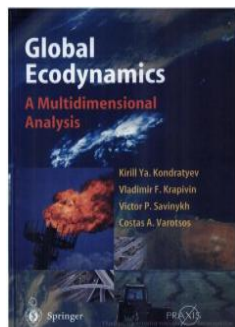
2. Kondratyev, K.Ya., Grigoryev, A.A. & Varotsos, C.A. (2002). **ENVIRONMENTAL DISASTERS: ANTHROPOGENIC AND NATURAL**. Chichester: Springer-Praxis. 528 pages, ISBN: 3-54043-303-1
(8 editions published in 2002 in English and held by 251 WorldCat member libraries worldwide)



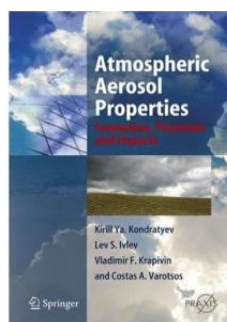
3. Kondratyev, K.Ya., Krapivin, V.F. & Varotsos, C.A. (2003). **GLOBAL CARBON CYCLE AND CLIMATE CHANGE**. Chichester: Springer-Praxis. 392 pages, ISBN: 3-540-00809-8
(10 editions published in 2003 in English and German and held by 273 WorldCat member libraries worldwide)



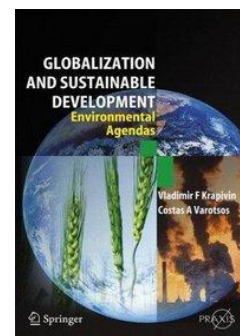
4. Kondratyev, K.Ya., Krapivin, V.F., Savinykh, P. & Varotsos, C.A. (2004). **GLOBAL ECODYNAMICS: A MULTIDIMENSIONAL ANALYSIS**. Chichester: Springer-Praxis. 723 pages, ISBN: 3-540-20476-8
(2 editions published in 2004 in German and English and held by 6 WorldCat member libraries worldwide)



5. Kondratyev, K.Ya., Ivlev, L.S., Krapivin, V.F. & Varotsos, C.A. (2005). **ATMOSPHERIC AEROSOL PROPERTIES: FORMATION PROCESSES, AND IMPACTS**. Chichester: Springer 608 p. ISBN: 3-540-26263-6
(4 editions published in 2006 in English & held by 1 WorldCat member library worldwide)



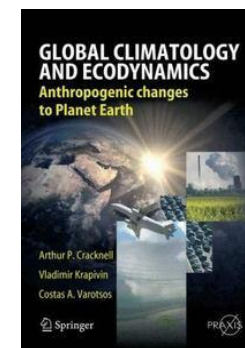
7. Krapivin, V.F. & Varotsos, C.A. (2007). **GLOBALISATION AND SUSTAINABLE DEVELOPMENT: ENVIRONMENTAL AGENDAS**. Chichester: Springer-Praxis. 336p ISBN 978-3540-70661-8
(17 editions published in 2007 in English and held by 126 WorldCat member libraries worldwide)



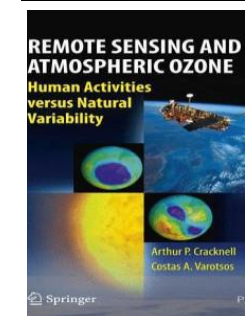
8. Krapivin, V.F. & Varotsos, C.A. (2008). **BIOGEOCHEMICAL CYCLES IN GLOBALIZATION AND SUSTAINABLE DEVELOPMENT**. Chichester: Springer 600 p, ISBN 978-3-540-75439-8
(16 editions published in 2008-2010 in English and held by 94 WorldCat member libraries worldwide)



9. Cracknell, A.P., Krapivin, V.F. & Varotsos, C.A. (2008). **GLOBAL CLIMATOLOGY AND ECODYNAMICS: ANTHROPOGENIC DRIVEN CHANGES TO PLANET EARTH**. Chichester: Springer 566 p ISBN: 978-3-540-78208-7
(16 editions published 2008 - 2009 in English and held by 85 WorldCat member libraries worldwide)



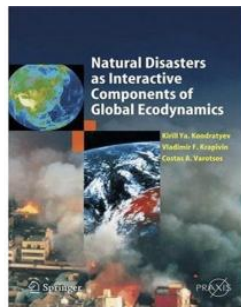
10. Cracknell, A.P. & Varotsos, C.A. (2012). **REMOTE SENSING AND ATMOSPHERIC OZONE: HUMAN ACTIVITIES VS NATURAL VARIABILITY**. Heidelberg: Springer 662P ISBN: 978-3-642-10334-6
(12 editions published in 2012 in English and held by 44 WorldCat member libraries worldwide)



11. Krapivin, V.F., Varotsos, C.A. & Soldatov, V.Yu. (2015). **NEW ECOINFORMATICS TOOLS IN ENVIRONMENTAL SCIENCE**. Berlin: Springer 924 p ISBN: 978-3-319-13977-7
(7 editions published in 2015 in English and held by 21 WorldCat member libraries worldwide)



6. Kondratyev, K.Ya., Krapivin, V.F. & Varotsos, C.A. (2006). **NATURAL DISASTERS AS INTERACTIVE COMPONENTS OF GLOBAL ECODYNAMICS**. Chichester: Springer. 616 p, ISBN: 978-3-540-31344-1 (16 editions published in 2006 in English and held by 184 WorldCat member libraries worldwide)



Note: In addition, two international Books-Monographs are under preparation:

12. GLOBAL ECOINFORMATICS AND ITS APPLICATIONS

13. PREDICTION AND DIAGNOSTICS OF STRESSFULL NATURAL PROCESSES

Note: The above-mentioned books - monographs are available in National Libraries of several countries, like: **Library of Congress/NACO Washington, DC, USA** LC-n97037562, **German National Library** DNB-12207999X, **National Library of France** BNF-14569186, **National Library of the Netherlands** NTA-292020902, **National Library of the Czech Republic** NKC-osa2013795243, **National Library of Poland** NLP-a31872013.

2.8.2. Contributions with chapters to other International Books

1. **REMOTE SENSING AND GLOBAL CLIMATE CHANGE.** Contribution with the Chapter "Atmospheric Ozone Concentration Measurements, by C. Varotsos, edited by R. Vaughan and A.P. Cracknell, NATO ASI Series, I, Global Environmental Change, Vol. 24, 253-268, 1994.
2. **THE DETERMINATION OF GEOPHYSICAL PARAMETERS FROM SPACE.** Contribution with the Chapter "Atmospheric Ozone Concentration: Satellite and ground-based measurements", by C. Varotsos. Institute of Physics Publishing Bristol and Philadelphia, Edited by N.E. Fancey, I. Gardiner and R.A. Vaughan, Vol. 24, 261-282, 1996.
3. **ATMOSPHERIC OZONE DYNAMICS. OBSERVATIONS IN THE MEDITERRANEAN REGION.** by C. Varotsos NATO ASI Series, Global Environmental Change Vol. 53, Springer-Verlag Heidelberg, 1997.
4. **TROPOSPHERIC OZONE RESEARCH. TROPOSPHERIC OZONE IN THE REGIONAL AND SUB-REGIONAL CONTEXT.** Contribution to Chapters: 2, 5 and 8. Edited by Oystein Hov, Vol.6, Published by Springer Verlag, Berlin, Heidelberg and New York, September 1997.
5. **PHYSICAL PROCESSES IN THE COASTAL ZONE: COMPUTER MODELLING AND REMOTE SENSING.** Contribution with the Chapter "Dynamics of Trace Gases, Solar Radiation and the Earth's Radiation Budget", by C. Varotsos / G. Chronopoulos, Published by Taylor and Francis CRC Press. Edited by A.P. Cracknell and E.S. Rowan, ISBN: 0750305630, January 1999.
6. **ENVIRONMENT AND ENERGY:** Contribution with the Chapter 9 in New Millennium Greece, by C. Varotsos, Published by IMCE, Paris France, 2001.

Note: In addition, the following four books have been published in Greek

1. **INTRODUCTION TO THE ATMOSPHERIC PHYSICS,** by C. Varotsos and G. Karras, Published by University of Athens, Athens 1997
2. **PHYSICO-CHEMISTRY OF THE ATMOSPHERE.** Part I : Greenhouse Effect and Climate Change, by K. Ya Kondratyev and C. Varotsos, Published by Kostarakis Athens 1999.
3. **ATMOSPHERE AND AVIATION,** by C. Varotsos, Published by Symmetria, Athens, 2001.
4. **SPECIFIC CHAPTERS IN ATMOSPHERIC PHYSICS AND CHEMISTRY: Applications to the climate system,** by C. Varotsos, Published by Symmetria, Athens, 2011.

2.8.3. Comments from highly-regarded magazines to our research

1. **EOS Transactions** (American Geophysical Union), 84(19): 183, 2003 (Section News, Atmos. Sci.)
2. **Europhysics News** (European Physical Society, EDP Sciences), 34 (2), 66-67 March-April 2003
3. **Nature, News,** 435: 6 (May 5, 2005) (www.nature.com/nature).
4. **Weather: Journal of the Royal Meteorological Society,** 66(10), (Oct. 2011) doi:10.1002/wea.712.
5. **Weather: Journal of the Royal Meteorological Society,** 67(2), (Feb. 2012), doi:10.1002/wea.1848

2.9. Research Publications

2.9.1. Research Papers in refereed Journals reported by SCI - Web of Science

1. Zerefos C., Varotsos C. and Repapis C.: **A note on the intercomparison between monthly mean radiance equivalent and rocketsonde temperatures**, Arch. Meteorol. Geoph. Biocl. A, 32, 129-134, 1983.
2. Lazaridou M. and Varotsos C.: **Comments on the ionic conduction in KBr - KI mixed crystals**, J. Phys. Chem. Solids, 46, 5, 643, 1985.
3. Varotsos C., Lazaridou M., Alexopoulos K. and Varotsos P.: **Point defect entropies and enthalpies in KCl**, Phys. Stat. Sol. (b), 130, K105-107, 1985.
4. Varotsos C. and Lazaridou M.: **Comment on the elastic constants of CaF₂ - SrF₂ mixed crystals**, Phys. Stat. Sol. (b), 129, K95-97, 1985.
5. Varotsos C., Lazaridou M. and Varotsos P.: **Migration and activation defect volumes in CdF₂**, Physical Review B, 32, 4, 2634-2635, 1985.
6. Varotsos C., Lazaridou M., Alexopoulos K. and Varotsos P.: **Comments on "the temperature and pressure dependence of disaccommodation in a Manganese Zinc Ferrite single crystal"**, J. Appl. Phys., 24, 6, 781, 1985.
7. Varotsos P., Alexopoulos K., Varotsos C. and Lazaridou M.: **Interconnection of point defect parameters in BaF₂**, Physica Status Solidi A-Applied Research, 88, K137-K140, 1985.
8. Lazaridou M., Varotsos C., Alexopoulos K. and Varotsos P.: **Point defect parameters of LiF**, J. Phys: C. Solid State Phys., 18, 3891-3895, 1985.
9. Varotsos P., Varotsos C., Hadjicantis V. and Lazaridou M.: **On a plausible explanation of the connection of point defect parameters with the melting point**, J. Phys. Chem. Solids, 47, 1, 79-82, 1986.
10. Varotsos C. and Eftaxias K.: **Connection of activation volume and activation enthalpy with the bulk properties in olivine, LiBr and CsCl**, Solid State Ionics, 20, 291-293, 1986.
11. Varotsos C., Lazaridou M. and Varotsos P.: **On the connection of the formation enthalpy of a Schottky defect in insulators with the Debye temperature**, Radiation Effects, vol 2, 669-673, 1986.
12. Varotsos P., Grammatikakis J., Eftaxias K. and Varotsos C.: **Electrical properties of non-irradiated and X-irradiated LiH and LiD**, Radiation Effects, 3, 599-604, 1986.
13. Varotsos C. and Repapis C.C.: **Seasonal variation of upper stratospheric and lower mesospheric temperature**, Arch. Met. Geoph. Biocl. Ser. B-Theor. App. Phys., 36, 229-238, 1986.
14. Varotsos C.: **Further evidence of the 11-year solar cycle in Stratospheric - lower Mesospheric Ozone and Temperatures**, Theor. Appl. Climatol., 38, 103-106, 1987.
15. Varotsos C.: **Notes on the design and operation of aerospace vehicles**, Astrophysics and Space Science, 134, 205-208, 1987.
16. Varotsos C.: **Periodic variations in Stratospheric and low Mesospheric Zonal Wind in the two Hemispheres**, Theor. Appl. Climatol., 38, 167-173, 1987.
17. Varotsos C.: **Quasi-stationary planetary waves and temperature reference atmosphere**, Meteorol. Atmos. Phys., 37, 297-299, 1987.
18. Varotsos C.: **Temperature trends in the stratosphere and lower mesosphere of the Northern Hemisphere**, Earth, Moon, and Planets, 39, 93-99, 1987.
19. Eftaxias K., Varotsos C. and Hadjicantis V.: **Migration volumes of PbF₂ from recent elastic and expansivity data**, Physical Review B, 37, 16, 9820-9823, 1988.
20. Varotsos C., Hadjicantis V. and Eftaxias K.: **Interconnection of the individual vacancy formation and pinning thermodynamic parameters in KCl**, Solid State Ionics, 26, 11-13, 1988.
21. Lazaridou M. and Varotsos C.: **Defect formation and migration entropies in alkaline earth fluorides**, Physica Status Solidi A-Applied Research, 105, K13, 1988.
22. Hadjicantis V., Varotsos C. and Eftaxias K.: **Comments on the diffusion of Ni and Ge in nickel**, Journal of Physics F: Metal Physics, 18, 1635-1640, 1988.

23. Hadjicontis V., Varotsos C. and Eftaxias K.: **Elastic moduli of BCC V-Ti, Mo-Nb and W-Ta alloys**, Journal of Physics F: Metal Physics, 18, 1133-1136, 1988.
24. Varotsos C.: **The temperature variations in the troposphere, stratosphere, and mesosphere of the Northern Hemisphere, 1965-1981**, Earth, Moon, and Planets, 41, 315-317, 1988.
25. Varotsos C.: **New results on the strato-mesospheric cooling of Northern hemisphere (1969-1978)**, Earth, Moon, and Planets, 41, 191-196, 1988.
26. Eftaxias K., Varotsos C. and Hadjicontis V.: **Cation vacancy migration entropy in alkali halides**, Physica Status Solidi B-Basic Research, 147, 83-88, 1988.
27. Varotsos C., Eftaxias K. and Hadjicontis V.: **Correlation of the diffusion coefficients of various elements diffusing in ferromagnetic and paramagnetic α -Fe**, Phys. Stat. Sol. (a), 107, K109-114, 1988.
28. Varotsos C.: **Ozone and temperature fluctuations in the strato-mesosphere with solar activity**, Astrophysics and Space Science, 146, 339-345, 1988.
29. Eftaxias K., Varotsos C. and Hadjicontis V.: **Correlation of the individual vacancy-formation parameters in NaCl**, Physical Review B, Vol. 38, 1548-1549, 1988.
30. Hadjicontis V., Eftaxias K. and Varotsos C.: **Connection between the Birch equation of state and the Schottky formation volume in NaCl**, J. Phys. Chem. Solids, 50, 11, 1193-1194, 1989.
31. Varotsos C.: **Comment on connections between the 11-year solar cycle, the Q.B.O. and total ozone**, Journal of Atmospheric and Terrestrial Physics, 51, 5, 367-370, 1989.
32. Eftaxias K., Hadjicontis V. and Varotsos C.: **Calculation of diffusion coefficients of Nitrogen in Vanadium**, J. Phys. Chem. Solids, Vol. 52, No. 3, 523-525, 1991.
33. Varotsos C.A. and Deligiorgi D.G.: **Connections between the U.S. National Temperature, the 10.7 cm Solar Flux and the Equatorial QBO**, Theor. and Applied Clim., 43, N3, 159-60, 1991.
34. Varotsos C.A. and Deligiorgi D.G.: **Sea surface temperature and Southern Oscillation signal in the upper Stratosphere- Lower Mesosphere**, International Journal of Climatology, 11, 77-83, 1991.
35. Varotsos C. and Cartalis C.: **Re-evaluation of surface ozone over Athens, Greece, for the period 1901-1940**, Atmospheric Research, 26, 303-310, 1991.
36. Varotsos C. and Cartalis C.: **The role of quasi-stationary planetary waves in the retrieval of concentrations from satellite measurements**, Geophysical Research Letters, Vol. 18, No. 4, 681-684, 1991.
37. Katsambas A., Ch. Antoniou, J. Stratigos, I. Arvanitis, F. Zolota, C. Varotsos, C. Cartalis and D.N. Asimakopoulos: **A simple algorithm for simulating the solar ultraviolet radiation at the earth's surface: An application in determining the minimum erythema dose**, Earth, Moon, and Planets, 53, 191-204, 1991.
38. Varotsos C., Dris N. and Asimakopoulos D.: **Terannual wave in the ozone and temperature in the Strato-Mesosphere as deduced from satellite measurements**, Journal of Climate, 5, 2, 181-185, 1992.
39. Asimakopoulos D., Deligiorgi D., Drakopoulos C., Helmis C., Kokkori K., Lalas D., Sikiotis D. and Varotsos C.: **An experimental study of nighttime air-pollutant transport over complex terrain in Athens**, Atmospheric Environment, 26B, 1, 59-71, 1992.
40. Varotsos C. and Helmis C.G.: **Deviations of the temperature models derived by remote and in situ sensing techniques for the global middle atmosphere**, International Journal of Remote Sensing, 13, 16, 3127-3133, 1992.
41. Varotsos C., Cartalis C., Feidas H., Gerasi E. and Asimakopoulos D.N.: **Relationship of ozone and its precursors in the west coast air basin of Athens: a statistical model for the assessment of air quality in an urban area**, Atmospheric Research, 28, 41-47, 1992.
42. Varotsos C., Helmis C. and Cartalis C.: **Annual and semi-annual waves in ozone as derived from SBUV vertical global ozone profiles**, Geophysical Research Letters, 19 (9), 925-928, 1992.
43. Varotsos C.A., Dris N.A., Asimakopoulos D.N. and Cartalis C.: **On the Relationship between the 10.7 cm Solar Flux, Surface Pressure and air temperature over Greece**, Theor. and Applied Climatol., 46, N1, 27-32, 1992.
44. Cartalis C., Varotsos C., Feidas H. and Katsambas A.: **The impact of air pollution in an urban area on the amount of solar ultraviolet radiation at the surface**, Toxicological and Environmental Chemistry, 36, N 3-4, 195-203, 1992.

45. Varotsos C.A and Cracknell A.P.: **Ozone depletion over Greece as deduced from Nimbus-7 TOMS measurements**, International Journal of Remote Sensing, 14, 11, 2053-2059, 1993.
46. Varotsos C., Varinou M. and Kalabokas P.: **Atmospheric ozone concentration at Athens, Greece. Part I: Surface ozone and its relationship with meteorological parameters**, Atmospheric Research, 30, 143-149, 1993.
47. Varotsos C., Kalabokas P. and Chronopoulos G.: **Atmospheric ozone concentration at Athens, Greece. Part II: Vertical ozone distribution in the troposphere**, Atmospheric Research, 30, 151-155, 1993.
48. Vlasi A., Varotsos C. and Kalabokas P.: **Oscillation des quatre mois de l'ozone total en Europe Centrale**, Publications de l'Association Internationale de Climatologie, Vol. 6, 467-474, 1993.
49. Kalabokas P., Vlasi A. and Varotsos C.: **Serie historique des donnees d'ozone au niveau du sol pour la region d' Athens, Grece (1931-1940)**, Publications de l' Association Internationale de Climatologie, Vol. 6, 631-638, 1993.
50. Sakellariou N., Asimakopoulos D., Varotsos C. and Capsocha O.: **Prevailing Cloud Types in Athens**, Theor. Applied Climatol., 48, 89-100, 1993.
51. Varotsos C.: **Thermodynamic properties of defects in H₂O-ice, NaCl, NaBr crystals on the basis of bulk elastic data for atmospheric implications**, Toxicological and Environmental Chemistry, Vol. 38, N3-4, 157-162, 1993.
52. Varotsos C.: **Thermodynamic properties of alkali-halide crystals: Implication for sea salt particles in polluted marine areas**, Toxicological and Environmental Chemistry, 38, N 3-4, 201-205, 1993.
53. Varotsos C.: **On the role of solid NaCl in polluted marine urban areas**, Toxicological and Environmental Chemistry, 41, N3-4, 135-138, 1994.
54. Varotsos C., Asimakopoulos D.N., Katsambas A. and Stratigos J.: **On the ozone-related changes in biologically active ultraviolet radiation reaching the earth's surface**, Toxicological and Environmental Chemistry, Vol. 41, N1-2, 9-13, 1994.
55. Varotsos C., Kalabokas P. and Chronopoulos G.: **Stratosphere-Troposphere ozone exchange at Athens, Greece**. Toxicological and Environmental Chemistry, 44, N3-4, 211-216, 1994.
56. Varotsos C., Kalabokas P., Vlasi A., Katsambas A., Stratigos J. and Antoniou C.: **The biologically active ultraviolet radiation in relation to the surface ozone and the wind field**, Toxicolog and Environ Chemistry, 44, N3-4, 233-242, 1994.
57. Varotsos C.: **On the role of solid NaBr in the atmosphere after the eruption of alkalic volcanoes**, Toxicolog. and Environmental Chemistry, 42, N3-4, 209-213, 1994.
58. Varotsos C., Tsiachris D., Asimakopoulos D.N., Katsambas A., Stratigos J. and Antoniou C.: **Measurements of solar ultraviolet-B radiation in Greece**, Toxicological and Environmental Chemistry, 46, 11-18, 1994.
59. Varotsos C.: **Decrease in biologically active ultraviolet radiation due to tropospheric ozone increase**, Toxic. Env. Chemistry, Vol. 45, 173-178, 1994.
60. Varotsos C. and Kondratyev K.Y.: **Temporal variations of the total ozone content over St. Petersburg**, Toxicological and Environmental Chemistry, Vol. 46, 19-29, 1994.
61. Jacovides C.P., Varotsos C., Kaltsounides N.A., Petrakis M. and Lalas D.P.: **Atmospheric turbidity parameters in the highly polluted site of Athens basin**, Renewable Energy, Vol. 4, N5, 465-470, 1994.
62. Varotsos C., Kalabokas P. and Cracknell A.P.: **Intercomparison of ozone models derived by remote and in situ sensing techniques with recent local measurements at middle latitudes**, International Journal of Remote Sensing, 15, 9, 1933-1939, 1994.
63. Varotsos C.: **Solar ultraviolet radiation and total ozone, as derived from satellite and ground-based instrumentation**, Geophysical Research Letters, 21, 17, 1787-1790, 1994.
64. Cracknell A.P. and Varotsos C.: **Comments on "Linke and Unsworth-Monteith turbidity parameters in Athens". by H. D. Kambezidis, D. H. Founda and N. S. Papanikolaou (January B, 1993, 119, 367-374)**, Q. J. R. Meteorol. Soc., 120, 1105-1106, 1994.
65. Cartalis C. and Varotsos C.: **Surface ozone in Athens, Greece, at the beginning and at the end of the twentieth century**, Atmospheric Environment, Part A-General Topics, Vol. 28, No. 1, 3-8, 1994.
66. Varotsos C., Kalabokas P. and Chronopoulos G.: **Association of the laminated vertical ozone structure with the lower-stratospheric circulation**, J. Applied Meteorology, 33, 4, 473-476, 1994.

67. Varotsos C., Kalabokas P. and Chronopoulos G.: **Comparison of vertical ozone profiles as deduced from remote sensing and in-situ sensing techniques**, International Journal of Remote Sensing - Letters, 15, 5, 1155-1160, 1994.
68. Varotsos C., Vlassi A., Chronopoulos G. and Cracknell A.: **Annual, semi-annual and terannual waves in total ozone as derived from TOMS data at the subtropics**, International Journal of Remote Sensing, 15, 7, 1531-1536, 1994.
69. Varotsos C. and Cracknell A.P.: **Three years of total ozone measurements over Athens obtained using the remote sensing technique of a Dobson spectrophotometer**, International Journal of Remote Sensing, 15, 7, 1519-1524, 1994.
70. Varotsos C. and Cracknell A.P.: **Remote sounding of minor constituents in the stratosphere and heterogeneous reactions of gases at solid interfaces**, International Journal of Remote Sensing, 15, 7, 1525-1530, 1994.
71. Reid S. J., Vaughan G., Mitchell N.J., Prichard I.T., Smit H.J., Jorgensen T.S., Varotsos C. and de Backer H.: **Distribution of ozone laminae during EASOE and the possible influence of inertia-gravity waves**, Geophysical Research Letters, 21, 13, 1479-1482, 1994.
72. Cracknell A.P., Varotsos C. and Asimakopoulos D.N.: **On the total ozone depletion over Greece derived from satellite-flown and ground-based instruments**, Int J Remote Sens, 15, (16), 3285-3293, 1994.
73. Cracknell A.P. and Varotsos C.: **Ozone depletion over Scotland as derived from Nimbus-7 TOMS measurements**, International Journal of Remote Sensing, Vol. 15, No. 13, 2659-2668, 1994.
74. Kondratyev K.Y., Varotsos C.A. and Cracknell A.P.: **Total ozone amount trend at St. Petersburg as deduced from Nimbus - 7 TOMS observations**, International Journal of Remote Sensing, 15, No. 13, 2669-2677, 1994.
75. Varotsos C. and Cracknell A.P.: **On the accuracy of total ozone measurements made with a Dobson spectrophotometer in Athens**, International Journal of Remote Sensing, Vol 15, No 16, 3279-3283, 1994.
76. Kondratyev K.Y. and Varotsos C.: **Atmospheric greenhouse effect in the context of global climate change**, Il Nuovo Cimento, 18C, 2, 123-151, 1995.
77. Von der Gathen P., M. Rex, N. R. P. Harris, D. Lucic, B. M. Knudsen, G. O. Braathen, H. De Backer, R. Fabian, H. Fast, M. Gil, E. Kyrö, I. S. Mikkelsen, M. Rummukainen, J. Staehelin and C. Varotsos: **Observational evidence for chemical ozone depletion over the Arctic in winter 1991-92**, Nature, Vol. 375, 131-134, 1995.
78. Varotsos C., Kondratyev K.Y. and Katsikis S.: **On the relationship between total ozone and solar ultraviolet radiation at St. Petersburg, Russia**, Geophysical Res. Letters, Vol. 22, 24, 3481-3484, 1995.
79. Kondratyev K.Y., Pokrovsky O.M. and Varotsos C.A.: **Atmospheric ozone trends and other factors of surface ultraviolet radiation variability**, Environmental Conservation, Vol. 22, N3 259-261, 1995.
80. Varotsos C.A. and Cracknell A.P.: **Ozone Depletion and Solar Ultraviolet Radiation: Impacts on Human Health and Ecosystems-A case study of Mediterranean Region, Athens, Greece 9-10 April 1994**, International Journal of Remote Sensing, Vol. 16, No. 4, 763-764, 1995.
81. Varotsos C.: **Editorial: 1st International Symposium on Ozone Depletion and Solar Ultraviolet Radiation: Impacts on Human Health - A case study of the Mediterranean Region**, Int Journal of Remote Sensing, 16, 10, 1745-1746, 1995.
82. Varotsos C.: **The National and Kapodistrian University of Athens Laboratory of Meteorology**, International Journal of Remote Sensing, Vol. 16, No. 10, 1743-1744, 1995.
83. Varotsos C.: **On the correction of the total ozone content over Athens, Greece as deduced from satellite observations**, International Journal of Remote Sensing, Vol. 16, No. 10, 1771-1776, 1995.
84. Varotsos C.A., Cracknell A.P., Sakellariou N.K. and Lykoudis S.P.: **On the statistical analysis of the ozone depletion over Greece**, International Journal of Remote Sensing, Vol. 16, No. 10, 1829-1837, 1995.
85. Varotsos C.A.: **Vertical ozone simulation in the middle atmosphere**, Geomagnetism and Aeronomy, 34, 5, 132-138, 1995.
86. Varotsos C. and Cracknell A.P.: **Total ozone variations over Greece as deduced from satellite observations**, Geom. and Aeronomy, Vol. 34, No. 5, 139-144, 1995.
87. Varotsos C.A., Chronopoulos G.J., Katsikis S. and Sakellariou N.K.: **Further evidence of the role of air pollution on solar ultraviolet radiation reaching the ground**, International Journal of Remote Sensing, 16, No 10, 1883-1886, 1995.

88. Chandra S. and Varotsos C.A.: **Recent trends of the total column ozone: implications for the Mediterranean region**, International Journal of Remote Sensing, Vol. 16, No. 10, 1765-1779, 1995.
89. Sakellariou N., Varotsos C.A. and Lykoudis S.P.: **On the intercomparison of satellite and ground-based observations of prevailing cloud types over Athens**, International Journal of Remote Sensing, Vol. 16, No. 10, 1799-1804, 1995.
90. Gernandt H., Goersdorf U., Claude H. and Varotsos C.A.: **Possible impact of polar stratospheric processes on mid-latitude vertical ozone distributions**, International Journal of Remote Sensing, Vol. 16, No. 10, 1839-1850, 1995.
91. Retalis A., Cartalis C. and Varotsos C.A.: **An analysis of the distribution of nitrogen dioxide in South-Eastern Mediterranean for the period 1985-1989**, International Journal of Remote Sensing, Vol. 16, No. 10, 1897-1903, 1995.
92. Kondratyev K.Y. and Varotsos C.A.: **Volcanic eruptions and global ozone dynamics**, International Journal of Remote Sensing, Vol. 16, No. 10, 1887-1895, 1995.
93. Varotsos C. and Kondratyev K.Y.: **Ozone dynamics over Greece as derived from satellite and in situ measurements**, International Journal of Remote Sensing, Vol. 16, No. 10, 1777-1798, 1995.
94. Kondratyev K.Y. and Varotsos C.A.: **Atmospheric ozone variability in the context of global change**, International Journal of Remote Sensing, Vol. 16, No. 10, 1851-1881, 1995.
95. Varotsos C., Cracknell A., Sakellariou N., Katsikis S., Chronopoulos G. and Kassomenos P.: **On the SO₂, NO₂ interferences in total ozone measurements made with the Dobson spectrophotometer No. 118 in Athens**, International Journal of Remote Sensing, Vol. 16, No. 10, 1805-1814, 1995.
96. Sakellariou N., Asimakopoulos D., Eutaxias G., Kalamatianou A., Varotsos C.A. and Katsikis S.: **Measurements of the spectral components of direct normal solar radiation over Athens**, Int Journal of Remote Sensing, 16, 10, 1815-1828, 1995.
97. Cracknell A. P. and Varotsos C.A.: **The present status of the total ozone depletion over Greece and Scotland: a comparison between Mediterranean and more northerly latitudes**, International Journal of Remote Sensing, Vol. 16, No 10, 1751-1764, 1995.
98. Varotsos C. and Kondratyev K.Y.: **The role of clouds on the solar ultraviolet radiation**, Toxicological and Environmental Chemistry, Vol. 47, 77-82, 1995.
99. Varotsos C.: **Simulation of broad-band and spectral solar ultraviolet radiation**, Int. J. Solar Energy, 16, 203-216, 1995.
100. Varotsos C. and Cracknell A.P.: **Simulation ozone model in the middle atmosphere of the northern midlatitudes**, Toxicological and Environmental Chemistry, Vol. 48, 11-29, 1995.
101. Varotsos C. and Cracknell A.P.: **Temporal variations of the total ozone content over Greece as deduced from satellite observations**, Toxicological and Environmental Chemistry, Vol. 48, 1-9, 1995.
102. Varotsos C.: **On the association between the column ozone and the spectral solar ultraviolet radiation**, Toxicological and Environmental Chemistry, Vol. 50, 119-130, 1995.
103. Varotsos C., Alexandris D., Chronopoulos G., Katsambas A., Antoniou C. and Stratigos J.: **Association of the vertical ozone structure with the solar ultraviolet radiation reaching the ground**, Toxicological and Environmental Chemistry, Vol. 52, 121-127, 1995.
104. Varotsos C., Voudouri A., Katsambas A. and Ghosh S.: **Monitoring UV radiation using polysulphone film badges at two different sites**, Toxicological and Environmental Chemistry, Vol. 54, 211-217, 1996.
105. Ghosh S., Varotsos C. and Alexandris D.: **O₃ destruction by clouds: observational and theoretical studies over Athens, Greece**, Toxicological and Environmental Chemistry, Vol. 57, 63-78, 1996.
106. Varotsos C., Cracknell A.P., Kaltsounidis N.A. and Jacovides C.P.: **The use of TOMS data in the calculation of atmospheric turbidity parameters**, International Journal of Remote Sensing, Vol. 17, No. 2, 399-403, 1996.
107. Chandra S., Varotsos C. and Flynn L.E.: **The mid-latitude total ozone trends in the northern hemisphere**, Geophysical Research Letters, Vol. 23, No. 5, 555-558, 1996.
108. Psiloglou V., Santamouris M., Varotsos C. and Asimakopoulos D.N.: **A new parameterization of the integral ozone transmission**, Solar Energy, Vol. 56, No. 6, 573-581, 1996.
109. Kondratyev K.Y. and Varotsos C.A.: **Global total ozone dynamics. Impact on surface solar ultraviolet radiation variability and ecosystems. Part I: Global ozone dynamics and environmental safety**, Environ. Sci. & Pollut. Res.3, 3, 153-157, 1996.

110. Kondratyev K.Y. and Varotsos C.A.: **Global total ozone dynamics. Impact on surface solar ultraviolet radiation variability and ecosystems. Part II: Dynamics of Atmospheric Chemical Composition: The Role of Remote Sensing**, Environ. Sci. & Pollut. Res., Vol. 3, No. 4, 205-209, 1996.
111. Gusten H., Heinrich G., Monnich E., Weppner J., Cvitaš T., Klasinc L., Varotsos C.A and Asimakopoulos D.N.: **Thessaloniki '91 Field Measurement Campaign-II. Ozone formation in the greater Thessaloniki area**, Atmospheric Environment, Vol. 37, No. 8, 1115-1126, 1997.
112. Katsambas A., Varotsos C., Veziryianni G. and Antoniou C.: **Surface Solar Ultraviolet Radiation: A theoretical approach of the SUVR reaching the ground in Athens, Greece**, Environ. Sci. & Pollut. Res., 4 (2), 69-73, 1997.
113. Varotsos C. and Feretis E.: **Health effects on human eye resulting from the increased ambient solar ultraviolet radiation**, Toxicological and Environmental Chemistry, Vol 61, 43-68, 1997.
114. Ghosh S., Varotsos C. and Alexandris D.: **Some further calculations on the uptake of HCl by stratospheric sulphate aerosol droplets**, Toxicological and Environmental Chemistry, Vol. 59, 31-41, 1997.
115. Reid S.J., M. Rex, P. von der Gathen, I. Floisand, F. Stordal, G. D. Carver, L. A. Beck, L. De Haan, E. Reimer, R. Krüger-Carstensen, E. Kyro, F. M. O' Connor, G. O. Braathen, V. Doronkhov, H. Fast M. Gil, Z. Litynska. N. Molineux, Ravegnani F., G. Murphy, C. Varotsos, J. Wenger, and C. Zerefos: **A study of ozone laminae using diabatic trajectories, contour advection and photochemical trajectory model simulations**, J. Atmospheric Chemistry, 30, 187-207, 1998.
116. Varotsos C. and Cracknell A.P.: **Total ozone depletion over Greece as deduced from satellite observations**, International Journal of Remote Sensing, Vol. 19, No. 17, 3317-3325, 1998.
117. Varotsos C., Ghosh S., Chronopoulos G., Katsikis S. and Cracknell A.P.: **Total ozone measurements over Athens: Intercomparison between Dobson, TOMS (v 6) and SBUV measurements**, Int J Remote Sens, 19, 17, 3327-3333, 1998.
118. Efstathiou M., Varotsos C. and Kondratyev K.Y.: **An estimation of the surface ultraviolet irradiance during an extreme Total Ozone minimum**, Journal of Meteorology and Atmospheric Physics, 68, 171-176, 1998.
119. M. Rex, P. von der Gathen, N. R. P. Harris, D. Lucic, B. M. Knudsen, G. O. Braathen, S. J. Reid, H. De Backer, H. Claude, R. Fabian, H. Fast, M. Gil, E. Kyro, I. S. Mikkelsen, M. Rummukainen, H.G. Smit, J. Staehelin, C. Varotsos, I. Zaitcev: **In-situ measurements of stratospheric ozone depletion rates in the Arctic Winter 1991/92: A Lagrangian Approach**, J. Geophys. Res., V 103, D5, 5843-5853, 1998.
120. Katsambas A.D., Katoulis A.C., Varotsos C.: **Sun education in Greece**, Clin. Dermatology, 16, 525-526, 1998.
121. Varotsos C., Chronopoulos G., Cracknell A.P., Johnson B.E., Katsambas A. and Philippou A.: **Total ozone and solar ultraviolet radiation as derived from satellite and ground-based instrumentation at Dundee Scotland**, International Journal of Remote Sensing, Vol. 19, No. 17, 3301-3305, 1999.
122. Varotsos C., Katsikis S. and Cracknell A.P.: **On the influence of stray light on the total ozone measurements made with Dobson spectrophotometer No. 118 in Athens, Greece**, International Journal of Remote Sensing, 19, 17, 3307-3315, 1999.
123. Kondratyev K.Y. and Varotsos C.A.: **Total and tropospheric ozone changes: observations and numerical modelling**, Il Nuovo Cimento C, 22, (2), 219-246, 1999.
124. Varotsos C., Alexandris D., Chronopoulos G.: **On the role of the lower-stratospheric circulation to the vertical ozone structure**, Phys. Chem. Earth PT C 24 (5): 481-485, 1999.
125. Alexandris D., Varotsos C., Kondratyev K.Y. and Chronopoulos G.: **On the altitude Dependence of Solar effective UV**, Phys.Chem.Earth(C), 24, N5 515-517, 1999.
126. Sakellariou N., Katsambas A., Feretis E., Varotsos C. and Chronopoulos G.: **The role of the cloud optical thickness in the attenuation of the solar ultraviolet radiation reaching the ground; Implications to the human health impacts**, Tox. Envir. Chemistry", Vol. 69, 381-393, 1999.
127. Varotsos C., Feretis E. and Kondratyev K.Y.: **Impact of total ozone variability on surface solar ultraviolet radiation change. Implication for ocular damage**, Tox Env. Chem., 71, 13-19, 1999.
128. Ghosh S. and Varotsos C.: **On the uptake of O₃ into aerosol and water droplets over Athens, Greece**, Toxicological and Environmental Chemistry, 68, 117-131, 1999.
129. Adamenko V.N., Kondratyev K.Y. and Varotsos C.A.: **Arctic Climate Empirical Diagnostics: a contribution to the climate change debate**, Quarterly Journal of the Hungarian Meteorological Service (IDOJARAS), vol. 103, No.4, p. 219-235, 1999.

130. Schulz, A., M. Rex, J. Steger, N. Harris, G.O. Braathen, E. Remein, R. Alfier, A. Beck, M. Alpers, J. Cisneros, H. Claude, H. De Bakker, H. Dier, V. Dorokhov, H. Fast, S. Godin, G. Hansen, H. Kanzawa, B. Kois, Y. Kondo, E. Kosmidis, E. Kyro, Z. Litynska, M.J. Molyneux, G. Murphy, H. Nakane, C. Parrondo, F. Ravegnani, C. Varotsos, C. Vialle, P. Viatte, V. Yushkov, C. Zerefos, P. Von der Gathen: **Match observations in the Arctic winter 1996/97: High stratospheric ozone loss rates correlate with low temperatures deep inside the polar vortex**, *Geophys. Res. Lett.*, Vol. 27, No 02, p.205-208, 2000.
131. Ziemke J.R., Chandra S., Herman J. and Varotsos C.: **Erythemally weighted UV trends over northern latitudes derived from Nimbus 7 TOMS measurements**, *J. Geophys. Res.*, 105, D6, 7373-7382, 2000.
132. Varotsos C., Kondratyev K.Y. and Cracknell A.P.: **New evidence for ozone depletion over Athens, Greece**, *International Journal of Remote Sensing*, Vol. 21, No. 15, 2951-2955, 2000.
133. Varotsos C., Kondratyev K.Y., Alexandris D., Chronopoulos G.: **Aircraft observations of the vertical gradient of biologically effective ultraviolet radiation**, *Radiation Prot. Dos.* 91 (1-3): 161-163, 2000.
134. Varotsos C., Feretis H., Kondratyev K.Y., Efstathiou M.: **Human eye diseases resulting from SUVR exposure**, *Radiation Prot. Dos.* 91 (1-3): 25-27, 2000.
135. Ziemke J.R., Chandra S., Herman J., Varotsos C.: **Erythema weighted ultraviolet trends over northern latitudes**, *Radiation Prot. Dos.* 91 (1-3): 157-160, 2000.
136. Kondratyev K.Y. and Varotsos C.: **Global Tropospheric Ozone Dynamics, Part I: Tropospheric Ozone Precursors**, *Environ. Sci. & Pollut. Res*, 8, No.1, 57-62, 2001.
137. Kondratyev K.Y. and Varotsos C.: **Global Tropospheric Ozone Dynamics, Part II: Numerical Modelling of Tropospheric Ozone Variability**, *Environ. Sci. & Pollut. Res*, 8, No.2, 113-119, 2001.
138. Schulz A., M. Rex, P., N.R.P. Harris, G.O. Braathen, E. Reimer, R. Alfier, L. Kilbane-Dawe, S. Eckermann, M. Allaart, M. Alpers, B. Bojkov, J. Cisneros, H. Claude, E. Guevas, J. Davies, H. De Backer, H. Dier, V. Dorokhov, H. Fast, S. Godin, B. Johnson, B. Kois, Y. Kondo, E. Kosmidis, E. Kyro, Z. Litynska, I.S. Mikkelsen, M.J. Molyneux, G. Murphy, H. T. Nagai, Nakane, F. O'Connor, G. Parrondo, F.J. Schmidlin, P. Shrivankova, C. Varotsos, G. Vialle, P. Viatte, V. Yushkov, C. Zerefos, and P. von der Gathen: **Arctic ozone loss in threshold conditions: Match observations in 97/98 and 98/99**, *J. Geophys. Res.* 106, D 7495-7503, 2001.
139. Varotsos C., Alexandris D., Chronopoulos G. and Tzani C.: **Aircraft observations of the solar ultraviolet irradiance throughout the troposphere**, *J. Geophys. Res.*, 106 (D14): 14843-14854 JUL 27 2001.
140. Varotsos C., Kondratyev K.Y. and Efstathiou M.: **On the seasonal variation of the surface ozone in Athens, Greece**, *Atmospheric Environment*, 35, 315-320, 2001.
141. Kondratyev K.Y. and Varotsos C.: **Review article: Remote sensing and global tropospheric ozone observed dynamics**, *International Journal of Remote Sensing*, Vol. 23, No. 1, 159-178, 2002.
142. Varotsos C.: **Climate Change problems and carbon Dioxide Emissions: Expecting 'Rio+10'**, Feature in *ESPR - Environ Sci & Pollut Res* 9 (2), 97-98, 2002.
143. Feretis E., Theodorakopoulos P., Varotsos C., Efstathiou M., Tzani C., Xirou T., Alexandridou N., Aggelou M.: **On the plausible association between environmental conditions and human eye damage**, *Environ Sci & Pollut Res* 9 (3), 163-165, 2002.
144. Varotsos C.: **The southern hemisphere ozone hole split in 2002**, *Environ Sci & Pollut Res.*, 9 (6), 375-376, 2002.
145. Efstathiou M.N., Varotsos C.A., Singh R.P., Cracknell A.P. and Tzani C.: **On the longitude dependence of total ozone trends over middle-latitudes**, *International Journal of Remote Sensing*, Vol. 24, No. 6, 1361-1367, 2003.
146. Varotsos C.: **What is the Lesson from the Unprecedented Event over Antarctica in 2002?**. *ESPR - Environ Sci & Pollut Res.*, 10 (2), 80-81, 2003.
147. Varotsos C.A., Efstathiou M.N., Kondratyev K.Y.: **Long-term variation in surface ozone and its precursors in Athens, Greece - A forecasting tool**, *Environ. Sci. & Pollut. Res* 10 (1): 19-23 2003.
148. Varotsos C.: **Why did a "no-ozone-hole" episode occur in Antarctica?**, *EOS, Trans., American Geophysical Union* 84(19), 183, 2003.
149. Varotsos C.: **Major sudden warming and strange twist of the ozone hole over Antarctica in 2002**, *Europhysics News* 34/2, 66-67, 2003.
150. Varotsos C.: **On the unprecedented event of the Antarctic ozone hole split in 2002**, *World Resource Review* 15:2, 483-492, 2003.

151. Varotsos C.: **Atmospheric pollution and remote sensing: implications for the Southern hemisphere ozone hole split in 2002 and the Northern mid-latitude ozone trend**, Adv. Space Res. 33 (3): 249-253, 2004.
152. Varotsos C., Cartalis C., Vlamakis A., Tzani C. and Keramitsoglou I.: **The long-term coupling between column ozone and tropopause properties**, J Climate 17 (19): 3843-3854 OCT 2004.
153. Varotsos C.: **The Extraordinary Events of the Major, Sudden Stratospheric Warming, the Diminutive Antarctic Ozone Hole, and its Split in 2002**, Environ Sci & Pollut Res, 11 (6), 405-411, 2004.
154. Varotsos C. and Cracknell A.P.: **New features observed in the 11-year solar cycle**, International Journal of Remote Sensing, Vol. 25, No. 11, 2141-2157, 2004.
155. Varotsos C.: **News on the Antarctic Ozone Hole**, Environ. Sci. & Pollut. Res 12 (6): 322-322, 2005.
156. Varotsos C.: **Airborne measurements of aerosol, ozone, and solar ultraviolet irradiance in the troposphere**, J Geophys. Res-Atmos 110 (D9): art. no. D09202 2005.
157. Varotsos C., Ondov J., Efstathiou M.: **Scaling properties of air pollution in Athens, Greece and Baltimore, Maryland**, Atmos. Environ. 39 (22): 4041-4047, 2005.
158. Ferm M., De Santis F., Varotsos C.: **Nitric acid measurements in connection with corrosion studies**, Atmos. Environ. 39 (35): 6664-6672 2005.
159. Varotsos C.: **Power-law correlations in column ozone over Antarctica**, Int J Rem. Sens. 26 (16): 3333-3342 2005.
160. Varotsos C.: **Modern computational techniques for environmental data; Application to the global ozone layer**, Lect. Notes Comput. Sc. 3516: 504-510 2005.
161. Zerefos, C., Nastos P., Balis D., Papayannis A., Kelepertsis A., Kanellopoulou E., Nikolakis D., Eleftheratos K., Thomas W. and Varotsos C.: **A Complex study of Etna's volcanic plume from ground-based, in situ and space-borne observation**, International Journal of Remote Sensing, Vol. 27, No. 9, 1855-1864, 2006.
162. Varotsos C., Ondov J., Cracknell A.P. and Efstathiou M.: **Long-range persistence in global Aerosol Index dynamics**, International Journal of Remote Sensing, Vol. 27, No. 16, 3593-3603, 2006.
163. Ferm M., Watt J., O'Hanlon S., De Santis F. and Varotsos C.: **Deposition Measurement of Particulate Matter in connection with Corrosion Studies**, Analytical and Bioanalytical Chemistry, 384, 1320-1330, 2006.
164. Varotsos C and Kirk-Davidoff D., **Long-memory processes in ozone and temperature variations**, Atmos. Chem. Phys., 6, 4093-4100, 2006.
165. Varotsos C., Assimakopoulos M.N. and Efstathiou M., **Long-term memory effect in the atmospheric CO₂ concentration**, Atmos. Chem. Phys., 7, 629-634, 2007.
166. Cracknell A. and Varotsos C., **The Antarctic 2006 ozone hole (Editorial)**, Int J Remote Sens, 28, 1-2, 1-2, 2007.
167. Cracknell A. and Varotsos C., **Fifty years after the first artificial satellite: from SPUTNIK 1 to ENVISAT (Editorial)**, IJRS 28 (10) 2071-2072, 2007.
168. Varotsos C. and Cracknell A., **Validation of ENVISAT (SCIAMACHY) versus DOBSON and TOMS atmospheric ozone measurements at Athens, Greece: input for the upcoming IPY campaign**, International Journal of Remote Sensing, Vol. 28, No. 10, 2073-2075, 2007.
169. Cortesi U. *et al* **Geophysical validation of MIPAS-ENVISAT operational ozone data**. Atmos. Chem. Phys., 7 (18): 4807-4867, 2007.
170. Cracknell A. and Varotsos C., **The IPCC Fourth Assessment Report and the Fiftieth Anniversary of Sputnik, (Commentary)** Env. Science & Pollution Res., 14 (6), 384-387, 2007.
171. Christodoulakis J., Tzani C. and Varotsos C., **Standardisation of the Athens Dobson spectrophotometer versus Reference Dobson 064**, International Journal of Remote Sensing, Vol. 29, 2008.
172. Tzani C., Varotsos C and Viras L., **Impacts of the solar eclipse of 29 March 2006 on the surface ozone concentration, the solar ultraviolet radiation and the meteorological parameters at Athens, Greece**, Atmos. Chem. Phys., 8 (2), 245-250, 2008.
173. Varotsos C., Milinevsky G., Grytsai A., Efstathiou M. and Tzani C., **Scaling effect in planetary waves over Antarctica**, International Journal of Remote Sensing, Vol. 29, No. 9, 2697-2704, May, 2008.
174. Varotsos C., Tzani C., Tsitomeneas S., Assimakopoulos M.N. and Mammis A., **Surface Solar Ultraviolet Irradiance and Total Ozone during summertime**, Int J Remote Sens, Vol. 29, No. 9, 2667-2673, 2008.

175. Varotsos C., Cracknell A.P., Tzani C., Tsimoneas S. and Viras L., **Association of the Vertical Ozone Structure with the Lower-Stratospheric Circulation**, *Int J Remote Sens*, 29, No. 9, 2685-2695, May, 2008.
176. Tzani C. and C. Varotsos, **Tropospheric Aerosol Forcing of Climate in Greece**, *International Journal of Remote Sensing*, Vol. 29, No. 9, 2507-2517, May, 2008.
177. Sukov A., Soldatov V.Y.U., Krapivin V.F., Cracknell A.P. and Varotsos C.A.: **A Sequential Analysis Method for the Prediction of Tropical Hurricanes**, *International Journal of Remote Sensing*, Vol. 29, No. 9, 2787-2798, May, 2008.
178. Varotsos C., Efstathiou M. and Tzani C., **Scaling behaviour of the global tropopause** *Atmos. Chem. Phys.*, 9 (2), 677-683, 2009.
179. Varotsos C., Tzani C. and Cracknell A.: **The enhanced deterioration of the cultural heritage monuments due to air pollution**, *Environmental Science and Pollution Research*, 16 (5), 590-592, 2009.
180. Tzani C., Varotsos C., Ferm M., Christodoulakis J., Assimakopoulos M.N. and Efthymiou C.: **Nitric acid and particulate matter measurements at Athens, Greece, in connection with corrosion studies**, *Atmos. Chem. Phys.*, 9 (21), 8309-8316, 2009.
181. Tzani C., Tsvola E., Efstathiou M. and Varotsos C.: **Forest Fires Pollution Impact on the Solar UV Irradiance at the Ground**, *Fresenius Environmental Bulletin*, 18 (11A), 2151-2158, 2009.
182. Tzani C., Varotsos C.A., Assimakopoulos D.N. and Cracknell A.P.: **Surface ultraviolet radiation and ozone content in Europe as indicators of environment quality**, *International Journal of Remote Sensing*, Vol. 30, No. 15-16, 4123-4143, 2009.
183. Tzani C., Christodoulakis J., Efstathiou M. and Varotsos C.: **Comparison of the Athens Dobson spectrophotometer with World Standard Instruments**, *International Journal of Remote Sensing*, Vol. 30, No. 15-16, 3943-3950, 2009.
184. Efstathiou M.N., Tzani C. and Varotsos C.A.: **Long-term memory dynamics of total ozone content**, *International Journal of Remote Sensing*, Vol. 30, No. 15-16, 3897-3905, 2009.
185. Cracknell A.P. and Varotsos C.A.: **The contribution of remote sensing to the implementation of the Montreal Protocol and the monitoring of its success**, *International Journal of Remote Sensing*, Vol. 30, No. 15-16, 3853-3873, 2009.
186. Efstathiou M.N. and Varotsos C.: **On the altitude dependence of the temperature scaling behaviour at the global troposphere**, *International Journal of Remote Sensing*, Vol. 31, No. 2, 343-349, 2010.
187. Varotsos C. and Zellner R.: **A new modeling tool for the diffusion of gases in ice or amorphous binary mixture in the polar stratosphere and the upper troposphere**, *Atmos. Chem. Phys.*, 10, 3099-3105, 2010.
188. Tzani C., Theodorakopoulou K., Theodorakopoulos P. and Varotsos C.: **Tsunamis among the natural disasters**. *Fresenius Environmental Bulletin*, 19 (8), 1385-1403, 2010.
189. Varotsos C.A., Cracknell A.P. and Tzani C.: **Major atmospheric events monitored by deep underground muon data**, *Remote Sensing Letters* 1 (3), 169 - 178, 2010.
190. Eleftheratos K, Zerefos CS, Gerasopoulos E, Isaksen ISA, Rognerud B, Dalsoren S. and Varotsos C.: **A note on the comparison between total ozone from Oslo CTM2 and SBUV satellite data**. *Int J Remote Sens* 32, 9, 2535-2545, 2011.
191. Cracknell AP, Varotsos CA.: **New aspects of global climate-dynamics research and remote sensing Preface**, *International Journal of Remote Sensing* 32 Issue: 3, 579-600, 2011
192. Eleftheratos K, Zerefos CS, Varotsos C. et al.: **Interannual variability of cirrus clouds in the tropics in El Nino Southern Oscillation (ENSO) regions based on International Satellite Cloud Climatology Project (ISCCP) satellite data**, *International Journal of Remote Sensing*, 32 (21), 6395-6405, 2011.
193. Tzani C.; Varotsos, C.; Christodoulakis, J.; et al.: **On the corrosion and soiling effects on materials by air pollution in Athens, Greece**, *Atmos. Chem. & Phys.* 11 (23), 12039-12048, 2011.
194. Varotsos, C. A.; Cracknell, A. P.; Tzani, C.: **Major atmospheric events monitored by deep, underground muon data (vol 1, pg 169, 2010)** *Remote Sens Lett* 2 (2) 175, 2011
195. Efstathiou, M. N.; Tzani, C.; Cracknell, A. P.; et al. **New features of land and sea surface temperature anomalies**, *International Journal of Remote Sensing*, 32, 11, 3231-3238, 2011.
196. Varotsos, C. Efstathiou, M.; Tzani, C; et al. **On the limits of the air pollution predictability: the case of the surface ozone at Athens, Greece**, *Environ Sci. Pollut. Res* : 19 (1) 295-300, 2012.

217. Varotsos, C. A.; Cracknell, A. P.; Tzani, C. **The exceptional ozone depletion over the Arctic in January-March 2011**, Rem. Sens. Lett. : 3 (4) 343-352, 2012.
218. Efstathiou, M.; Tzani, C.; Varotsos, C.; et al. **The gutenbergrichter law for earthquakes in air pollution episodes: A case study for Athens, Greece**, ACTA GEOPHYSICA 60 (1) 280-290, 2012.
219. Varotsos, C. A.; Tzani, C., **A new tool for the study of the ozone hole dynamics over Antarctica**, ATMOSPHERIC ENVIRONMENT Volume: 47 Pages: 428-434, 2012
220. Efstathiou, M N.; Varotsos, C A, **Intrinsic properties of Sahel precipitation anomalies and rainfall**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 109 Issue: 3-4 Pages: 627-633, 2012.
221. Varotsos, C.; Ondov, J.; Tzani, C.; et al. **An observational study of the atmospheric ultra-fine particle dynamics**, ATMOSPHERIC ENVIRONMENT Volume: 59 Pages: 312-319 Published: NOV 2012.
222. Krapivin, V F.; Soldatov, V Yu; Varotsos, C A.; et al., **An adaptive information technology for the operative diagnostics of the tropical cyclones; solar-terrestrial coupling mechanisms**, JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS 89 Pages: 83-89, 2012
223. Varotsos, C. A.; Efstathiou, M. N.; Cracknell, A. P. **On the scaling effect in global surface air temperature anomalies**, ATMOSPHERIC CHEMISTRY AND PHYSICS 13 Issue: 10 Pages: 5243-5253, 2013.
224. Varotsos, C. A.; Melnikova, I; Efstathiou, M N.; et al., **1/f noise in the UV solar spectral irradiance**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 111 Issue: 3-4 Pages: 641-648, 2013.
225. Efstathiou, M N.; Varotsos, C A., **On the 11 year solar cycle signature in global total ozone dynamics**, METEOROLOGICAL APPLICATIONS Volume: 20 Issue: 1 Pages: 72-79, 2013.
226. Varotsos, C. A **The global signature of the ENSO and SST-like fields**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 113 Issue: 1-2 Pages: 197-204 Published: JUL 2013.
227. Varotsos, CA.; Efstathiou, M N.; Cracknell, A P., **Plausible reasons for the inconsistencies between the modeled and observed temperatures in the tropical troposphere**, GEOPHYSICAL RESEARCH LETTERS Volume: 40 Issue: 18 Pages: 4906-4910 Published: SEP 28 2013.
228. Varotsos, C A.; Melnikova, I; Efstathiou, M N.; et al. **On the 1/f noise in the UV solar spectral irradiance**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 114 Issue: 3-4 Pages: 725-727, 2013.
229. Varotsos, CA.; Efstathiou, M. N. **Is there any long-term memory effect in the tropical cyclones?** THEORETICAL AND APPLIED CLIMATOLOGY Volume: 114 Issue: 3-4 Pages: 643-650, 2013.
230. Varotsos, C. A.; Melnikova, I. N.; Cracknell, A. P.; et al., **New spectral functions of the near-ground albedo derived from aircraft diffraction spectrometer observations**, ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 14 Issue: 13 Pages: 6953-6965 Published: 2014.
231. Varotsos, C. A.; Ondov, J. M.; Efstathiou, M. N.; et al. **The local and regional atmospheric oxidants at Athens (Greece)** ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, 21 4430-4440, 2014.
232. Varotsos, C A.; Franzke, C L. E.; Efstathiou, M N.; et al. **Evidence for two abrupt warming events of SST in the last century**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 116 Issue: 1-2 Pages: 51-60 Published: APR 2014
233. Varotsos, C.; Christodoulakis, J.; Tzani, C.; et al. **Signature of tropospheric ozone and nitrogen dioxide from space: A case study for Athens, Greece**, ATMOSPHERIC ENVIRONMENT 89, 721-730, 2014.
234. Cracknell, A. P.; Varotsos, C. A. **Satellite systems for atmospheric ozone observations**, INTERNATIONAL JOURNAL OF REMOTE SENSING 3, 15, 5566-5597, 2014.
235. Cracknell, A P.; Varotsos, C A.; Timofeyev, Y M, **Remote sensing of atmospheric radiation and dynamics PREFACE**, INTERNATIONAL JOURNAL OF REMOTE SENSING, Volume: 35, 15 5563-5565, 2014.
236. Varotsos, C.; Ondov, J.; Tzani, C.; et al. **An observational study of the atmospheric ultra-fine particle dynamics (vol 59, pg 312, 2012)**, ATMOSPHERIC ENVIRONMENT, Volume: 94: 817-817 2014.
237. Varotsos, C. A.; Lovejoy, S.; Sarlis, N. V.; et al. **On the scaling of the solar incident flux**, ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 15 Issue: 13 Pages: 7301-7306 Published: 2015
238. Christodoulakis, J.; Varotsos, C.; Cracknell, A. P.; et al. **An assessment of the stray light in 25 years of Dobson total ozone data at Athens, Greece**, ATMOSPHERIC MEASUREMENT TECHNIQUES 8, 7, 3037-3046 2015.

219. Varotsos, C. A.; Efstathiou, M. N.; Cracknell, A. P. **Sharp rise in hurricane and cyclone count during the last century**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 119 Issue: 3-4,; 629-638, 2015.
220. Varotsos, Costas A.; Efstathiou, Maria N. **Symmetric scaling properties in global surface air temperature anomalies**, THEORETICAL AND APPLIED CLIMATOLOGY Volume: 121 Issue: 3-4, 767-773, 2015.
221. Varotsos, Costas; Tzanis, Chris; Efstathiou, Maria; et al. **Tempting long-memory in the historic surface ozone concentrations at Athens, Greece**, ATMOSPHERIC POLLUTION RESEARCH 6, 1055-1057, 2015
222. . Varotsos, C A.; Tzanis, C G.; Sarlis, N V. **On the progress of the 2015-2016 El Nino event**, ATMOSPHERIC CHEMISTRY AND PHYSICS Volume: 16 Issue: 4 Pages: 2007-2011, 2016
223. Lovejoy, Shaun; Varotsos, Costas **Scaling regimes and linear/nonlinear responses of last millennium climate to volcanic and solar forcings** EARTH SYSTEM DYNAMICS 7 Issue: 1 Pages: 133-150, 2016
224. Varotsos, C. A.; Tzanis, C.; Cracknell, A. P. **Precursory signals of the major El Nino Southern Oscillation events** THEORETICAL AND APPLIED CLIMATOLOGY 124 Issue: 3-4 Pages: 903-912, 2016
225. Krapivin, Vladimir F.; Varotsos, Costas A.; Christodoulakis, John **Mission to Mars: Adaptive Identifier for the Solution of Inverse Optical Metrology Tasks** EARTH MOON AND PLANETS 118 (1), 1-14, 2016
226. Varotsos, Costas A.; Mazei, Yuri A.; Burkovsky, Igor; et al. **Climate scaling behaviour in the dynamics of the marine interstitial ciliate community** THEORETICAL AND APPLIED CLIMATOLOGY 125 (3-4) 439-447, 2016
227. Varotsos, Costas A., and Satyajit Ghosh. **Impacts of climate warming on atmospheric phase transition mechanisms**. Theoretical and Applied Climatology 2016.
228. Krapivin, Vladimir F.; Varotsos, Costas A. **Modelling the CO₂ atmosphere-ocean flux in the upwelling zones using radiative transfer tools** JOURNAL OF ATMOSPHERIC AND SOLAR-TERRESTRIAL PHYSICS 150, 47-54, 2016
229. Christodoulakis, John; Tzanis, Chris G.; Varotsos, Costas A.; et al. **Impacts of air pollution and climate on materials in Athens, Greece** Atmospheric Chemistry and Physics 17 (1), 439-448 Published: JAN 10 2017
230. Krapivin, V. F., Varotsos, C. A., & Soldatov, V. Y. **The Earth's Population Can Reach 14 Billion in the 23rd Century without Significant Adverse Effects on Survivability**. Int. J. Environ. Res. Public Health, 14(8), 885; 2017 doi:10.3390/ijerph14080885
231. Krapivin, V. F., Varotsos, C. A., & Soldatov, V. Y. **Simulation results from a coupled model of carbon dioxide and methane global cycles**. Ecological Modelling, 359, 69-79, 2017.
232. Varotsos, C. A., Efstathiou, M. N., & Cracknell, A. P. **On the temporal evolution of the tropical stratospheric ozone**. Journal of Atmospheric and Solar-Terrestrial Physics, 157, 1-5. 2017
233. Varotsos, C. A., & Efstathiou, M. N. **On the wrong inference of long-range correlations in climate data; the case of the solar and volcanic forcing over the Tropical Pacific**. Theoretical and Applied Climatology, 128(3-4), 761-767, 2017.
234. Varotsos, C.A., Efstathiou, M.N., Cracknell, A.P. **On the association of aerosol optical depth and total ozone fluctuations with recent earthquakes in Greece**. Acta Geophysica 65(4), pp. 659-665, 2017.

2.9.2. Research Papers in refereed Russian Journals

1. Kondratyev K.Y. and Varotsos C.: **Annual, semi-annual and seasonal ozone variations for the St. Petersburg area as derived from TOMS data**, Studing the Earth from Space, 5, 18-26, 1993.
2. Kondratyev K.Y. and Varotsos C.: **Ozone depletion over St. Petersburg region as deduced from Nimbus-7 TOMS observations**, Doklady Akad. NAUK, 331, N5, 622-24, 1993.
3. Varotsos C. and Kondratyev K.Y.: **Changes in solar ultraviolet radiation reaching the ground due to tropospheric and stratospheric ozone variations**, Earth Research from Space, 12, N1, 3-9, 1994.
4. Varotsos C. and Kondratyev K.Y.: **Athens environmental dynamics: From a rural to an urban region**, Optics of the Atmosphere and Ocean, 7, N3, 346-362, 1994.

5. Varotsos C. and Kondratyev K.Y.: **Mean zonal temperature field in the global middle atmosphere and its periodicity**, Earth Research from Space, N2, 3-13, 1994.
6. Varotsos C., Kondratyev K.Y., Katsambas A., Stratigos J. and Antoniou C.: **On the risk of human skin from the solar ultraviolet radiation**, Doklady Akad. NAUK, Vol. 338, N2, 262-263, 1994.
7. Varotsos C. and Kondratyev K.Y.: **Interrelationship between Solar Ultraviolet Radiation and Total Ozone Content: Observations in Greece**, Optics of the Atmosphere and Ocean 8, 4, 608-613, 1995.
8. Varotsos C. and Kondratyev K.Y.: **The Tropospheric Pollution and the Solar Ultraviolet Radiation**, Optics of the Atmosphere and Ocean, Vol. 8, No 4, 614-618, 1995.
9. Varotsos C. and Kondratyev K.Y.: **On the underestimation of the total ozone in the region of Athens (Greece) obtained from satellite observations**, Doklady Akad. NAUK., 340, No. 2, 247-249, 1995.
10. Kondratyev K.Y., Asimakopoulos D.N. and Varotsos C.: **European Ecodynamics in the Context of Global Change**, Earth Research from Space, 4(3), 243-255, 1995
11. Kondratyev K.Y. and Varotsos C.A.: **Variability of Total Ozone in the Atmospheric Boundary Layer of Athens**, Doklady Akad. NAUK, Vol. 344, No. 3, 385-386, 1995.
12. Kondratyev K.Y., Varotsos C.A. and Fedchenko P.P.: **Global total ozone dynamics, its impact on surface solar ultraviolet radiation variability and ecosystems**, Earth Research from Space, 5, N4, 228-239, 1995.
13. Varotsos C., Ghosh S., Katsambas A., Katsikis A., Kondratyev K.Y., Siokis D. and Chronopoulos G.: **On the level of illumination by ultraviolet solar radiation of flying crews in a cabin**, Doklady Akad. NAUK, v 348/3, 387-389, 1996.
14. Varotsos C., Ghosh S. and Kondratyev K.Y.: **On the uptake of ozone by aerosol particles and cloud droplets under Athens atmospheric conditions**, Doklady Akad. NAUK, 1996,v. 347, N 5, 677-680.
15. Varotsos C., Ghosh S., Katsikis S., Kondratyev K.Y. and Cracknell A.P.: **Intercomparison of the observation data for total ozone content with the use of satellite and surface observations (the Athens city as an example)**, Earth Obs. Rem. Sens., Vol 4, 18-23, 1996.
16. Borrell P., Varotsos C. and Kondratyev K.Y.: **Key problems of chemistry and photochemistry of the troposphere: the completion of the first phase of EUROTRAC**, Ecological Chemistry, 7 No. 1, 1-12, 1997.
17. Varotsos C., Kondratyev K.Y. and Chronopoulos G.: **On total ozone content decrease in middle latitudes of Northern hemisphere from satellite observations data in Athens region (Greece)**, Doklady Akad. NAUK, 355, N1, 104-105, 1997.
18. Varotsos C. and Kondratyev K.Y.: **The potential interconnection between the vertical ozone concentration distribution in mid-latitudes and processes in the polar stratosphere**, Doklady Akad. NAUK, Vol.360, No.1, p. 107-110, 1998.
19. Varotsos C. and Kondratyev K.Y.: **Total Ozone Dynamics in mid-latitudes of the Northern Hemisphere**, Doklady Akad. NAUK, Vol. 359, No.6, 1998
20. Varotsos C. and Kondratyev K.Y.: **The impact of lower stratospheric circulation on the vertical distribution of ozone concentration: a case study of Athens, Greece**, Doklady Akad. NAUK, Vol.360, No.3, 394-396, 1998
21. Varotsos C. and Kondratyev K.Y.: **Vertical profiles of ultraviolet solar radiation in the troposphere**, Doklady Akad. NAUK Vol. 360, No.2, 254-256, 1998.
22. Varotsos C. and K. Ya. Kondratyev: **An experience of complex interpretation of remote sensing and in-situ ozone observation data**, Earth Research from Space, 4, 3-13, 1998.
23. Kondratyev K. Y. and Varotsos C.A.: **Investigation of tropospheric ozone in Europe**, Ecological Chemistry, 9, 3-9, 2000.
24. Kondratyev K.Y. and Varotsos C.: **Observed and calculated variability of SUVR due to TOZ variations**, Studying the Earth from Space, No 2, 23-36, 2000.
25. Varotsos C.A. and Krapivin VF: **Modeling the CO₂ atmosphere-ocean flux in the upwelling zones**. Reports of the Moscow A. S. Popov Scientific-Technical Society of Radio Engineering, Electronics and Communications. Series "Ecoinformatics Problems", Issue XII, Moscow, 2016, pp. 17-26.
26. Krapivin V.F., Varotsos C.A., Cracknell A.P., and Soldatov V.Y.: **Constructive methodology for the tropical cyclone monitoring**, Reports of the Moscow A. S. Popov Scientific-Technical Society of Radio Engineering, Electronics and Communications. Series "Ecoinformatics Problems", Issue XII, Moscow, 2016, pp. 191-198

