

<b>Date of the CV</b>	02/03/2023
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## Section A. PERSONAL DATA

Name and Surname	Ángel Rodés		
DNI	25478265S	Age	43
Researcher's identification number	Researcher ID	C-9228-2011	
	Scopus Author ID	15073351100	
	ORCID	0000-0001-8488-7689	
	Personal webpage	<a href="http://www.angelrodes.com">www.angelrodes.com</a>	

### A.1. Current professional situation

Institution	University of Santiago de Compostela		
Dpt. / Centre	Geography / Faculty of Geography and History		
Address	Praza da Universidade, 1, 15703 Santiago de Compostela, Spain		
Phone	(+34) 624035360	Email	<a href="mailto:angelrodes@gmail.com">angelrodes@gmail.com</a>
Professional category	Research Fellow 'María Zambrano'	Start date	2022
Keywords	Geochronology, Earth Surface Processes, Geomorphology		

### A.2. Previous positions

Period	Job Title / Name of Employer / Country
2020-2022	Research Scientist / University of Glasgow / UK
2011-2020	Research Associate / University of Glasgow / UK
2010-2011	Technologist / University of Barcelona / Spain
2008-2010	Expert technician / University of Barcelona / Spain
2008-2009	Associate Lecturer / University of Barcelona / Spain
2003-2007	Research Assistant "FPI" / University of Barcelona / Spain
2001-2002	Teaching Assistant Scholarship / University of Zaragoza / Spain

### A.3. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
PhD. The last deglaciation in the Pyrenees: Be-10 surface exposure dating, and numerical modeling of paleoglaciérs.	Universitat de Barcelona Université Paul Cézanne, Aix-Marseille III	2008
MSc. Licenciado en Ciencias (Geología)	Universidad de Zaragoza	2002

### A.4. General quality indicators of scientific production

Participated in:

- 9 R&D **projects** funded through competitive calls (total **5.7M€**, **93k€** as PI of **1 project**)
- 7 R&D non-competitive **contracts** (total **5.3M€**, **50k€** as PI of **4 contracts**)

#### Publication metrics (ResearcherID):

Publications in Web of Science:	44	H-index (Web of Science):	18
Sum of times cited (Scopus):	1165	i10-index (Google Scholar):	33

## Section B. SUMMARY OF THE CURRICULUM

**Research interests:** Geochronology, Cosmogenic Isotopes, Numerical Modeling, Earth Surface Processes, Glacial Geomorphology, Tectonic Geomorphology.

BSc (Hons) & MSc in Geology at the University of Zaragoza in 2002. I got my PhD Thesis at the University of Barcelona in 2008, supervised by Dr Raimon Pallàs and Prof. Didier Bourles, from the University of Barcelona and the Centre Européen de Recherche et d'Enseignement des Géosciences de l'Environnement (CEREGE, France). I participated in the installation of the **first laboratory of terrestrial cosmogenic isotopes in Spain** (Laboratori de Cosmonúclids Terrestres, UB). Several stays in France and the United States allowed me to incorporate the latest chemical and numerical techniques in the new laboratory.

After my PhD, I worked for the Topo-Iberia project in the Barcelona laboratory and the new ASTER acceleration spectrometer (CEREGE), where I learned how to interpret acceleration spectrometry data (AMS raw data) and master rock-to-age data reduction.

From 2011 to 2022, I was a **researcher and laboratory manager** at the Cosmogenic Isotope Analysis Facility (CIAF, recently renamed as NEIF-Cosmo), within the Scottish Universities Environmental Research Centre (SUERC, Scotland). I managed the day-to-day operation of sample preparation at the Cosmo laboratories (mineral separation,  $^{10}\text{Be}$ - $^{26}\text{Al}$ , ICP-OES, and  $^{36}\text{Cl}$  laboratories). This required significant management responsibility for **1 PDRA and 2 technicians**. Typically **10 competitive research projects** were allocated to the Facility **every year**, which require ~250 AMS analyses and training of 3 to 5 student and post-doctoral research visitors through the **CIAF student training program** I was responsible for. I provided support to PIs during the proposal design, writing, and submission stage, and contributed significantly to joint publications. My role required scheduling analysis time with the SUERC Accelerator Mass Spectrometry and the Noble Gas Isotope laboratories.

In addition to the lab management, I led the development of new chemical protocols (e.g. routine  $^{10}\text{Be}$  analysis of olivine: Carracedo et al. 2019), standard materials (e.g. preparing a low  $^{10}\text{Be}$  carrier from phenakite that was distributed internationally), new numerical models (e.g. calculators that integrate stable and radioactive cosmonuclides: Sudgen et al., 2017), and new applications (e.g. agriculture: Rodés & Evans, 2020) that have demonstrably shaped the discipline internationally.

I also designed a **numerical modelling course for Geologists and Geochemists**, which I delivered between 2019 and 2021. This has allowed me to position myself, not only as an international expert in landscape geochronology but also as a trainer of researchers at the European level.

In April 2022, I moved to the University of Santiago de Compostela as a 'María Zambrano' fellow (Next Generation EU Funds). One of the objectives of my grant is to **lead the commissioning of a new centre for landscape geochronology research**, which will be shared between the three Galician universities. In November 2022, we presented a report (Rodés-Bolumburu, Sanjurjo-Sánchez & Fernández-Fernández, 2022) requested by the Galician Government (Xunta de Galicia) including economic, scientific, and technical plans and a portfolio of scientific services of the new facilities. The new centre will offer **scientific support and doctoral training on several landscape dating techniques**: radiocarbon, luminescence, and cosmogenic isotopes, including AMS analysis.

In parallel, I've just started a new research line on "High-frequency Radon measurements and modelling its concentration response to the ventilation pattern", which is critical to **assess the risk of lung cancer**. The pilot study I lead has already been included in a national project application.

My roles as geochronologist and numerical modeler are key to the success of the projects I take part in, shifting my research towards technical and analytical advances. This is reflected in a high rate of scientific production and award generation. **The sum of funding allocated to competitive and non- competitive R&D&I projects and contracts in which I have participated exceeds €10M.**

**Membership:**

2008-2011	Natural Hazards Research Group (RISKNAT) <i>University of Barcelona</i>
2011-2019	Cosmogenic Isotope Analysis Facility (CIAF) <i>Natural Environment Research Council</i>
2019-2022	National Environmental Isotope Facility (NEIF) <i>UK Research and Innovation</i>
2019-Pres.	Cosmogenic Nuclide Research Group (SUERC-Cosmo) <i>University of Glasgow</i>
2022-Pres.	Grupo de Investigación de Análisis Territorial (ANTE) <i>University of Santiago de Compostela</i>

**Other relevant merits:**

Regularly asked to review CIAF project applications, manuscripts in international journals (e.g. **Earth and Planetary Science Letters, Geology, Quaternary Geochronology, or Nature**), and member of the **editorial board of Geosciences** (MDPI).

**Convener.** Novel applications and technique developments of cosmogenic nuclides (GM2.12). **EGU** General Assembly, 2021.

Member of the **scientific committee** of Cosmo2022-Scotland:, Edinburgh, 2022.

**Invited speaker** in England, Spain, Scotland, and China.

Secretary of the **CIAF Steering Committee** between 2012 and 2018.

**Advisor on commissioning new laboratories** in UNESP (Brazil), CENIEH (Spain), Guiyang (China), and iThemba LABS (South Africa).

Awarded **2 María Zambrano Grants** (UB and USC) Program of Excellence 'Requalification of the Spanish university system- Next Generation EU', 2022.

**AQU accreditations:** *Lector, and Acreditació de Recerca (Agregat).*

**ANECA accreditations:** *Profesor Ayudante Doctor, Profesor Contratado Doctor, and Profesor de Universidad Privada.*

## Section C. MOST RELEVANT MERITS

### C.1. Publications

- 1 Leger, T. P. M., Hein, A. S., **Rodés, Á.**, Bingham, R. G., Schimmelpfennig, I., Fabel, D., & Tapia, P. 2023. A cosmogenic nuclide-derived chronology of pre-Last Glacial Cycle glaciations during MIS 8 and MIS 6 in northern Patagonia. *Climate of the Past* Vol. 19, Issue 1, pp. 35–59.
- 2 de Graaff, L. W. S., **Rodés, Á.**, Pallàs Serra, R., Anders, N. S., Seijmonsbergen, A. C. & De Jong, M. G. G. 2023. 10Be age datings of Late Würmian erratics from Vorarlberg (Austria) and southern Germany. *Inatura – Forschung online*, 106: 8 S
- 3 **Scientific-technical report. Rodés-Bolumburu, Á.**, Sanjurjo-Sánchez, J., Fernández-Fernández, A. (2022) Galician Chronolabs. *Informe científico-técnico para a Xunta de Galicia*. Universidade de Santiago de Compostela, Universidade da Coruña e Universidade de Vigo. 37 pp.
- 4 Martin, J. R. V., Thorndycraft, V. R., Davies, B. J., & **Rodés, Á.** 2022. Rapid glacier recession at Monte San Lorenzo (Patagonia) in response to abrupt Southern Hemisphere warming 13.0–12.0 ka BP. *Journal of Quaternary Science* Vol. 38, Issue 2, pp. 160–173.
- 5 Hornsey, J., Rowan, A. V., Kirkbride, M. P., Livingstone, S. J., Fabel, D., **Rodes, A.**, Quincey, D. J., Hubbard, B., & Jomelli, V. (2022). Be-10 Dating of Ice-Marginal Moraines in the Khumbu Valley, Nepal, Central Himalaya, Reveals the Response of Monsoon-Influenced Glaciers to Holocene Climate Change. *Journal of Geophysical Research: Earth Surface* Vol. 127, Issue 8.
- 6 Liu, Y., Wang, S., Xu, S., Fabel, D., Stuart, F. M., **Rodés, Á.**, Zhang, X., & Luo, W. 2022. New chronological constraints on the Plio-Pleistocene uplift of the Guizhou Plateau, SE margin of the Tibetan Plateau. *Quaternary Geochronology* Vol. 67, p. 101237.
- 7 Lira, M.-P., García, J.-L., Bentley, M. J., Jamieson, S. S. R., Darvill, C. M., Hein, A. S., Fernández, H., **Rodés, Á.**, Fabel, D., Smedley, R. K., & Binnie, S. A. 2022. The Last Glacial Maximum and Deglacial History of the Seno Skyring Ice Lobe (52°S), Southern Patagonia. *Frontiers in Earth Science* Vol. 10.
- 8 **Rodés, Á.** 2021. The NUNAtak Ice Thinning (NUNAIT) Calculator for Cosmonuclide Elevation Profiles Geosciences.11-9. ISSN 2076-3263.
- 9 Tomkins, M. D., Dortch, J. M., Hughes, P. D., Huck, J. J., Pallàs, R., **Rodés, Á.**, Allard, J. L., Stimson, A. G., Bourlès, D., Rinterknecht, V., Jomelli, V., Rodríguez-Rodríguez, L., Copons, R., Barr, I. D., Darvill, C. M., & Bishop, T. 2021. Moraine crest or slope: An analysis of the effects of boulder position on cosmogenic exposure age. *Earth and Planetary Science Letters* Vol. 570, p. 117092.
- 10 Evans, D. L., Quinton, J. N., Tye, A. M., **Rodés, Á.**, Rushton, J. C., Davies, J. A. C., & Mudd, S. M. 2021. How the composition of sandstone matrices affects rates of soil formation. *Geoderma* Vol. 401, p. 115337.
- 11 Leger, T. P. M., Hein, A. S., Bingham, R. G., **Rodés, Á.**, Fabel, D., & Smedley, R. K. 2021. Geomorphology and 10Be chronology of the Last Glacial Maximum and deglaciation in northeastern Patagonia, 43°S-71°W. *Quaternary Science Reviews* Vol. 272, p. 107194.
- 12 García, J.-L., Lüthgens, C., Vega, R. M., **Rodés, Á.**, Hein, A. S., & Binnie, S. A. 2021. A composite 10Be, IR-50 and 14C chronology of the pre-Last Glacial Maximum (LGM) full ice extent of the western Patagonian Ice Sheet on the Isla de Chiloé, south Chile (42° S). *E&G Quaternary Science Journal* Vol. 70, Issue 1, pp. 105–128.
- 13 Evans, D.; **Rodés, Á.**; Tye, A. 2021. The sensitivity of cosmogenic radionuclide analysis to soil bulk density: Implications for soil formation rates *European Journal of Soil Science*. 72-1, pp.174-182.
- 14 Rodríguez-Rodríguez, L., Antón, L., **Rodés, Á.**, Pallàs, R., García-Castellanos, D., Jiménez-Munt, I., Struth, L., Leanni, L., Aumaître, G., Bourlès, D., & Keddadouche, K. 2020. Dates and rates of endo-exorheic drainage development: Insights from fluvial terraces (Duero River, Iberian Peninsula). *Global and Planetary Change* Vol. 193, p. 103271.
- 15 **Rodés, Á.**; Evans, D. L. 2020. Cosmogenic soil production rate calculator *MethodsX*. 7,

- pp.100753-100753. ISSN 2215-0161.
- 16 Lane, T., Paasche, Ø., Kvisvik, B., Adamson, K., **Rodés, Á.**, Patton, H., Gomez, N., Gheorghiu, D., Bakke, J. and Hubbard, A. 2020. Elevation Changes of the Fennoscandian Ice Sheet Interior During the Last Deglaciation. *Geophysical Research Letters*. 47-14, pp.e2020GL088796-e2020GL088796.
  - 17 Mendelova, M.; Hein, A. S.; **Rodes, A.**; Xu, Sheng. 2020. Extensive mountain glaciation in central Patagonia during Marine Isotope Stage 5 *Quaternary Science Reviews*. 227, pp.105996-105996.
  - 18 Mendelova, M.; Hein, A.S.; **Rodes, A.**; Smedley R. K.; Xu, S.2020. Glacier expansion in central Patagonia during the Antarctic Cold Reversal followed by retreat and stabilisation during the Younger Dryas *Quaternary Science Reviews*. 227, pp.106047-106047.
  - 19 Karampaglidis, T.; Benito-Calvo, A.; **Rodés, A.**; et al; Bourles, D. 2020. Pliocene endorheic-exhoreic drainage transition of the Cenozoic Madrid Basin (Central Spain) *Global and Planetary Change*. 194, pp.103295-103295.
  - 20 Davies, B. J.; Darvill, C. M.; Lovell, H.; Bendle, J. M.; Dowdeswell, J. A.; Fabel, D.; García, J.; Geiger, A.; Glasser, N. F.; Gheorghiu, D. M.; Harrison, S.; Hein, A. S.; Kaplan, M. R.; Martin, J. R.; Mendelova, M.; Palmer, A.; Pelto, M.; **Rodés, A.**; Sagredo, E. A.; Smedley, R. K.; Smellie, J. L.; Thorndycraft, V. R. 2020. The evolution of the Patagonian Ice Sheet from 35 ka to the present day (PATICE) *Earth-Science Reviews*. 204, pp.103152-103152. ISSN 0012-8252.
  - 21 Roda-Boluda, D. C.; D'Arcy, M.; Whittaker, A. C.; Gheorghiu, D. M.; Rodés, Á.I. 2019. 10Be erosion rates controlled by transient response to normal faulting through incision and landsliding. *Earth and Planetary Science Letters*. 507, pp.140-153
  - 22 Evans, D. L.; Quinton, J. N.; Tye, A. M.; **Rodes, A.**; Davies, J. A. C.; Mudd, S. M.; Quine, T. A. 2019. Arable soil formation and erosion: a hillslope-based cosmogenic nuclide study in the United Kingdom *SOIL*. 5-2, pp.253-263.
  - 23 de Souza, D. H.; Stuart, F. M.; **Rodés, Á.**; Pupim, F. N.; Hackspacher, Peter C. 2019. Controls on the erosion of the continental margin of southeast Brazil from cosmogenic 10Be in river sediments. *Geomorphology*. 330, pp.163-176. ISSN 0169-555X.
  - 24 Carracedo, A.; **Rodés, Á.**; Smellie, J.L.; Stuart, F.M.2019. Episodic erosion in West Antarctica inferred from cosmogenic 3He and 10Be in olivine from Mount Hampton. *Geomorphology*. 327, pp.438-445.
  - 25 Campbell, G., Walker, R., Abdrakhmatov, K., Carolin, S., Carr, A., Elliott, J., Jackson, J., Mackenzie, D., Rizza, M. and **Rodes, A.** 2019. Rapid Late Quaternary Slip, Repeated Prehistoric Earthquake Rupture, and Widespread Landsliding Associated With the Karakudzhur Thrust, Central Kyrgyz Tien Shan. *Tectonics*. 38-11, pp.3740-3764.
  - 26 Stokes, M.; Mather, A.; **Rodes, A.**; Kearsley, S.; Lewin, S. 2018. Anatomy, Age and Origin of an Intramontane Top Basin Surface (Sorbas Basin, Betic Cordillera, SE Spain) *Quaternary*. 1-2.
  - 27 **Corrigendum**. Sugden, D. E., Hein, A. S., Woodward, J., Marrero, S. M., **Rodes, A.** , Dunning, S. A., Stuart, F. M., Freeman, S. P.H.T. , Winter, K. and Westoby, M. J. 2018. Corrigendum to "The million-year evolution of the glacial trimline in the southernmost Ellsworth Mountains, Antarctica" *Earth and Planetary Science Letters*. 502, pp.291-292
  - 28 Dingle, E. H.; Sinclair, H. D.; Attal, M.; **Rodés, Á.**; Singh, V. 2018. Temporal variability in detrital 10Be concentrations in a large Himalayan catchment. *Earth Surface Dynamics*. 6-3, pp.611-635.
  - 29 Dyke, L. M.; Hughes, A.; Andresen, C. S.; Murray, T.; F Hiemstra, J.; Bjørk, A.; **Rodés, Á.** 2018. The deglaciation of coastal areas of southeast Greenland. *The Holocene*. 28-9, pp.1535-1544.
  - 30 Hughes, P. D.; Fink, D.; **Rodés, Á.**; Fenton, C. R.; Fujioka, T. 2018. Timing of Pleistocene glaciations in the High Atlas, Morocco: New 10Be and 36Cl exposure ages. *Quaternary Science Reviews*. 180, pp.193-213
  - 31 Wilson, P.; **Rodés, Á.**; Smith, A. 2018. Valley glaciers persisted in the Lake District, north-west England, until ?16–15 ka as revealed by terrestrial cosmogenic nuclide (10Be) dating: a response to Heinrich event 1? *Journal of Quaternary Science*. 33-5, pp.518-526.
  - 32 Southall, D. W.; Wilson, P.; Dunlop, P.; Schnabel, C.; **Rodés, Á.**; Gulliver, P.; Xu, S. 2017. Age evaluation and causation of rock-slope failures along the western margin of

- the Antrim Lava Group (ALG), Northern Ireland, based on cosmogenic isotope ( $^{36}\text{Cl}$ ) surface exposure dating. *Geomorphology*. 285, pp.235-246.
- 33 Wilson, P.; Lord, T.; **Rodés, Á.** 2017. Glaciation and deglaciation age of the Stump Cross area, Yorkshire Dales, northern England, determined by terrestrial cosmogenic nuclide ( $^{10}\text{Be}$ ) dating. *Cave and Karst Science*. 44-1, pp.76-81.
  - 34 Davies, B. J.; Hambrey, M. J.; Glasser, N. F.; Holt, T.; **Rodés, A.**; Smellie, J. L.; Carrivick, J. L.; Blockley, S. 2017. Ice-dammed lateral lake and epishelf lake insights into Holocene dynamics of Marguerite Trough Ice Stream and George VI Ice Shelf, Alexander Island, Antarctic Peninsula. *Quaternary Science Reviews*. 177, pp.189-219.
  - 35 Ballantyne, C. K.; Fabel, D.; Gheorghiu, D.; **Rodés, Á.**; Shanks, R.; Xu, S.. 2017. Late Quaternary glaciation in the Hebrides sector of the continental shelf: cosmogenic nuclide dating of glacial events on the St Kilda archipelago. *Boreas*. 46-4, pp.605-621.
  - 36 Hein, A. S.; Coge, A.; Darvill, C. M.; Mendelova, M.; Kaplan, M. R.; Herman, F.; Dunai, T. J.; Norton, K.; Xu, S.; Christl, M.; **Rodés, A.** 2017. Regional mid-Pleistocene glaciation in central Patagonia. *Quaternary Science Reviews*. 164, pp.77-94. ISSN 0277-3791.
  - 37 Sugden, D. E., Hein, A. S., Woodward, J., Marrero, S. M., **Rodés, A.**, Dunning, S. A., Stuart, F. M., Freeman, S. P.H.T., Winter, K. and Westoby, M. J. 2017. The million-year evolution of the glacial trimline in the southernmost Ellsworth Mountains, Antarctica. *Earth and Planetary Science Letters*. 469, pp.42-52.
  - 38 Karampaglidis, T.; Benito-Calvo, A.; **Rodés, Á.**; Pérez-González, A.; Miguens-Rodríguez, L. 2016. Datación de dos terrazas rocosas del valle del Río Lozoya (Comunidad de Madrid, España) mediante los isótopos cosmogénicos  $^{10}\text{Be}$  y  $^{26}\text{Al}$ . *Cuaternario y Geomorfología*. 30-1-2, pp.37-47.
  - 39 Walker, R.T.; Khatib, M.M.; Bahroudi, A.; **Rodés, A.**; Schnabel, C.; Fattahi, M.; Talebian, M.; Bergman, E. 2015. Co-seismic, geomorphic, and geologic fold growth associated with the 1978 Tabas-e-Golshan earthquake fault in eastern Iran. *Geomorphology*. 237, pp.98-118.
  - 40 Darvill, C. M.; Bentley, M. J.; Stokes, C. R.; Hein, A. S.; **Rodés, Á.** 2015. Extensive MIS 3 glaciation in southernmost Patagonia revealed by cosmogenic nuclide dating of outwash sediments. *Earth and Planetary Science Letters*. 429, pp.157-169.
  - 41 Moreno, X.; Masana, E.; Pallas, R.; Gracia, E.; **Rodés, Á.**; Bordonau, J. 2015. Quaternary tectonic activity of the Carboneras Fault in the La Serrata range (SE Iberia): Geomorphological and chronological constraints. *Tectonophysics*. 663. pp. 78-94
  - 42 **Rodés, Á.**; Pallas, R.; Ortuño, M.; García-Melendez, E.; Masana, E. 2014. Combining surface exposure dating and burial dating from paired cosmogenic depth profiles. Example of El Límite alluvial fan in Huércal-Overa basin (SE Iberia). *Quaternary Geochronology*. 19-0, pp.127-134.
  - 43 TLane, T.P.; Roberts, D.H.; Rea, B.R.; Ó Cofaigh, C.; Vieli, A.; **Rodés, A.** 2014. Controls upon the Last Glacial Maximum deglaciation of the northern Uummannaq Ice Stream System, West Greenland. *Quaternary Science Reviews*. 92 . pp. 324-344.
  - 44 Ballantyne, C. K.; Wilson, P.; Gheorghiu, D.; **Rodés, A.** 2014. Enhanced rock-slope failure following ice-sheet deglaciation: timing and causes. *Earth Surface Processes and Landforms*. 39-7, pp.900-913.
  - 45 Dyke, L. M.; L.C. Hughes, A.; Murray, T.; Hiemstra, J. F.; Andresen, C. S.; **Rodés, Á.** 2014. Evidence for the asynchronous retreat of large outlet glaciers in southeast Greenland at the end of the last glaciation. *Quaternary Science Reviews*. 99-0, pp.244-259.
  - 46 Glasser, N.F.; Davies, B.J.; Carrivick, J.L.; **Rodés, A.**; Hambrey, M.J.; Smellie, J.L.; Domack, E. 2014. Ice-stream initiation, duration and thinning on James Ross Island, northern Antarctic Peninsula. *Quaternary Science Reviews*. 86-0, pp.78-88. ISSN 0277-3791.
  - 47 Wilson, P.; Lord, T.; **Rodés, Á.** 2013. Deglaciation of the eastern Cumbria glaciokarst, northwest England, as determined by cosmogenic nuclide ( $^{10}\text{Be}$ ) surface exposure dating, and the pattern and significance of subsequent environmental changes. *Cave and Karst Science*. 40, pp.22-27.
  - 48 Roberts, D.H.; Rea, B.R.; Lane, T.P.; Schnabel, C.; **Rodés, A.** 2013. New constraints on Greenland ice sheet dynamics during the last glacial cycle: evidence from the Uummannaq ice stream system. *Journal of Geophysical Research: Earth Surface*. 118,

- 49 Anton, L.; **Rodés, A.**; De Vicente, G.; Pallas, R.; Garcia-Castellanos, D.; Stuart, F. M.; Braucher, R.; Bourles, D. 2012. Quantification of fluvial incision in the Duero Basin (NW Iberia) from longitudinal profile analysis and terrestrial cosmogenic nuclide concentrations. *Geomorphology*. 165-166-0, pp.50-61
- 50 **Rodés, Á.**; Pallàs, R.; Braucher, R.; Moreno, X.; Masana, E.; Bourlès, D. 2011. Effect of density uncertainties in cosmogenic  $^{10}\text{Be}$  depth-profiles: Dating a cemented Pleistocene alluvial fan (Carboneras Fault, SE Iberia). *Quaternary Geochronology*. 6-2, pp.186-194.
- 51 Gràcia, E.; Vizcaino, A.; Escutia, C.; Asioli, A.; **Rodés, A.**; Pallàs, R.; Garcia-Orellana, J.; Lebreiro, S.; Goldfinger, C. 2010. Holocene earthquake record offshore Portugal (SW Iberia): Testing turbidite paleoseismology in a slow convergence margin. *Quaternary Science Reviews*. Elsevier Ltd. 29, pp.1156-1172.
- 52 Pallàs, R.; **Rodés, Á.**; Braucher, R.; Bourlès, D.; Delmas, M.; Calvet, M.; Gunnell, Y. 2010. Small, isolated glacial catchments as priority targets for cosmogenic surface exposure dating of Pleistocene climate fluctuations, southeastern Pyrenees. *Geology*. 38-10, pp.891-894.
- 53 **Book section**. Moreno, X., Gracia, E., Masana, E., **Rodés, A.**, Bartolome, R., Pallas, R. 2009. Paleoseismological study along the Carboneras Fault: onshore-offshore evidences of recent tectonic activity. *Archeoseismology and Palaeoseismology in the Alpine-Himalayan Collisional Zone*. Abstract Volume. 1st INQUA-IGCP-567 International Workshop on Earthquake Archaeology and Palaeoseismology, Baelo Claudia, Spain (2009). Sección de Publicaciones de la Escuela Técnica Superior de Ingenieros Industriales. Universidad Politécnica de Madrid.. 1-1, pp.91-94. ISBN 978-84-7484-217-3.
- 54 **Rodés, A.**; Pallàs, R.; Braucher, R.; Bourlès, D. 2008. La última deglaciación en los Pirineos a partir de datación de superficies de exposición mediante  $^{10}\text{Be}$  *Geo-Temas*. 10, pp.355-358.
- 55 Pallàs, R.; **Rodés, Á.**; Braucher, R.; et al; Santanach, P.2006. The late Pleistocene and Holocene glaciation in the Pyrenees: A critical review and new evidence from  $^{10}\text{Be}$  exposure ages, south-central Pyrenees. *Quaternary Science Reviews*. 25, pp.2937-2963.
- 56 Pueyo-Anchuela, O.; González, Á.; Ipas, J.; Manuel, J.; Orgaz, J. Á.; **Rodés, Á.**; Teixido, F.; Gil, A.; Millán-Garrido, H. 2004. Análisis de la deformación a partir del estudio de la anisotropía de susceptibilidad magnética (ASM) en una estructura de pliegues y cabalgamientos. Ejemplo de un corte del sector central del Pirineo Oscense. *Geo-Temas*. 6-4, pp.327-330. **Popular science article**. **Rodés, Á.** 2017. El bronceado de las rocas. *El Pirineo Aragonés*. 6857. pp. 16.

## C.2. Invited presentations

1. **Á. Rodés** (2023) O radón no edificio de Xeografía e Historia. Mitigación do risco de cancro de pulmén mediante ventilación. *Seminario de Futuros Urbanos, 2023*. Galician Studies and Development Institute (IDEGA), Spain.
2. **Á. Rodés** (2021)  $^{10}\text{Be}$  & Agriculture. *Scottish Workshop for Cosmogenic Practitioners, 2021*, Scottish Universities Environmental Research Centre, East Kilbride, UK.
3. **Á. Rodés** (2019) Natural examples of cosmogenic signatures from complex exposure and burial histories. *Seminars of The State Key Laboratory of Environmental Geochemistry (SKLEG – Chinese Academy of Sciences)*, 2019, Guiyang, China.
4. **Á. Rodés** (2015) Cosmogenic nuclides in sediments. *UoG-UNESP geoscience research symposium*, 2015, University of Glasgow, UK.
5. **Á. Rodés, A. Davidson & M. Miguens-Rodriguez** (2014) Implications of wet chemistry techniques and stable  $^9\text{Be}$  and  $^{27}\text{Al}$  analysis on the final  $^{10}\text{Be}$  and  $^{26}\text{Al}$  concentrations. *Scottish Workshop for Cosmogenic Practitioners*, 2014, Edinburgh, UK.
6. **Á. Rodés** (2013) Combined surface exposure and burial dating from cosmogenic  $^{10}\text{Be}$ - $^{26}\text{Al}$  depth profiles. *ESF EARTHTIME-EU Scientific Meeting*, 2013, Burgos, Spain.
7. **Á. Rodés** (2012) Applications of combined cosmogenic  $^{10}\text{Be}$  and  $^{26}\text{Al}$  depth profiles in sediments. *Seminars of the School of Geography, Earth & Environmental Sciences*, 2012, University of Plymouth, UK.

### C.3. Participation in R&D and Innovation projects

- 1 Resolving the timing of the local Last Glacial Maximum and penultimate glaciation in the understudied northeast of Patagonia. British Geological Survey. PI Andrew Hein. (University of Edinburgh). 2020 – 2022. 43,268 €.
- 2 Reconstructing glacial history and landscape evolution in Patagonia. PI Andrew S. Hein. (University of Edinburgh). 2018-2022. 55.000 €.
- 3 Resolving the timing of the local Last Glacial Maximum and penultimate glaciation in the understudied northeast of Patagonia British Geological Survey. PI Andrew Hein. (University of Edinburgh). 2020-2021. 43.268 €.
- 4 Defining the Last Glacial Maximum of the Patagonian Ice Sheet and its termination in its understudied northeast sector (43°S) Natural Environment Research Council. PI Andrew Hein. (University of Edinburgh). 2019-2020. 64.176 €.
- 5 Servicio de análisis de muestras mediante la técnica de datación de núclidos cosmogénicos. (Licitación 2018/2501SR03) CENIEH. PI **Ángel Rodés**. (SUERC). 2018-2019. 114.810 €.
- 6 Temporal Variability in Sediment Flux of the Ganga River Using Detrital <sup>10</sup>Be Natural Environment Research Council. PI Hugh Sinclair. (University of Edinburgh). 2015- 2016. 30.816 €.
- 7 Ice free enclaves in West Greenland during the last glacial cycle? Scottish Universities Environmental Research Centre. PI David Roberts. (Durham University). 2012- 2014. 14.328 €.
- 8 The pattern, timing and dynamics of glaciation in the Cairngorm mountains Natural Environment Research Council. PI David Graham. (University of Loughborough). 11/07/2012- 12/07/2013. 6.432 €.
- 9 Geociencias en Iberia: Estudios integrados de topografía y evolución 4D. (Topo-Iberia) CAYCIT (Comisión Asesora de Investigación Científica y Técnica. Ministerio de Educación y Ciencia). PI Josep Gallart Muset. (Universitat de Barcelona). 2006-2011. 5.400.000 €.
- 10 Estudio Paleosísmico mediante Isotopos Cosmogénicos. Comisión Interministerial de Ciencia y Tecnología (CICYT). PI Pedro Francisco Santanach Prat. (Universitat de Barcelona). 2002-2007. 91.300 €.

### C.4. Participation in R&D and Innovation contracts

- 1 Análisis comercial de muestras mediante isótopos cosmogénicos. CENIEH. PI **Ángel Rodés**. 2020-2021. 34.000 €.
- 2 Servicio en colaboración para la datación de muestras de superficies glaciares mediante Be-10. Universidad Nacional de Educación a Distancia. **Ángel Rodés**. 2020-2021. 2.357 €.
- 3 Análisis comercial de muestras mediante isótopos cosmogénicos. CENIEH. PI **Ángel Rodés**. 2019-2020. 7.000 €.
- 4 National Environmental Isotope Facility – Cosmogenic nuclides (NEIF-Cosmo) UK Research and Innovation. Fabel, Derek. (Scottish Universities Environmental Research Centre (SUERC)). 2019-2024. 2.662.000 €.
- 5 Servicio en colaboración de preparación química de muestras para análisis de Be-10 mediante AMS. Universidad de Castilla la Mancha. PI **Ángel Rodés**. 2019- 2020. 7.000 €.
- 6 Cosmogenic Isotope Analysis Facility Natural Environment Research Council. PI Derek Fabel. (Scottish Universities Environmental Research Centre (SUERC)). 2016-2019. 1.560.000 €.
- 7 Cosmogenic Isotope Analysis Facility Natural Environment Research Council. PI Rob Ellam. (Scottish Universities Environmental Research Centre (SUERC)). 2014- 2016. 1.008.000 €.