



An Roinn Tithíochta,  
Rialtais Áitiúil agus Oidhreacht  
Department of Housing,  
Local Government and Heritage

Post Ref: 037183



**Maynooth  
University**  
National University  
of Ireland Maynooth

# Ollscoil Mhá Nuad Maynooth University

## Department of Geography/ICARUS Post Doctoral Researcher (Specified Purpose, anticipated to be 46 months)

### The Role

Maynooth University is committed to a strategy in which the primary University goals of excellent research and scholarship and outstanding education are interlinked and equally valued.

We are seeking a Postdoctoral researcher to join our team on the EXACT project. The project is funded by Met Éireann under grant agreement No 2024-1127, part of the TRANSLATE project delivering state of the art climate services for Ireland. The successful candidate will work with the PI Prof. Conor Murphy, and collaborators Prof. Peter Thorne and Dr. Amr Mahfouz, together with a PhD researcher to deliver the project..

### The EXACT project

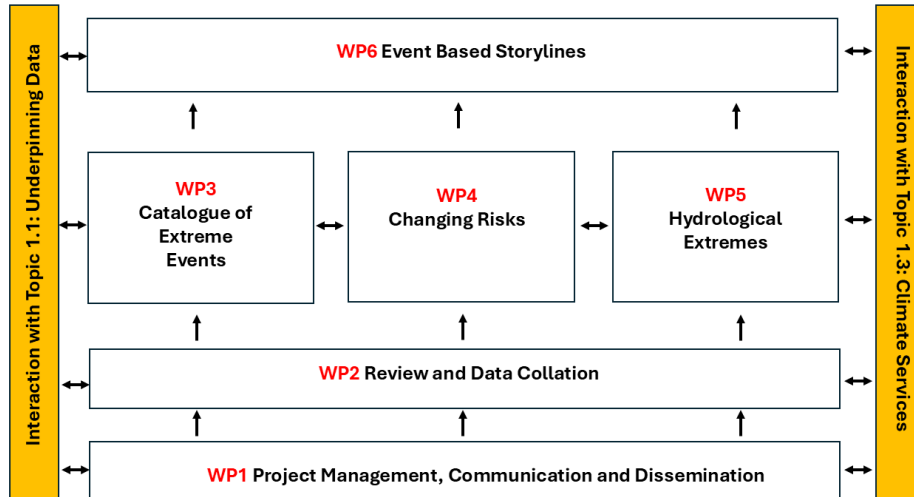
The EXACT project seeks to advance understanding of climate change impacts on extremes in Ireland. It will do this by leveraging Met Eireann's rich observational data and cutting edge projections of future climate from the TRANSLATE project. At the core of the project is the production of knowledge to inform effective climate services in realising the national objective of a climate resilient Ireland. EXACT will develop a catalogue of hydrometeorological extremes for Ireland, undertake detection and attribution assessments of change in observed timeseries of extremes, examine causal chains linking meteorological and hydrological extremes and their impacts, and develop novel storyline based methods to enhance knowledge and communication for adapting to compound extreme events that have cascading impacts across sectors in Ireland. A key strength of the proposal is its integration across meteorology and hydrology to improve understanding of the key risks posed by climate change to Ireland and advance toolkits for timely and effective adaptation.

In delivering these objectives, EXACT is organised around six highly integrated work packages (see Figure). **WP1** will ensure the smooth running of the project and oversee the timely delivery, communication and dissemination of outcomes, including reporting to Met Éireann and communications with other funded projects under the TRANSLATE project and stakeholder engagement. **WP2** will provide the foundations to subsequent WPs by conducting a literature review to ensure the project addresses key gaps and leverages the cutting edge of research. It will ensure that the data necessary for subsequent WPs is available and develop initial code for analysis. It will provide insight and resources for stakeholders to ensure they have access to the best and most up to date knowledge on



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changing climate extremes. **WP3** will deliver a catalogue of extreme events for informing adaptation at national and local scales. The catalogue will be searchable, integrate across multiple meteorological variables, focus on univariate and multivariate compound extremes and include the assessment of impacts of past events to link with vulnerability and exposure.



**WP4** will evaluate changes in notable extremes from observations and TRANSLATE projections for future climate. It will discern evidence for the emergence of a climate change signal and employ memorable extremes to communicate changing risks, providing an anchor for decision makers to understand exposure and vulnerability. **WP5** aims to evaluate the impacts of climate change on river flows and hydrological extremes across Irish catchments using TRANSLATE projections, providing for the first time an assessment of hydrological impacts using standardised national projections, thus addressing a critical research gap. **WP6** will leverage the catalogue of extremes and TRANSLATE projections to develop event based and dynamic storylines to explore plausible impacts of climate change for memorable extremes to inform adaptation planning nationally.

## Principal Duties

### Research and Analysis

- Lead the design and execution of analyses on changing climate and hydrological extremes across Ireland.
- Contribute to detection and attribution studies of observed extremes and emerging climate change signals.
- Develop and apply statistical and modelling approaches (including R/Python) for trend analysis, compound event assessment, and storyline development.
- Integrate TRANSLATE climate projections with hydrological models for ~120 Irish catchments to assess flood and drought risks.

### Data and Code Management

- Collate, quality-check, and curate climate and hydrological datasets.
- Develop reproducible workflows and ensure open access to datasets and code (e.g., GitHub repositories, DOI-assigned datasets).

### Publications and Dissemination

- Lead and co-author peer-reviewed journal papers.
- Contribute to technical reports, report cards for policymakers, and storymaps for wider audiences.
- Present project findings at international conferences (EGU, EMS), national meetings (e.g., Irish National Hydrology Conference), and stakeholder events (CIAN, CAROs).

### Collaboration and Stakeholder Engagement

- Work closely with Met Éireann, project collaborators, and other TRANSLATE teams to ensure integration of results.
- Engage with stakeholders and co-develop adaptation-relevant storylines of extremes.

### Project and Team Support

- Assist the PI with project management, including planning, progress tracking, and reporting.
- Support supervision and mentoring of the project's PhD researcher.
- Contribute to training, capacity-building, and integration of project outputs into MSc teaching at Maynooth.

### The ideal candidate will have:

#### Essential

- PhD (awarded or submitted) in climate science, hydrology, meteorology, or a closely related discipline.
- Demonstrated expertise in statistical analysis of climate/hydrological time series, gridded datasets and extremes.
- Proven experience with climate model projections and their analysis
- Proficiency in R and/or Python.
- Strong publication record commensurate with career stage.
- Experience in project/research management and delivering outputs on schedule.
- Excellent written and verbal communication skills, with experience presenting to both academic and stakeholder audiences.
- Ability to work independently and collaboratively in a multidisciplinary team.

#### Desirable

- Experience with compound event analysis and storyline/event-based approaches.
- Knowledge of Irish climate/hydrology and access to relevant datasets.
- Familiarity with detection and attribution methods (e.g., attribution of extremes to climate change).
- Experience with open science practices (e.g., GitHub, reproducible workflows, FAIR data principles).
- Track record of stakeholder engagement or co-production of knowledge (e.g., working with policymakers, practitioners, or communities).
- Experience mentoring/supervising junior researchers or students.



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- Familiarity with European/international climate initiatives (e.g., IPCC, WWA, EU climate services).

## Faculty and Research Institutes

The Faculty of Social Sciences comprises the Departments of Adult and Community Education; Anthropology; Applied Social Studies; Design Innovation; Economics, Finance & Accounting; Education; Geography; International Development; Law; Sociology; the Froebel Department of Primary and Early Childhood Education; and the School of Business. The role of the Faculty is to co-ordinate the academic activities of individual departments, to oversee the strategic development of departments and to support interdepartmental programmes. The University has also developed a number of interdisciplinary institutes to support excellent research and to build research capacity across disciplines.

## Department

The Department of Geography has approximately 22 permanent academic staff, supported by contracted staff and dedicated professional support, administrative and technical assistance. We offer undergraduate and postgraduate degrees, based on our research strengths across many aspects of physical and human geography, in a vibrant learning environment.

Currently, we offer single major and double major undergraduate awards in Geography as part of the MH101 BA programme at Maynooth University and, initiated in 2020, the MH203 BSc degree in Biological and Geographical Sciences. This crosses faculties to provide innovative teaching and learning in this important interdisciplinary subject area. The department also offers MScs in Climate Change, GIS and Remote Sensing, and MAs in Geography and Spatial Justice.

In addition to a strong research reputation, the department has a strong emphasis on teaching innovation with several innovative climate-related participatory learning assignments having been published in the peer-reviewed literature. The department hosts the flagship ICARUS (Irish Climate Analysis and Research Units) Climate Research Centre. It also has many well established and founding links to the Maynooth University Social Sciences Institute, the National Centre for Geocomputation and The Hamilton Institute.

## The University

Maynooth University is a very distinctive university, a collegial institution focused on science and engineering, humanities, and social sciences, and equally committed to research, teaching and community engagement. Located in Ireland's only university town, its distinctive features and character owe much to its unique history and heritage. It provides a high-quality educational experience to over 15,000 students on a campus with 18<sup>th</sup> century roots and 21<sup>st</sup> century dynamism.

The strategic trajectory and accomplishments of Maynooth University, in the 25 years since its establishment as an autonomous public university, are exceptional, and a source of great pride to the university community, staff, students and alumni. Maynooth University in 2024 ranked in the top 90 global Times Higher Education (THE) Young University rankings, placing 86<sup>th</sup> in the world. Maynooth University's growing global reputation is based on the originality, quality, importance and impact of its research and scholarship, commitment to teaching and learning, the quality of academic programmes, and its leadership in widening participation in higher education. The sources of success are the dedication of its staff and the energy and engagement of its students.



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Maynooth University is a place of lively contrasts – a modern institution, dynamic, rapidly-growing, research-led and engaged, yet grounded in historic academic strengths and scholarly traditions. With over 15,000 students Maynooth offers a range of programmes at undergraduate, postgraduate and doctoral level in the humanities, science and engineering and social sciences, including business, law and education. The University also offers a range of international programmes and partnerships.

Maynooth's unique collegial culture fosters an interdisciplinary approach to research, which its world-class academics bring to bear in tackling some of the most fundamental challenges facing society today. The University's research institutes and centres consolidate and deliver this impact as vibrant communities of learning, discovery and creation. Research at Maynooth also is very much central to its teaching and the University prides itself on placing equal value on its research and teaching missions.

### Maynooth University's Values

Our values define who we are, what we believe in and how we act as a community. They underpin our future success and guide our expectations of ourselves and each other. Our values apply to everyone in the University community:

- Integrity
- Collegiality
- Responsibility
- Freedom of expression
- Ambition

### Maynooth University Strategic Plan 2023 – 2028

The University's Strategic Plan 2023 - 2028 builds on our rich academic history and strong foundations to set out an ambitious and forward-looking path for the future of our University. This roadmap underscores our commitment to adapt to a changing world while staying true to our values.

Our vision is to be a university of excellence, opportunity and impact, having a significant stake in all three.

**For more information about Maynooth University's future direction, please visit:**  
<https://strategy.maynoothuniversity.ie/>

### Plean Straitéiseach Ollscoil Mhá Nuad 2023 - 2028

Tógann Plean Straitéiseach na hOllscoile 2023 - 2028 ar ár stair acadúil shaibhir agus ar ár mbunchlocha láidre chun conair uailmhianach agus cheannródaíoch a leagadh amach do thodhchaí ár nOllscoile. Soiléiríonn an treochlár seo ár dtiomantas do dhul i dtáithí ar dhomhan atá ag síorathrú agus ár ngníomhaíochtaí a chur in oiriúint dó, agus san am céanna a bheith dílis dár luachanna Ollscoile. Is í an fhís atá againn a bheith mar ollscoil feabhais, deiseanna agus tionchair, agus lámh láidir a bheith againn i ngach ceann de na trí ghné seo.

**Léigh anseo le haghaidh breis eolais faoi thodhchaí Ollscoil Mhá Nuad:**  
<https://strategy.maynoothuniversity.ie/?lang=ga>

### Selection and Appointment



Athena  
Swan  
Ireland



Athena  
SWAN  
Bronze Award



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- Only shortlisted candidates will be invited to attend for interview;
- Appointments will be approved by the President based on the report of the selection board;
- It is anticipated that interviews will be held during the week of the 13<sup>th</sup> October;
- The appointment is expected to be effective from 1<sup>st</sup> November or as soon as possible thereafter.

## Equality and Diversity

Maynooth University actively works to ensure equality, celebrate the diversity of our community, and promote inclusion. To learn more about our commitment to Equality and Diversity, please read the Maynooth University [Equality and Diversity Policy](#) / [Polasáí Comhionannais agus Éagsúlachta](#), our policy on the [Employment of People with Disabilities](#), and our [Gender Equality Action Plan 2023-2026](#). We aim to reflect the diversity of the community we serve and welcome applications from all individuals across our society.

## Terms and Conditions

<b>Tenure</b>	This a full time, temporary post for a specified purpose, anticipated to be 46 months duration to project end date of 31 <sup>st</sup> August 2029.
<b>Location</b>	The place of work is the campus of Maynooth University, Maynooth, Co. Kildare.
<b>Salary</b>	Post-Doctoral Researcher: €46,305 per annum (Point 1, with increments)  Appointments will be made in accordance with public sector pay provisions.
<b>Hours of work</b>	A 37-hour working week is in operation in respect of full-time positions (pro-rated for part-time positions).  This can be reviewed or adjusted from time to time through national agreements.
<b>Annual Leave</b>	Annual leave and public holidays are provided for in the University policy: <a href="https://www.maynoothuniversity.ie/human-resources/policies/annual-leave-policy">https://www.maynoothuniversity.ie/human-resources/policies/annual-leave-policy</a>  Annual leave will be allocated on a pro-rata basis for part-time and temporary positions.
<b>University policies and schemes</b>	Employees of the University will be subject to the terms of the University policies and schemes, available on the University website at:  <a href="https://www.maynoothuniversity.ie/university-policies">https://www.maynoothuniversity.ie/university-policies</a>  <a href="https://www.maynoothuniversity.ie/human-resources/policies">https://www.maynoothuniversity.ie/human-resources/policies</a>
<b>Pension</b>	This is a pensionable post. Employees of the University will enter into a public sector pension scheme, and as such, applicants must ensure they are eligible to become a member of a public sector pension scheme for the duration of the appointment. Details of the public sector pension schemes are available at:





	<a href="https://www.maynoothuniversity.ie/human-resources/pension-information">https://www.maynoothuniversity.ie/human-resources/pension-information</a>
<b>Eligibility</b>	<p>Applicants should note that eligibility is determined by the Department of Enterprise, Trade and Employment. Further information regarding eligibility is available at:  <a href="https://enterprise.gov.ie/en/what-we-do/workplace-and-skills/employment-permits/employment-permit-eligibility/">https://enterprise.gov.ie/en/what-we-do/workplace-and-skills/employment-permits/employment-permit-eligibility/</a></p> <p>Non-EEA applicants are responsible for ensuring they can secure a visa to travel to Ireland. Any offer of employment is conditional on applicants securing the appropriate employment permissions.</p> <p><b>Former Irish Public Service employees - Certain Restrictions on Eligibility</b></p> <p>Eligibility of applicants formerly employed by an Irish Public Sector body, and who availed of an Irish Public Service Redundancy or Incentivised Retirement Scheme under the Schemes below, may be affected:</p> <ul style="list-style-type: none"> <li>• Collective Agreement: Redundancy Payments to Public Servants</li> <li>• Incentivised Scheme for Early Retirement (ISER)</li> <li>• Department of Health and Children Circular (7/2010)</li> <li>• Department of Environment, Community &amp; Local Government (Circular Letter LG(P) 06/2013)</li> </ul> <p>Applicants should ensure that they are eligible to be re-engaged in the Irish Public Service under the terms of such Schemes. Applicants should address queries with their former Irish Public Sector employer.</p>
<b>Garda vetting</b>	Garda vetting or clearance may be required by the University.
<b>Medical</b>	The University may require a medical examination as a condition of employment.

## Data Protection Law

Applications to the University will be treated in accordance with the University Data Protection Policies. For information on the University's Data Protection Policies and Privacy Notice, please see our website:  
<https://www.maynoothuniversity.ie/data-protection>

## Application Procedure

### Closing Date:

23:30hrs (local Irish time) on Sunday, **28<sup>th</sup> September 2025**.

Please note all applications must be made via our **Online Recruitment Portal** at the following link:

<https://www.maynoothuniversity.ie/human-resources/vacancies>

Applications must be submitted by the closing date and time specified above. Any applications which are still in progress at the closing time on the specified closing date will be cancelled automatically by the system.



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Late applications will not be accepted.

**Maynooth University is an equal opportunities employer**

**The position is subject to the Statutes of the University**



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