

Publications P. Carl

Graduation

Diploma thesis (Physics) 1971, Humboldt University at Berlin:
Theoretische Methoden zur Beschreibung des Relaxationsverhaltens linearer und nichtlinearer Systeme unter Einbeziehung oszillierender chemischer Reaktionen.

PhD thesis (Dr. rer. nat.; Physics) 1974, Humboldt University at Berlin.
Simulationsuntersuchungen zur Polymerisation an der Phasengrenze Plasma-Festkörper. Nichtlineare Response und Bildungsmechanismen.

Selected Written Publications

Carl, P. (1980)
OLYMPUS for a BESM-6. The development of medium-scale programs within the OLYMPUS framework: system OLYDES,
Computer Phys. Commun. **20**, 165–179.

Carl, P. (1985)
Klimatische Konsequenzen eines Kernwaffenkrieges und ihre Auswirkungen auf die Biosphäre,
Report I/85, 87 pp., GDR Physical Society, Berlin.

Stenchikov, G.L. and P. Carl (1985)
Climatic consequences of nuclear war: Sensitivity against large-scale inhomogeneities in the initial atmospheric pollutions,
96 pp., Academy of Sciences and Physical Society of the GDR, Berlin.

Carl, P. (1987/88)
Kernwaffenkrieg, Klima und Umwelt – Pathologie einer Katastrophe,
Report series "Informationen des DDR-Komitees für wissenschaftliche Fragen der Sicherung des Friedens und der Abrüstung", GDR Academy of Sciences, Berlin,
part I, 1987 (issue 3), 72 pp.; part II, 1988 (issue 1), 72 pp.; part III, 1988 (issue 3), 72 pp.

Carl, P. (1988)
Die Lektion von Tschernobyl,
Wissenschaft und Frieden **6**(4), 17–22.

Carl, P. and G.L. Stenchikov (1988)
Structural analysis of the climatic response to a nuclear war,
in: Sydow, A., S.G. Tsafestas and R. Vichnevetsky (eds.) *Systems Analysis and Simulation 1988*, vol. II,
Mathematical Research **47**, 33–36, Akademie-Verlag, Berlin.
License edition: Luker, P.A. and B. Schmidt (eds.) *Advances in Simulation*, vol. 2, 33–36, Springer-Verlag
New York Berlin Heidelberg etc. doi:10.1007/978-1-4613-8936-1_5

Carl, P. (1988)
Software engineering aspects of computational systems analysis in physics,
in: Sydow, A., S.G. Tsafestas and R. Vichnevetsky (eds.) *Systems Analysis and Simulation 1988*, vol. II,
Mathematical Research **47**, 375–378, Akademie-Verlag Berlin.
License edition: Luker, P.A. and B. Schmidt (eds.) *Advances in Simulation*, vol. 2, 375–378, Springer-Verlag
New York Berlin Heidelberg etc. doi:10.1007/978-1-4613-8936-1_80

Carl, P. (1989)
Self-deterrence: global and regional structures of the climatic response to nuclear war scenarios,
in: Hassard, J., T. Kibble and P. Lewis (eds.) *Ways out of the arms race*, 337–341, World Scientific,
Singapore.

Carl, P. (1990)
Notes on the global geophysical consequences of a 'limited' war in Europe,
in: Tartaglia, A. and M. Vadacchino (eds.) *Induced critical conditions in the atmosphere*, 72–82, World
Scientific, Singapore.

- Carl, P. (1990)
Atmosphärische und klimatische Konsequenzen eines Atomkrieges,
in: Carl, P. (ed.) *Götterdämmerung. Globale Folgen eines atomaren Konflikts*, 160–213, Akademie-Verlag, Berlin.
- Carl, P. (1991)
Notes on the climate response in the aftermath of Gulf War II,
Z. f. Meteorologie **41**, 476–480.
- Carl, P. (1992)
Zur dynamischen Struktur des planetaren Monsuns,
Wiss. Z. Humboldt Universität, Reihe Math./Naturwiss. **41**, 29–35.
- Carl, P. (1994)
Der planetare Monsun als kritisches Phänomen,
3rd German Climate Conference, Potsdam, April 11–14, PIK Report No. 1, 30–32.
- Grell, J., I. Tschentscher and P. Carl (1994)
Attraktoranalyse des borealen Sommermonsuns in einem niederdimensionalen GCM,
3rd German Climate Conference, Potsdam, April 11–14, PIK Report No. 1, 93–95.
- Kroschk, S., P. Carl and T. Eichler (1994)
Ein Klimamodell für Forschung und Lehre,
3rd German Climate Conference, Potsdam, April 11–14, PIK Report No. 1, 147–149.
- Tschentscher, I., P. Carl and K.D. Worbs (1994)
Ein atmosphärischer El Niño Trigger?
3rd German Climate Conference, Potsdam, April 11–14, PIK Report No. 1, 258–260.
- Worbs, K.D., H. Lönhardt and P. Carl (1994)
Zum Einfluss von Randbedingungen und Parameterisierungen auf die Monsundynamik eines niederdimensionalen GCMs
3rd German Climate Conference, Potsdam, April 11–14, PIK Report No. 1, 277–280.
- Carl, P. (1994)
Monsoon dynamics in a low-dimensional GCM,
WCRP-84, WMO/TD-No. 619, Vol. II, 773–780, WMO, Geneva.
- Tschentscher, I., K.D. Worbs and P. Carl (1994)
Frequency drift and retreat variability of a GCM's monsoon oscillator,
WCRP-84, WMO/TD-No. 619, Vol. II, 781–788, WMO, Geneva.
- Carl, P., K.D. Worbs and I. Tschentscher (1995)
On a dynamic systems approach to atmospheric model intercomparison,
WCRP-92, WMO/TD-No. 732, 445–450, WMO, Geneva.
- Carl, P. (1996)
Summer monsoon, MJO, annual cycle, QBO, Southern Oscillation ... On the dynamic architecture of the atmosphere,
2nd GEWEX Scientific Conference, Washington, June 17–21, Preprint vol., 25–26.
- Carl, P. and I. Tschentscher (1997)
Strukturelle Klimavariabilität,
Ann. Meteorol. **34**, 23–24.
- Tschentscher, I. and P. Carl (1997)
Dynamische Selbstorganisation in einem Atmosphäre–Land System,
Ann. Meteorol. **34**, 25–26.
- Carl, P. (1998)
The 1991–92 fluctuation in atmospheric methane—a tale on global climate dynamics and man's interference,
Report No. 8, 18 pp., Climate Dynamics Project, Berlin.
- Carl, P. (1998)
Eine zweite – generisch intrasaisonale – Südliche Oszillation aus dem Atmosphäre–Land-System?
Ann. Meteorol. **37**, 351–352.

- Carl, P. (1998)
Zur Modenstruktur des Klimasystems in Zeitreihen des Indischen Monsuns,
Ann. Meteorol. **37**, 347–348.
- Carl, P. (1999)
On the genesis of interannual scales from out of intraseasonal monsoon dynamics,
3rd GEWEX Scientific Conference, Beijing, June 16–19, Preprint vol., 17–18.
- Carl, P. (1999)
Monsoon dynamics of the century and the methane anomaly of the early 90s,
3rd GEWEX Scientific Conference, Beijing, June 16–19, Preprint vol., 61–62.
- Carl, P. (2003)
Synchronized motions within the instrumental climate record, 1870–1997,
Terra Nostra (6), 89–95.
- Carl, P. (2003)
Solar vs. thermal signal separation in the global surface air temperature series,
Int. Conf. Earth System Modelling, Proceedings on CD-ROM, 15 pp., Hamburg.
- Carl, P. and H. Behrendt (2006)
Funktionelle Disaggregation von Zeitreihen des Gesamtabflusses,
Dresdner Schr. Hydrol., issue 5, 49–58.
- Carl, P. (2007)
Modellierung der globalen Zirkulation,
in: Hupfer, P. (ed.) *Klimaforschung in der DDR. Ein Rückblick*, Geschichte der Meteorologie in Deutschland,
vol. 8, 125–126 & 215, Deutscher Wetterdienst, Offenbach.
- Carl, P. and H. Behrendt (2008)
Regularity based functional streamflow disaggregation: 1. Comprehensive foundation,
Water Resour. Res. **44**, W02420. doi:10.1029/2004WR003724
- Carl, P., K. Gerlinger, F.F. Hattermann, V. Krysanova, C. Schilling and H. Behrendt (2008)
Regularity based functional streamflow disaggregation: 2. Extended demonstration,
Water Resour. Res. **44**, W03426, doi:10.1029/2006WR005056.
Corrigendum: *Water Resour. Res.* **44**, W06701. doi:10.1029/2008WR007105
- Carl, P., Y. Svirezhev and G. Stenchikov (2008)
Environmental and biospheric impacts of nuclear war,
in: Jørgensen, S.E. and B.D. Fath (eds.) *Encyclopaedia of Ecology*, vol. 2: *Global Ecology*, 1314–1321,
Elsevier, Oxford.
- Carl, P. (2009)
Climate modelling in martialic contexts,
in: Hupfer, P. and K. Dethloff (eds.) *Selected Contributions on Results of Climate Research in East
Germany (the former GDR)*, Berichte zur Polar- und Meeresforschung No. 588, 187–189, Alfred Wegener
Institute for Polar and Marine Research, Bremerhaven.
- Carl, P. (2011)
MP based detection of synchronized motions across the instrumental climate record,
Proceedings, 557–600, IEEE Statistical Signal Processing Workshop, Nice, June 28–30. ISBN 978-1-4577-
0568-7/11
- Carl, P. (2013)
On the dynamical status of the climate system—I: A General Circulation Model en route to chaos,
in: Stavrinides, S.G., S. Banerjee, S.H. Caglar and M. Ozer (eds.) *Chaos and Complex Systems*, 521–528,
Springer-Verlag Berlin Heidelberg. doi:10.1007/978-3-642-33914-1_73
- Carl, P. (2013)
On the dynamical status of the climate system—II: Synchronous motions galore across the records,
in: Stavrinides, S.G., S. Banerjee, S.H. Caglar and M. Ozer (eds.) *Chaos and Complex Systems*, 529–539,
Springer-Verlag Berlin Heidelberg. doi:10.1007/978-3-642-33914-1_74
- Carl, P. (2013)
A General Circulation Model en route to intraseasonal monsoon chaos,
in: Banerjee, S. and L. Rondoni (eds.) *Applications of Chaos and Nonlinear Dynamics in Science and
Engineering* **3**, chap. 3, 63–99, Springer-Verlag Berlin Heidelberg. doi:10.1007/978-3-642-34017-8_3

Carl, P. (2014)

Atmospheric tracers and the monsoon system – lessons learnt from the 1991 Kuwait oil well fires, in: Banerjee, S. and S.S. Erçetin (eds.) *Chaos, Complexity and Leadership 2012*, 371–410, Springer Science+Business Media Dordrecht. doi:10.1007/978-94-007-7362-2_47

Selected Oral Publications

Invited Lectures

Carl, P. (1988)

Konsequenzen eines Atomkrieges für Klima und Umwelt,
Keynote Lecture, General Assembly of the GDR Physical Society, Dresden, February 08–10.

Carl, P. (1989)

Global and regional structure, complexity and evolution of the climatic disturbance following nuclear war,
Keynote Lecture, EPS Study Conference on "Induced Critical Conditions in the Atmosphere", Torino, September 27–30.

Carl, P. (1993)

Zur dynamischen Struktur des planetaren Monsuns,
Guest Lecture, Potsdam Institute for Climate Impact Research (PIK), Potsdam, February 17.

Carl, P. (1995)

Zur atmosphärischen Kopplung von Monsun- und ENSO-System,
Guest Lecture, PIK Colloquium, Potsdam, January 10.

Carl, P. (1996)

Zur Natur des Jahresganges und seiner intrasaisonalen bis intradekadischen Anomalien,
Guest Lecture, Meteorological Colloquium at the FU Berlin, Berlin, December 09.

Carl, P. (1998)

Zu Modenstrukturen in Monsun-Zeitreihen und ihrer Relevanz für die Verifikation von Systemkonzepten der Klimadynamik,
Guest Lecture, Alfred Wegener Institute for Polar und Marine Research (AWI), Potsdam, April 28.

Carl, P. (1999)

„On the sounds of climate and climate change“ – Aspekte nichtlinearer Dynamik im Klimasystem,
Guest Lecture, Max Planck Institute for Plasma Physics (IPP), Berlin, October 13.

Carl, P. (2000)

On the modulation dimension of climatic signals,
Invited Lecture, International Conference on Climate and Environment Variability and Predictability (CEVP), Shanghai, August 07–11.

Carl, P. and H. Behrendt (2002)

Multifractality based functional streamflow evaluation and disaggregation,
Solicited Lecture, XXVII EGS General Assembly, Nice, April 22–26.

Carl, P. (2010)

Synchronized motions and detached events, from global climate to the river basin scale – a time series study,
Guest Lecture, Brandenburg University of Technology (BTU), Cottbus, February 24.

Contributions

Carl, P. and G.L. Stenchikov (1988)

CCAS model output of relevance to the biosphere—acute phase stress matrix calculations,
SCOPE–ENUWAR Moscow Workshop, Moscow, March 21–26.

Carl, P. (1990)

Brennende Ölfelder im Nahen Osten: regionale Klima- und Umweltkatastrophe mit globalen Fernwirkungen?
Annual Assembly, German Meteorological Society (DMG), Chemnitz, December 03–06.

Carl, P. (1991)

Rauch im planetaren Monsunsystem,
2nd German Climate Conference, Neubrandenburg, October 28–31.

- Carl, P. (1992)
Dynamische Struktur und Sensitivität des planetaren Monsunsystems in einem Grobgitter-Zirkulationsmodell der Troposphäre,
General Assembly, German Meteorological Society (DMG), Berlin, March 16–20.
- Carl, P. (1992)
Dynamics of the planetary-scale summer monsoon,
XVII EGS General Assembly, Edinburgh, April 06–10.
- Carl, P. (1995)
On the paleoclimatic relevance of a monsoon hypothesis,
XIV INQUA International Congress, Berlin, August 03–10.
- Carl, P. (1996)
Elements of a conceptual climate dynamics,
XXI EGS General Assembly, The Hague, Mai 06–10.
- Carl, P. and I. Tschentscher (1997)
A nonlinear atmosphere-land system with intraseasonal to interannual scales,
First WMO International Workshop on Monsoon Studies (IMW-1), Denpasar, Indonesia, February 24–28.
- Carl, P. and I. Tschentscher (1997)
On the nature of the annual cycle and its anomalies,
XXII EGS General Assembly, Vienna, April 21–25.
- Carl, P. (1999)
Pulsschlag des Monsuns. Zum dynamischen Status und Evolutionspotential des Klimasystems,
Annual Assembly, German Physical Society (DPG), Heidelberg, March 15–19.
- Carl, P. (1999)
Growing seasonal synchronicity between global trace gas loads and worldwide gas production?
XXII IUGG General Assembly, Birmingham, July 19–30.
- Carl, P. (1999)
Verifying nonlinear climate conceptions from time series: methodological bricks,
XXII IUGG General Assembly, Birmingham, July 19–30.
- Tschentscher, I. and P. Carl (1999)
Mechanisms of a self-maintained monsoon activity cycle,
AGU Fall Meeting, San Francisco, December 13–17.
- Carl, P. (2000)
Zum Langzeitgedächtnis der Atmosphäre,
Annual Assembly, German Physical Society (DPG), Bremen, March 21–24.
- Carl, P. (2000)
Joint time–frequency–scale–modulation analysis of climatic time series—a survey,
XXV EGS General Assembly, Nice, April 25–29.
- Carl, P. (2000)
Long-term memory of the atmosphere: On the constitutive effects of cyclic forcing,
XXV EGS General Assembly, Nice, April 25–29.
- Carl, P. (2000)
Nonlinear prediction based on adaptive analysis & synthesis using modulated atomic dictionaries,
XXV EGS General Assembly, Nice, April 25–29.
- Carl, P. (2000)
A 'breathing' seasonal cycle at the roots of a GCM's climate variability,
Int. Conf. Climate Environment Variability and Predictability (CEVP), Shanghai, August 07–11.
- Carl, P. (2000)
Dynamische Aspekte der Klimaentwicklung im 20. Jahrhundert,
5th German Climate Conference, Hamburg, October 02–06.
- Carl, P. (2000)
Monsun-Modellklimate,
5th German Climate Conference, Hamburg, October 02–06.

- Carl, P. (2001)
Frequency modulation in the instrumental record,
VIII Int. Meeting Statistical Climatology (IMSC), Lüneburg, March 12–16.
- Carl, P. (2001)
Kuriositäten globaler Erwärmung: Frequenzmodulation als Fingerprint, temporäre Koalitionen – und dekadische Abkühlung vor den Toren?
Spring Assembly, German Physical Society (DPG), Hamburg, March 20–22.
- Carl, P. (2001)
Growth of thermal signal energy, phase coincidence with insolation – and cooling ahead?
XXVI EGS General Assembly, Nice, March 25–30.
- Carl, P. (2001)
Exploring the modulation dimensions of climate and environmental signals,
XXVI EGS General Assembly, Nice, March 25–30.
- Carl, P. (2001)
Phenomenology vs. topology—a monsoon inspired perspective on the climate system's dynamical status,
VIII IAMAS Scientific Assembly, Innsbruck, July 10–18.
- Behrendt, H. and P. Carl (2002)
Regularity based functional streamflow disaggregation,
XXVII EGS General Assembly, Nice, April 22–26.
- Carl, P. (2002)
Dynamic signatures of insolation throughout the instrumental record,
XXVII EGS General Assembly, Nice, April 22–26.
- Carl, P. (2005)
The synchronized climate system as seen from its records,
EPS13 Conference "Beyond Einstein—Physics of the 21st century", Berne, July 11–15.
- Carl, P. (2006)
Zum Charakter des solaren Signals in Klimazeitreihen der instrumentellen Periode,
7th German Climate Conference, Munich, October 09–11.
- Carl, P. (2007)
Atomarer ‚Schlagabtausch‘ in den Subtropen: Implikationen der Ölbrände in Kuwait, 1991,
Spring Assembly, German Physical Society (DPG), Regensburg, March 26–30.
- Carl, P. (2009),
Matching pursuits with Gaussian logons – a novel view on climate dynamics,
EGU General Assembly, Vienna, April 20–24.
- Carl, P. and H. Behrendt (2009),
Functional streamflow disaggregation – modern variations on a classical theme,
EGU General Assembly, Vienna, April 20–24.
- Carl, P. (2009)
Der Wasserkreislauf im Kontext: Eine Zeitreihenstudie zu Klimavariabilität und -wandel,
8th German Climate Conference, Bonn, October 05–08.
- Carl, P. (2010)
Synchronbewegungen und isolierte Ereignisse von der globalen bis zur lokalen Skala – eine Zeitreihenstudie,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Vienna, September 20–24.
- Carl, P. (2012)
Konzeptionelle GCM-Studien zur intrasaisonalen Aktivität des globalen Monsunsystems,
9th German Climate Conference, Freiburg, October 09–12.
- Carl, P. (2013)
Mekong downstream: Climate signatures in runoff,
Mekong Environmental Symposium, Ho Chi Minh City (Saigon), March 05–07.

Selected Poster Presentations

Carl, P. (1991)

Software-technologische Aspekte der Klimamodellierung,
2nd German Climate Conference, Neubrandenburg, October 28–31.

Carl, P. (1992)

The planetary-scale monsoon—a critical phenomenon?
2nd Int. Conf. on Modelling of Global Climate Change and Variability, Hamburg, September 07–11.

Carl, P. and I. Tschentscher (1995)

Structural and dynamic aspects of monsoon-(EN)SO coupling,
XXI IUGG General Assembly, Boulder, July 02–14.

Tschentscher, I. and P. Carl (1995)

Some simple reasoning about atmospheric variability,
XXI IUGG General Assembly, Boulder, July 02–14.

Carl, P. (1995)

On monsoon dynamics and atmospheric variability; state of a hypothesis,
3rd Int. Conf. on Modelling of Global Climate Change and Variability, Hamburg, September 04–08.

Tschentscher, I. and P. Carl (1995)

Atmospheric dynamics, variability and predictability in a low-dimensional GCM,
3rd Int. Conf. on Modelling of Global Climate Change and Variability, Hamburg, September 04–08.

Carl, P., I. Tschentscher, I. and K.D. Worbs (1995)

Zur atmosphärischen Kopplung von Monsun und ENSO (post-deadline contribution),
Assembly of German Meteorologists, Munich, September 11–14.

Carl, P. (1996)

Universal roads of climate change?
AGU Fall Meeting, San Francisco, December 15–19.

Carl, P. and I. Tschentscher (1997)

Climate change along universal routes to chaos?
XXII EGS General Assembly, Vienna, April 21–25.

Carl, P. (1997)

Dynamic architecture of a nonlinear atmosphere-land system,
Physics of Climate Conference, London, October 29–30.

Carl, P. (1999)

The atmospheric CH₄ anomaly of the early 90s: Reading the score by time–frequency methods,
XXIV EGS General Assembly, The Hague, April 19–23.

Carl, P. (1999)

On the sounds of the climate system's dynamical status and evolution,
XXII IUGG General Assembly, Birmingham, July 18–30.

Carl, P. (1999)

Did Asian monsoon dynamics influence the timing of Mt. Pinatubo's eruption?
XXII IUGG General Assembly, Birmingham, July 18–30.

Carl, P. (1999)

The systems dynamic core of a conceptual GCM: exploration, validation,
4th Int. Conf. on Modelling of Global Climate Change and Variability, Hamburg, September 13–17.

Carl, P. (1999)

Topological aspects and mechanisms related to AMIP type Asian monsoon variability,
4th Int. Conf. on Modelling of Global Climate Change and Variability, Hamburg, September 13–17.

Carl, P. (1999)

Dynamics of worldwide oil and gas production – an exercise in man-climate coevolution?
4th Int. Conf. on Modelling of Global Climate Change and Variability, Hamburg, September 13–17.

Carl, P. (2000)

Modulation of the seasonal cycle – a fundamental concept of climate variability?
XXV EGS General Assembly, Nice, April 25–29.

- Carl, P. (2000)
Performance of a Matching Pursuit algorithm with frequency-modulated Gabor dictionary,
XXV EGS General Assembly, Nice, April 25–29.
- Carl, P. (2000)
Modell-Klimavariabilität und ‚systemdynamischer Kern‘ eines AGCMs,
5th German Climate Conference, Hamburg, October 02–06.
- Carl, P. (2001)
Minutes on the dynamical status of the atmosphere-land system,
XXVI EGS General Assembly, Nice, March 25–30.
- Carl, P. (2001)
Climate sensitivity and variability via monsoon driven phase modulation of the seasonal cycle,
XXVI EGS General Assembly, Nice, March 25–30.
- Carl, P. (2001)
Phenomenology vs. topology – a monsoon inspired perspective on the climate system’s dynamical status,
8th IAMAS Scientific Assembly, Innsbruck, July 10–18.
- Carl, P. (2001)
Monsoon-driven phase modulation of the seasonal cycle – a source of predominantly biennial climate variability,
8th IAMAS Scientific Assembly, Innsbruck, July 10–18.
- Carl, P. (2001)
Radiative vs. thermal signal separation in the time-frequency plane,
8th IAMAS Scientific Assembly, Innsbruck, July 10–18.
- Behrendt, H. and P. Carl (2001)
Empirical separation and evaluation of runoff components for German mountain and lowlands rivers,
4th GEWEX Scientific Conference, Paris, September 10–14.
- Carl, P. (2001)
Frequency modulation throughout the instrumental record – another monsoon perspective on climate change,
4th GEWEX Scientific Conference, Paris, September 10–14.
- Carl, P. (2001)
Frequenzmodulation und Phasensynchronisation als Fingerprints,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Vienna, September 18–21.
- Carl, P. (2001)
Klimasensitivität und -variabilität durch selbstinduzierte Phasenmodulation des Jahresganges der globalen Zirkulation,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Vienna, September 18–21.
- Carl, P. (2001)
Monsunklima – Phänomenologie vs. Topologie: Syntheseversuch & Plädoyer für einen topologisch fundierten Monsunbegriff,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Vienna, September 18–21.
- Carl, P. (2001)
Empirische Trennung von Abflusskomponenten im BALTEX Gebiet,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Vienna, September 18–21.
- Carl, P. (2003)
Interdomain climatic covariability, 1870-1997,
EGS-AGU-EUG Joint Assembly, Nice, April 07–11.
- Carl, P. (2003)
Multifractal analysis of a GCM climate,
EGS-AGU-EUG Joint Assembly, Nice, April 07–11.
- Carl, P. and H. Behrendt (2003)
Regular and singular structures in German lowland and mountain river discharge,
EGS-AGU-EUG Joint Assembly, Nice, April 07–11.

- Carl, P. (2003)
Zur Quantifizierung des dynamischen Status' eines GCM-Klimas,
6th German Climate Conference, Potsdam, September 22–25.
- Carl, P. (2003)
Synchronbewegungen und Singularitäten im instrumentellen Klimarecord, 1870–1997,
6th German Climate Conference, Potsdam, September 22–25.
- Carl, P. (2004)
„Chaos control“ – Konzept zum Verständnis von Klimadynamik und Hypothese zur Klimaänderung,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Karlsruhe, September 07–10.
- Carl, P. and H. Behrendt (2006)
Suche nach Klimasignaturen in hydrologischen Zeitreihen,
7th German Climate Conference, Munich, October 09–11.
- Carl, P. (2007)
Nuclear exchange in the subtropics: Implications of the 1991 Kuwait oil well fires,
2nd Int. Conf. Earth System Mod. (ICESM), Hamburg, August 27–31.
- Carl, P. (2007)
On the solar signal in climate time series of the instrumental period,
2nd Int. Conf. Earth System Mod. (ICESM), Hamburg, August 27–31.
- Carl, P. (2007)
Solarstrahlung vs. Sonnenfleckenzahl: Signatur multidekadischer Moden im Klimarecord,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Hamburg, September 10–14.
- Carl, P. and H. Behrendt (2007)
Signaturen von Klima- und Wetterlagen in hydrologischen Zeitreihen,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Hamburg, September 10–14.
- Carl, P. (2009)
Matching pursuits with Gaussian logons—a novel view on climate dynamics,
EGU General Assembly, Vienna, April 20–24.
- Carl, P. (2009)
Empirical dynamic downscaling from global climate to the hydrology of river basin scale,
EGU General Assembly, Vienna, April 20–24.
- Carl, P. and H. Behrendt (2009)
Signatures of climate and weather regimes in runoff of the Middle Elbe near Dresden, Germany,
EGU General Assembly, Vienna, April 20–24.
- Carl, P., K. Gerlinger, F.F. Hattermann, V. Krysanova, C. Schilling and H. Behrendt (2009)
Functional streamflow disaggregation: Performance for headwater catchments from lowlands to alpine,
EGU General Assembly, Vienna, April 20–24.
- Carl, P. (2009)
Signaturen von Klima- und Wetterregimes im Abfluss am Elbe-Pegel bei Dresden,
8th German Climate Conference, Bonn, October 05–08.
- Carl, P. (2010)
Ein Algorithmus für die ‚sparsame‘ Approximation von Klima-Zeitreihen: Details, Eigenschaften,
German–Austrian–Swiss Assembly of Meteorologists (DACH), Vienna, September 20–24.
- Carl, P. (2012)
Global monsoon: A GCM that does it intraseasonally,
3rd Int. Conf. Earth System Mod. (ICESM), Hamburg, September 17–21.
- Carl, P. (2012)
Synchronous motions galore across the instrumental record,
3rd Int. Conf. Earth System Mod. (ICESM), Hamburg, September 17–21.
- Carl, P. (2012)
Synchronbewegungen und Telekonnektionen in Zeitreihen des Klimasystems,
9th German Climate Conference, Freiburg, October 09–12.

Carl, P. (2012)

Inverse hydrological modelling for persistent and intermittent streamflow: FSD & MFA on SWIM vs. observation,

Conf. Climate Change Challenges for Water Management in Northern China, Beijing, October 17–18.

Carl, P. (2013)

The Southeast Asian hydrological cycle: Challenges and opportunities of (sub-)seasonal foreshadowing,
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