

PERSONAL INFORMATION



Professor Pier Luigi Vidale

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Sex Male | Date of birth 02/06/1965 | Nationality Italian

Pier Luigi Vidale is Professor of Climate System Science at the University of Reading and co-leads the UK's global High Resolution Climate Modelling programme, a partnership between the [National Centre for Atmospheric Science](#) and the [Met Office](#).

Since the time of UJCC, a major UK-Japan collaboration, between 2004 and 2007, Pier Luigi has played a world-leading role in the development of global high resolution climate models, now at km-scale, and in understanding the role of scale interactions in the global climate system.

Current leadership roles at international level:

1. co-Chair of the World Climate Research Programme's Digital Earths Lighthouse Activity, aiming to shape, and bring into service, Digital Twins for climate;
2. Director of Science Collaboration for the [AFESP programme](#), a long-term strategic partnership between the University of Reading, the [European Centre for Medium Range Weather Forecasting](#), the [Met Office](#) and the [National Centre for Atmospheric Science](#);
3. Director (and founder) of the [NCAS Climate Modelling Summer School](#), held bi-annually at the University of Cambridge since its first edition, in 2007;
4. Chair of Environmental Science for the [Euro-HPC SAC](#)
5. co-Lead of the 14-partner [ERIE](#) (EU Horizon Europe, defining HighResMIP2 for CMIP7).

Pier Luigi was previously the Scientific Coordinator of the EU's 19-partner [PRIMAVERA](#) (EU H2020, defining HighResMIP for CMIP6).

PERSONAL STATEMENT

WORK EXPERIENCE

(1 March 2021-)

AFESP Director of Science Collaboration

University of Reading

The role covers all aspects of fostering research relevant to operational forecasting and S2S prediction between the University of Reading, the European Centre for Medium-Range Weather Forecasting (ECMWF), the Met Office and the National Centre for Atmospheric Science. Key focus areas:

- Meteorology, Oceanography, Earth System Science
- High-Performance Computing
- Numerical model development and assessment
- Education and Training

Business or sector Higher Education, Operational Prediction, Climate Services

(1 May 2008 -)

Chair of Climate System Science

University of Reading, School of Mathematical, Physical & Computational Sciences (SMPCS), Department of Meteorology

- Global Climate Modelling at km-scale, and relative scale interactions
- Land-Atmosphere Interactions

Business or sector Higher Education, Research Institution

(1 May 2011 – 1 May 2015)

Willis Chair of Climate System Science and Climate Hazards

University of Reading, School of Mathematical, Physical & Computational Sciences (SMPCS),
Department of Meteorology

- Global Modelling of Weather and Climate Hazards
- Climate Risks

Business or sector Higher Education

(2019–2020)

Visiting Professor

Department of Civil Engineering

University of Trento, IT

- Lecture series in climate modelling, ecosystem modelling risk modelling, for graduate and undergraduates

Business or sector Higher Education

(1 Oct 2004 –)

2008-: Research Professor (equivalent to Full Professor)**2004-2008: Principal Scientist (equivalent to Associate Professor / Reader)**

National Centre for Atmospheric Science, Dept. of Meteorology, University of Reading

- Head of High-Resolution Global Climate Modelling
- Head of Land Surface Processes

Business or sector Research Institute

(1 Jan 1999 – 30 Sep 2004)

Senior Scientist

Institute for the Atmosphere and Climate, ETH, Zürich

- Regional Climate Modelling

Business or sector Higher Education

(1 Mar 1998 – 30 Dec 1998)

Research Associate

Colorado State University, Fort Collins, CO, USA

(in parallel to R.A. at the University of California, Santa Barbara, CA, USA)

- Mesoscale Modelling, Land-Atmosphere Interactions

Business or sector Higher Education

EDUCATION AND TRAINING

(1992 - 1998)

PhD, Atmospheric Science

Replace with EQF
(or other) level if
relevant

Colorado State University, Fort Collins, CO, USA

- Mesoscale modelling, Land-Atmosphere interactions

(1990 - 1992)

MSc, Meteorology

Replace with EQF
(or other) level if
relevant

University of São Paulo, SP, Brazil

- Mesoscale modelling

(1992 - 1998)

BSc, Meteorology

Replace with EQF
(or other) level if
relevant

University of São Paulo, SP, Brazil

- Objective Analysis, Mesoscale modelling, Land-Atmosphere interactions

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Portuguese	C2	C2	C2	C2	C2
French	C2	C2	C2	C1	B2
German	C1	B2	C1	B1	A2
Spanish	C1	C2	C1	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

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

Communication skills

- good communication skills gained through my experience as lecturer, as well as my industry interactions with end users
- strong experience with media (TV and radio interviews, documentaries)

Organisational / managerial skills

- leadership (currently responsible for a team of 12 post-doctoral researchers)
- have led many research programmes in multiple countries, I was the Scientific Coordinator of a major EU-H2020 grant, PRIMAVERA (€15 million, 19 institutions) in 2015-2020; have led multiple multi-million proposals before that.

Job-related skills

- strong experience in proposal writing and team management

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient User	Proficient User	Proficient User	Independent User	Proficient User

Levels: Basic user - Independent user - Proficient user

[Digital competences - Self-assessment grid](#)

Other computer skills.

- very strong UNIX and general programming (FORTRAN, Python, IDL, shell languages), I am one of the world's top users of scientific supercomputing.
- excellent command of LaTeX, which I use to edit my scientific articles
- excellent command of office suite (word processor, spread sheet, presentation software), which I am forced to use for lecturing etc.

Other skills

Driving licence B

ADDITIONAL INFORMATION

- Publications
- Presentations
- Projects
- Conferences
- Seminars
- Honours and awards
- Memberships
- References
- Citations
- Courses
- Certifications

Research Grants and Contracts Held (>100 £K):

Current

- Hurricane Risk Amplification and Changing North Atlantic Natural disasters Huracán (NERC+NSF, £3.7 million, £500k to UoR). PI: Vidale
- CLARE – REsilience and PReparedness to tropical cyclones across Southern Africa REPRESA (£5million, £670k to UoR), Reading co-PI.
- European Eddy-Rich Earth System Models (EERIE), EU-Horizon Europe, €10 million). The pre-award PIs were M. Roberts (MO, Coordinator) and PL Vidale (NCAS, Scientific Coordinator) The current EU coordinator is T. Jung (AWI), due to UK not joining the EU-HE, but Roberts and Vidale remain as (UK) co-coordinators.
- Next-Generation Earth System Models (NextGEMS), EU-Horizon 2020, €11 million), Reading PI, the European Coordinator is B. Stevens (Max Planck Institut).
- Land Ecosystem Models based On New Theory, obseRvations, and Experiments (LEMONTREE), Schmidt Futures VESRI, Reading co-PI, US\$ 12 million, of which ~2 million at Reading

Previously held (short selection, only > £100K, and only since 2016)

- PRocess-based climate sIMulation: AdVances in high resolution modelling and European climate Risk Assessment, (PRIMAVERA, EU-Horizon 2020, €15 million). The PIs were M. Roberts (MO, Coordinator) and PL Vidale (NCAS, Scientific Coordinator)
- Quantifying Cyclone Risk in the Trinidad Oil Field Region (BP) PI, £120K/yr
- CSSP-China, Portrayal of Chinese Land-Atmosphere Interactions (PORCELAIN): Reading PI, £234K
- CSSP-China, Development of an improved urban- environment scheme in global and regional models, Reading co-PI, £300K
- Wind Storm Climate Service (WISC) EU-Horizon 2020 Copernicus C3S Insurance Climate Services portal, £260k (PI)
- Drivers of regional East Asian monsoon variability (DREAM), Met Office Climate Science for Service Partnership – China, £600k (CSSP-China, co-I)
- High-resolution Climate Modelling (HRCM), NERC National Capability grant, P.L. Vidale (PI), 5-year rotation of circa £600K/yr.
- UK on PRACE: weather-resolving Simulations of Climate for globAL Environmental risk (UPSCALE): 144 Million core-hours, the number 1 science project on TIER-0 supercomputing in Europe in 2011-2015. P.L. Vidale (PI).
- Improving Predictions of Drought for User Decision-Making (IMPETUS), NERC grant NE/L010488/1, £696k (co-I).
- HydrOlogical cYcle Understanding via Process-bAsed GLObal Detection, Attribution and prediction (Horyuji PAGODA), NERC grant NE/I006524/1, P.L. Vidale (PI).
- Integrated Carbon, Water and Land Management for Poverty Alleviation ICWALPA (ESPA) NERC grant NE/I00307X/1, P.L. Vidale (PI).
- High-resolution Climate Modelling (HRCM), NERC grant NE/R8/H12/123, P.L. Vidale (PI).

Peer-reviewed publications (2016-present): ~1700 citations/year;

SCOPUS h-index = 55 (Google Scholar h-index=65, i10-index=124)

- Stevens, B, S Adami, S Ali, T ,H Anzt, T, ... (2023) *Earth Virtualization Engines (EVE)* Earth System Science Data Discussions 2023, 1-14
- Feng, X,Toumi,R, Roberts, M, Hodges, KI, Vidale, PL (2023) *An approach to link climate model tropical cyclogenesis bias to large-scale wind circulation modes*, Geophysical Research Letters 50 (15), e2023GL103838
- Delfino, R. J., Vidale, P. L., Bagtasa, G. and Hodges, K. (2023) *Response of damaging Philippines tropical cyclones to a warming climate using the pseudo global warming approach*. Climate Dynamics. ISSN 0930-7575 doi: <https://doi.org/10.1007/s00382-023-06742-6>

- Muetzelfeldt, M., Schiemann, R., Turner, A., Vidale, P. L. and Menon, A. (2023) *Intraseasonal oscillations of the Silk Road pattern lead to predictability in East Asian precipitation patterns and the Mei Yu front*. Environmental Research Communications, 5 (1). 015003. ISSN 2515-7620 doi: <https://doi.org/10.1088/2515-7620/acb040>
- Perez, G. M. P., Vidale, P. L., Dacre, H. and García-Franco, J. L. (2022) *Using a synoptic-scale mixing diagnostic to explain global precipitation variability from weekly to interannual time scales*. Journal of Climate, 35 (24). pp. 4625-4643. ISSN 1520-0442 doi: <https://doi.org/10.1175/jcli-d-22-0110.1>
- Athanasiadis, P. J., Ogawa, F., Omrani, N.-E., Keenlyside, N., Schiemann, R., Baker, A. J., Vidale, P. L., Bellucci, A., Ruggieri, P., Haarsma, R., Roberts, M., Roberts, C., Novak, L. and Gualdi, S. (2022) *Mitigating climate biases in the mid-latitude North Atlantic by increasing model resolution: SST gradients and their relation to blocking and the jet*. Journal of Climate, 35 (21). pp. 3379-3400. ISSN 1520-0442 doi: <https://doi.org/10.1175/JCLI-D-21-0515.1>
- Delfino, R. J., Bagtasa, G., Hodges, K. and Vidale, P. L. (2022) *Sensitivity of simulating Typhoon Haiyan (2013) using WRF: the role of cumulus convection, surface flux parameterizations, spectral nudging, and initial and boundary conditions*. Natural Hazards and Earth System Science, 22 (10). pp. 3285-3307. ISSN 1684-9981 doi: <https://doi.org/10.5194/nhess-22-3285-2022>
- Harris, B. L., Tailleux, R., Holloway, C. E. and Vidale, P. L. (2022) *A moist available potential energy budget for an axisymmetric tropical cyclone*. Journal of the Atmospheric Sciences, 79 (10). pp. 2493-2513. ISSN 1520-0469 doi: <https://doi.org/10.1175/JAS-D-22-0040.1>
- Haslebacher, C., Demory, M.-E., Demory, B.-O., Sarazin, M. and Vidale, P. L. (2022) *Impact of climate change on site characteristics of eight major astronomical observatories using high-resolution global climate projections until 2050*. Astronomy & Astrophysics, 665. A149. ISSN 1432-0746 doi: <https://doi.org/10.1051/0004-6361/202142493>
- Baker, A. J., Roberts, M. J., Vidale, P. L., Hodges, K. I., Seddon, J., Vanniere, B., Haarsma, R. J., Schiemann, R., Kapetanakis, D., Tourigny, E., Lohmann, K., Roberts, C. D. and Terray, L. (2022) *Extratropical transition of tropical cyclones in a multiresolution ensemble of atmosphere-only and fully coupled global climate models*. Journal of Climate, 35 (16). pp. 5283-5306. ISSN 1520-0442 doi: <https://doi.org/10.1175/JCLI-D-21-0801.1>
- Oliver, R. J., Mercado, L. M., Clark, D. B., Huntingford, C., Taylor, C. M., Vidale, P. L., McGuire, P. C., Todt, M., Folwell, S., Shamsudheen Semeena, V. and Medlyn, B. E. (2022) *Improved representation of plant physiology in the JULES-vn5.6 land surface model: photosynthesis, stomatal conductance and thermal acclimation*. Geoscientific Model Development, 15. pp. 5567-5592. ISSN 1991-9603 doi: <https://doi.org/10.5194/gmd-15-5567-2022>
- Volonté, A. , Turner, A. G., Schiemann, R., Vidale, P. L. and Klingaman, N. P. (2022) *Characterising the interaction of tropical and extratropical air masses controlling East Asian summer monsoon progression using a novel frontal detection approach*. Weather and Climate Dynamics, 3 (2). pp. 575-599. ISSN 2698-4024 doi: <https://doi.org/10.5194/wcd-3-575-2022>
- Chevuturi, A., Klingaman, N. P., Turner, A. G., Guo, L. and Vidale, P. L. (2022) *Projected changes in the East Asian hydrological cycle for different levels of future global warming*. Atmosphere, 13 (3). 405. ISSN 2073-4433 doi: <https://doi.org/10.3390/atmos13030405>
- Chevuturi, A. , Klingaman, N. P., Guo, L., Holloway, C. E., Guimarães, B. S., Coelho, C. A. S., Kubota, P. Y., Young, M., Black, E., Baker, J. C. A. and Vidale, P. L. (2021) *Subseasonal prediction performance for South American land-atmosphere coupling in extended austral summer*. Climate Resilience and Sustainability. ISSN 2692-4587 doi: <https://doi.org/10.1002/cli.2.28>
- Muetzelfeldt, M. R., Schiemann, R., Turner, A. G., Klingaman, N. P., Vidale, P. L. and Roberts, M. J. (2021) *Evaluation of Asian summer precipitation in different configurations of a high-resolution general circulation model in a range of decision-relevant spatial scales*. Hydrology and Earth System Sciences, 25 (12). pp. 6381-6405. ISSN 1027-5606 doi: <https://doi.org/10.5194/hess-25-6381-2021>
- Loizou, P., Guishard, M., Kayall, K., Vidale, P. L., Hodges, K. and Dierer, S. (2021) *Development of a simple, open-source hurricane wind risk model for Bermuda with a sensitivity test on decadal variability*. In: Collins, J. M. and Done, J. (eds.) Hurricane Risk in a Changing Climate. Springer. (In Press)
- Vidale, P.L., G. Egea, M. Todt, W. Peters, P. C. McGuire, O. Müller, B. Balan-Sarojini and A. Verhoef (2021) On the treatment of soil water stress in GCM simulations of vegetation physiology. Frontiers in Environmental Science. doi: 10.3389/fenvs.2021.689301
- Müller, O. V., Vidale, P. L., Vannière, B., Schiemann, R., & McGuire, P. C. (2021). Does the HadGEM3-GC3.1 GCM Overestimate Land Precipitation at High Resolution? A Constraint Based on Observed River Discharge, *Journal of Hydrometeorology*, 22(8), 2131-2151

- <https://doi.org/10.1175/JHM-D-20-0290.1>
- Baker, A. J. , Hodges, K. I., Schiemann, R. K. H. and **Vidale**, P. L. (2021) *Historical variability and lifecycles of North Atlantic midlatitude cyclones originating in the tropics*. Journal of Geophysical Research: Atmospheres, 126 (9). e2020JD033924. ISSN 2169-8996
doi: <https://doi.org/10.1029/2020JD033924>
 - Perez, G. M. P., **Vidale**, P. L., Klingaman, N. P. and Martin, T. C. M.(2021) *Atmospheric convergence zones stemming from large-scale mixing*. Weather and Climate Dynamics, 2 (2). pp. 475-488. ISSN 2698-4024 doi: <https://doi.org/10.5194/wcd-2-475-2021>
 - Harper, A. B., Williams, K. E., McGuire, P., Duran Rojas, M. C., Hemming, D., Verhoef, A., Huntingford, C., Rowland, L., Marthews, T., Eller, C. B., Mathison, C., Nobrega, R., Gedney, N., **Vidale**, P. L., Otu-Larbi, F., Panday, D., Garrigues, S., Wright, A., Slevin, D., De Kauwe, M. G., Blyth, E., Ardö, J., Black, A., Bonal, D., Buchmann, N., Burban, B., Fuchs, K., de Grandcourt, A., Mammarella, I., Merbold, L., Montagnani, L., Nouvellon, Y., Restrepo-Coupe, N. and Wohlfahrt, G. (2021)*Improvement of modelling plant responses to low soil moisture in JULESv4.9 and evaluation against flux tower measurements*.Geoscientific Model Development. ISSN 1991-9603
 - Hertwig, D. , Ng, M., Grimmond, S. , **Vidale**, P. L. and McGuire, P. C.(2021) *High-resolution global climate simulations: representation of cities*. International Journal of Climatology. ISSN 0899-8418 doi: <https://doi.org/10.1002/joc.7018>
 - **Vidale**, P. L., Hodges, K., Vanniere, B. , Davini, P., Roberts, M. J., Strommen, K., Weisheimer, A., Plesca, E. and Corti, S. (2021) *Impact of stochastic physics and model resolution on the simulation of tropical cyclones in climate GCMs*. Journal of Climate. ISSN 1520-0442
doi: <https://doi.org/10.1175/JCLI-D-20-0507.1>
 - Bellucci, A., and Coauthors, (2021): Air-sea interactions over the Gulf Stream in an ensemble of HighResMIP present climate simulations. Clim. Dyn., accepted. <https://doi.org/10.1007/s00382-020-05573-z>.
 - Judt, F., D. Klocke, R. Rios-Berrios, B. Vanniere, F. Ziemen, L. Auger, J. Biercamp, C. Bretherton, X. Chen, P. Duiben, C. Hohenegger, M. Khairoutdinov, C. Kodama, L. Kornblueh, S.-J. Lin, M. Nakano, P. Neumann, W. Putman, N. Röber, M. Roberts, M. Satoh, R. Shibuya, B. Stevens, P. L. **Vidale**, N. Wedi, L. Zhou, (2021): Tropical Cyclones in Global Storm-Resolving Models. J. Meteor. Soc. Japan, <https://doi.org/10.2151/jmsj.2021-029>.
 - Kreussler, P., Caron, L.-P., Wild, S., Loosveldt Tomas, S., Chauvin, F., Moine, M.-P., Roberts, M.J., Ruprich-Robert, Y., Seddon, J., Valcke, S., Vanniere, B., **Vidale**, P.L., (2021): Tropical Cyclone Integrated Kinetic Energy in an Ensemble of HighResMIP Simulations. GRL, 48, e2020GL090963, <https://doi.org/10.1029/2020GL090963>.
 - Yamada, Y., Kodama, C., Satoh, M., Sugi, M., Roberts, M. J., Mizuta, R., Noda, A. T., Nasuno, T., Nakano, M., **Vidale**, P. L., (2021): Evaluation of the contribution of tropical cyclone seeds to changes in tropical cyclone frequency due to global warming in high-resolution multi-model ensemble simulations. Progress in Earth and planetary Science, 8, 11. <https://doi.org/10.1186/s40645-020-00397-1>.
 - Zhang, W., G. Villarini, E. Scoccimarro, M. Roberts, P. L. **Vidale**, B. Vanniere, L.-P. Caron, D. Putrasahan, C. Roberts, R. Senan, M.-P. Moine, (2021): Tropical Cyclone Precipitation in the HighResMIP Atmosphere-only Experiments of the PRIMAVERA Project. Clim. Dyn., <https://doi.org/10.1007/s00382-021-05707-x>.
 - Müller, O; **Vidale**, P.L.; Vanniere, B.; Schiemann, R.; Senan, R.; Haarsma, R.; Jungclaus, J. (2021) Land-atmosphere Coupling Sensitivity to GCMs Resolution: A Multi-model Assessment of Local and Remote Processes in the Sahel Hotspot", J. Clim, 34 (3), 967-985
 - E. Black, Pinnington, E.; Wainwright, C.; Lahive, F.; Quaife, T.; Allan, R.; Cook, P.; Daymond, A.; Hadley, P.; McGuire, P.; Verhoef, A.; **Vidale**, P.L. (2021): Cocoa plant productivity in West Africa under climate change: a modelling and experimental study, ERL, 16 (1), 014009
 - Taylor, J., Nicoll, M. A. C., Black, E., Wainwright, C. M., Jones, C. G., Tatayah, V., **Vidale**, P. L. and Norris, K. (2021) *Phenological tracking of a seasonal climate window in a recovering tropical island bird species*.Climatic Change, 164. 41. ISSN 0165-0009
doi: <https://doi.org/10.1007/s10584-021-02971-y>
 - L Guo L; van der Ent, R.J.; Klingaman, NP; Demory, M.E.; **Vidale**, P.L.; Turner, A.G. (2020): Effects of horizontal resolution and air-sea coupling on simulated moisture sources for regional East Asian precipitation, Geoscientific Model Development, 13 (12), 6011-6028
 - Vanniere, B. , Roberts, M. J., **Vidale**, P. L., Hodges, K., Demory, M.-E., Caron, L.-P., Scoccimarro, E., Terray, L. and Senan, R. (2020) The moisture budget of tropical cyclones in HighResMIP models: large-scale environmental balance and sensitivity to horizontal resolution. Journal of Climate. ISSN 1520-0442 doi: <https://doi.org/10.1175/JCLI-D-19-0999.1>
 - Hertwig, D. , Grimmond, S. , Hendry, M. A. , Saunders, B. , Wang, Z. , Jeoffrion, M., **Vidale**, P. L. , McGuire, P. C. , Bohnenstengel, S. I. , Ward, H. C. and Kotthaus, S. (2020) Urban signals in

- high-resolution weather and climate simulations: role of urban land-surface characterisation. *Theoretical and Applied Climatology*. ISSN 0177-798X doi: <https://doi.org/10.1007/s00704-020-03294-1>
- Roberts, M. J., Camp, J., Seddon, J., **Vidale**, P. L., Hodges, K., Vannière, B., Mecking, J., Haarsma, R., Bellucci, A., Scoccimarro, E., Caron, L.-P., Chauvin, F., Terray, L., Valcke, S., Moine, M.-P., Putrasahan, D., Roberts, C. D., Senan, R., Zarzycki, C., Ullrich, P., Yamada, Y., Mizuta, R., Kodama, C., Fu, D., Zhang, Q., Danabasoglu, G., Rosenbloom, N., Wang, H. and Wu, L. (2020) Projected future changes in tropical cyclones using the CMIP6 HighResMIP multimodel ensemble. *Geophysical Research Letters*, 47 (14). e2020GL088662. ISSN 0094-8276 doi: <https://doi.org/10.1029/2020GL088662>
 - Jiaxiang, G., Shoshiro, M., Roberts, M. J., Haarsma, R., Putrahasan, D., Roberts, C., Scoccimarro, E., Terray, L., Vanniere, B. and **Vidale**, P. L. (2020) Influence of model resolution on bomb cyclones revealed by HighResMIP-PRIMAVERA simulations. *Environmental Research Letters*, 15 (8). 084001. ISSN 1748-9326 doi: <https://doi.org/10.1088/1748-9326/ab88fa>
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 - Roberts, M. J., Camp, J., Seddon, J., **Vidale**, P. L., Hodges, K., Vanniere, B., Mecking, J., Haarsma, R., Bellucci, A., Scoccimarro, E., Caron, L.-P., Chauvin, F., Terray, L., Valcke, S., Moine, M.-P., Putrasahan, D., Roberts, C., Senan, R., Zarzycki, C. and Ullrich, P. (2020) Impact of model resolution on tropical cyclone simulation using the HighResMIP-PRIMAVERA multi-model ensemble. *Journal of Climate*, 33 (7). pp. 2557-2583. ISSN 1520-0442 doi: <https://doi.org/10.1175/jcli-d-19-0639.1>
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 - Roberts, M. J., Baker, A., Blockley, E. W., Calvert, D., Coward, A., Hewitt, H. T., Jackson, L. C., Kuhlbrodt, T., Mathiot, P., Roberts, C. D., Schiemann, R., Seddon, J., Vanniere, B. and **Vidale**, P. L. (2019) Description of the resolution hierarchy of the global coupled HadGEM3-GC3.1 model as used in CMIP6 HighResMIP experiments. *Geoscientific Model Development*, 12 (12). pp. 4999-5028. ISSN 1991-9603 doi: <https://doi.org/10.5194/gmd-12-4999-2019>
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Professional Bodies:

Co-Chair: World Climate Research Programme Digital Earths Lighthouse.

Domain Panel Chair in Earth System Sciences and Environmental Studies in Euro-HPC (€1.8bn European supercomputing project)

Member of Faculty: University of Trento (Visiting Professor 2019-2020), UME Graduate School, Institute for Advanced Studies, Pavia (2011-)

Member of:

- Swiss Supercomputing Centre Scientific Advisory Committee
- Euro-HPC and EU-PRACE Allocation Committees
- EU's IS-ENES/ENES-2 and ENES HPC Task Force.
- Met Office Hadley Centre Advisory Committees (Model Development Assessment and Project Assurance Team).
- Met Office INTEGRATE board, of the Gung-Ho Exec, and of the Expert Advisory Board for the Copernicus Roadmap for European Climate Projections.
- Joint UK Land Ecosystems Simulator (JULES) Management Board

Represented the UK in several bi-laterals with other nations (e.g. U.S. Department of Energy workshop on "Challenges in Climate Change Science"), and bi-laterals in Brazil, Japan, India, China.

ANNEXES

