

To find out more about the mural, see all the paintings, and learn about the science behind it from the UEA's Climatic Research Unit, go to [crudata.uea.ac.uk/cru/climate-mural](http://crudata.uea.ac.uk/cru/climate-mural) or scan this QR code:



## This is a climate emergency

Our current path sets us on a course to experience temperatures not seen since the prehistoric time before humans, possibly 6°C warmer than before the Industrial Revolution, causing irreversible damage to life on our planet.

But we still have a choice – the choice to reduce carbon emissions through bold collective action and the choice to protect Earth's environment and ecosystems.

The science is unequivocal. Climate change is a threat to human well-being and the health of our planet. Through art, it is brought to life. Using leading climate research, local artist Gennadiy Ivanov's work is a call to action. Global science, local expression.



The artist  
Gennadiy Ivanov

## Exhibiting the mural

The University of East Anglia, Norwich City Council, and artist Gennadiy Ivanov have come together to produce a unique climate mural that portrays the true scale of climate change underway, combining science and art to serve as a visual appeal for action to avert the worst effects of the climate crisis.

The large mural, which will span an entire wall of Norwich City Hall's council chamber, depicts our climate past, present and future. The mural is 10 metres long and 1.5 metres high, consisting of six panels showing a timeline of global temperature changes over the past 66 million years and projected out to the year 2200.

The visual temperature record is accompanied on the mural by images of the eroding Norfolk coastline as it is lost to rising sea levels – a scene anyone who has visited the area will be familiar with, and one that demonstrates the very clear and very local impact that a warming climate is already having.

## The science

The temperature record of the last 66 million years has been pieced together from many different sources: kilometre long ice cores, tree rings, and modern weather stations in lowlands, on mountains and the middle of oceans.



The projections for the future show two scenarios. One model where we stabilise the climate by 2050, and another – whose track we are on now – where a failure to act on emissions drives temperatures to heights not experienced by humans.

Together, the reconstruction of past global temperatures and possible futures have been used to create a visual timeline of climate change.

The mural takes this timeline to make the data vivid and accessible, turning science into a powerful visual message.

## The influence of climate

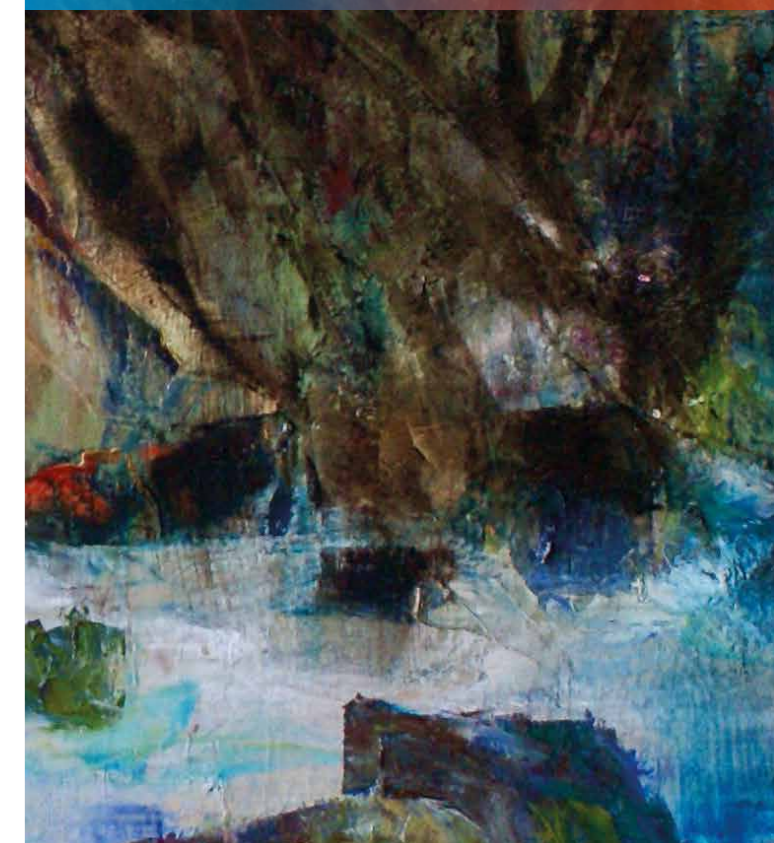
Accompanying the mural are additional paintings that incorporate global and local historic events which took place over the course of the timeline. Volcanic eruptions and ice ages, the industrial revolution, floods and droughts, rebellions and witch hunts – all either influences on, or consequences of, a changing climate.

There are five paintings with these historical elements, one for each of the first five main mural panels depicting our climate past and present. The sixth painting is blank, a future undrawn. The actions we take now will determine its form and the prospects for our planet over the next 100 years and beyond.



# A climate mural for our times

Global science, local expression





# Our changing climate – and a call to make the choices needed to protect it – has been depicted in art. The latest science, artistic invention and a familiar Norfolk context combine to create a climate change mural: ‘Global science, local expression’.

66 million years ago  
to 3 million years ago



The time period of the first panel stretches from the near-extinction of the dinosaurs and through the Age of Mammals. Concentrations of carbon dioxide and temperatures were much higher than today, meaning the world was free of ice and sea levels were up to 70m higher.

3 million years ago  
to 500 AD



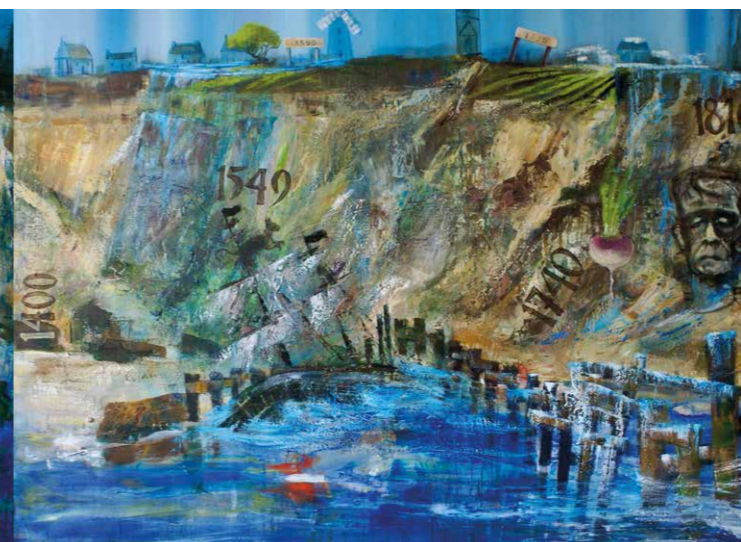
The second panel's timespan is dominated by the cycle of Ice Ages, during which sea levels fluctuated by around 120m, and Norfolk was periodically covered by ice. The last 12,000 years were characterised by a more stable climate which allowed the early development of human civilisations.

501 to 1400 AD



Norwich was founded at the beginning of the period depicted in the third panel, when the climate was particularly mild. However, by the 1100s the climate worsened, bringing storms, flooding, famine, social unrest, and encouraged the spread of disease.

1401 to 1850 AD



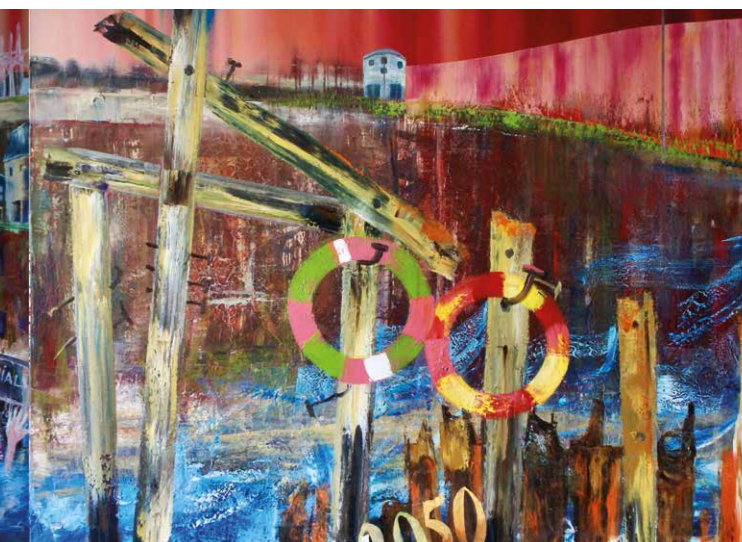
The changeable climate during centuries represented by the fourth panel of the painting had an enormous effect on Norwich and Norfolk. The so-called “Little Ice Age” saw devastating cold, storms and floods. Although the harsh climate had severe impacts on society, a revolution in agricultural practices helped lessen the damage.

1851 AD to the present



Since 1851, human activity and the burning of fossil fuels has seen large increases in the emission of greenhouse gases, causing temperatures to rise to levels not seen for many thousands of years. The fifth panel depicts our rapidly warming climate with its more intense extreme weather events – as well as the developing science of climate change and establishment of UEA's Climatic Research Unit in Norwich 50 years ago.

Present to 2200 AD



The final panel of the mural shows two possible climate futures. The first assumes humanity has taken the action needed to reduce carbon dioxide emissions to a level where increased temperatures are more manageable. The other future is the path we are currently on. It will lead to temperatures similar to those seen in the first panel. The lifebuoys represent our choices... which one will we grasp?