



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Silvio Gualdi**
E-mail Silvio.gualdi@cmcc.it

Desired employment / Occupational field

Climate Research

Work experience

Dates	2014-present
Occupation or position held	Head of Division
Main activities and responsibilities	Heading the Division of Climate Simulations and Predictions, leading the production of climate prediction and climate change projections.
Name and address of employer	Centro Euro-Mediterraneo per i Cambiamenti Climatici (CMCC), 16, via Augusto Imperatore, 73100 Lecce - Italy
Type of business or sector	Climate research and provision of climate services
Dates	2011-2014
Occupation or position held	Head of Division
Main activities and responsibilities	Heading the Division of Climate Services, leading the production of climate prediction and climate change projections.
Name and address of employer	Centro Euro-Mediterraneo per i Cambiamenti Climatici (CMCC), 16, via Augusto Imperatore, 73100 Lecce - Italy
Type of business or sector	Climate research and provision of climate services
Dates	2007-2011
Occupation or position held	Senior Scientist
Main activities and responsibilities	Leader of the "Climate Variability and Climate Change" group
Name and address of employer	Centro Euro-Mediterraneo per i Cambiamenti Climatici (CMCC), 16, via Augusto Imperatore, 73100 Lecce - Italy
Type of business or sector	Climate research
Dates	2000-present
Occupation or position held	Scientist
Main activities and responsibilities	Climate simulations and climate variability analysis
Name and address of employer	Istituto Nazionale di Geofisica e Vulcanologia (INGV), via di Vigna Murata 605, 00147 Roma, Italy
Type of business or sector	Climate research
Dates	1996-2000
Occupation or position held	Scientist
Main activities and responsibilities	Climate simulations and climate variability analysis
Name and address of employer	Istituto per le Scienze dell'Atmosfera e dell'Oceano (ISAO-CNR), via Gobetti 101, 40129 Bologna, Italy
Type of business or sector	Climate research

Education and training

Dates 1999
Title of qualification awarded PhD in Geophysics

Principal subjects/occupational skills covered	Statistical analysis and study of the dynamics of the Tropical Intraseasonal Oscillation as observed and simulated with general circulation models
Name and type of organisation providing education and training	Hamburg University (Germany)
Dates	1989
Title of qualification awarded	Degree in Physics
Principal subjects/occupational skills covered	Polar optical phonons – electrons interaction in quantum wells
Name and type of organisation providing education and training	University of Modena (Italy)

Personal skills and competences

Mother tongue(s) **Italian**

Other language(s) **English, German**

Self-assessment
European level ()*

English
German

Understanding		Speaking		Writing			
Listening		Reading		Spoken interaction		Spoken production	
	Proficient User		Proficient User		Proficient User		Proficient User
	Basic User		Basic User		Basic User		Basic User

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences I have a consolidated experience in team working

- Teaching skills and competences
- 2014, May-June: Teacher of the "Techniques of Statistical Analysis of Data" course held in the framework of the teaching programme "Software Technologies for the Marine Safety" of the project TESSA. Lecce, Italy.
 - 2014, May 19-23: Teacher at the CMCC-ICCG Summer School on "Adaptation Policies and Practices in the Mediterranean Basin (MedAdapt)". Island of San Giorgio Maggiore, Venice, Italy.
 - 2013, May 23-25: Teacher at the CMCC-ICCG Summer School on "Adaptation Policies and Practices in the Mediterranean Basin (MedAdapt)". Island of San Giorgio Maggiore, Venice, Italy.
 - 2013, March-April: Teacher of the "Techniques of Statistical Analysis of Data" course held in the framework of the teaching programme "Software Technologies for the Marine Safety" of the project TESSA. Lecce, Italy.
 - 2012, June, 20-29: Co-Director and Teacher at the Alpine Summer School, Course XIX, on "Regional Climate Dynamics in the Mediterranean and beyond: An Earth System perspective". Valsavarenche, Valle d'Aosta, Italy.
 - 2009-12: Co-tutor of the PhD Thesis in "Science and Management of Climate Change", University of Venice Ca' Foscari: "Climate Variability in West Africa during the Monsoon Season: the Impact of Sea Surface Temperatures and Anthropogenic Sulfate Aerosols in the CMCC Global Climate Model". Candidate: Claudine WenhajiNdomeni.
 - 2009-12: Co-tutor of the PhD Thesis in "Science and Management of Climate Change", University of Venice Ca' Foscari: "A long-term climatology of Medicanes". Candidate: Leone Cavicchia.
 - 2014-present: Teacher of "Climate Dynamics and Predictions" for the "Science and Management of the Climate Change" Doctorate Programme of the Cà Foscari University of Venice.
 - 2007-2013: Teacher of "Climate Dynamics" for the "Science and Management of the Climate Change" Doctorate Programme of the Cà Foscari University of Venice.
 - A.A. 2004-05: Co-tutor of the PhD Thesis in Geophysics, University of Bologna, Faculty of Scienze Matematiche, Fisiche e Naturali: "Effects of Land Surface and Vegetation Processes on the Climate Simulated by an Atmospheric General Circulation Model. Candidate: Andrea Alessandri.
 - A.A. 2003-04: Co-tutor of the degree thesis in Physics, University of Bologna, Faculty of Scienze Matematiche, Fisiche e Naturali: "Impatto delle Montagne Rocciose sui Regimi Climatici Invernali del

Nord Atlantico e dell'Europa". Candidate: Giovanni Nardi Pantoli.

- A.A. 2002-03: Co-tutor of the degree thesis in Environmental Sciences, University of Bologna, Faculty of Scienze Matematiche, Fisiche e Naturali: "I Regimi Climatici del Mar Mediterraneo". Candidate: Francesca Marzocchi.
- A.A. 2000-01: Co-tutor of the degree thesis in Environmental Sciences, University of Bologna, Faculty of Scienze Matematiche, Fisiche e Naturali: "Impatti della distribuzione di vegetazione sui cambiamenti climatici". Candidate: Andrea Alessandri.
- A.A. 1999-00: Teacher of "Statistical methods for climate variability assessment" (an integrative course of Climatology and Meteorology), degree in Environmental Sciences, University of Bologna, Faculty of Scienze Matematiche, Fisiche e Naturali.
- A.A. 1998-99: Co-tutor of the degree thesis in Environmental Sciences, University of Bologna, Faculty of Scienze Matematiche, Fisiche e Naturali: "Regimi Climatici del Mediterraneo". Candidate: Alessandro Stevanato.

Technical skills and competences

My main domain of competence is in simulation and analysis of climate variability from intraseasonal to multi-decadal timescales and climate change. The principal areas of my expertise can be summarized as follows:

- development and implementation of coupled climate models (CGCMs) used to produce simulations of past, present and future climate scenarios;
- production of climate predictions (seasonal-to-multi annual time scales) and climate change projections;
- analysis of the climate simulations performed with the CGCMs and comparison with the observations with the aim to investigate the dominant modes of climate variability and the ability of the models to reproduce them;
- investigation and assessment of the mechanisms of interaction between the major modes of tropical variability acting at different timescales, such as for example, the tropical intraseasonal oscillation and the interannual variability (El Nino, NAO, etc...);
- investigation and assessment of the mechanisms of teleconnection between the tropical variability and the variability in the mid-latitude, especially in the Euro-Mediterranean region;
- use of advanced statistical tools for climate analysis, such as "Empirical Orthogonal Functions" (EOFs), "Principal Oscillation Patterns" (POPs), "Singular Value Decomposition" (SVD), "cross-correlation analysis", Couple Manifold, wavelet analysis, etc.

Computer skills and competences

Competent with computers based on Unix operative system, with Fortran programming language, and numerical modeling in general.

Additional information

International Projects:

- Partner (Task Leader) of the IV EU Framework Program (FP) Project "SINTEX", 1998 – 2001;
- Partner (INGV Principal Investigator) of the V EU-FP Project "DEMETER" (Task Leader), 2000 -2003;
- Partner (INGV Principal Investigator) of the VI EU-FP Project "ENSEMBLES", 2004-2009.
- Partner (Task Leader) of the VI EU-FP Project "MERSEA-IP", 2004-2008;
- Partner (Task Leader) of the VI EU-FP Project "CLARIS", 2004-2007;
- Partner (Research Line leader) of the VI EU-FP Project "CIRCE", 2007-2011;
- Partner (co-leader of the Work Package 6) of the VII EU-FP Project "COMBINE", 2009-2013;
- Partner of the 5th phase of the international Research Programme WCRP/CLIVAR "Coupled Model Intercomparison Project" (CMIP-5);
- Partner (CMCC Principal Investigator) of the VII EU-FP Project "CLIMRUN", 2011-2014;
- Partner (Task Leader) of the VII EU-FP "FUME", 2010-2013;
- Partner (Task Leader) of the VII EU-FP7 "CLIMAFRICA", 2010-2014;
- Partner (CMCC Principal Investigator, WP leader) of the National Project "NextData", 2012-2016;
- Partner of the South East Europe Transnational Cooperation Programme Project "ORIENTGATE",

2013-2015;

- Partner (CMCC Principal Investigator) of the Climate-KIC Project “WatenerCast”, 2015-2017;

Awards and Professional Activities:

- 2001: Visiting Scientist at the University of Reading (UK);
- 2004-2008: Member of the Governing Board of the EU Project “MERSEA-IP”;
- 2006: Norbert Gerbier-MUMM International Award;
- 2007: Convener of the Session “Climate Change” at the “Convegno Nazionale di Fisica della Terra Fluida e Problematiche Affini, Ischia 11-15 giugno 2007”;
- 2007-present Member of the MedCLIVAR Programme;
- 2007-2011: Member of the Executive Board of the EU-FP Project “CIRCE”;
- 2008-present: Member of the International Scientific Steering Committee of HyMex (Hydrological Cycle in the Mediterranean Experiment);
- 2008-present: Member of the Faculty Board of the PhD Programme on “Science and Management of Climate Change”, University of Venice Ca’ Foscari;
- 2008-2011: Convener of the AW4 Session (“Large scale air-sea interaction processes and their influence on the Euro-Mediterranean climate”) at the Annual Meeting of the European Meteorological Society (EMS);
- 2009: Member of the National Delegation for the 15th Session of the WMO Commission for Climatology (CCI-XV), Antalya, Turkey, 19-24 February;
- 2009: Member of the Steering Committee of the EU-ENSEMBLES Symposium: “A symposium for decision makers and climate scientists to see the results and research of the ENSEMBLES climate change project”;
- 2010; Member of the Scientific Committee of the 4th HyMeX Workshop 8-10 June 2010 CNR, Bologna, Italy;
- 2011-present: Convener of the ASI4 (“Small and large scale air-sea interactions and coastal meteorology”) at the Annual Meeting of the European Meteorological Society (EMS);
- 2011-2013 Visiting Scientist at the University of Venice Ca’ Foscari;
- 2012-present: Member of the Executive Board of the National Project “NextData”;
- 2013-present: Editor of the International Journal of Climatology;
- 2013: Member of the Italian Delegation to the WMO – First Session of the Intergovernmental Board for Climate Services (IBCS-I), 1-5 July, WMO, Geneva, Switzerland;
- 2013-present: member of the MedCOF (Mediterranean Climate Outlook Forum) International Managing Board;
- 2014: Member of the Scientific Committee of the MedCLIVAR 2014 Conference “Understanding Climate Evolution and Effects on Environment and Societies in the Old World region”, 22-25 June, Ankara, Turkey;
- 2014; Member of the Scientific Committee of the 8th HyMeX Workshop, 15-18 September 2014, Valletta, Malta;
- 2014: Member of the Scientific Committee of the 2nd Annual conference of the Società Italiana per le Scienze del Clima (SISC), 29-30 September, Venice, Italy;
- 2015-present: Senior Editor of the Climate Science Oxford Research Encyclopedias of the Oxford University Press;

Publications:

61 Schindler A., A. Toreti, M. Zampieri, E. Scoccimarro, **S. Gualdi**, S. Fukutome, E. Xoplaki and J. Luterbacher, 2015: On the Internal Variability of Simulated Daily Precipitation. *J. Climate*, **28**, 3124–3630.

60 Bellucci, A., R. Haarsma, **S. Gualdi**, P. Athanasiadis and co-workers, 2015: An assessment of a multi-model ensemble of decadal climate predictions. *Clim. Dyn.*, **44**, 2787 – 2806.

59 Zampieri, M., E. Scoccimarro, **S. Gualdi** and A. Navarra, 2015: Observed shift towards earlier spring

discharge in the main Alpine rivers. *Sci Total Environ*, **503**, 222-232.

58 Materia, S., A. Borrelli, A. Bellucci, A. Alessandri, P. Di Pietro, P. Athanasiadis, A. Navarra and **S. Gualdi**, 2014: Impact of atmosphere and surface initial conditions on seasonal forecast of global surface temperature, *J. Climate*, **27**, 9253-9271.

57 Athanasiadis P. J., A. Bellucci, L. Hermanson, A. A. Scaife, C. MacLachlan, A. Arribas, S. Materia, A. Borrelli and **S. Gualdi**, 2014: The representation of atmospheric blocking and the associated low-frequency variability in two seasonal prediction systems, *J. Climate*, **27**, 9082-9100.

56 Cavicchia L., H. von Storch and **S. Gualdi**, 2014: A long-term climatology of Medicanes. *Clim. Dyn.*, 1183-1195 DOI 10.1007/s00382-013-1893-7.

55 Cavicchia L., H. von Storch and **S. Gualdi**, 2014: Mediterranean Tropical-Like Cyclones in Present and Future Climate. *J. Climate*, **27**, 7493-7501.

54 Krichak S. O., J. S. Breitgand, **S. Gualdi** and S. B. Feldstein, 2014: Teleconnection–extreme precipitation relationships over the Mediterranean region. *Theor Appl Climatol*, **117**, 679-692, DOI 10.1007/s00704-013-1036-4.

53 Drobinski P., Ducrocq V., Alpert P., Anagnostou E., Béranger K., Borga M., Braud I., Chanzy A., Davolio S., Delrieu G., Estournel C., Filali Boubrahmi N., Font J., Grubisic V., **Gualdi S.**, Homar V., Ivancan-Picek B., Kottmeier C., Kotroni V., Lagouvardos K., Lionello P., Llasat M. C., Ludwig W., Lutoff C., Mariotti A., Richard E., Romero R., Rotunno R., Roussot O., Ruin I., Somot S., Taupier-Letage I., Tintore J., Uijlenhoet R., Wernli L., 2014: HyMeX, a 10-year Multidisciplinary Program on the Mediterranean Water Cycle, *Bull. Amer. Meteo. Soc.*, **95**, 1063-1082, DOI: 10.1175/BAMS-D-12-00242.1

52 Davini P., C. Cagnazzo, P.G. Fogli, E. Manzini, **S. Gualdi** and A. Navarra, 2014: European Blocking and Atlantic Jet Stream Variability in the NCEP/NCAR Reanalysis and the CMCC-CMS climate model. *Clim. Dyn.* **43**, 71-85, DOI 10.1007/s00382-013-1873-y.

51 Scoccimarro E., **S. Gualdi**, G. Villarini, G. Vecchi, M. Zhao, K. Walsh, A. Navarra, 2014: Intense precipitation events associated with landfalling tropical cyclones in response to a warmer climate and increased CO₂. *J. Climate*, **27**, 4642-4654, doi: 10.1175/JCLI-D-14-00065.1

50 Fattore F., T. Bertolini, S. Materia, **S. Gualdi**, A.T. M'Bou, G. Nicolini, R. Valentini, A. De Grandcourt, D. Tedesco, S. Castaldi, 2014: Seasonal trends of dry and bulk concentration of nitrogen compounds over a rain forest in Ghana. *Biogeosciences*, **11**, 3069-3081, DOI: 10.5194/bg-11-3069-2014

49 Baruffi, F, M Bisaglia, M. Cappelletto, S. Pasini, A. Galli, V. Marsala, A. Scarinci, C. Panelli, **S. Gualdi**, A. Zandonella, 2013: Groundwater storage in adaptation to climate change. Proceedings Instit. Civil Engin.-Water Manag., **166**: 488-500 DOI: 10.1680/wama.11.00096.

48 Scoccimarro E., **S. Gualdi**, A Bellucci, M. Zampieri, A. Navarra, 2013: Heavy precipitation events in a warmer climate: results from CMIP5 models. *J Climate*, **26**, 7902-7911.

47 Toreti, A. P. Naveau, M. Zampieri, A. Schindler, E. Scoccimarro, E. Xoplaki, H. A. Dijkstra, **S. Gualdi** and J. Luterbacher, 2013: Projections of global changes in precipitation extremes from Coupled Model Intercomparison Project Phase 5 models. *Geophys. Res. Lett*, **40**, 4887–4892, doi:10.1002/grl.50940.

46 Villarini G., E. Scoccimarro and **S. Gualdi**, 2013: Projections of Heavy Rainfall over the Central US based on CMIP5 Models. *Atm.. Sci. Lett.*, **14**: 200–205.

45 Zampieri M., E. Scoccimarro and **S. Gualdi**, 2013: Atlantic influence on spring snowfall over the Alps in the past 150 years. *Environ. Res. Lett.* **8** (2013) 034026, doi:10.1088/1748-9326/8/3/034026.

44 Bucchignani, E., A. Sanna, **S. Gualdi**, s. Castellari, P. Schiano, 2013: Simulation of the climate of the XX century in the Alpine space. *Nat. Hazards*, **67**, 981-990. DOI: 10.1007/s11069-011-9883-8.

43 Bellucci A., **S. Gualdi**, S. Masina, A. Storto, E. Scoccimarro, C. Cagnazzo, P. Fogli, E. Manzini, and A. Navarra, 2013: Decadal Climate Predictions with a coupled OAGCM initialized with oceanic reanalyses. *Clim. Dyn.*, **40**, 1483-1497, DOI: 10.1007/s00382-012-1468-z.

42 Sanna A., P. Lionello and **S. Gualdi**, 2013: Coupled atmosphere ocean climate model simulations in the Mediterranean region: effect of a high-resolution marine model on cyclones and precipitation. *Nat. Hazards Earth Sys. Sci.*, **13**, 1567-1577 DOI: 10.5194/nhess-13-1567-2013.

41 **Gualdi S.**, S. Somot, L. Li, V. Artale, M. Adani, A. Bellucci, A. Braun, S. Calmanti, A. Carillo, A. Dell'Aquila, M. Déqué, C. Dubois, A. Elizalde, A. Harzallah, D. Jacob, B. L'Hévéder, W. May, P. Oddo, P. Ruti, A. Sanna, G. Sannino, E. Scoccimarro, F. Sevault, A. Navarra, 2013: The CIRCE Simulations: Regional Climate Change Projections with Realistic Representation of the Mediterranean Sea. *Bull. Amer. Meteo. Soc.*, **94**, 65-81.

- 40 Baruffi F., A. Cisotto, A. Cimolino, M. Ferri, M. Monego, D. Norbiato, M. Cappelletto, M. Bisaglia, A. Pretner, A. Galli, A. Scarinci, V. Marsala, C. Panelli, **S. Gualdi**, E. Bucchignani, S. Torresan, S. Pasini, A. Critto, A. Marcomini, 2012: Climate change impact assessment on Veneto and Friuli plain groundwater. Part I: An integrated modeling approach for hazard scenario construction, *Sci Total Environ*, <http://dx.doi.org/10.1016/j.scitotenv.2012.07.070>.
- 39 Materia S., **S. Gualdi**, L Terray, A. Navarra, 2012. The effect of Congo River freshwater discharge on Eastern Equatorial Atlantic climate variability. *Clim. Dyn.*, DOI 10.1007/s00382-012-1514-x.
- 38 Davini P., C. Cagnazzo, **S. Gualdi** and A. Navarra, 2012: Bidimensional diagnostics, variability and trends of Northern Hemisphere Blocking. *J. Climate*, 10.1175/JCLI-D-12-00032.1.
- 37 Dubois C., S. Somot, S. Calmanti A. Carillo, M. Deque, A. Dell'Aquila, A. Elizalde, **S. Gualdi**, D. Jacob, B. Lheveder, L.Li, P. Oddo, G. Sannino, E. Scoccimarro and F. Sevault., 2012: Future projections of the surface heat and water budgets of the Mediterranean sea in an ensemble of coupled atmosphere-ocean regional climate models. *Clim. Dyn.*, DOI 10.1007/s00382-011-1261-4.
- 36 Scoccimarro E., **S. Gualdi** and A. Navarra, 2012: Tropical Cyclone Effects on Arctic Sea Ice Variability. *Geophys. Res. Lett.*, doi:10.1029/2012GL052987.
- 35 Bellafiore D., E. Bucchignani, **S. Gualdi**, S. Carniel, V. Djurdjevic and G. Umgiesser , 2012: Assessment of meteorological climate models as inputs for coastal studies. *Ocean Dyn.*, DOI 10.1007/s10236-011-0508-2.
- 34 Scoccimarro E., **S. Gualdi**, A. Bellucci, A. Sanna, P.G. Fogli, E. Manzini, M. Vichi, P. Oddo, and A. Navarra, 2011. Effects of Tropical Cyclones on Ocean Heat Transport in a High Resolution Coupled General Circulation Model. *J. Climate*, 24, 4368-4384,
- 33 Bisaglia, M, M Cappelletto, S. Pasini, A. Cimolino, F. Baruffi, F A. Galli, V. Marsala, A. Scarinci, S. Gualdi, E. Bucchignani, A. Zandonella, 2011: Implementation of a model for estimating the summer irrigation deficit in the upper plains of the Veneto and Friuli regions and and first application in adaptation to climate change. *Ital. J. Agrometeo*. **16**, 5-14.
- 32 Mathew R., **S. Gualdi**, H.-K. Lee Drbohlav, A. Navarra, 2011: Seasonality in the Relationship between El Nino and Indian Ocean Dipole *Clim. Dyn.*, 221-236.
- 31 Alessandri A., A. Borrelli, **S. Gualdi**, E. Scoccimarro and S. Masina, 2011: Tropical cyclone count forecasting using a dynamical Seasonal Prediction System: sensitivity to improved ocean initialization. *J. Climate*, 24, 2963-2982.
- 30 Alessandri A., A. Borrelli, S. Masina, A. Cherchi, **S. Gualdi**, A. Navarra, P. Di Pietro and A. Carril, 2010: The INGV-CMCC Seasonal Prediction System: improved ocean initial conditions. *Mon. Weath. Rev.*, **138**, 2930-2952.
- 29 Williams, P. D., E. Guilyardi,, G. Madec,, **S. Gualdi** and E. Scoccimarro,, 2010. The role of mean ocean salinity in climate. *Dynam. Atmos. Oceans*, **49**, 108-123.
- 28 Bellucci A., **S. Gualdi** and A. Navarra, 2010: The double-ITCZ syndrome in coupled general circulation models: the role of large-scale vertical circulation regimes *J. Climate*, **23**, 1127-1145
- 27 Bellucci A., **S. Gualdi**, E. Scoccimarro and A. Navarra, 2008: NAO-Ocean Circulation Interactions in a Coupled General Circulation Model. *Clim. Dyn.*, **31**, 759-777 DOI: 10.1007/s00382-008-0408-4
- 26 **Gualdi S.**, E. Scoccimarro and A. Navarra, 2008: Changes in Tropical Cyclone Activity due to Global Warming: Results from a High-Resolution Coupled General Circulation Model. *J. Climate*, **21**, 5204-5228. DOI: 10.1175/2008JCLI1921.1.
- 25 Navarra A., **S. Gualdi**, S. Masina, S. Behera, J-J Luo, S. Masson, E. Guilyardi, P. Delecluse, and T. Yamagata, 2007: Atmospheric horizontal resolution affects tropical climate variability in coupled models. *J. Climate*, **21**, 730-750
- 24 Carril A., **S. Gualdi**, A. Cherchi, and A. Navarra, 2007: Heatwaves in Europe: Areas of homogeneous variability and links with the regional to large-scale atmospheric and SSTs anomalies. *Clim. Dyn.*, DOI 10.1007/s00382-007-0274-5, **30**, 77-98
- 23 Drbohlav-Lee H.-K., **S. Gualdi**, and A. Navarra, 2007: A Diagnostic Study of the Indian Ocean Dipole Mode in El Nino and Non-El Nino Years. *J. Climate*, **20**, 2961-2977
- 22 Cherchi A., **S. Gualdi**, S. Behera, J-J Luo, S. Masson, T. Yamagata, and A. Navarra, 2007: The influence of Tropical Indian Ocean SST on the Indian summer monsoon. *J. Climate*, **20**, 3083-3105
- 21 Alessandri A., **S. Gualdi**, J. Polcher, and A. Navarra, 2007: Effects of Land-Surface-Vegetation on the

- boreal summer surface climate of a GCM. *J. Climate*, **20**, 255-278.
- 20 Zhang C., M. Dong, **S. Gualdi**, H. H. Hendon, E. D. Maloney, A. Marshall, K. R. Sperber, and W Wang, 2006: Simulations of the Madden-Julian Oscillation in Four Pairs of Coupled and Uncoupled Global Models. *Clim Dyn*, **27**, 573-592
- 19 Ruti, P.M, D. Di Rocco and **S. Gualdi**, 2006: Impact of increased vertical resolution on simulation of tropical climate. *Theor Appl Climatol*, **85**, 61-80.
- 18 Behera S.K., J-J Luo, G. S. Masson, P. Delecluse, **S. Gualdi**, A. Navarra and T. Yamagata, 2005: Paramount impact of the Indian Ocean Dipole Mode on the East African Short Rains: a CGCM study. *J Climate*, **18**, 4514-4530.
- 17 Fischer A.S., P. Terray, E. Guilyardi, **S. Gualdi**, P. Delecluse, 2005: Two independent triggers for the Indian Ocean Dipole/Zonal Mode in a coupled GCM. *J.f Climate*, **18**, 3428-3449.
- 16 Sperber K.R., **S. Gualdi**, S. Legutke, V. Gayler, 2005: The Madden-Julian Oscillation in ECHAM-4 coupled and uncoupled GCMs. *Clim Dyn*, **25**, 117-140.
- 15 **Gualdi S.**, A. Alessandri, and A. Navarra, 2005: Impact of atmospheric horizontal resolution on ENSO forecasts. *Tellus*, **57A**, 357-374
- 14 Masson S, J-J Luo, G. Madec, J. Vialard, F. Durand, **S. Gualdi**, E. Guilyardi, S. Behera, P. Delecluse, A. Navarra and T. Yamagata, 2005: Impact of barrier layer on winter-spring variability of the South-Eastern Arabian Sea. *Geophys. Res. Lett.*, **32**, L07703, doi:10.1029/2004GL021980.
- 13 Guilyardi E., **S. Gualdi**, J. Slingo, A. Navarra, P. Delecluse, J. Cole, G. Madec, M. Roberts, M. Latif, and L. Terray, 2004: Representing El Niño in coupled ocean-atmosphere GCMs: the dominant role of the atmosphere. *J. Climate*, **17**, 4623-4629.
- 12 Palmer T.N., A. Alessandri, U. Andersen, P. Cantelaube, M. Davey, P. Délecluse, M. Déqué, E. Díez, F. J. Doblas-Reyes, H. Feddersen, R. Graham, **S. Gualdi**, J.-F. Guérémy, R. Hagedorn, M. Hoshen, N. Keenlyside, M. Latif, A. Lazar, E. Maisonnave, V. Marletto, A. P. Morse, B. Orfila, P. Rogel, J.-M. Terres, M. C. Thomson, 2004: Development of a European Multi-Model Ensemble System for Seasonal to Inter-Annual Prediction (DEMETER). *Bull Amer Meteo Soc*, **85**, 853-872.
- 11 Luo J.-J., S. Masson, S. Behera, P. Delecluse, **S. Gualdi**, A. Navarra, and T. Yamagata, 2003: South Pacific Origin of the Decadal ENSO-like Variation as Reproduced by a Coupled GCM. *Gephys Res Lett*, **30**, 2250 doi:10.1029/2003GL018649.
- 10 **Gualdi S.**, E. Guilyardi, A. Navarra, S. Masina and P. Delecluse, 2003: The Interannual Variability in the Tropical Indian Ocean as Simulated by a CGCM. *Clim Dyn*, **20**, 567-582.
- 9 Guilyardi E., P. Delecluse, **S. Gualdi** and A. Navarra, 2003: Mechanisms for ENSO phase change in a coupled GCM. *J of Climate*, **16**, 1141-1158.
- 8 **Gualdi S.**, A. Navarra, E. Guilyardi, and P. Delecluse, 2003: Assessment of the Tropical Indo-Pacific Climate in the SINTEX CGCM. *Ann Geophys*, **46**, 1-26.
- 7 Corti S., **S. Gualdi** and A. Navarra, 2003 "Analysis of the midlatitude weather regimes in the 200-year control integration of the SINTEX model". *Ann Geophys*, **46**, 27-37.
- 6 Navarra A., M. Biasutti, **S. Gualdi**, E. Roeckner, U. Schlese and U. Schulzweida, 2000: Sensitivity experiments to mountain representation in spectral models. *Annali di Geofisica*, **43**, 559-584.
- 5 **Gualdi S.**, A. Navarra and M. Fischer, 1999: The tropical intraseasonal oscillation in a coupled ocean-atmosphere general circulation model. *Gephys Res Lett*, **26**, 2973-2976.
- 4 **Gualdi S.**, A Navarra and G. Tinarelli, 1999: The interannual variability of the Madden-Julian Oscillation in an ensemble of GCM simulations. *Clim Dynam.*, **15**, 643-658.
- 3 **Gualdi S.** and A. Navarra, 1998: A study of the seasonal variability of the tropical intraseasonal oscillation. *Global Atmosphere and Ocean System*, **6**, 337-372.
- 2 **Gualdi S.**, H. von Storch and A. Navarra, 1997: Tropical Intraseasonal Oscillation Appearing in Operational Analyses and in a Family of General Circulation Models. *J Atmos Sci*, **54**, 1185-1202.
- 1 Lugli P., P. Bordone, **S. Gualdi**, P. Poli and S.M. Goodnick, 1989: Hot phonon in Quantum-Well Systems. *Solid-State Electronics*, **32**, pp. 1881-1885.

Books

1. **Gualdi S.**, E. Scoccimarro, and A. Navarra, 2008. Changes in Tropical Cyclone Activity due to Global

Warming in a General Circulation Model, in "Hurricanes and Climate Change", Eds. J.B. Elsner and T. H. Jagger, Springer Books, ISBN: 978-0-387-09409-0, pp. 287-321;

2. **Gualdi S.**, F. Giorgi, and A. Navarra, 2010. Le proiezioni del clima futuro nell'area dell'Euro-Mediterraneo negli scenari globali e regionali, in "I cambiamenti climatici in Italia. Vulnerabilità e impatti" eds S. Castellari e V. Artale, Bologna, Bionomia University Press, 47-80 pp (in Italian).

3. **Gualdi S.** and Co-authors, 2011. Future Climate Projections in Regional Assessment of Climate Change in the Mediterranean. A. Navarra, L.Tubiana (eds.), Springer, Dordrecht, The Netherlands. In press.

4. Planton S., P. Lionello, V. Artale, R. Aznar, A. Carrillo, J. Colin, L. Congedib, C. Dubois, A. Elizalde, **S. Gualdi**, E. Hertig, J. Jacobeit, G. Jordà, L. Li, A. Mariotti, Cl. Piani, P. Ruti, E. Sanchez-Gomez, G. Sannino, F. Sevault, S. Somot, M. Tsimplis, 2012: The Climate of the Mediterranean Region in Future Climate Projections. P. Lionello (Editor), Elsevier, ISBN: 978-0-12-416042-2, pp 449-496.

Bologna, 5 May 2015,

Sincerely
Silvio Gualdi

