

## CL – Climate: Past, Present, Future (#EGU17CL) – Orals

### Monday, 24 April

<b>MO1</b> , 08:30–10:00	<b>CL1.15</b> , Quaternary climate archives and proxy uncertainty, <b>08:30–15:00, Room E1</b>
	<b>CL2.09/AS4.8/BG9.19</b> , Phenology and seasonality in climate change and ecology (co-organized), <b>08:30–12:00, Room F2</b>
	<b>CL3.07/AS4.27</b> , Extreme Events and Impacts (co-organized), <b>08:30–10:00, Room 0.14</b>
	<b>OS1.2/AS1.20/CL1.29</b> , The North Atlantic: natural variability and global change (co-organized), <b>08:30–17:00, Room D2</b>
	<b>AS1.18/CL3.09</b> , The global monsoons in current, future and palaeoclimates and their role in extreme weather and climate events (co-organized), <b>08:30–12:00, Room E2</b>
	<b>SSS9.13/BG9.45/CL4.06/CR4.7</b> , Soils in cold-climate regions (co-organized), <b>08:30–12:15, Room -2.21</b>
<b>MO2</b> , 10:30–12:00	<b>CL0.00</b> , Open Session on Climate: Past, Present and Future, <b>10:30–12:00, Room 0.14</b>
	<b>CL1.15</b> , Quaternary climate archives and proxy uncertainty, <b>08:30–15:00, Room E1</b>
	<b>CL2.09/AS4.8/BG9.19</b> , Phenology and seasonality in climate change and ecology (co-organized), <b>08:30–12:00, Room F2</b>
	<b>OS1.2/AS1.20/CL1.29</b> , The North Atlantic: natural variability and global change (co-organized), <b>08:30–17:00, Room D2</b>
	<b>AS1.18/CL3.09</b> , The global monsoons in current, future and palaeoclimates and their role in extreme weather and climate events (co-organized), <b>08:30–12:00, Room E2</b>
	<b>SSS9.13/BG9.45/CL4.06/CR4.7</b> , Soils in cold-climate regions (co-organized), <b>08:30–12:15, Room -2.21</b>
	<b>NP4.1/AS4.13/CL5.06</b> , Time Series Analysis, Prediction, Verification and Inter-Comparison of Geoscientific Observations and Model Data (co-organized), <b>10:30–17:00, Room M2</b>
<b>G3.1/CL5.14/CR6.10/GD3.4/GM10.6/NH8.3/OS1.17</b> , How much does glacial isostatic adjustment contribute to earth system modelling? (co-organized), <b>10:30–12:00, Room 1.61</b>	
<b>MOL</b> , 12:15–13:15	<b>UMI0</b> , Plenary, <b>12:15–13:15, Room E1</b>
<b>MO3</b> , 13:30–15:00	<b>CL1.11/AS4.18/CR2.8</b> , The state-of-the-art in ice coring sciences (co-organized), <b>13:30–17:00, Room F2</b>
	<b>CL1.15</b> , Quaternary climate archives and proxy uncertainty, <b>08:30–15:00, Room E1</b>
	<b>CL3.04</b> , Impacts at 1.5°C warming and how we get there, <b>13:30–17:00, Room 0.14</b>
	<b>OS1.2/AS1.20/CL1.29</b> , The North Atlantic: natural variability and global change (co-organized), <b>08:30–17:00, Room D2</b>
	<b>SSS9.14/BG9.46/CL3.13</b> , Carbon sequestration in soils for mitigation, adaptation and food security: making the ‘4 per 1000’ goal a reality and studying soils based negative emissions technologies (NETs) (co-organized), <b>13:30–17:00, Room -2.21</b>
	<b>NP4.1/AS4.13/CL5.06</b> , Time Series Analysis, Prediction, Verification and Inter-Comparison of Geoscientific Observations and Model Data (co-organized), <b>10:30–17:00, Room M2</b>
<b>MO4</b> , 15:30–17:00	<b>CL1.11/AS4.18/CR2.8</b> , The state-of-the-art in ice coring sciences (co-organized), <b>13:30–17:00, Room F2</b>

	<b>CL3.04</b> , Impacts at 1.5°C warming and how we get there, <b>13:30–17:00, Room 0.14</b>
	<b>OS1.2/AS1.20/CL1.29</b> , The North Atlantic: natural variability and global change (co-organized), <b>08:30–17:00, Room D2</b>
	<b>HS5.9/CL2.17/CR6.9/NH1.9</b> , Water infrastructure risks under climate variability and change: role of data analysis, operating approaches, hydro-meteorological and multi-sectoral forecasts (co-organized), <b>15:30–17:00, Room 2.95</b>
	<b>SSS9.14/BG9.46/CL3.13</b> , Carbon sequestration in soils for mitigation, adaptation and food security: making the ‘4 per 1000’ goal a reality and studying soils based negative emissions technologies (NETs) (co-organized), <b>13:30–17:00, Room -2.21</b>
	<b>NH1.5/AS4.37/CL4.19/HS11.27/SM10.9/SSS10.16</b> , Hazard Risk Management of Agroecosystems and Induced Human Migration (co-organized), <b>15:30–17:15, Room L6</b>
	<b>NP4.1/AS4.13/CL5.06</b> , Time Series Analysis, Prediction, Verification and Inter-Comparison of Geoscientific Observations and Model Data (co-organized), <b>10:30–17:00, Room M2</b>
<b>Tuesday, 25 April</b>	
<b>TU1</b> , 08:30–10:00	<b>CL1.13</b> , The speleothem archive: understanding processes and interpreting Quaternary climate change, <b>08:30–12:00, Room F2</b>
	<b>CL4.08/HS11.5</b> , Understanding past, present and future changes in the hydrological cycle (co-organized), <b>08:30–10:00, Room 0.14</b>
	<b>CL5.10</b> , Regional climate modeling, including CORDEX, <b>08:30–15:00, Room E1</b>
	<b>OS1.2/AS1.20/CL1.29</b> , The North Atlantic: natural variability and global change (co-organized), <b>08:30–10:00, Room G2</b>
	<b>GD6.2/CL1.32/CR5.6/EMRP4.29/SM10.6/TS9.7</b> , Unveiling the structure, evolution and influence of the Antarctic Lithosphere (co-organized), <b>08:30–10:00, Room L7</b>
	<b>SSS1.6/AS4.51/BG9.13/CL3.06/HS11.43/NH9.22</b> , European Environmental Policies and Sustainability (co-organized), <b>08:30–10:15, Room -2.20</b>
<b>TU2</b> , 10:30–12:00	<b>CL1.13</b> , The speleothem archive: understanding processes and interpreting Quaternary climate change, <b>08:30–12:00, Room F2</b>
	<b>CL3.08</b> , From climate to impacts: Linking models and projecting impacts across sectors, <b>10:30–12:00, Room 0.94</b>
	<b>CL4.18</b> , Understanding, representing and communicating earth system processes in weather and climate, <b>10:30–12:00, Room 0.14</b>
	<b>CL5.10</b> , Regional climate modeling, including CORDEX, <b>08:30–15:00, Room E1</b>
	<b>GM1.1/EOS20/CL5.18/SSS13.1</b> , Beyond the case study: Concepts in Earth Sciences (co-organized), <b>10:30–12:00, Room L1</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>TU3</b> , 13:30–15:00	<b>CL1.03</b> , Studying the climate of the last two millennia, <b>13:30–17:00, Room F2</b>
	<b>CL1.28</b> , Quaternary glacial-interglacial transitions: causes and effects, <b>13:30–17:00, Room 0.14</b>
	<b>CL2.05</b> , Arctic climate change: governing mechanisms and global implications, <b>13:30–15:00, Room 0.94</b>
	<b>CL5.10</b> , Regional climate modeling, including CORDEX, <b>08:30–15:00, Room E1</b>
	<b>ML33/CL</b> , CL Division Outstanding ECS Award Lecture by Francesco Muschitiello (co-organized), <b>14:45–15:00, Room 0.14</b>

	<b>GM6.4/CL1.16/SSS3.10</b> , Palaeoenvironmental evolution, connectivity and geomorphological dynamics in dryland areas: New approaches, challenges, pros and cons (co-organized), <b>13:30–15:15, Room L1</b>
	<b>NH9.1/CL2.26</b> , Natural hazard event analyses for risk reduction and adaptation (co-organized), <b>13:30–15:00, Room 2.31</b>
	<b>GI2.1/AS4.42/BG9.21/CL5.16/NH6.10/PS1.6/ST3.7</b> , Atmospheric and Meteorological Instrumentation (co-organized), <b>13:30–17:00, Room 0.96</b>
<b>TU4, 15:30–17:00</b>	<b>CL1.03</b> , Studying the climate of the last two millennia, <b>13:30–17:00, Room F2</b>
	<b>CL1.28</b> , Quaternary glacial-interglacial transitions: causes and effects, <b>13:30–17:00, Room 0.14</b>
	<b>CL5.11/AS1.32</b> , Convection-permitting atmospheric modelling (co-organized), <b>15:30–17:00, Room 0.94</b>
	<b>GI2.1/AS4.42/BG9.21/CL5.16/NH6.10/PS1.6/ST3.7</b> , Atmospheric and Meteorological Instrumentation (co-organized), <b>13:30–17:00, Room 0.96</b>
	<b>SC20/AS5.1/CL6.02/NP9.5</b> , Response, variability and transitions in geophysical systems (co-organized), <b>15:30–17:00, Room -2.31</b>
<b>TU5, 17:30–19:00</b>	<b>SC49/CL6.03/CR6.12/OS</b> , Meet Your Reviewer (co-organized), <b>17:30–19:00, Room N2</b>
<b>Wednesday, 26 April</b>	
<b>WE1, 08:30–10:00</b>	<b>CL2.02</b> , Urban climate and urban biometeorology, <b>08:30–12:00, Room 0.14</b>
	<b>CL2.04</b> , Earth radiation budget, radiative forcing and climate change, <b>08:30–12:00, Room E1</b>
	<b>CL3.03/AS1.22/CR1.6/OS1.15</b> , Polar Climate Predictability and Prediction (co-organized), <b>08:30–10:00, Room 0.96</b>
	<b>CL4.04/OS1.16</b> , Decadal to millennial scale climate variability of the late Quaternary (co-organized), <b>08:30–15:00, Room F2</b>
	<b>CR1.1/CL2.18</b> , State of the Cryosphere: Observations and Modelling (co-organized), <b>08:30–12:00, Room G2</b>
	<b>US1/AS4.52/BG9.67/CL4.20/SSS0.4</b> , Vegetation-climate interactions across time scales (co-organized), <b>08:30–12:00, Room E2</b>
	<b>AS4.10/CL5.12/ESSI1.14/OS4.15</b> , Recent developments in numerical atmospheric, oceanic and sea-ice models: towards global cloud and eddy resolving simulations on exascale supercomputers (co-organized), <b>08:30–12:00, Room 0.94</b>
	<b>OS5.2/CL5.15</b> , Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean (co-organized), <b>08:30–12:00, Room -2.32</b>
<b>WE2, 10:30–12:00</b>	<b>CL2.01</b> , Detecting and attributing climate change: trends, extreme events, and impacts, <b>10:30–12:00, Room 0.96</b>
	<b>CL2.02</b> , Urban climate and urban biometeorology, <b>08:30–12:00, Room 0.14</b>
	<b>CL2.04</b> , Earth radiation budget, radiative forcing and climate change, <b>08:30–12:00, Room E1</b>
	<b>CL4.04/OS1.16</b> , Decadal to millennial scale climate variability of the late Quaternary (co-organized), <b>08:30–15:00, Room F2</b>
	<b>ML14/CL</b> , Hans Oeschger Medal Lecture by Denis-Didier Rousseau (co-organized), <b>10:30–11:30, Room F2</b>
	<b>CR1.1/CL2.18</b> , State of the Cryosphere: Observations and Modelling (co-organized), <b>08:30–12:00, Room G2</b>
	<b>US1/AS4.52/BG9.67/CL4.20/SSS0.4</b> , Vegetation-climate interactions across time scales (co-organized), <b>08:30–12:00, Room E2</b>
	<b>AS4.10/CL5.12/ESSI1.14/OS4.15</b> , Recent developments in numerical atmospheric, oceanic and sea-ice models: towards global cloud and eddy resolving simulations on exascale supercomputers (co-organized), <b>08:30–12:00, Room 0.94</b>

	<b>OS5.2/CL5.15</b> , Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean (co-organized), <b>08:30–12:00, Room -2.32</b>
<b>WE3</b> , 13:30–15:00	<b>CL1.01/AS4.9/CR1.12/HS7.9/OS1.13</b> , Into the Anthropocene; Observing and interpreting the historical record of temperature and other climate indicators (co-organized), <b>13:30–15:00, Room 0.14</b>
	<b>CL1.25/AS4.26/HS2.4.5</b> , Flood and weather extremes of the past (co-organized), <b>13:30–15:00, Room 0.96</b>
	<b>CL4.04/OS1.16</b> , Decadal to millennial scale climate variability of the late Quaternary (co-organized), <b>08:30–15:00, Room F2</b>
	<b>CL4.07/AS1.14/BG9.18/CR1.7/HS11.3</b> , Mountain climates: processes, change and related impacts (co-organized), <b>13:30–17:00, Room E2</b>
	<b>GM7.3/CL1.09/SSS3.11</b> , Geoarchaeology: Human impact, adaptation and response to climatic and environmental change from the past to the present (co-organized), <b>13:30–17:00, Room L3</b>
	<b>CR1.2/CL4.09</b> , Ice-sheet and climate interactions (co-organized), <b>13:30–15:00, Room -2.32</b>
	<b>BG2.16/CL5.24/SSS9.40</b> , Response of terrestrial ecosystems to climate change: Learning from experimental manipulations and natural gradients (co-organized), <b>13:30–17:00, Room 2.20</b>
	<b>SC56/CL6.04/CR6.13</b> , Communicating Climate Change - blogging as a group (co-organized), <b>13:30–15:00, Room -2.85</b>
<b>WE4</b> , 15:30–17:00	<b>CL1.02</b> , Historical Climatology, <b>15:30–17:00, Room 0.14</b>
	<b>CL1.23/BG9.14/CR6.3/OS2.5</b> , Polar continental margins and fjords – climate, oceanography, tectonics and geohazards (co-organized), <b>15:30–17:00, Room 0.96</b>
	<b>CL4.07/AS1.14/BG9.18/CR1.7/HS11.3</b> , Mountain climates: processes, change and related impacts (co-organized), <b>13:30–17:00, Room E2</b>
	<b>CL5.03/GM2.3</b> , Advances in Quaternary Geochronology (co-organized), <b>15:30–17:00, Room F2</b>
	<b>GM7.3/CL1.09/SSS3.11</b> , Geoarchaeology: Human impact, adaptation and response to climatic and environmental change from the past to the present (co-organized), <b>13:30–17:00, Room L3</b>
	<b>AS1.25/CL4.14</b> , Past and future atmospheric temperature changes and their drivers (co-organized), <b>15:30–17:00, Room 0.94</b>
	<b>BG2.16/CL5.24/SSS9.40</b> , Response of terrestrial ecosystems to climate change: Learning from experimental manipulations and natural gradients (co-organized), <b>13:30–17:00, Room 2.20</b>
<b>WE5</b> , 17:30–19:00	<b>SC7/CL6.01/NP9.1</b> , Short course: Scales and Scaling in the Climate System (co-organized), <b>17:30–20:00, Room L2</b>
	<b>SC65/CL6.15</b> , Introduction to isotope science in speleothem research (co-organized), <b>17:30–19:00, Room -2.31</b>
<b>WE6</b> , 19:00–20:00	<b>SC7/CL6.01/NP9.1</b> , Short course: Scales and Scaling in the Climate System (co-organized), <b>17:30–20:00, Room L2</b>
<b>Thursday, 27 April</b>	
<b>TH1</b> , 08:30–10:00	<b>CL4.10/CR1.13/OS1.12</b> , Sea level rise: past, present and future (co-organized), <b>08:30–12:00, Room F2</b>
	<b>CL5.08/AS1.3/OS4.10</b> , Downscaling: methods and applications (co-organized), <b>08:30–12:00, Room 0.14</b>
	<b>HS7.2/AS1.9/CL2.15/NH1.14/NP10.1</b> , Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized), <b>08:30–10:00, Room 2.95</b>

	<b>BG2.8/CL3.14/SSS9.38</b> , Terrestrial ecosystem responses to global change: integrating carbon, nutrient, and water cycles in experiments and models (co-organized), <b>08:30–12:00, Room 2.20</b>
	<b>GM6.1/CL4.12/TS4.5</b> , Geomorphic and tectonic response to climate variability at different temporal and spatial scales: insights from surface processes and continental archives (co-organized), <b>08:30–10:00, Room L3</b>
<b>TH2, 10:30–12:00</b>	<b>CL4.10/CR1.13/OS1.12</b> , Sea level rise: past, present and future (co-organized), <b>08:30–12:00, Room F2</b>
	<b>CL5.08/AS1.3/OS4.10</b> , Downscaling: methods and applications (co-organized), <b>08:30–12:00, Room 0.14</b>
	<b>G5.2/AS4.44/CL2.20</b> , Atmospheric Remote Sensing with Space Geodetic Techniques (co-organized), <b>10:30–17:00, Room D1</b>
	<b>BG2.8/CL3.14/SSS9.38</b> , Terrestrial ecosystem responses to global change: integrating carbon, nutrient, and water cycles in experiments and models (co-organized), <b>08:30–12:00, Room 2.20</b>
<b>TH3, 13:30–15:00</b>	<b>CL1.12/BG9.16/SSP4.9</b> , Tree ring proxies of climatic and environmental change (co-organized), <b>13:30–17:00, Room E2</b>
	<b>CL4.15</b> , The climate of the Mediterranean region: from basic science to impacts, <b>13:30–17:00, Room F2</b>
	<b>CL5.05</b> , Development of climate datasets: homogenization, trends, variability and extremes, including sub-daily timescales, <b>13:30–17:00, Room 0.14</b>
	<b>GM10.1/CL1.33/CR4.8</b> , The Legacy of Mountain Glaciations – Glacial landforms and their palaeoclimatic interpretation (co-organized), <b>13:30–15:00, Room N1</b>
	<b>SSS4.5/BG9.57/CL2.12</b> , Plant-soil-microbial interactions under global change (co-organized), <b>13:30–17:00, Room -2.47</b>
	<b>CR1.4/CL2.19</b> , Glaciers and ice caps under climate change (co-organized), <b>13:30–17:00, Room -2.32</b>
	<b>G5.2/AS4.44/CL2.20</b> , Atmospheric Remote Sensing with Space Geodetic Techniques (co-organized), <b>10:30–17:00, Room D1</b>
<b>TH4, 15:30–17:00</b>	<b>CL1.12/BG9.16/SSP4.9</b> , Tree ring proxies of climatic and environmental change (co-organized), <b>13:30–17:00, Room E2</b>
	<b>CL4.15</b> , The climate of the Mediterranean region: from basic science to impacts, <b>13:30–17:00, Room F2</b>
	<b>CL5.05</b> , Development of climate datasets: homogenization, trends, variability and extremes, including sub-daily timescales, <b>13:30–17:00, Room 0.14</b>
	<b>OS1.8/CL2.08</b> , Tropical & Subtropical Ocean Circulation, Equatorial to Mid-Latitude Air-Sea Interactions (co-organized), <b>15:30–17:00, Room 0.49</b>
	<b>SSS4.5/BG9.57/CL2.12</b> , Plant-soil-microbial interactions under global change (co-organized), <b>13:30–17:00, Room -2.47</b>
	<b>CR1.4/CL2.19</b> , Glaciers and ice caps under climate change (co-organized), <b>13:30–17:00, Room -2.32</b>
	<b>G5.2/AS4.44/CL2.20</b> , Atmospheric Remote Sensing with Space Geodetic Techniques (co-organized), <b>10:30–17:00, Room M1</b>
	<b>GM2.1/CL5.02/SSS12.23</b> , Advances in the use of cosmogenic nuclides and the quantification of landscape evolution (co-organized), <b>15:30–17:00, Room N1</b>
	<b>SC66/CL6.05/CR6.14</b> , Polar Science Career Panel (EGU Cryosphere and APECS) (co-organized), <b>15:30–17:00, Room -2.16</b>
<b>TH6, 19:00–20:00</b>	<b>ML21/CL</b> , Milutin Milankovic Medal Lecture by Axel Timmermann (co-organized), <b>19:00–20:00, Room F2</b>

## Friday, 28 April

FR1, 08:30–10:00	<b>CL1.21/BG9.59/OS2.10/SSP2.8/SSS3.15</b> , Past climate - isotopic and multi-proxy continental and shallow marine records (co-organized), <b>08:30–10:00, Room 0.94</b>
	<b>CL1.31</b> , Paleoclimates and ice dynamics from the Cretaceous to the Holocene: learning about past and future climate changes from numerical experiments and model-data comparisons, <b>08:30–12:00, Room F2</b>
	<b>CL4.11</b> , Land-climate interactions from models and observations: Implications from past to future climate, <b>08:30–12:00, Room 0.14</b>
	<b>SSP4.7/CL1.08/NH2.9/SM1.4</b> , Integrating stratigraphy, sedimentology, paleontology and paleoclimate in human evolution and dispersal studies - from early hominins to the Anthropocene (co-organized), <b>08:30–12:00, Room 1.85</b>
	<b>AS4.16/BG9.2/CL2.14/HS11.1</b> , Stable isotopes in the atmosphere - from vapor to precipitation (co-organized), <b>08:30–10:00, Room F1</b>
	<b>BG2.3/CL2.31/SSS10.17</b> , Forest Management under Climate Change (co-organized), <b>08:30–10:15, Room 2.20</b>
	<b>HS4.6/CL3.02</b> , From sub-seasonal forecasting to climate projections: predicting hydrologic extremes and servicing water managers (co-organized), <b>08:30–12:00, Room 2.95</b>
	<b>AS1.19/CL3.10</b> , Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-organized), <b>08:30–10:00, Room 0.96</b>
	<b>SSS9.7/CL5.21/GM7.8/HS11.55</b> , Soil Erosion, Land Use and Climate Change: mapping, measuring, modelling, and societal challenges (co-organized), <b>08:30–15:15, Room K2</b>
FR2, 10:30–12:00	<b>CL1.19/AS4.17/OS1.19</b> , Advances in integrating ice core, marine and terrestrial records and their timescales (INTIMATE and IntCal) (co-organized), <b>10:30–12:00, Room 0.94</b>
	<b>CL1.31</b> , Paleoclimates and ice dynamics from the Cretaceous to the Holocene: learning about past and future climate changes from numerical experiments and model-data comparisons, <b>08:30–12:00, Room F2</b>
	<b>CL4.11</b> , Land-climate interactions from models and observations: Implications from past to future climate, <b>08:30–12:00, Room 0.14</b>
	<b>SSP4.7/CL1.08/NH2.9/SM1.4</b> , Integrating stratigraphy, sedimentology, paleontology and paleoclimate in human evolution and dispersal studies - from early hominins to the Anthropocene (co-organized), <b>08:30–12:00, Room 1.85</b>
	<b>AS4.3/CL2.21</b> , Atmospheric composition, weather and climate in Sub-Saharan Africa (co-organized), <b>10:30–17:00, Room E2</b>
	<b>HS4.6/CL3.02</b> , From sub-seasonal forecasting to climate projections: predicting hydrologic extremes and servicing water managers (co-organized), <b>08:30–12:00, Room 2.95</b>
	<b>OS1.9/AS1.17/BG9.60/CL4.16</b> , The Indian Ocean's past, present, and future – A session in Honour of Gary Meyers (co-organized), <b>10:30–12:00, Room 0.49</b>
	<b>NP3.3/CL5.19</b> , Scaling, multifractals and Nonlinear dynamics in the atmosphere, ocean, climate and environment (co-organized), <b>10:30–15:00, Room M2</b>
<b>SSS9.7/CL5.21/GM7.8/HS11.55</b> , Soil Erosion, Land Use and Climate Change: mapping, measuring, modelling, and societal challenges (co-organized), <b>08:30–15:15, Room K2</b>	

<b>FR3, 13:30–15:00</b>	<b>CL1.18/OS2.9</b> , Annually resolved archives of marine climate change (co-organized), <b>13:30–17:00, Room 0.94</b>
	<b>CL3.01</b> , Climate Predictions - from monthly, seasonal to decadal time scales, <b>13:30–17:00, Room 0.14</b>
	<b>CL4.17/AS1.16/OS1.22</b> , Tropical Climate Variability and Teleconnections: past, present and future (co-organized), <b>13:30–17:00, Room F2</b>
	<b>AS4.3/CL2.21</b> , Atmospheric composition, weather and climate in Sub-Saharan Africa (co-organized), <b>10:30–17:00, Room E2</b>
	<b>NP3.3/CL5.19</b> , Scaling, multifractals and Nonlinear dynamics in the atmosphere, ocean, climate and environment (co-organized), <b>10:30–15:00, Room M2</b>
	<b>SSS9.7/CL5.21/GM7.8/HS11.55</b> , Soil Erosion, Land Use and Climate Change: mapping, measuring, modelling, and societal challenges (co-organized), <b>08:30–15:15, Room K2</b>
<b>FR4, 15:30–17:00</b>	<b>CL1.18/OS2.9</b> , Annually resolved archives of marine climate change (co-organized), <b>13:30–17:00, Room 0.94</b>
	<b>CL3.01</b> , Climate Predictions - from monthly, seasonal to decadal time scales, <b>13:30–17:00, Room 0.14</b>
	<b>CL4.17/AS1.16/OS1.22</b> , Tropical Climate Variability and Teleconnections: past, present and future (co-organized), <b>13:30–17:00, Room F2</b>
	<b>AS4.3/CL2.21</b> , Atmospheric composition, weather and climate in Sub-Saharan Africa (co-organized), <b>10:30–17:00, Room E2</b>
	<b>NH1.7/CL2.23/HS11.28</b> , Addressing the challenge of compound events, multi-risk modelling and cross-risk assessment methods (co-organized), <b>15:30–17:00, Room L6</b>

## CL – Climate: Past, Present, Future (#EGU17CL) – PICOs

### Tuesday, 25 April

TU1, 08:30–10:00	IE3.6/GM1.8/AS4.50/BG9.65/CL5.26/HS11.23/SSS11.11, R's deliberate role in Earth sciences (co-organized), <b>PICO spot A</b>
TU3, 13:30–15:00	CL4.01/AS3.4/GM11.2, Aeolian dust: Initiator, Player, and Recorder of Environmental Change (co-organized), <b>PICO spot 5a</b>
	NH9.5/AS4.32/CL2.27/HS11.38/SM3.9/SSS13.3, Natural Hazard and Risk Assessment in Developing Countries (co-organized), <b>PICO spot 1</b>
TU4, 15:30–17:00	CL4.01/AS3.4/GM11.2, Aeolian dust: Initiator, Player, and Recorder of Environmental Change (co-organized), <b>PICO spot 5a</b>

### Wednesday, 26 April

WE1, 08:30–10:00	HS2.2.2/AS4.15/CL2.07/CR3.6/NH1.16, Mountains and snow: Advances in large-scale land surface, hydrological and climate modelling (co-organized), <b>PICO spot 3</b>
WE2, 10:30–12:00	HS2.2.2/AS4.15/CL2.07/CR3.6/NH1.16, Mountains and snow: Advances in large-scale land surface, hydrological and climate modelling (co-organized), <b>PICO spot 3</b>
WE3, 13:30–15:00	CL5.01, Climate Services - Underpinning Science, <b>PICO spot A</b>
WE4, 15:30–17:00	CL5.13, Towards CMIP6 internationally coordinated climate modeling experiments: the role and use of modeling and observation research infrastructures, <b>PICO spot 3</b>

### Thursday, 27 April

TH1, 08:30–10:00	SSS1.7/AS4.49/CL5.20/HS11.44/NH9.21, "Lighthouse" examples, illustrating soil relevance for the UN Sustainable Development Goals (SDG's) (co-organized), <b>PICO spot 3</b>
TH2, 10:30–12:00	CL4.03, Climate change and its impacts in the Baltic and North Sea regions: Observations and model projections, <b>PICO spot 5a</b>
	SSS1.7/AS4.49/CL5.20/HS11.44/NH9.21, "Lighthouse" examples, illustrating soil relevance for the UN Sustainable Development Goals (SDG's) (co-organized), <b>PICO spot 3</b>

### Friday, 28 April

FR2, 10:30–12:00	CL5.04, Synoptic climatology – methods and applications, <b>PICO spot 5a</b>
FR4, 15:30–17:00	BG1.5/CL2.33/HS6.6, Climate extremes, biosphere and society: impacts, remote sensing, and feedbacks (co-organized), <b>PICO spot 5a</b>



## CL – Climate: Past, Present, Future (#EGU17CL) – Posters

### Monday, 24 April

<b>MO5</b> , 17:30–19:00	<b>CL0.00</b> , Open Session on Climate: Past, Present and Future, <b>Hall X5, X5.1–X5.21</b>
	<b>CL1.11/AS4.18/CR2.8</b> , The state-of-the-art in ice coring sciences (co-organized), <b>Hall X5, X5.22–X5.49</b>
	<b>CL1.15</b> , Quaternary climate archives and proxy uncertainty, <b>Hall X5, X5.50–X5.81</b>
	<b>CL2.09/AS4.8/BG9.19</b> , Phenology and seasonality in climate change and ecology (co-organized), <b>Hall X5, X5.82–X5.112</b>
	<b>CL3.04</b> , Impacts at 1.5°C warming and how we get there, <b>Hall X5, X5.113–X5.133</b>
	<b>CL3.07/AS4.27</b> , Extreme Events and Impacts (co-organized), <b>Hall X5, X5.134–X5.153</b>
	<b>OS1.2/AS1.20/CL1.29</b> , The North Atlantic: natural variability and global change (co-organized), <b>Hall X4, X4.1–X4.62</b>
	<b>HS5.9/CL2.17/CR6.9/NH1.9</b> , Water infrastructure risks under climate variability and change: role of data analysis, operating approaches, hydro-meteorological and multi-sectoral forecasts (co-organized), <b>Hall A, A.322–A.340</b>
	<b>AS1.18/CL3.09</b> , The global monsoons in current, future and palaeoclimates and their role in extreme weather and climate events (co-organized), <b>Hall X5, X5.154–X5.184</b>
	<b>SSS9.14/BG9.46/CL3.13</b> , Carbon sequestration in soils for mitigation, adaptation and food security: making the ‘4 per 1000’ goal a reality and studying soils based negative emissions technologies (NETs) (co-organized), <b>Hall X1, X1.301–X1.325</b>
	<b>SSS9.13/BG9.45/CL4.06/CR4.7</b> , Soils in cold-climate regions (co-organized), <b>Hall X1, X1.282–X1.300</b>
	<b>NH1.5/AS4.37/CL4.19/HS11.27/SM10.9/SSS10.16</b> , Hazard Risk Management of Agroecosystems and Induced Human Migration (co-organized), <b>Hall X4, X4.289–X4.308</b>
	<b>NP4.1/AS4.13/CL5.06</b> , Time Series Analysis, Prediction, Verification and Inter-Comparison of Geoscientific Observations and Model Data (co-organized), <b>Hall X4, X4.71–X4.104</b>
<b>G3.1/CL5.14/CR6.10/GD3.4/GM10.6/NH8.3/OS1.17</b> , How much does glacial isostatic adjustment contribute to earth system modelling? (co-organized), <b>Hall X3, X3.125–X3.141</b>	

### Tuesday, 25 April

<b>TU5</b> , 17:30–19:00	<b>CL1.03</b> , Studying the climate of the last two millennia, <b>Hall X5, X5.1–X5.28</b>
	<b>CL1.13</b> , The speleothem archive: understanding processes and interpreting Quaternary climate change, <b>Hall X5, X5.29–X5.53</b>
	<b>CL1.28</b> , Quaternary glacial-interglacial transitions: causes and effects, <b>Hall X5, X5.54–X5.72</b>
	<b>CL2.05</b> , Arctic climate change: governing mechanisms and global implications, <b>Hall X5, X5.73–X5.91</b>
	<b>CL3.08</b> , From climate to impacts: Linking models and projecting impacts across sectors, <b>Hall X5, X5.92–X5.110</b>
<b>CL4.08/HS11.5</b> , Understanding past, present and future changes in the hydrological cycle (co-organized), <b>Hall X5, X5.111–X5.127</b>	

	<b>CL4.18</b> , Understanding, representing and communicating earth system processes in weather and climate, <b>Hall X5, X5.128–X5.147</b>
	<b>CL5.10</b> , Regional climate modeling, including CORDEX, <b>Hall X5, X5.148–X5.186</b>
	<b>GM6.4/CL1.16/SSS3.10</b> , Palaeoenvironmental evolution, connectivity and geomorphological dynamics in dryland areas: New approaches, challenges, pros and cons (co-organized), <b>Hall X2, X2.31–X2.49</b>
	<b>GD6.2/CL1.32/CR5.6/EMRP4.29/SM10.6/TS9.7</b> , Unveiling the structure, evolution and influence of the Antarctic Lithosphere (co-organized), <b>Hall X2, X2.289–X2.305</b>
	<b>NH9.1/CL2.26</b> , Natural hazard event analyses for risk reduction and adaptation (co-organized), <b>Hall X3, X3.218–X3.238</b>
	<b>SSS1.6/AS4.51/BG9.13/CL3.06/HS11.43/NH9.22</b> , European Environmental Policies and Sustainability (co-organized), <b>Hall X1, X1.134–X1.139</b>
	<b>GI2.1/AS4.42/BG9.21/CL5.16/NH6.10/PS1.6/ST3.7</b> , Atmospheric and Meteorological Instrumentation (co-organized), <b>Hall X4, X4.176–X4.190</b>
	<b>GM1.1/EOS20/CL5.18/SSS13.1</b> , Beyond the case study: Concepts in Earth Sciences (co-organized), <b>Hall X2, X2.1–X2.14</b>
<b>Wednesday, 26 April</b>	
<b>WE3</b> , 13:30–15:00	<b>US1/AS4.52/BG9.67/CL4.20/SSS0.4</b> , Vegetation-climate interactions across time scales (co-organized), <b>Hall X4, X4.498–X4.506</b>
<b>WE5</b> , 17:30–19:00	<b>CL1.01/AS4.9/CR1.12/HS7.9/OS1.13</b> , Into the Anthropocene; Observing and interpreting the historical record of temperature and other climate indicators (co-organized), <b>Hall X5, X5.1–X5.21</b>
	<b>CL1.02</b> , Historical Climatology, <b>Hall X5, X5.22–X5.41</b>
	<b>CL1.23/BG9.14/CR6.3/OS2.5</b> , Polar continental margins and fjords – climate, oceanography, tectonics and geohazards (co-organized), <b>Hall X5, X5.42–X5.57</b>
	<b>CL1.25/AS4.26/HS2.4.5</b> , Flood and weather extremes of the past (co-organized), <b>Hall X5, X5.58–X5.73</b>
	<b>CL2.01</b> , Detecting and attributing climate change: trends, extreme events, and impacts, <b>Hall X5, X5.74–X5.87</b>
	<b>CL2.02</b> , Urban climate and urban biometeorology, <b>Hall X5, X5.88–X5.115</b>
	<b>CL2.04</b> , Earth radiation budget, radiative forcing and climate change, <b>Hall X5, X5.116–X5.142</b>
	<b>CL3.03/AS1.22/CR1.6/OS1.15</b> , Polar Climate Predictability and Prediction (co-organized), <b>Hall X5, X5.143–X5.156</b>
	<b>CL4.04/OS1.16</b> , Decadal to millennial scale climate variability of the late Quaternary (co-organized), <b>Hall X5, X5.157–X5.191</b>
	<b>CL4.07/AS1.14/BG9.18/CR1.7/HS11.3</b> , Mountain climates: processes, change and related impacts (co-organized), <b>Hall X5, X5.192–X5.223</b>
	<b>CL5.03/GM2.3</b> , Advances in Quaternary Geochronology (co-organized), <b>Hall X5, X5.224–X5.243</b>
	<b>GM7.3/CL1.09/SSS3.11</b> , Geoarchaeology: Human impact, adaptation and response to climatic and environmental change from the past to the present (co-organized), <b>Hall X2, X2.148–X2.182</b>
	<b>SSS9.17/CL2.10</b> , Land Use and Climate Change Impact on Grasslands and Wetlands: a Pedological, Hydrological, Biological and Geomorphological Approach (co-organized), <b>Hall X1, X1.159–X1.170</b>
	<b>CR1.1/CL2.18</b> , State of the Cryosphere: Observations and Modelling (co-organized), <b>Hall X4, X4.1–X4.15</b>

	<b>NH9.7/AS4.33/CL2.28/HS11.34</b> , Urban Resilience Studies –Risk Mapping (co-organized), <b>Hall X3, X3.203–X3.219</b>
	<b>CR1.2/CL4.09</b> , Ice-sheet and climate interactions (co-organized), <b>Hall X4, X4.16–X4.27</b>
	<b>AS1.25/CL4.14</b> , Past and future atmospheric temperature changes and their drivers (co-organized), <b>Hall X5, X5.330–X5.346</b>
	<b>AS4.10/CL5.12/ESSI1.14/OS4.15</b> , Recent developments in numerical atmospheric, oceanic and sea-ice models: towards global cloud and eddy resolving simulations on exascale supercomputers (co-organized), <b>Hall X5, X5.493–X5.525</b>
	<b>OS5.2/CL5.15</b> , Surface Waves and Wave-Coupled Effects in Lower Atmosphere and Upper Ocean (co-organized), <b>Hall X4, X4.124–X4.153</b>
	<b>GI1.3/AS4.41/CL5.17/EMRP4.39/HS11.7/NH6.9/SM5.9</b> , Environmental sensor networks (co-organized), <b>Hall X4, X4.274–X4.281</b>
<b>Thursday, 27 April</b>	
<b>TH4</b> , 15:30–17:00	<b>BG2.16/CL5.24/SSS9.40</b> , Response of terrestrial ecosystems to climate change: Learning from experimental manipulations and natural gradients (co-organized), <b>Hall A, A.24–A.49</b>
<b>TH5</b> , 17:30–19:00	<b>CL1.12/BG9.16/SSP4.9</b> , Tree ring proxies of climatic and environmental change (co-organized), <b>Hall X5, X5.1–X5.33</b>
	<b>CL4.10/CR1.13/OS1.12</b> , Sea level rise: past, present and future (co-organized), <b>Hall X5, X5.34–X5.66</b>
	<b>CL4.15</b> , The climate of the Mediterranean region: from basic science to impacts, <b>Hall X5, X5.67–X5.97</b>
	<b>CL5.05</b> , Development of climate datasets: homogenization, trends, variability and extremes, including sub-daily timescales, <b>Hall X5, X5.98–X5.119</b>
	<b>CL5.08/AS1.3/OS4.10</b> , Downscaling: methods and applications (co-organized), <b>Hall X5, X5.120–X5.146</b>
	<b>CL5.11/AS1.32</b> , Convection-permitting atmospheric modelling (co-organized), <b>Hall X5, X5.147–X5.162</b>
	<b>GM10.1/CL1.33/CR4.8</b> , The Legacy of Mountain Glaciations – Glacial landforms and their palaeoclimatic interpretation (co-organized), <b>Hall X2, X2.74–X2.92</b>
	<b>OS1.8/CL2.08</b> , Tropical & Subtropical Ocean Circulation, Equatorial to Mid-Latitude Air-Sea Interactions (co-organized), <b>Hall X4, X4.27–X4.55</b>
	<b>SSS4.5/BG9.57/CL2.12</b> , Plant-soil-microbial interactions under global change (co-organized), <b>Hall X1, X1.179–X1.198</b>
	<b>HS7.2/AS1.9/CL2.15/NH1.14/NP10.1</b> , Precipitation uncertainty and variability: observations, ensemble simulation and downscaling (co-organized), <b>Hall A, A.220–A.240</b>
	<b>CR1.4/CL2.19</b> , Glaciers and ice caps under climate change (co-organized), <b>Hall X5, X5.400–X5.414</b>
	<b>G5.2/AS4.44/CL2.20</b> , Atmospheric Remote Sensing with Space Geodetic Techniques (co-organized), <b>Hall X3, X3.140–X3.170</b>
	<b>CR1.5/AS4.22/CL2.22</b> , Atmosphere – Cryosphere interaction, poster only. (co-organized), <b>Hall X5, X5.415–X5.424</b>
	<b>GM2.1/CL5.02/SSS12.23</b> , Advances in the use of cosmogenic nuclides and the quantification of landscape evolution (co-organized), <b>Hall X2, X2.59–X2.73</b>
	<b>NP3.3/CL5.19</b> , Scaling, multifractals and Nonlinear dynamics in the atmosphere, ocean, climate and environment (co-organized), <b>Hall X4, X4.119–X4.146</b>

## Friday, 28 April

FR2, 10:30–12:00	<b>BG2.3/CL2.31/SSS10.17</b> , Forest Management under Climate Change (co-organized), <b>Hall A, A.52–A.68</b>
	<b>BG2.8/CL3.14/SSS9.38</b> , Terrestrial ecosystem responses to global change: integrating carbon, nutrient, and water cycles in experiments and models (co-organized), <b>Foyer M, M.1–M.26</b>
FR3, 13:30–15:00	<b>SSP4.7/CL1.08/NH2.9/SM1.4</b> , Integrating stratigraphy, sedimentology, paleontology and paleoclimate in human evolution and dispersal studies - from early hominins to the Anthropocene (co-organized), <b>Hall X2, X2.35–X2.54</b>
FR5, 17:30–19:00	<b>CL1.18/OS2.9</b> , Annually resolved archives of marine climate change (co-organized), <b>Hall X5, X5.1–X5.18</b>
	<b>CL1.19/AS4.17/OS1.19</b> , Advances in integrating ice core, marine and terrestrial records and their timescales (INTIMATE and IntCal) (co-organized), <b>Hall X5, X5.19–X5.35</b>
	<b>CL1.21/BG9.59/OS2.10/SSP2.8/SSS3.15</b> , Past climate - isotopic and multi-proxy continental and shallow marine records (co-organized), <b>Hall X5, X5.36–X5.56</b>
	<b>CL1.31</b> , Paleoclimates and ice dynamics from the Cretaceous to the Holocene: learning about past and future climate changes from numerical experiments and model-data comparisons, <b>Hall X5, X5.57–X5.82</b>
	<b>CL3.01</b> , Climate Predictions - from monthly, seasonal to decadal time scales, <b>Hall X5, X5.83–X5.110</b>
	<b>CL4.11</b> , Land-climate interactions from models and observations: Implications from past to future climate, <b>Hall X5, X5.111–X5.135</b>
	<b>CL4.17/AS1.16/OS1.22</b> , Tropical Climate Variability and Teleconnections: past, present and future (co-organized), <b>Hall X5, X5.136–X5.167</b>
	<b>AS4.16/BG9.2/CL2.14/HS11.1</b> , Stable isotopes in the atmosphere - from vapor to precipitation (co-organized), <b>Hall X5, X5.411–X5.424</b>
	<b>AS4.3/CL2.21</b> , Atmospheric composition, weather and climate in Sub-Saharan Africa (co-organized), <b>Hall X5, X5.357–X5.396</b>
	<b>NH1.7/CL2.23/HS11.28</b> , Addressing the challenge of compound events, multi-risk modelling and cross-risk assessment methods (co-organized), <b>Hall X3, X3.122–X3.139</b>
	<b>NH6.4/BG9.34/CL2.24/HS11.32</b> , Assessment of climate hazards' impact on natural and cultural environment: Remote sensing and GIS applications (co-organized), <b>Hall X3, X3.259–X3.271</b>
	<b>HS4.6/CL3.02</b> , From sub-seasonal forecasting to climate projections: predicting hydrologic extremes and servicing water managers (co-organized), <b>Hall A, A.414–A.429</b>
	<b>AS1.19/CL3.10</b> , Mid-latitude Cyclones and Storms: Diagnostics of Observed and Future Trends, and related Impacts (co-organized), <b>Hall X5, X5.168–X5.190</b>
	<b>GM6.1/CL4.12/TS4.5</b> , Geomorphic and tectonic response to climate variability at different temporal and spatial scales: insights from surface processes and continental archives (co-organized), <b>Hall X2, X2.136–X2.150</b>
<b>OS1.9/AS1.17/BG9.60/CL4.16</b> , The Indian Ocean's past, present, and future – A session in Honour of Gary Meyers (co-organized), <b>Hall X4, X4.1–X4.14</b>	
<b>SSS9.7/CL5.21/GM7.8/HS11.55</b> , Soil Erosion, Land Use and Climate Change: mapping, measuring, modelling, and societal challenges (co-organized), <b>Hall X1, X1.179–X1.211</b>	