

Supplementary material for:

The Global Methane Budget: 2000-2012

Marielle Saunois¹, Philippe Bousquet¹, Ben Poulter², Anna Peregon¹, Philippe Ciais¹, Josep G. Canadell³, Edward J. Dlugokencky⁴, Giuseppe Etiope⁵, David Bastviken⁶, Sander Houweling^{7,8}, Greet Janssens-Maenhout⁹, Francesco N. Tubiello¹⁰, Simona Castaldi^{11,12}, Robert B. Jackson¹³, Mihai Alexe⁹, Vivek K. Arora¹⁴, David J. Beerling¹⁵, Peter Bergamaschi⁹, Donald R. Blake¹⁶, Gordon Brailsford¹⁷, Victor Brovkin¹⁸, Lori Bruhwiler⁴, Cyril Crevoisier¹⁹, Patrick Crill²⁰, Charles Curry²¹, Christian Frankenberg²², Nicola Gedney²³, Lena Höglund-Isaksson²⁴, Misa Ishizawa²⁵, Akihiko Ito²⁵, Fortunat Joos²⁶, Heon-Sook Kim²⁵, Thomas Kleinen¹⁸, Paul Krummel²⁷, Jean-François Lamarque²⁸, Ray Langenfelds²⁷, Robin Locatelli¹, Toshinobu Machida²⁵, Shamil Maksyutov²⁵, Kyle C. McDonald²⁹, Julia Marshall³⁰, Joe R. Melton³¹, Isamu Morino²⁵, Simon O'Doherty³², Frans-Jan W. Parmentier³³, Prabir K. Patra³⁴, Changhui Peng³⁵, Shushi Peng¹, Glen P. Peters³⁶, Isabelle Pison¹, Catherine Prigent³⁷, Ronald Prinn³⁸, Michel Ramonet¹, William J. Riley³⁹, Makoto Saito²⁵, Ronny Schroeder^{29,40}, Isobel J. Simpson¹⁶, Renato Spahni²⁶, Paul Steele²⁷, Atsushi Takizawa⁴¹, Brett F. Thornton²⁰, Hanqin Tian⁴², Yasunori Tohjima²⁵, Nicolas Viovy¹, Apostolos Voulgarakis⁴³, Michiel van Weele⁴⁴, Guido van der Werf⁴⁵, Ray Weiss⁴⁶, Christine Wiedinmyer²⁸, David J. Wilton¹⁵, Andy Wiltshire⁴⁷, Doug Worthy⁴⁸, Debra B. Wunch⁴⁹, Xiyang Xu³⁹, Yukio Yoshida²⁵, Bowen Zhang⁴², Zhen Zhang^{2,50}, and Qian Zhu⁵¹.

1. *Laboratoire des Sciences du Climat et de l'Environnement, LSCE-IPSL (CEA-CNRS-UVSQ), Université Paris-Saclay 91191 Gif-sur-Yvette, France*
2. *Institute on Ecosystems and Department of Ecology, Montana State University, Bozeman, MT 59717, USA*
3. *Global Carbon Project, CSIRO, Marine and Atmospheric Research, Canberra, ACT 2601, Australia*
4. *NOAA ESRL, 325 Broadway, Boulder, Colorado 80305, USA*
5. *Istituto Nazionale di Geofisica e Vulcanologia, Sezione Roma 2, via V. Murata 605 00143 Roma*
6. *Department of Thematic Studies – Environmental Change, Linköping University, SE-581 83 LINKÖPING, Sweden*
7. *Netherlands Institute for Space Research (SRON), Sorbonnelaan 2, 3584 CA Utrecht, The Netherlands*
8. *Institute for Marine and Atmospheric Research Sorbonnelaan 2, 3584 CA, Utrecht, The Netherlands*
9. *European Commission, Joint Research Centre, Institute for Environment and Sustainability, Air and Climate Unit, Ispra, Italy*
10. *Statistics Division, Food and Agriculture Organization of the United Nations (FAO), Viale delle Terme di Caracalla, Rome 00153, Italy*

11. *Department of Environmental Sciences, Second University of Naples, via Vivaldi 43, 81100 Caserta, Italy*
12. *Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC), via Augusto Imperatore 16, 73100 Lecce, Italy*
13. *School of Earth, Energy & Environmental Sciences, Stanford university, Stanford, CA 94305-2210, USA*
14. *Canadian Centre for Climate Modelling and Analysis, Climate Research Division, Environment and Climate Change Canada, Victoria, BC, V8W 2Y2, Canada*
15. *Department of Animal and Plant Sciences, University of Sheffield, Sheffield S10 2TN, UK*
16. *University of California Irvine, 570 Rowland Hall, Irvine, California 92697, USA*
17. *NIWA Turangi, 22 Turanga Place, Turangi 3334, New Zealand*
18. *Max Planck Institute for Meteorology, Bundesstrasse 53, 20146 Hamburg, Germany*
19. *Laboratoire de Météorologie Dynamique, LMD-IPSL, Ecole Polytechnique, 91120 Palaiseau, France*
20. *Department of Geological Sciences and Bolin Centre for Climate Research, Svante Arrhenius väg 8, SE-106 91 Stockholm, Sweden*
21. *School of Earth and Ocean Sciences, University of Victoria, PO Box 1700 STN CSC, Victoria, BC, Canada V8W 2Y2*
22. *Jet Propulsion Laboratory, M/S 183-601, 4800 Oak Grove Drive, Pasadena, CA 91109, USA*
23. *Met Office Hadley Centre, Joint Centre for Hydrometeorological Research, Maclean Building, Wallingford OX10 8BB, UK*
24. *Air Quality and Greenhouse Gases program (AIR), International Institute for Applied Systems Analysis (IIASA), A-2361 Laxenburg, Austria*
25. *Center for Global Environmental Research, National Institute for Environmental Studies (NIES), Onogawa 16-2, Tsukuba, Ibaraki 305-8506, Japan*
26. *Climate and Environmental Physics, Physics Institute and Oeschger Center for Climate Change Research, University of Bern, Sidlerstr. 5, CH-3012 Bern, Switzerland*
27. *CSIRO Oceans and Atmosphere, Aspendale, Victoria 3195 Australia*
28. *NCAR, PO Box 3000, Boulder, Colorado 80307-3000, USA*
29. *Department of Earth and Atmospheric Sciences, City University of New York, New York, NY 10031, USA*
30. *Max Planck Institute for Biogeochemistry, Hans Knoell Str. 10, 07745 Jena, Germany*
31. *Climate Research Division, Environment and Climate Change Canada, Victoria, BC, V8W 2Y2, Canada*
32. *School of Chemistry, University of Bristol, Cantock's Close, Clifton, Bristol BS8 1TS*
33. *Department of Physical Geography and Ecosystem Science, Lund University, Sölvegatan 12, SE-223 62, Lund, Sweden*
34. *Department of Environmental Geochemical Cycle Research, JAMSTEC, 3173-25 Showa-machi, Kanazawa-ku, Yokohama, 236-0001, Japan*
35. *Department of Biology Sciences, Institute of Environment Science, University of Quebec at Montreal, Montreal, QC H3C 3P8, Canada*
36. *Center for International Climate and Environmental Research – Oslo (CICERO), Pb. 1129 Blindern, 0318 Oslo, Norway*
37. *CNRS/LERMA, Observatoire de Paris, 61 Ave. de l'Observatoire, 75014 Paris, France*
38. *Massachusetts Institute of Technology (MIT), Building 54-1312, Cambridge, MA 02139, USA*
39. *Earth Sciences Division, Lawrence Berkeley National Lab, 1 Cyclotron Road, Berkeley, CA 94720, USA*
40. *Institute of Botany, University of Hohenheim 70593 Stuttgart, Germany*
41. *Japan Meteorological Agency (JMA), 1-3-4 Otemachi, Chiyoda-ku, Tokyo 100-8122, Japan*
42. *International Center for Climate and Global Change Research, School of Forestry and Wildlife Sciences, Auburn University, 602 Duncan Drive, Auburn, AL 36849, USA*
43. *Space & Atmospheric Physics, The Blackett Laboratory, Imperial College London, London SW7 2AZ, U.K.*
44. *KNMI, PO Box 201, 3730 AE, De Bilt, Netherlands*
45. *VU University Amsterdam, Faculty of Earth and Life Sciences, Earth and Climate Cluster, Amsterdam, The Netherlands*

46. *Scripps Institution of Oceanography (SIO), University of California San Diego, La Jolla, CA 92093, USA*
47. *Met Office Hadley Centre, FitzRoy Road, Exeter, EX1 3PB, United Kingdom*
48. *Environnement Canada, 4905, rue Dufferin, Toronto, Canada.*
49. *Department of Physics, University of Toronto, 60 St. George Street, Toronto, Ontario, Canada*
50. *Swiss Federal Research Institute WSL, Birmensdorf 8059, Switzerland*
51. *State Key Laboratory of Soil Erosion and Dryland Farming on the Loess Plateau, Northwest A&F University, Yangling, Shaanxi 712100, China*

Correspondance to: Marielle Saunois (marielle.saunois@lsce.ipsl.fr)

Table S1: list of the countries used to define the 14 continental regions

Region num.	Region name	Countries or territories
1	Temperate South America	Argentina, Chile, Falkland Islands Malvinas, Paraguay, Uruguay
2	Tropical South America	Aruba, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Grenada, Guyana, Peru, Suriname, Trinidad and Tobago, Venezuela
3	Central North America	Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Guadeloupe, Guatemala, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Turks and Caicos Islands, United States Virgin Islands
4	Contiguous USA	USA without Alaska, Bermuda Islands
5	Boreal North America	Canada, Alaska, Saint Pierre and Miquelon
6	Southern Africa	Angola, Botswana, Burundi, Comoros, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Guinea, Lesotho, Madagascar, Malawi, Mauritius, Mayotte, Mozambique, Namibia, Reunion, Rwanda, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia, Zimbabwe
7	Northern Africa	Algeria, Benin, Burkina Faso, Cabo Verde, Cameroon, Central African Republic, Chad, Cote d Ivoire, Djibouti, Egypt, Eritrea, Ethiopia, Ethiopia PDR, Gambia, Ghana, Guinea-Bissau, Liberia, Libya, Mali, Mauritania, Morocco, Nigeria, Saint Helena Ascension and Tristan da Cunha, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan former, Togo, Tunisia, Uganda, Western Sahara
8	Europe	Albania, Andorra, Austria, Belgium, Belgium, Luxembourg, Bulgaria, Channel Islands, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Hungary, Iceland, Ireland, Isle of Man, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, United Kingdom.
9	Russia	Russian federation
10	Central Eurasia and Japan	Afghanistan, Armenia, Azerbaijan, Bahrain, Belarus, Taiwan, People's Republic of Korea, Georgia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Mongolia, Nepal, Occupied Palestinian Territory, Oman, Pakistan, Qatar, Republic of Korea, Republic of Moldova, Saudi Arabia, Syrian Arab Republic, Tajikistan, Turkey, Turkmenistan, Ukraine, United Arab Emirates, Uzbekistan, Yemen
11	China	China mainland, Macao, Hong Kong
12	India	India
13	South East Asia	Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Guam, Indonesia Kiribati, Lao People's Democratic Republic, Malaysia, Maldives, Marshall Islands, Myanmar, Nauru, Northern Mariana Islands, Palau, Philippines, Singapore, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tokelau, Viet Nam
14	Oceania	American Samoa, Australia, Cook Islands, Fiji, French Polynesia, New Caledonia, New Zealand, Niue, Norfolk Island, Pacific Islands Trust Territory, Papua New Guinea, Pitcairn Islands, Samoa, Tonga, Tuvalu, Vanuatu, Wallis and Futuna Islands