Queensland Government | QCAA Queensland Curriculum & Assessment Authority

Queensland Curriculum and Assessment Authority

Geography 2025 v1.2

IA1: Sample assessment instrument

This sample has been compiled by the QCAA to assist and support teachers in planning and developing assessment instruments for individual school settings.

Student name	sample only
Student number	sample only
Teacher	sample only
Exam date	sample only

Marking summary

Criterion	Marks allocated	Provisional marks
Explaining	5	
Comprehending	5	
Anaysing and Applying	8	
Communicating	7	
Overall	**25**	

Conditions

Technique	Examination — combination response
Unit	Unit 3: Responding to land cover transformation
Topic/s	Topic 1: Land cover transformations and climate change
Time	Planning time: 15 minutes Working time: 120 minutes
Seen / Unseen	Unseen
Other	Students may bring into the examination: • a QCAA-approved non-programmable calculator • rulers free from markings other than measurement indicators.

Instructions

Respond in the space provided on the examination paper.

Task

This examination consists of three short response questions and one extended response question.

Short response

Question 1

a. In the space below draw and annotate a diagram showing the processes occurring in the ice albedo feedback loop.

b. Explain how changing albedo of ice is both an indication of and a contributing factor to climate change.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 2

a. Forests act as both a source and a sink for carbon. Explain how land cover change in forests impacts the function of a forest as either a carbon source or a sink. In your response refer to one of the examples studied in class.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b. Explain how the changing function of a forest, due to land cover change, impacts climate. Use an example of a specific type of land cover change in your response.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Question 3

a. Describe the spatial pattern of Tundra greenness shown on Figure 1.

b. What indications of climate change could explain the pattern of greenness in the Tundra?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

c. Complete the consequences wheel to detail the implications of the greenness pattern in the Tundra for people and for places in the region.

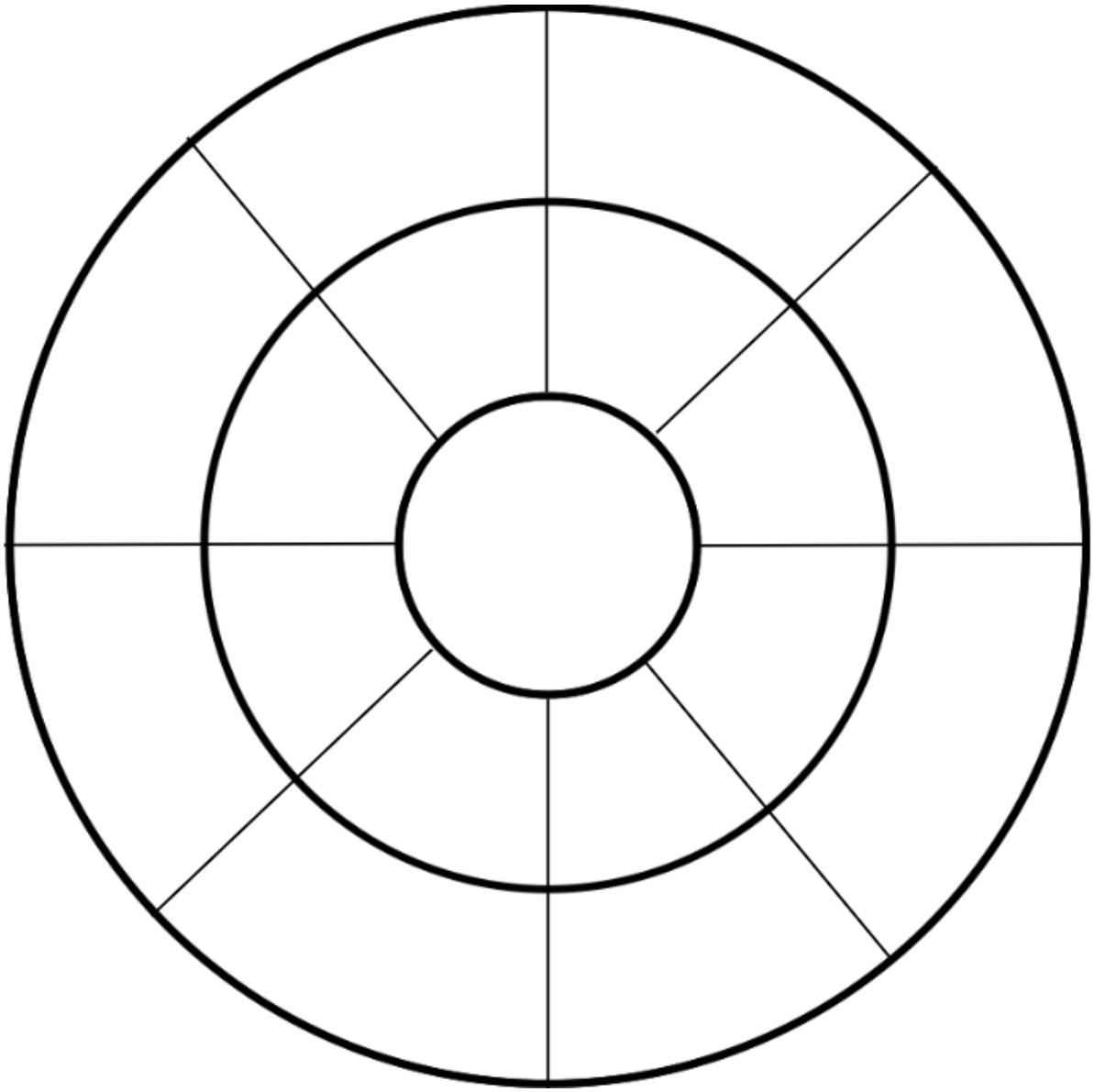
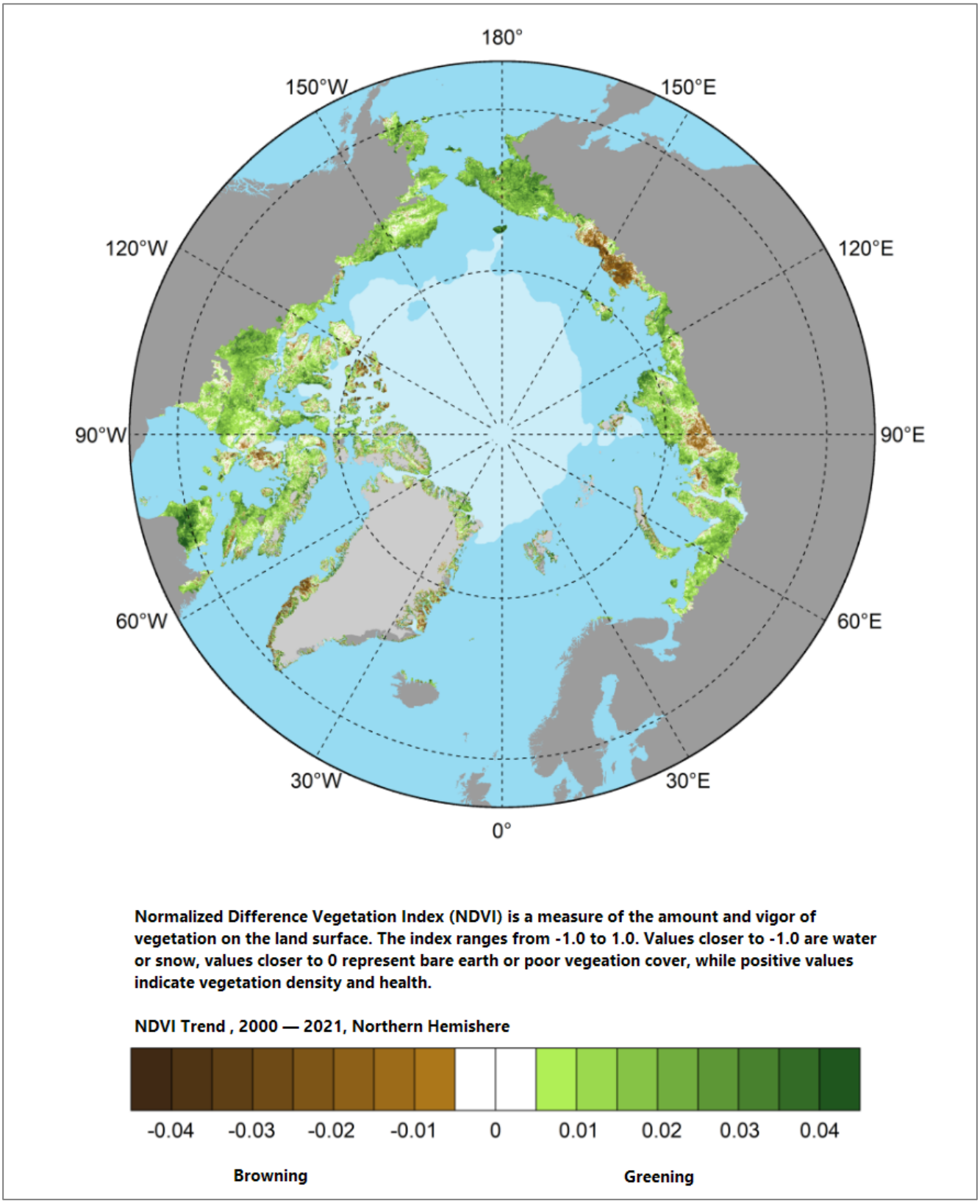


Figure 1: Tundra greenness map



Extended response

Question 4

Analyse the stimulus provided in the Stimulus section to make inferences about how patterns, trends and relationships represent a geographical challenge in relation to climate change for land cover in southeastern Spain.

Apply your geographic understanding from the analysis to generalise about the impacts of the geographical challenge on biophysical and anthropogenic environments in southeastern Spain.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Instrument-specific marking guide (IA1): Examination — combination response (25%)

Explaining	Marks
The student response has the following characteristics:	
• detailed explanations of interactions between biophysical and anthropogenic processes that result in land cover change • detailed explanations of interactions between biophysical and anthropogenic processes that result in climate change • explanations of complex relationships between land cover change and climate change	4–5
• simple explanations of interactions between biophysical and anthropogenic process that result in land cover change • simple explanations of interactions between biophysical and anthropogenic process that result in climate change • explanations of simple relationships between land cover change and climate change	2–3
• unclear explanation of interactions between biophysical and anthropogenic processes that result in land cover change • unclear explanation of interactions between biophysical and anthropogenic processes that result in climate change • vague explanation of relationships between land cover change and climate change.	1
The student response does not satisfy any of the descriptors above.	0

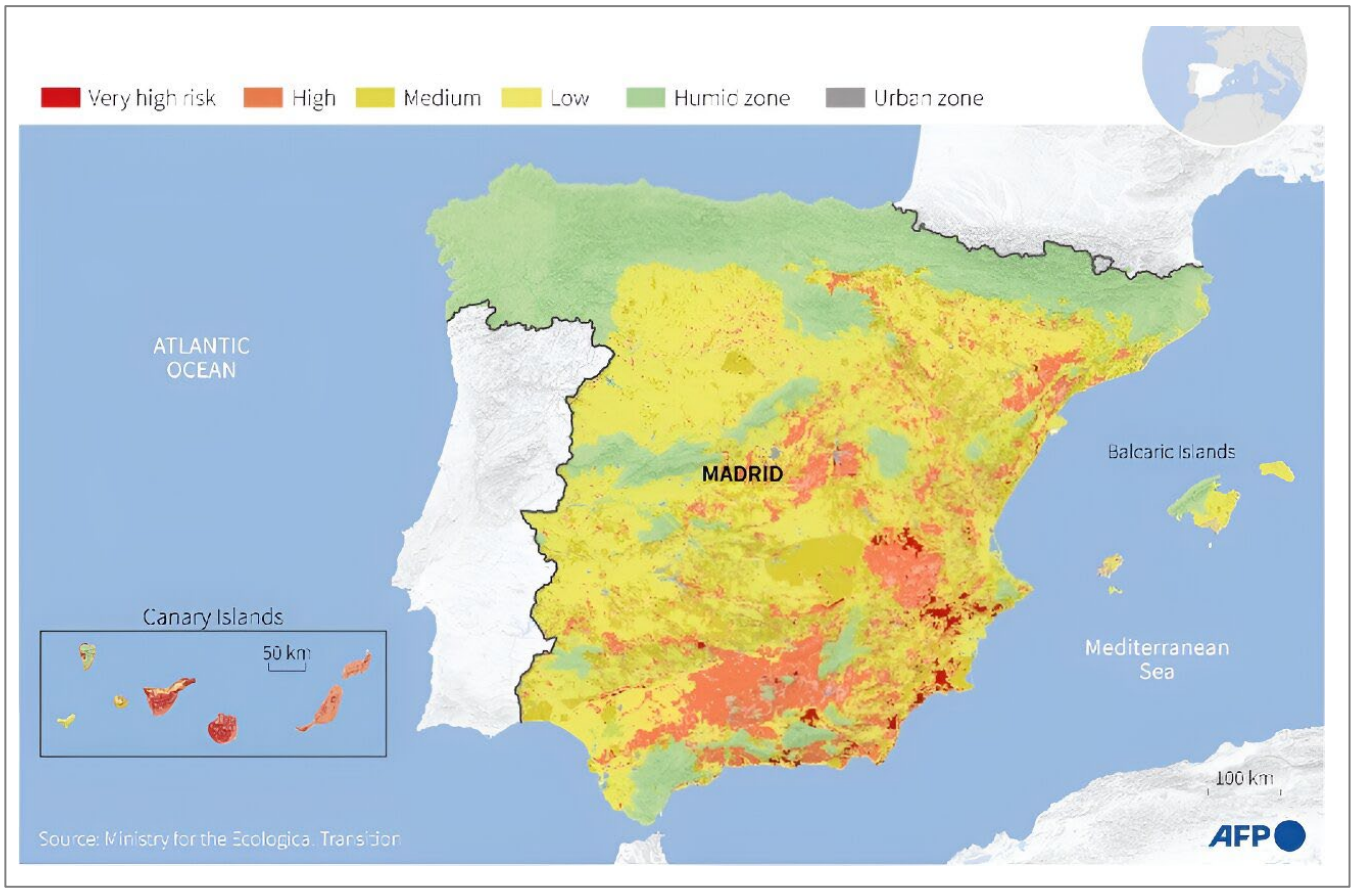
Comprehending	Marks
The student response has the following characteristics:	
• recognition of comprehensive spatial patterns of land cover change • recognition of critical indications of climate change • identification of significant relationships and implications for people and/or places	4–5
• recognition of simple spatial patterns of land cover change • recognition of fundamental indications of climate change • identification of rudimentary relationships and implications for people and/or places	2–3
• vague recognition of spatial patterns of land cover change • vague recognition of indications of climate change • identification of irrelevant relationships and/or implications for people and/or places.	1
The student response does not satisfy any of the descriptors above.	0

Analysing and Applying	Marks
The student response has the following characteristics:	
• astute interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge • discerning use of data and information • sophisticated generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments	7–8
• logical interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge • considered use of data and information • reasoned generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments	5–6
• simple interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge • appropriate use of data and information • fundamental generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments	3–4
• vague interpretations and inferences that identify how patterns, trends and relationships represent a geographical challenge • minimal use of data and information • narrow generalisations about the impacts of the geographical challenge on biophysical and anthropogenic environments.	1–2
The student response does not satisfy any of the descriptors above.	0

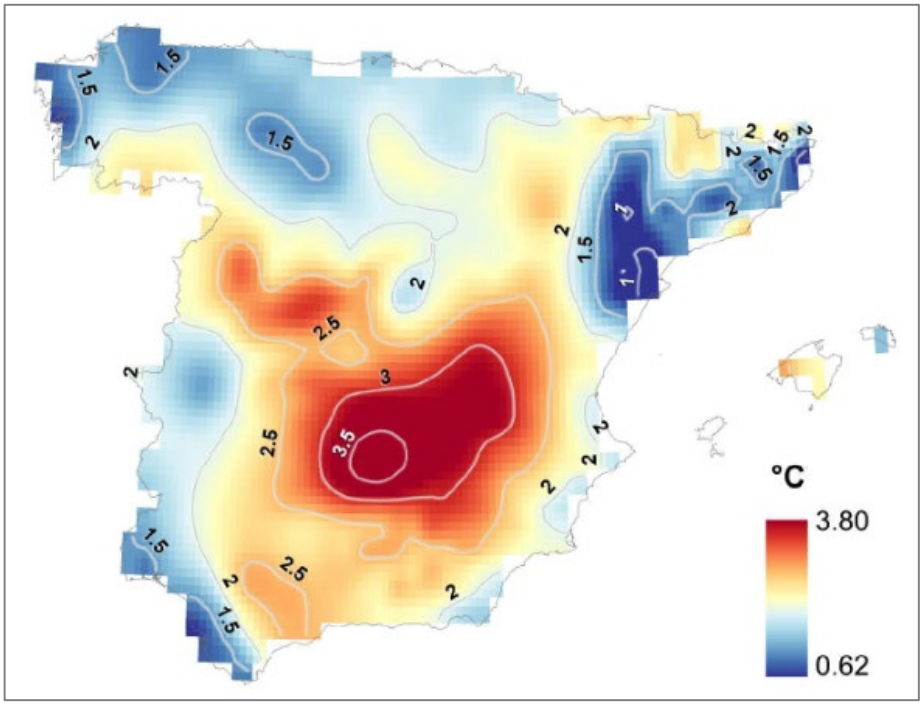
Communicating	Marks
The student response has the following characteristics:	
• consistently uses appropriate forms of geographical communication • accomplished use of geographical terminology • adept use of the conventions of written communication	6–7
• uses appropriate forms of geographical communication • considered use of geographical terminology • purposeful use of the conventions of written communication	4–5
• uses relevant forms of geographical communication • appropriate use of geographical terminology • sufficient use of the conventions of written communication	2–3
• uses inappropriate forms of geographical communication • inconsistent use of geographical terminology • fragmented use of the conventions of written communication	1
The student response does not satisfy any of the descriptors above.	0

Stimulus

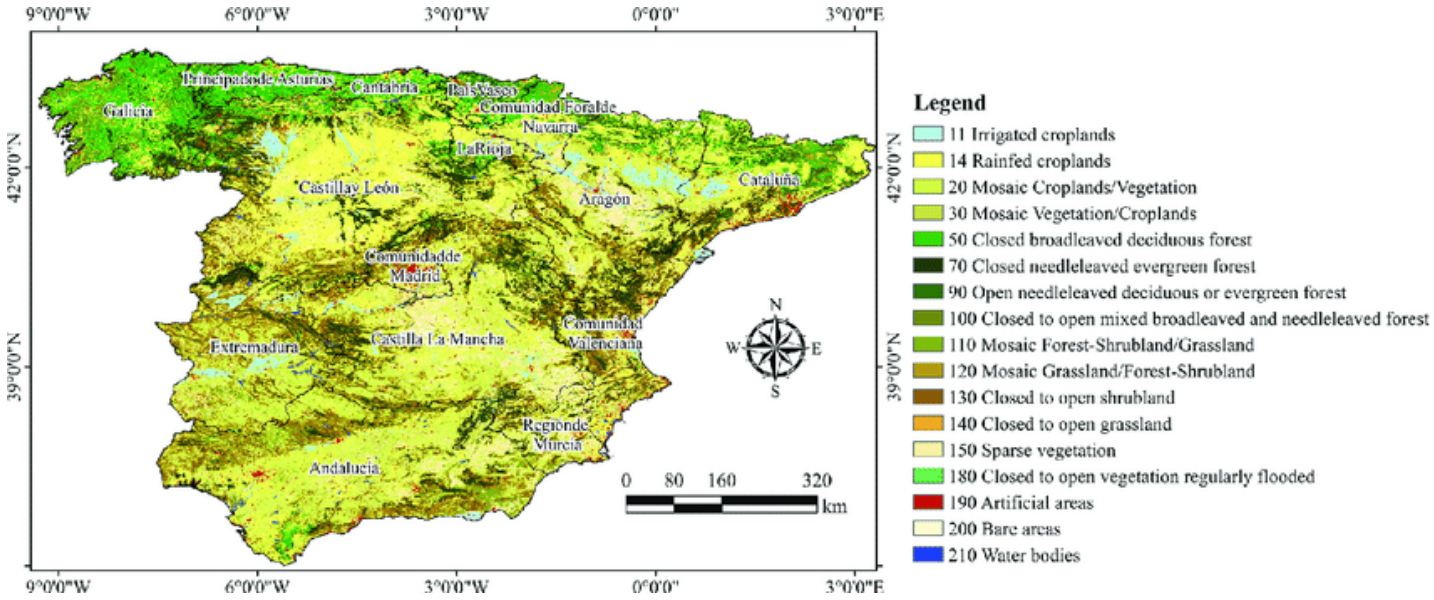
Stimulus 1: Desertification of Spain, 2023



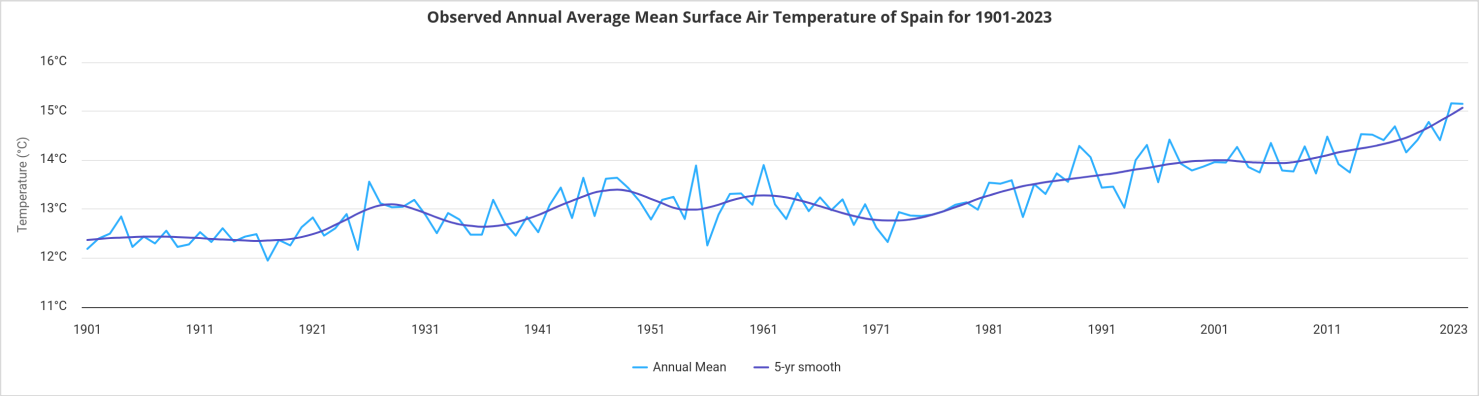
Stimulus 2: Pattern of mean temperature change, Spain 1971–2022

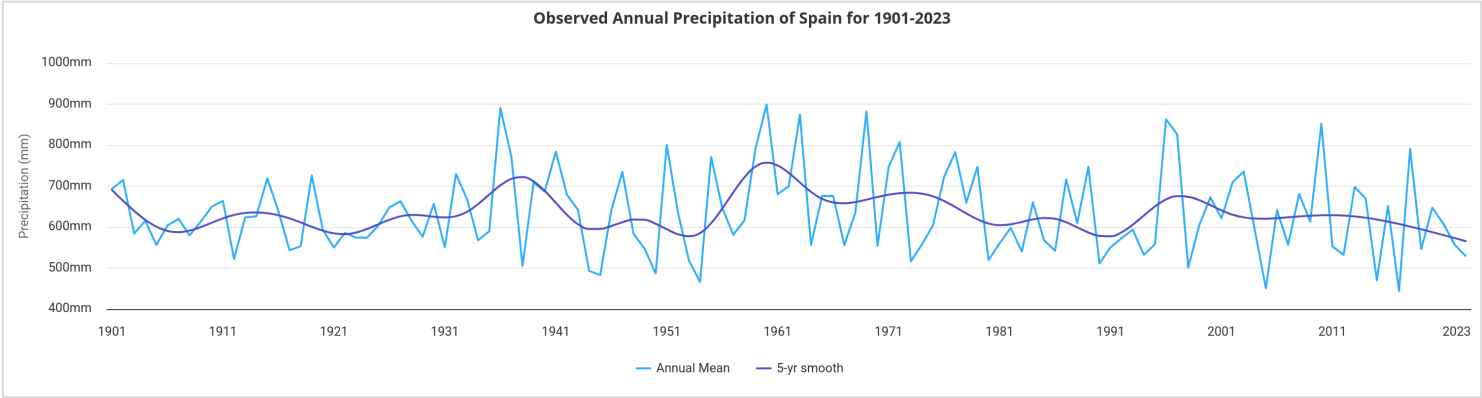


Stimulus 3: Land use Spain



Stimulus 4: Temperature (a) and Precipitation (b) over time, Spain 1901–2023





© State of Queensland (QCAA) 2025

Licence: https://creativecommons.org/licenses/by/4.0 | **Copyright notice:** www.qcaa.qld.edu.au/copyright — lists the full terms and conditions, which specify certain exceptions to the licence. |
Attribution: '© State of Queensland (QCAA) 2025' — please include the link to our copyright notice.

Other copyright material in this publication is listed below.

Figure 1 — Frost, G. V. et al (2021, November 17). *Arctic Report Card: Update for 2021:Tundra Greenness.* Retrieved from NOAA in the Arctic: https://arctic.noaa.gov/report-card/report-card-2021/tundra-greenness-2/ CC0 Public Domain

Stimulus 1 — Map by Ministry of Ecological Transition (France) in *Spain worries over 'lifeless land' amid creeping desertification* (2023, August 1) retrieved 20 May 2025 from https://phys.org/news/2023-08-spain-lifeless-desertification.html Used under etalab-2.0 licence.

Stimulus 2 — Arellano, B., Zheng, Q., & Roca, J. (2025). Analysis of Climate Change Effects on Precipitation and Temperature Trends in Spain. *Land*, *14*(1), 85. https://doi.org/10.3390/land14010085 Licensed Creative Commons Attribution 4.0 (CC BY 4.0)

Stimulus 3 — Fig 2 in Wang, Xia & Zhang, Yihang & Atkinson, Peter & Yao, Huaiying. (2020). Predicting soil organic carbon content in Spain by combining Landsat TM and ALOS PALSAR images. *International Journal of Applied Earth Observation and Geoinformation*. 92. 102182. 10.1016/j.jag.2020.102182.

Licensed Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0)

Stimulus 4 — World Bank Group. (2021). *Spain — Climatology*. Retrieved from Climate Change Knowledge Portal: https://climateknowledgeportal.worldbank.org/country/spain/climate-data-historical Data used under a Creative Commons Attribution 4.0 International licence (CC BY 4.0)