

## CL – Climate: Past, Present, Future (#EGU18CL) – Orals

### Monday, 09 April

<b>MO1</b> , 08:30–10:00	<b>CL0.00</b> , Open Session on Climate: Past, Present and Future, <b>08:30–10:00</b> , <b>Room 0.14</b>
	<b>CL1.02</b> , Studying the climate of the last two millennia, <b>08:30–12:00</b> , <b>Room F2</b>
	<b>CL4.10</b> , Arctic climate change: governing mechanisms and global implications, <b>08:30–10:00</b> , <b>Room 0.94</b>
	<b>IE4.5/AS5.14/BG1.22/CL5.26/EMRP4.35/ESSI2.12/GD10.7/GI1.7</b> , Information extraction from satellite observations using data-driven methods (co-organized), <b>08:30–10:00</b> , <b>Room N2</b>
	<b>AS1.16/CL2.04/HS11.6</b> , Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (co-organized), <b>08:30–17:00</b> , <b>Room 0.11</b>
	<b>OS1.5/AS1.29/CL2.14</b> , Climate variability of the Atlantic and Europe (co-organized), <b>08:30–15:00</b> , <b>Room L3</b>
	<b>GI0.2/AS4.23/BG1.27/CL5.15/EMRP4.36/ERE1.8/G6.2/GD1.2/GM12.5/GMPV10.10/HS11.1/NH9.24/NP9.2/SM1.11/SSP1.3/SSS13.70/TS1.8</b> , COST Actions in Geosciences: breakthrough ideas, research activities and results (co-organized), <b>08:30–11:45</b> , <b>Room 0.49</b>
	<b>EMRP3.2/CL5.24</b> , Environmental Magnetism: advances and perspectives (co-organized), <b>08:30–10:00</b> , <b>Room 2.15</b>
	<b>NP4.1/CL5.29/NH11.20</b> , Time Series Analysis in the Geosciences - Concepts, Methods and Applications (co-organized), <b>08:30–10:00</b> , <b>Room M2</b>
<b>MO2</b> , 10:30–12:00	<b>CL1.02</b> , Studying the climate of the last two millennia, <b>08:30–12:00</b> , <b>Room F2</b>
	<b>CL4.11/AS1.34</b> , Tropical-Extratropical Variability and Teleconnections: past, present and future (co-organized), <b>10:30–17:00</b> , <b>Room 0.14</b>
	<b>CL5.01/GM2.11</b> , Advances in Quaternary Geochronology (co-organized), <b>10:30–12:00</b> , <b>Room 0.94</b>
	<b>IE4.1/NP4.3/AS5.13/CL5.18/ESSI2.3/GD10.6/HS3.7/NH11.14/SM7.03</b> , Big data and machine learning in geosciences (co-organized), <b>10:30–17:00</b> , <b>Room N2</b>
	<b>AS1.16/CL2.04/HS11.6</b> , Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (co-organized), <b>08:30–17:00</b> , <b>Room 0.11</b>
	<b>OS1.5/AS1.29/CL2.14</b> , Climate variability of the Atlantic and Europe (co-organized), <b>08:30–15:00</b> , <b>Room L3</b>
	<b>GI0.2/AS4.23/BG1.27/CL5.15/EMRP4.36/ERE1.8/G6.2/GD1.2/GM12.5/GMPV10.10/HS11.1/NH9.24/NP9.2/SM1.11/SSP1.3/SSS13.70/TS1.8</b> , COST Actions in Geosciences: breakthrough ideas, research activities and results (co-organized), <b>08:30–11:45</b> , <b>Room 0.49</b>
<b>MO3</b> , 13:30–15:00	<b>CL2.03</b> , Detecting and attributing climate change: trends, extreme events, and impacts, <b>13:30–17:00</b> , <b>Room F2</b>
	<b>CL4.11/AS1.34</b> , Tropical-Extratropical Variability and Teleconnections: past, present and future (co-organized), <b>10:30–17:00</b> , <b>Room 0.14</b>
	<b>CL4.17</b> , Sea level rise: past, present and future, <b>13:30–15:00</b> , <b>Room 0.94</b>
	<b>IE4.1/NP4.3/AS5.13/CL5.18/ESSI2.3/GD10.6/HS3.7/NH11.14/SM7.03</b> , Big data and machine learning in geosciences (co-organized), <b>10:30–17:00</b> , <b>Room N2</b>
	<b>GM6.3/CL1.30/SSP2.11/SSS13.29</b> , Deciphering human-environmental interactions during the late Quaternary as lessons for the Anthropocene – prospects and challenges in geoarchaeology (co-organized), <b>13:30–17:00</b> , <b>Room 0.96</b>
	<b>AS1.16/CL2.04/HS11.6</b> , Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (co-organized), <b>08:30–17:00</b> , <b>Room 0.11</b>

	<b>OS1.5/AS1.29/CL2.14</b> , Climate variability of the Atlantic and Europe (co-organized), <b>08:30–15:00, Room L3</b>
	<b>HS4.6/CL3.13</b> , From sub-seasonal forecasting to climate projections: predicting hydrologic extremes and servicing water managers (co-organized), <b>13:30–15:00, Room 2.15</b>
	<b>GI2.1/AS5.2/BG1.29/CL5.27/NH1.19/PS5.4/ST4.9</b> , Atmospheric and Meteorological Instrumentation (co-organized), <b>13:30–15:00, Room 0.49</b>
	<b>NH9.12/AS5.17/CL5.30/ESSI1.9/GIO.4/GMPV6.12/HS11.44/SM3.15/SSS13.66</b> , Methods and Tools for Natural Risk Management and Communications – Innovative ways of delivering information to end users and sharing data among the scientific community (co-organized), <b>13:30–15:00, Room L8</b>
<b>MO4, 15:30–17:00</b>	<b>CL1.10/AS3.7</b> , Eurasian Aeolian Deposits: Understanding atmospheric variability and interactions (co-organized), <b>15:30–17:00, Room 0.94</b>
	<b>CL2.03</b> , Detecting and attributing climate change: trends, extreme events, and impacts, <b>13:30–17:00, Room F2</b>
	<b>CL4.11/AS1.34</b> , Tropical-Extratropical Variability and Teleconnections: past, present and future (co-organized), <b>10:30–17:00, Room 0.14</b>
	<b>IE4.1/NP4.3/AS5.13/CL5.18/ESSI2.3/GD10.6/HS3.7/NH11.14/SM7.03</b> , Big data and machine learning in geosciences (co-organized), <b>10:30–17:00, Room N2</b>
	<b>GM6.3/CL1.30/SSP2.11/SSS13.29</b> , Deciphering human-environmental interactions during the late Quaternary as lessons for the Anthropocene – prospects and challenges in geoarchaeology (co-organized), <b>13:30–17:00, Room 0.96</b>
	<b>AS1.16/CL2.04/HS11.6</b> , Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (co-organized), <b>08:30–17:00, Room 0.11</b>
	<b>NP2.2/AS1.9/CL2.11</b> , Dynamical Extremes in Climate Sciences (co-organized), <b>15:30–17:00, Room M2</b>
	<b>SC1.10/CL6.06/GM12.4/SSP2.20</b> , Age Models and geochronology: An introductory course to different age-depth modelling approaches (co-organized), <b>15:30–17:00, Room -2.85</b>
<b>MO6, 19:00–20:00</b>	<b>SC1.24/CL6.01/NP8.1</b> , Simple applications of dynamical systems theory to real-world climate data (co-organized), <b>19:00–20:00, Room -2.31</b>
<b>Tuesday, 10 April</b>	
<b>TU1, 08:30–10:00</b>	<b>CL1.07</b> , Interdisciplinary tree-ring research, <b>08:30–12:00, Room 0.14</b>
	<b>CL1.19</b> , Paleoclimates from the Cretaceous to the Holocene: learning from numerical experiments and model-data comparisons, and using paleoclimate modelling and data to learn about the future, <b>08:30–10:00, Room F2</b>
	<b>CL4.13</b> , The climate of the Mediterranean region: from basic science to impacts, <b>08:30–12:00, Room 0.94</b>
	<b>IE2.7/AS3.6/BG1.10/CL2.24/CR8.7</b> , Atmosphere – Cryosphere interaction with focus on transport, deposition and effects of dust, black carbon, and other aerosols (co-organized), <b>08:30–12:00, Room N2</b>
	<b>NP2.1/AS1.25/CL2.10/OS1.13</b> , ENSO: Dynamics, Predictability and Modelling (co-organized), <b>08:30–12:00, Room L2</b>
	<b>AS4.9/CL2.12</b> , Atmospheric composition, weather and climate in Sub-Saharan Africa (co-organized), <b>08:30–10:00, Room F1</b>
<b>TU2, 10:30–12:00</b>	<b>CL1.07</b> , Interdisciplinary tree-ring research, <b>08:30–12:00, Room 0.14</b>
	<b>CL1.14</b> , Isotopic and multi-proxy continental, atmospheric and marine records - A tribute to Stanislaw Halas, <b>10:30–12:00, Room F2</b>

	<b>CL4.13</b> , The climate of the Mediterranean region: from basic science to impacts, <b>08:30–12:00, Room 0.94</b>
	<b>IE2.7/AS3.6/BG1.10/CL2.24/CR8.7</b> , Atmosphere – Cryosphere interaction with focus on transport, deposition and effects of dust, black carbon, and other aerosols (co-organized), <b>08:30–12:00, Room N2</b>
	<b>NP2.1/AS1.25/CL2.10/OS1.13</b> , ENSO: Dynamics, Predictability and Modelling (co-organized), <b>08:30–12:00, Room L2</b>
	<b>OS5.1/AS2.4/CL2.25</b> , Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean (co-organized), <b>10:30–15:00, Room L7</b>
	<b>NH9.7/CL3.12/HS11.39</b> , Urban Resilience Studies (co-organized), <b>10:30–12:00, Room L8</b>
	<b>GM3.3/BG2.8/CL4.27/SSS3.4</b> , Chemical weathering, soil formation, and organic carbon mobilization across spatial and temporal scales (co-organized), <b>10:30–12:00, Room 0.31</b>
<b>TUL</b> , 12:15–13:15	<b>DM3/CL</b> , Division meeting for Climate: Past, Present & Future (CL) (co-organized), <b>12:15–13:15, Room F2</b>
	<b>SC3.4/CL6.05/CR8.10/OS6.3</b> , Polar science career panel (EGU Cryosphere and APECS) (co-organized), <b>12:15–13:15, Room -2.85</b>
<b>TU3</b> , 13:30–15:00	<b>CL1.31</b> , Climate response to orbital forcing (including Milutin Milankovic Medal Lecture), <b>13:30–17:00, Room F2</b>
	<b>CL3.01</b> , Extreme Events and Impacts, <b>13:30–15:00, Room 0.94</b>
	<b>CL3.04/NP5.6</b> , Climate Predictions from monthly, seasonal to decadal time scales (co-organized), <b>13:30–15:00, Room 0.14</b>
	<b>OS5.1/AS2.4/CL2.25</b> , Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean (co-organized), <b>10:30–15:00, Room L7</b>
	<b>SSP2.6/CL4.25</b> , Palaeoenvironments of the Precambrian World: from the Archean via Snowball Earth and beyond (co-organized), <b>13:30–15:00, Room 0.96</b>
	<b>SSP3.9/CL5.20</b> , Limnogeology - reading the geological record of lakes (sponsored by IAS and SEPM) (co-organized), <b>13:30–17:00, Room 0.31</b>
<b>TU4</b> , 15:30–17:00	<b>CL1.01</b> , Historical Climatology, <b>15:30–17:00, Room 0.94</b>
	<b>CL1.31</b> , Climate response to orbital forcing (including Milutin Milankovic Medal Lecture), <b>13:30–17:00, Room F2</b>
	<b>CL4.04</b> , Understanding past, present and future changes in the hydrological cycle, <b>15:30–17:00, Room 0.14</b>
	<b>ML22/CL</b> , Milutin Milankovic Medal Lecture by David A. Hodell (co-organized), <b>16:00–17:00, Room F2</b>
	<b>CR1.3/CL1.26/GM9.5</b> , Reconstructing paleo ice dynamics: Comparing and combining field-based evidence and numerical modeling (co-organized), <b>15:30–17:00, Room 1.85</b>
	<b>AS1.28/CL3.02</b> , Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-organized), <b>15:30–17:00, Room E2</b>
	<b>BG1.7/CL4.28</b> , Soil stocks and atmospheric fluxes of carbon and nitrogen in high-latitude ecosystems (co-organized), <b>15:30–17:00, Room 2.31</b>
	<b>SSP3.9/CL5.20</b> , Limnogeology - reading the geological record of lakes (sponsored by IAS and SEPM) (co-organized), <b>13:30–17:00, Room 0.31</b>
	<b>SC2.15/CL6.03/CR8.12</b> , Communicating geoscience to the media (co-organized), <b>15:30–17:00, Room -2.31</b>

### Wednesday, 11 April

<b>WE1</b> , 08:30–10:00	<b>CL1.18</b> , Proxy system modelling and data assimilation in paleoclimatology, <b>08:30–10:00, Room 0.94</b>
	<b>CL2.18</b> , Urban climate, urban biometeorology, and science tools for cities, <b>08:30–15:00, Room 0.14</b>
	<b>CL4.09</b> , Processes and impacts of climate and ocean changes in the Arctic-subarctic and the North Atlantic – from past to future., <b>08:30–12:00, Room F2</b>
	<b>IE2.2/GMPV1.4/BG1.11/CL4.29/ERE1.6/GD3.6/PS1.1/SSP1.10</b> , Terrestrial Planet Evolution: deep carbon cycle and interior/exterior coupling (co-organized), <b>08:30–10:00, Room N2</b>
	<b>ST4.5/AS4.15/CL2.02</b> , Solar Total and Spectral Irradiance Recent Observations and Results, Links with Models and Possible Consequences for Climate (co-organized), <b>08:30–10:00, Room L1</b>
	<b>CR1.2/CL4.19</b> , Modelling ice sheets and glaciers and ice-climate interactions (co-organized), <b>08:30–15:00, Room L3</b>
	<b>GM5.4/CL4.32/HS11.21/SSP4.6/SSS13.26</b> , Drylands: paleoenvironmental and geomorphic perspectives and challenges (co-organized), <b>08:30–10:00, Room G2</b>
<b>WE2</b> , 10:30–12:00	<b>CL2.18</b> , Urban climate, urban biometeorology, and science tools for cities, <b>08:30–15:00, Room 0.14</b>
	<b>CL3.03/AS4.12/BG4.13/HS11.8/NH11.15/NP5.5/SSS13.13</b> , Earth System Prediction and Application (co-organized), <b>10:30–12:00, Room 0.94</b>
	<b>CL4.09</b> , Processes and impacts of climate and ocean changes in the Arctic-subarctic and the North Atlantic – from past to future., <b>08:30–12:00, Room F2</b>
	<b>IE2.3/AS3.10/CL4.22/GMPV6.4/NH2.2</b> , Characterizing, understanding and predicting the radiative effects and the climatic impacts of major volcanic eruptions (co-organized), <b>10:30–12:00, Room N2</b>
	<b>CR1.2/CL4.19</b> , Modelling ice sheets and glaciers and ice-climate interactions (co-organized), <b>08:30–15:00, Room L3</b>
	<b>G3.1/CL4.20/CR8.6/GD11.6/GM11.10/NH11.17</b> , Glacial isostatic adjustment and its role in the global earth system (co-organized), <b>10:30–12:00, Room -2.32</b>
<b>WEL</b> , 12:15–13:15	<b>ML2/AS/BG/CL</b> , Alfred Wegener Medal Lecture by Meinrat O. Andreae (co-organized), <b>12:15–13:15, Room E1</b>
<b>WE3</b> , 13:30–15:00	<b>CL1.08</b> , Tropical coral archives – Reconstructions of climate and environment beyond the instrumental record at society-relevant timescales, <b>13:30–17:00, Room E2</b>
	<b>CL1.21</b> , On the dynamics of Dansgaard-Oeschger events; perspectives from paleoclimate data and modeling (including Hans Oeschger Medal Lecture and CL Division Outstanding ECS Lecture), <b>13:30–17:00, Room F2</b>
	<b>CL2.18</b> , Urban climate, urban biometeorology, and science tools for cities, <b>08:30–15:00, Room 0.14</b>
	<b>IE2.6/SSP2.2/CL4.23/GMPV1.9</b> , Past and Future Mass Extinctions, Climate and Environmental Change: where do we stand? (co-organized), <b>13:30–17:00, Room N2</b>
	<b>ML35/CL</b> , CL Division Outstanding ECS Lecture by Christo Buizert (co-organized), <b>13:30–13:45, Room F2</b>
<b>GM9.1/CL1.27/CR4.7</b> , Mountain Glaciations and beyond - Glacial landforms and their palaeoclimatic interpretation (co-organized), <b>13:30–17:00, Room 0.31</b>	

	<b>AS3.24/CL2.07</b> , Advances in estimating and attributing long-term ozone and temperature trends in the middle atmosphere (co-organized), <b>13:30–15:00, Room 0.88</b>
	<b>CR1.2/CL4.19</b> , Modelling ice sheets and glaciers and ice-climate interactions (co-organized), <b>08:30–15:00, Room L3</b>
	<b>SSP2.10/CL4.30/GM6.9</b> , Integrating stratigraphy, sedimentology, palaeontology and paleoclimate in human evolution and dispersal studies - from early hominins to the Holocene (co-organized), <b>13:30–15:00, Room G2</b>
	<b>SC1.18/CL6.02/GM12.3/HS12.5/NH10.4/TS11.13</b> , Building and maintaining R packages (co-organized), <b>13:30–15:00, Room -2.16</b>
<b>WE4</b> , 15:30–17:00	<b>CL1.08</b> , Tropical coral archives – Reconstructions of climate and environment beyond the instrumental record at society-relevant timescales, <b>13:30–17:00, Room E2</b>
	<b>CL1.21</b> , On the dynamics of Dansgaard-Oeschger events; perspectives from paleoclimate data and modeling (including Hans Oeschger Medal Lecture and CL Division Outstanding ECS Lecture), <b>13:30–17:00, Room F2</b>
	<b>CL4.08</b> , Mountain climates: processes, change and related impacts, <b>15:30–17:00, Room 0.14</b>
	<b>IE2.6/SSP2.2/CL4.23/GMPV1.9</b> , Past and Future Mass Extinctions, Climate and Environmental Change: where do we stand? (co-organized), <b>13:30–17:00, Room N2</b>
	<b>ML14/CL</b> , Hans Oeschger Medal Lecture by Hubertus Fischer (co-organized), <b>16:00–17:00, Room F2</b>
	<b>SSP2.9/CL1.24</b> , Northern Eurasian Lakes – Quaternary Glaciation and Climate History (co-organized), <b>15:30–17:00, Room G2</b>
	<b>GM9.1/CL1.27/CR4.7</b> , Mountain Glaciations and beyond - Glacial landforms and their palaeoclimatic interpretation (co-organized), <b>13:30–17:00, Room 0.31</b>
	<b>GD8.2/CL4.21/CR8.4/EMRP4.20/SM4.11/TS1.7</b> , Unveiling the structure, evolution and influence of the Antarctic Lithosphere (co-organized), <b>15:30–17:00, Room -2.47</b>
<b>Thursday, 12 April</b>	
<b>TH1</b> , 08:30–10:00	<b>CL1.15</b> , Diagnosing past climate mechanisms through the Integration of Ice core, MArine and TErrestrial records, <b>08:30–10:00, Room E2</b>
	<b>CL1.32/SSP2.21</b> , Climate Change in the geological record: what can we learn from data and models? (co-organized), <b>08:30–10:00, Room 0.14</b>
	<b>CL2.01</b> , Earth radiation budget, radiative forcing and climate change, <b>08:30–15:00, Room F2</b>
	<b>IE2.1/NP3.4/AS1.8/CL2.08/CR1.9/OS1.20/ST4.7</b> , Climate Variability Across Scales and Climate States (co-organized), <b>08:30–12:00, Room N2</b>
	<b>HS7.2/AS1.17/CL2.06/NH1.17/NP5.4</b> , Precipitation Modelling: uncertainty, variability, assimilation, ensemble simulation and downscaling (co-organized), <b>08:30–15:00, Room B</b>
	<b>NP1.1/CL4.03</b> , Mathematics of Planet Earth (including Lewis Fry Richardson Medal Lecture and NP Division Outstanding ECS Lecture) (co-organized), <b>08:30–17:00, Room L3</b>
<b>TH2</b> , 10:30–12:00	<b>CL1.11</b> , Novel and quantitative methods for continental palaeoenvironmental reconstruction., <b>10:30–12:00, Room 0.14</b>
	<b>CL1.33/BG3.11/CR8.11/GM9.8/OS2.15</b> , Polar continental margins and fjords – climate, oceanography, tectonics and geohazards (co-organized), <b>10:30–12:00, Room E2</b>

	<b>CL2.01</b> , Earth radiation budget, radiative forcing and climate change, <b>08:30–15:00, Room F2</b>
	<b>IE2.1/NP3.4/AS1.8/CL2.08/CR1.9/OS1.20/ST4.7</b> , Climate Variability Across Scales and Climate States (co-organized), <b>08:30–12:00, Room N2</b>
	<b>HS7.2/AS1.17/CL2.06/NH1.17/NP5.4</b> , Precipitation Modelling: uncertainty, variability, assimilation, ensemble simulation and downscaling (co-organized), <b>08:30–15:00, Room B</b>
	<b>NP1.1/CL4.03</b> , Mathematics of Planet Earth (including Lewis Fry Richardson Medal Lecture and NP Division Outstanding ECS Lecture) (co-organized), <b>08:30–17:00, Room L3</b>
<b>THL</b> , 12:15–13:15	<b>ML1/CL</b> , Alexander von Humboldt Medal Lecture by Filippo Giorgi (co-organized), <b>12:15–13:15, Room E1</b>
<b>TH3</b> , 13:30–15:00	<b>CL1.17</b> , The speleothem archive: understanding processes and interpreting Quaternary climate change, <b>13:30–17:00, Room 0.14</b>
	<b>CL2.01</b> , Earth radiation budget, radiative forcing and climate change, <b>08:30–15:00, Room F2</b>
	<b>CL5.07</b> , Convection-permitting atmospheric modelling, <b>13:30–15:00, Room L3</b>
	<b>IE2.8/CL4.02/AS1.7/BG1.40/NP2.6/OS1.22</b> , Constraining climate sensitivity from various lines of evidence (co-organized), <b>13:30–15:00, Room N2</b>
	<b>HS7.2/AS1.17/CL2.06/NH1.17/NP5.4</b> , Precipitation Modelling: uncertainty, variability, assimilation, ensemble simulation and downscaling (co-organized), <b>08:30–15:00, Room B</b>
	<b>SSS5.1/CL3.06</b> , Mechanisms of soil organic matter stabilization and C sequestration (co-organized), <b>13:30–15:00, Room K2</b>
	<b>NP1.1/CL4.03</b> , Mathematics of Planet Earth (including Lewis Fry Richardson Medal Lecture and NP Division Outstanding ECS Lecture) (co-organized), <b>08:30–17:00, Room E2</b>
<b>TH4</b> , 15:30–17:00	<b>CL1.17</b> , The speleothem archive: understanding processes and interpreting Quaternary climate change, <b>13:30–17:00, Room 0.14</b>
	<b>CL1.20/OS1.6</b> , Past changes in Atlantic Meridional Overturning Circulation (AMOC) structure, variability, and their impact on climate and biogeochemistry (co-organized), <b>15:30–17:00, Room F2</b>
	<b>CL5.05</b> , Downscaling: methods and applications, <b>15:30–17:00, Room L3</b>
	<b>IE2.9/BG1.5/CL3.07/SSS13.73</b> , Nitrogen-transformation processes in terrestrial and aquatic ecosystems under global change (co-organized), <b>15:30–17:00, Room N2</b>
	<b>NH3.10/CL2.21</b> , Effects of climate and environmental changes on landslides (co-organized), <b>15:30–17:00, Room L8</b>
	<b>NP1.1/CL4.03</b> , Mathematics of Planet Earth (including Lewis Fry Richardson Medal Lecture and NP Division Outstanding ECS Lecture) (co-organized), <b>08:30–17:00, Room E2</b>
	<b>AS1.27/CL4.06</b> , The global monsoons in current, future and palaeoclimates and their role in extreme weather and climate events (co-organized), <b>15:30–17:00, Room 0.94</b>
	<b>SC2.9/AS6.2/CL6.04/CR8.8/OS6.2</b> , What are the key problems in Climate Science? (co-organized), <b>15:30–17:00, Room -2.91</b>
<b>Friday, 13 April</b>	
<b>FR1</b> , 08:30–10:00	<b>CL1.06/GM8.12/HS1.19</b> , Tackling past hydrological cycles - from local and regional to global scales (co-organized), <b>08:30–10:00, Room F2</b>

	<b>CL1.13</b> , Quaternary climate archives and proxy uncertainty, <b>08:30–12:00, Room E2</b>
	<b>CL4.14</b> , Land-climate interactions from models and observations: Implications from past to future climate, <b>08:30–12:00, Room 0.14</b>
	<b>BG2.27/CL3.08/SSS13.7</b> , The role of trees and understories in controlling forest dynamics in current and future environments (co-organized), <b>08:30–12:00, Room L2</b>
	<b>GMPV6.1/AS3.32/CL5.22/NH2.7</b> , Volcanic Ash – Generation, Transport, Impacts and Applications (co-organized), <b>08:30–12:00, Room G1</b>
<b>FR2, 10:30–12:00</b>	<b>CL1.13</b> , Quaternary climate archives and proxy uncertainty, <b>08:30–12:00, Room E2</b>
	<b>CL4.14</b> , Land-climate interactions from models and observations: Implications from past to future climate, <b>08:30–12:00, Room 0.14</b>
	<b>CL5.06</b> , Regional climate modeling, including CORDEX, <b>10:30–17:00, Room F2</b>
	<b>BG2.27/CL3.08/SSS13.7</b> , The role of trees and understories in controlling forest dynamics in current and future environments (co-organized), <b>08:30–12:00, Room L2</b>
	<b>OS1.9/AS1.24/BG3.5/CL4.07</b> , The Indian Ocean's past, present, and future (co-organized), <b>10:30–12:00, Room 1.85</b>
	<b>AS5.6/BG4.14/CL5.09/OS1.14</b> , Recent Developments in Numerical Earth System Modelling (co-organized), <b>10:30–12:00, Room 0.94</b>
	<b>GMPV6.1/AS3.32/CL5.22/NH2.7</b> , Volcanic Ash – Generation, Transport, Impacts and Applications (co-organized), <b>08:30–12:00, Room G1</b>
	<b>SC1.25/CL6.07/NP8.4</b> , Scales and scaling in the climate system (co-organized), <b>10:30–12:00, Room -2.31</b>
<b>FR3, 13:30–15:00</b>	<b>CL1.29</b> , Quaternary climate transitions and climate-carbon cycle interactions, <b>13:30–17:00, Room E2</b>
	<b>CL5.03</b> , Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes, <b>13:30–15:00, Room 0.14</b>
	<b>CL5.06</b> , Regional climate modeling, including CORDEX, <b>10:30–17:00, Room F2</b>
	<b>GM9.3/CL1.25</b> , Quaternary ice sheets, sea-level change and geomorphological evolution (co-organized), <b>13:30–15:00, Room 0.31</b>
	<b>AS4.3/CL2.05</b> , The atmospheric water cycle: processes, dynamics and characteristics (co-organized), <b>13:30–15:00, Room 0.11</b>
	<b>BG2.19/CL2.17</b> , Land use and land cover change effects on surface biogeophysics, biogeochemistry and climate (co-organized), <b>13:30–15:00, Room 2.20</b>
	<b>AS5.10/BG1.13/CL5.08/HS3.6/OS1.18</b> , High resolution weather and climate models on large supercomputers (co-organized), <b>13:30–17:00, Room 0.94</b>
	<b>GI2.7/AS4.16/CL5.23/EMRP4.8/HS11.13/PS4.7</b> , Cosmic rays across scales and disciplines: the new frontier in environmental research (co-organized), <b>13:30–17:00, Room L3</b>
<b>FR4, 15:30–17:00</b>	<b>CL1.29</b> , Quaternary climate transitions and climate-carbon cycle interactions, <b>13:30–17:00, Room E2</b>
	<b>CL2.15</b> , Phenology and seasonality in climate change, <b>15:30–17:00, Room 0.14</b>
	<b>CL5.06</b> , Regional climate modeling, including CORDEX, <b>10:30–17:00, Room F2</b>
	<b>IE2.4/NH5.7/CL4.18/GD11.7/OS2.14</b> , Sea-Level Changes from Minutes to Millennia (co-organized), <b>15:30–17:00, Room N2</b>
	<b>AS1.3/CL2.20</b> , Aviation Meteorology: Observations, Modeling, and Operations (co-organized), <b>15:30–17:00, Room 0.11</b>

<b>NH5.4/AS4.29/CL3.10/HS11.32/OS2.11</b> , Natural Hazards and climate change impacts in coastal areas (co-organized), <b>15:30–17:00, Room L4/5</b>
<b>AS5.10/BG1.13/CL5.08/HS3.6/OS1.18</b> , High resolution weather and climate models on large supercomputers (co-organized), <b>13:30–17:00, Room 0.94</b>
<b>GI2.7/AS4.16/CL5.23/EMRP4.8/HS11.13/PS4.7</b> , Cosmic rays across scales and disciplines: the new frontier in environmental research (co-organized), <b>13:30–17:00, Room L3</b>



## CL – Climate: Past, Present, Future (#EGU18CL) – PICO

### Monday, 09 April

<b>MO1</b> , 08:30–10:00	<b>AS3.5/CL5.19/GM10.2</b> , Aeolian dust: Initiator, Player, and Recorder of Environmental Change (co-organized), <b>PICO spot 5a</b>
<b>MO2</b> , 10:30–12:00	<b>AS3.5/CL5.19/GM10.2</b> , Aeolian dust: Initiator, Player, and Recorder of Environmental Change (co-organized), <b>PICO spot 5a</b>
<b>MO3</b> , 13:30–15:00	<b>CL5.02/AS5.7/BG1.38/GD10.9/GI0.5/GM2.10/GMPV10.9/HS11.25/NH11.1/NP9.4/OS4.14/PS6.4/SM7.04/SSP1.12/SSS13.12/ST4.8/TS11.9</b> , The development of geoscientific modelling (co-organized), <b>PICO spot 5a</b>
<b>MO4</b> , 15:30–17:00	<b>CL5.02/AS5.7/BG1.38/GD10.9/GI0.5/GM2.10/GMPV10.9/HS11.25/NH11.1/NP9.4/OS4.14/PS6.4/SM7.04/SSP1.12/SSS13.12/ST4.8/TS11.9</b> , The development of geoscientific modelling (co-organized), <b>PICO spot 5a</b>

### Tuesday, 10 April

<b>TU4</b> , 15:30–17:00	<b>CL5.14</b> , Climate Econometrics, <b>PICO spot 5a</b>
	<b>CR1.8/CL1.16</b> , The Quest for Oldest Ice (co-organized), <b>PICO spot 3</b>
	<b>GM5.2/CL4.31</b> , Geomorphic response to climate variability: integrating different temporal or spatial scales from geomorphic processes and sediment archives (co-organized), <b>PICO spot 1</b>

### Wednesday, 11 April

<b>WE1</b> , 08:30–10:00	<b>CL1.03</b> , Flood and weather extremes of the past, <b>PICO spot 5a</b>
	<b>IE4.4/GM2.8/AS5.8/BG1.17/CL5.28/GD10.10/GMPV10.5/HS3.5/SSS13.77/TS11.12</b> , R and the benefit of low-cost solutions - democratic participation to face challenges in Earth science (co-organized), <b>PICO spot 4</b>
	<b>HS7.3/CL2.19/ERE2.5/NH1.16/NP9.1</b> , Water, climate, food and health (co-organized), <b>PICO spot 5b</b>
<b>WE2</b> , 10:30–12:00	<b>IE4.4/GM2.8/AS5.8/BG1.17/CL5.28/GD10.10/GMPV10.5/HS3.5/SSS13.77/TS11.12</b> , R and the benefit of low-cost solutions - democratic participation to face challenges in Earth science (co-organized), <b>PICO spot 4</b>
	<b>HS7.3/CL2.19/ERE2.5/NH1.16/NP9.1</b> , Water, climate, food and health (co-organized), <b>PICO spot 5b</b>

### Thursday, 12 April

<b>TH1</b> , 08:30–10:00	<b>BG5.2/CL1.12</b> , Linking microbial communities and climatic archives: the influence of the subsurface biosphere on terrestrial and marine sediments (co-organized), <b>PICO spot A</b>
	<b>GMPV4.8/CL1.34</b> , Arctic, Antarctic and other glaciated terranes volcanism - magmatic, tectonic, geomorphic and climatic implications (co-organized), <b>PICO spot 3</b>
<b>TH2</b> , 10:30–12:00	<b>CL5.04</b> , Synoptic climatology – methods and applications, <b>PICO spot 1</b>

### Friday, 13 April

<b>FR1, 08:30–10:00</b>	<b>CL5.13, Climate Services - Underpinning Science, PICO spot 5a</b>
<b>FR2, 10:30–12:00</b>	<b>CL5.13, Climate Services - Underpinning Science, PICO spot 5a</b>

## CL – Climate: Past, Present, Future (#EGU18CL) – Posters

### Monday, 09 April

<b>MO5, 17:30–19:00</b>	<b>CL0.00</b> , Open Session on Climate: Past, Present and Future, <b>Hall X5, X5.238–X5.256</b>
	<b>CL1.02</b> , Studying the climate of the last two millennia, <b>Hall X5, X5.257–X5.281</b>
	<b>CL1.10/AS3.7</b> , Eurasian Aeolian Deposits: Understanding atmospheric variability and interactions (co-organized), <b>Hall X5, X5.283–X5.299</b>
	<b>CL2.03</b> , Detecting and attributing climate change: trends, extreme events, and impacts, <b>Hall X5, X5.300–X5.324</b>
	<b>CL3.05</b> , Polar Climate Predictability and Prediction, <b>Hall X5, X5.325–X5.340</b>
	<b>CL4.10</b> , Arctic climate change: governing mechanisms and global implications, <b>Hall X5, X5.341–X5.354</b>
	<b>CL4.11/AS1.34</b> , Tropical-Extratropical Variability and Teleconnections: past, present and future (co-organized), <b>Hall X5, X5.355–X5.383</b>
	<b>CL4.17</b> , Sea level rise: past, present and future, <b>Hall X5, X5.384–X5.406</b>
	<b>CL5.01/GM2.11</b> , Advances in Quaternary Geochronology (co-organized), <b>Hall X5, X5.407–X5.424</b>
	<b>IE4.1/NP4.3/AS5.13/CL5.18/ESSI2.3/GD10.6/HS3.7/NH11.14/SM7.03</b> , Big data and machine learning in geosciences (co-organized), <b>Hall X3, X3.44–X3.75</b>
	<b>IE4.5/AS5.14/BG1.22/CL5.26/EMRP4.35/ESSI2.12/GD10.7/GI1.7</b> , Information extraction from satellite observations using data-driven methods (co-organized), <b>Hall X5, X5.226–X5.237</b>
	<b>GM6.3/CL1.30/SSP2.11/SSS13.29</b> , Deciphering human-environmental interactions during the late Quaternary as lessons for the Anthropocene – prospects and challenges in geoarchaeology (co-organized), <b>Hall X1, X1.333–X1.366</b>
	<b>AS1.16/CL2.04/HS11.6</b> , Precipitation: Measurement, Climatology, Remote Sensing, and Modeling (co-organized), <b>Hall X5, X5.39–X5.86</b>
	<b>NP2.2/AS1.9/CL2.11</b> , Dynamical Extremes in Climate Sciences (co-organized), <b>Hall X3, X3.1–X3.27</b>
	<b>OS1.5/AS1.29/CL2.14</b> , Climate variability of the Atlantic and Europe (co-organized), <b>Hall X4, X4.88–X4.125</b>
	<b>HS4.6/CL3.13</b> , From sub-seasonal forecasting to climate projections: predicting hydrologic extremes and servicing water managers (co-organized), <b>Hall A, A.106–A.127</b>
	<b>GI0.2/AS4.23/BG1.27/CL5.15/EMRP4.36/ERE1.8/G6.2/GD1.2/GM12.5/GMPV10.10/HS11.1/NH9.24/NP9.2/SM1.11/SSP1.3/SSS13.70/TS1.8</b> , COST Actions in Geosciences: breakthrough ideas, research activities and results (co-organized), <b>Hall X1, X1.1–X1.28</b>
<b>HS3.4/AS5.12/BG1.42/CL5.16</b> , Challenges and advances in using High-Performance Computing for Terrestrial Systems Modelling (co-organized), <b>Hall A, A.72–A.82</b>	
<b>EMRP3.2/CL5.24</b> , Environmental Magnetism: advances and perspectives (co-organized), <b>Hall X2, X2.103–X2.115</b>	
<b>GI2.1/AS5.2/BG1.29/CL5.27/NH1.19/PS5.4/ST4.9</b> , Atmospheric and Meteorological Instrumentation (co-organized), <b>Hall X1, X1.54–X1.74</b>	
<b>NP4.1/CL5.29/NH11.20</b> , Time Series Analysis in the Geosciences - Concepts, Methods and Applications (co-organized), <b>Hall X3, X3.28–X3.43</b>	

**NH9.12/AS5.17/CL5.30/ESS1.9/GI0.4/GMPV6.12/HS11.44/SM3.15/SSS13.66**, Methods and Tools for Natural Risk Management and Communications – Innovative ways of delivering information to end users and sharing data among the scientific community (co-organized), **Hall X1, X1.216–X1.233**

## Tuesday, 10 April

**TU5, 17:30–19:00**

**CL1.01**, Historical Climatology, **Hall X5, X5.263–X5.284**

**CL1.07**, Interdisciplinary tree-ring research, **Hall X5, X5.285–X5.313**

**CL1.14**, Isotopic and multi-proxy continental, atmospheric and marine records - A tribute to Stanislaw Halas, **Hall X5, X5.314–X5.338**

**CL1.19**, Paleoclimates from the Cretaceous to the Holocene: learning from numerical experiments and model-data comparisons, and using paleoclimate modelling and data to learn about the future, **Hall X5, X5.339–X5.357**

**CL1.31**, Climate response to orbital forcing (including Milutin Milankovic Medal Lecture), **Hall X5, X5.358–X5.371**

**CL3.01**, Extreme Events and Impacts, **Hall X5, X5.372–X5.388**

**CL3.04/NP5.6**, Climate Predictions from monthly, seasonal to decadal time scales (co-organized), **Hall X5, X5.389–X5.410**

**CL4.04**, Understanding past, present and future changes in the hydrological cycle, **Hall X5, X5.411–X5.425**

**CL4.13**, The climate of the Mediterranean region: from basic science to impacts, **Hall X5, X5.426–X5.449**

**CL5.11/CR7.5/HS11.55**, Linking climate and impact models: Challenges, approaches, solutions (co-organized), **Hall X5, X5.450–X5.462**

**IE2.7/AS3.6/BG1.10/CL2.24/CR8.7**, Atmosphere – Cryosphere interaction with focus on transport, deposition and effects of dust, black carbon, and other aerosols (co-organized), **Hall X5, X5.100–X5.124**

**CR1.3/CL1.26/GM9.5**, Reconstructing paleo ice dynamics: Comparing and combining field-based evidence and numerical modeling (co-organized), **Hall X4, X4.1–X4.16**

**NP2.1/AS1.25/CL2.10/OS1.13**, ENSO: Dynamics, Predictability and Modelling (co-organized), **Hall X4, X4.319–X4.339**

**AS4.9/CL2.12**, Atmospheric composition, weather and climate in Sub-Saharan Africa (co-organized), **Hall X5, X5.242–X5.262**

**OS5.1/AS2.4/CL2.25**, Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean (co-organized), **Hall X4, X4.119–X4.139**

**AS1.28/CL3.02**, Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-organized), **Hall X5, X5.42–X5.60**

**NH9.7/CL3.12/HS11.39**, Urban Resilience Studies (co-organized), **Hall X1, X1.261–X1.275**

**SSP2.6/CL4.25**, Palaeoenvironments of the Precambrian World: from the Archean via Snowball Earth and beyond (co-organized), **Hall X1, X1.324–X1.343**

**GM3.3/BG2.8/CL4.27/SSS3.4**, Chemical weathering, soil formation, and organic carbon mobilization across spatial and temporal scales (co-organized), **Hall X2, X2.93–X2.109**

**BG1.7/CL4.28**, Soil stocks and atmospheric fluxes of carbon and nitrogen in high-latitude ecosystems (co-organized), **Hall A, A.337–A.349**

**SSP3.9/CL5.20**, Limnogeology - reading the geological record of lakes (sponsored by IAS and SEPM) (co-organized), **Hall X1, X1.360–X1.378**

## Wednesday, 11 April

<b>WE5</b> , 17:30–19:00	<b>CL1.08</b> , Tropical coral archives – Reconstructions of climate and environment beyond the instrumental record at society-relevant timescales, <b>Hall X5, X5.220–X5.239</b>
	<b>CL1.18</b> , Proxy system modelling and data assimilation in paleoclimatology, <b>Hall X5, X5.240–X5.256</b>
	<b>CL1.21</b> , On the dynamics of Dansgaard-Oeschger events; perspectives from paleoclimate data and modeling (including Hans Oeschger Medal Lecture and CL Division Outstanding ECS Lecture), <b>Hall X5, X5.257–X5.270</b>
	<b>CL2.18</b> , Urban climate, urban biometeorology, and science tools for cities, <b>Hall X5, X5.271–X5.301</b>
	<b>CL3.03/AS4.12/BG4.13/HS11.8/NH11.15/NP5.5/SSS13.13</b> , Earth System Prediction and Application (co-organized), <b>Hall X5, X5.302–X5.316</b>
	<b>CL4.08</b> , Mountain climates: processes, change and related impacts, <b>Hall X5, X5.317–X5.332</b>
	<b>CL4.09</b> , Processes and impacts of climate and ocean changes in the Arctic-subarctic and the North Atlantic – from past to future:, <b>Hall X5, X5.333–X5.352</b>
	<b>CL4.12</b> , Climate change and its impacts in the Latin America and Caribbean region, <b>Hall X5, X5.353–X5.369</b>
	<b>IE2.3/AS3.10/CL4.22/GMPV6.4/NH2.2</b> , Characterizing, understanding and predicting the radiative effects and the climatic impacts of major volcanic eruptions (co-organized), <b>Hall X5, X5.84–X5.103</b>
	<b>IE2.6/SSP2.2/CL4.23/GMPV1.9</b> , Past and Future Mass Extinctions, Climate and Environmental Change: where do we stand? (co-organized), <b>Hall X1, X1.214–X1.230</b>
	<b>IE2.2/GMPV1.4/BG1.11/CL4.29/ERE1.6/GD3.6/PS1.1/SSP1.10</b> , Terrestrial Planet Evolution: deep carbon cycle and interior/exterior coupling (co-organized), <b>Hall X2, X2.345–X2.361</b>
	<b>SSP2.9/CL1.24</b> , Northern Eurasian Lakes – Quaternary Glaciation and Climate History (co-organized), <b>Hall X1, X1.231–X1.249</b>
	<b>GM9.1/CL1.27/CR4.7</b> , Mountain Glaciations and beyond - Glacial landforms and their palaeoclimatic interpretation (co-organized), <b>Hall X2, X2.1–X2.17</b>
	<b>ST4.5/AS4.15/CL2.02</b> , Solar Total and Spectral Irradiance Recent Observations and Results, Links with Models and Possible Consequences for Climate (co-organized), <b>Hall X4, X4.133–X4.146</b>
	<b>AS3.24/CL2.07</b> , Advances in estimating and attributing long-term ozone and temperature trends in the middle atmosphere (co-organized), <b>Hall X5, X5.140–X5.157</b>
<b>CR1.2/CL4.19</b> , Modelling ice sheets and glaciers and ice-climate interactions (co-organized), <b>Hall X5, X5.370–X5.398</b>	
<b>G3.1/CL4.20/CR8.6/GD11.6/GM11.10/NH11.17</b> , Glacial isostatic adjustment and its role in the global earth system (co-organized), <b>Hall X3, X3.122–X3.136</b>	
<b>GD8.2/CL4.21/CR8.4/EMRP4.20/SM4.11/TS1.7</b> , Unveiling the structure, evolution and influence of the Antarctic Lithosphere (co-organized), <b>Hall X2, X2.267–X2.287</b>	

**SSP2.10/CL4.30/GM6.9**, Integrating stratigraphy, sedimentology, palaeontology and paleoclimate in human evolution and dispersal studies - from early hominins to the Holocene (co-organized), **Hall X1, X1.250–X1.267**

**GM5.4/CL4.32/HS11.21/SSP4.6/SSS13.26**, Drylands: paleoenvironmental and geomorphic perspectives and challenges (co-organized), **Hall X1, X1.358–X1.373**

## Thursday, 12 April

**TH5, 17:30–19:00**

**CL1.11**, Novel and quantitative methods for continental palaeoenvironmental reconstruction., **Hall X5, X5.238–X5.251**

**CL1.15**, Diagnosing past climate mechanisms through the Integration of Ice core, MARine and TERrestrial records, **Hall X5, X5.252–X5.269**

**CL1.17**, The speleothem archive: understanding processes and interpreting Quaternary climate change, **Hall X5, X5.270–X5.289**

**CL1.20/OS1.6**, Past changes in Atlantic Meridional Overturning Circulation (AMOC) structure, variability, and their impact on climate and biogeochemistry (co-organized), **Hall X5, X5.290–X5.305**

**CL1.32/SSP2.21**, Climate Change in the geological record: what can we learn from data and models? (co-organized), **Hall X5, X5.306–X5.322**

**CL1.33/BG3.11/CR8.11/GM9.8/OS2.15**, Polar continental margins and fjords – climate, oceanography, tectonics and geohazards (co-organized), **Hall X5, X5.323–X5.339**

**CL2.01**, Earth radiation budget, radiative forcing and climate change, **Hall X5, X5.340–X5.372**

**CL5.05**, Downscaling: methods and applications, **Hall X5, X5.396–X5.414**

**CL5.07**, Convection-permitting atmospheric modelling, **Hall X5, X5.415–X5.428**

**IE2.1/NP3.4/AS1.8/CL2.08/CR1.9/OS1.20/ST4.7**, Climate Variability Across Scales and Climate States (co-organized), **Hall X4, X4.349–X4.372**

**IE2.9/BG1.5/CL3.07/SSS13.73**, Nitrogen-transformation processes in terrestrial and aquatic ecosystems under global change (co-organized), **Hall A, A.395–A.408**

**IE2.8/CL4.02/AS1.7/BG1.40/NP2.6/OS1.22**, Constraining climate sensitivity from various lines of evidence (co-organized), **Hall X5, X5.373–X5.395**

**NH3.10/CL2.21**, Effects of climate and environmental changes on landslides (co-organized), **Hall X1, X1.199–X1.215**

**SSS5.1/CL3.06**, Mechanisms of soil organic matter stabilization and C sequestration (co-organized), **Hall X3, X3.24–X3.41**

**NP1.1/CL4.03**, Mathematics of Planet Earth (including Lewis Fry Richardson Medal Lecture and NP Division Outstanding ECS Lecture) (co-organized), **Hall X4, X4.297–X4.332**

**AS1.27/CL4.06**, The global monsoons in current, future and palaeoclimates and their role in extreme weather and climate events (co-organized), **Hall X5, X5.26–X5.52**

**GI1.3/AS5.15/BG1.30/CL5.10/EMRP4.5/ESSI1.6/HS11.12/SM5.03**, Environmental sensor network (co-organized), **Hall X1, X1.59–X1.66**

## Friday, 13 April

**FR1, 08:30–10:00**

**OS1.9/AS1.24/BG3.5/CL4.07**, The Indian Ocean's past, present, and future (co-organized), **Hall X4, X4.55–X4.69**

**FR3, 13:30–15:00**

**HS7.2/AS1.17/CL2.06/NH1.17/NP5.4**, Precipitation Modelling: uncertainty, variability, assimilation, ensemble simulation and downscaling

	(co-organized), <b>Hall A, A.89–A.129</b>
<b>FR4, 15:30–17:00</b>	<b>BG2.27/CL3.08/SSS13.7</b> , The role of trees and understories in controlling forest dynamics in current and future environments (co-organized), <b>Hall A, A.434–A.458</b>
<b>FR5, 17:30–19:00</b>	<b>CL1.06/GM8.12/HS1.19</b> , Tackling past hydrological cycles - from local and regional to global scales (co-organized), <b>Hall X5, X5.345–X5.361</b>
	<b>CL1.13</b> , Quaternary climate archives and proxy uncertainty, <b>Hall X5, X5.362–X5.384</b>
	<b>CL1.29</b> , Quaternary climate transitions and climate-carbon cycle interactions, <b>Hall X5, X5.385–X5.406</b>
	<b>CL2.15</b> , Phenology and seasonality in climate change, <b>Hall X4, X4.1–X4.19</b>
	<b>CL4.14</b> , Land-climate interactions from models and observations: Implications from past to future climate, <b>Hall X5, X5.407–X5.433</b>
	<b>CL5.03</b> , Climate Data Homogenization and Analysis of Climate Variability, Trends and Extremes, <b>Hall X5, X5.434–X5.454</b>
	<b>CL5.06</b> , Regional climate modeling, including CORDEX, <b>Hall X5, X5.455–X5.497</b>
	<b>IE2.4/NH5.7/CL4.18/GD11.7/OS2.14</b> , Sea-Level Changes from Minutes to Millennia (co-organized), <b>Hall X1, X1.178–X1.188</b>
	<b>GM9.3/CL1.25</b> , Quaternary ice sheets, sea-level change and geomorphological evolution (co-organized), <b>Hall X2, X2.29–X2.41</b>
	<b>AS4.3/CL2.05</b> , The atmospheric water cycle: processes, dynamics and characteristics (co-organized), <b>Hall X5, X5.236–X5.254</b>
	<b>BG2.19/CL2.17</b> , Land use and land cover change effects on surface biogeophysics, biogeochemistry and climate (co-organized), <b>Hall A, A.383–A.402</b>
	<b>AS1.3/CL2.20</b> , Aviation Meteorology: Observations, Modeling, and Operations (co-organized), <b>Hall X5, X5.1–X5.13</b>
	<b>NH5.4/AS4.29/CL3.10/HS11.32/OS2.11</b> , Natural Hazards and climate change impacts in coastal areas (co-organized), <b>Hall X1, X1.145–X1.164</b>
	<b>AS5.10/BG1.13/CL5.08/HS3.6/OS1.18</b> , High resolution weather and climate models on large supercomputers (co-organized), <b>Hall X5, X5.321–X5.344</b>
	<b>AS5.6/BG4.14/CL5.09/OS1.14</b> , Recent Developments in Numerical Earth System Modelling (co-organized), <b>Hall X5, X5.301–X5.320</b>
	<b>GMPV6.1/AS3.32/CL5.22/NH2.7</b> , Volcanic Ash – Generation, Transport, Impacts and Applications (co-organized), <b>Hall X2, X2.396–X2.407</b>
	<b>GI2.7/AS4.16/CL5.23/EMRP4.8/HS11.13/PS4.7</b> , Cosmic rays across scales and disciplines: the new frontier in environmental research (co-organized), <b>Hall X4, X4.242–X4.259</b>