

#ClimateHeritage



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ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

DAVID HARKIN
CLIMATE CHANGE SCIENTIST



@DMHarkin

SCOTLAND'S CHANGING CLIMATE

PAST / FUTURE CHANGE



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Ed Hawkins, Climate Scientist, University of Reading





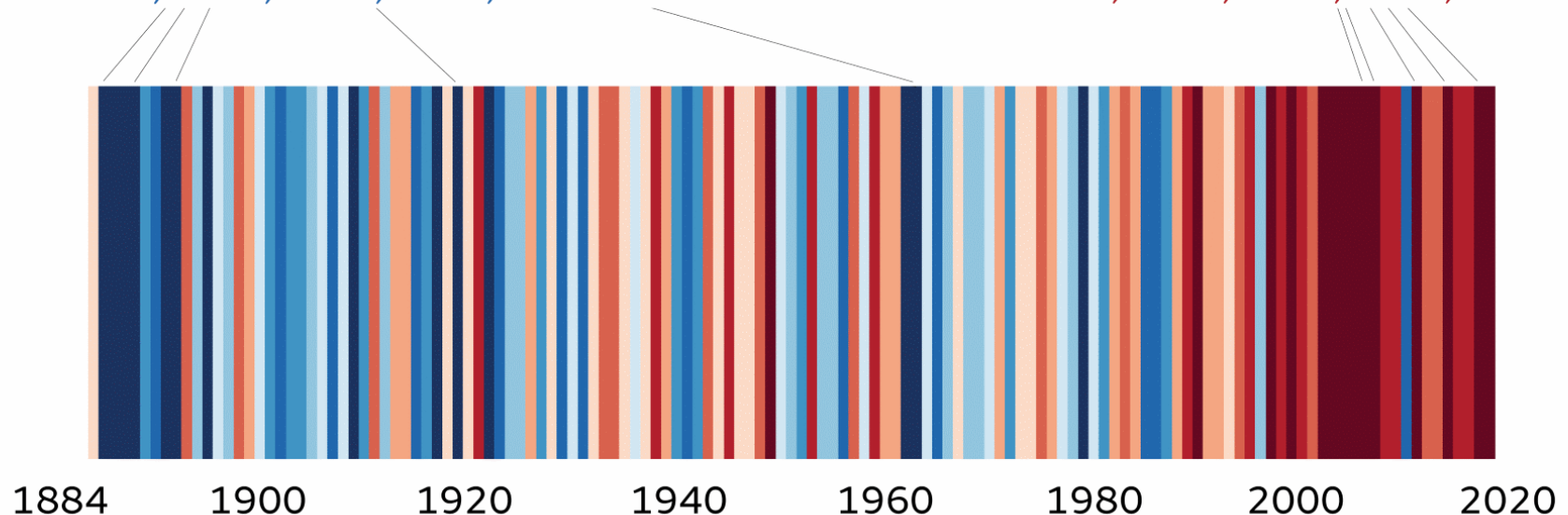
UK annual temperature

5 coolest years

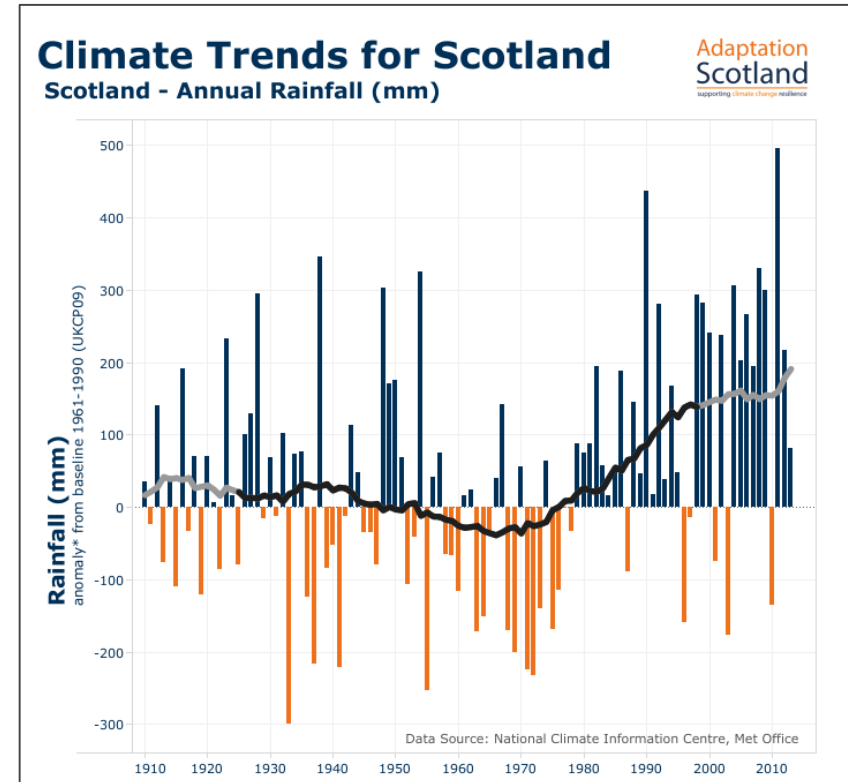
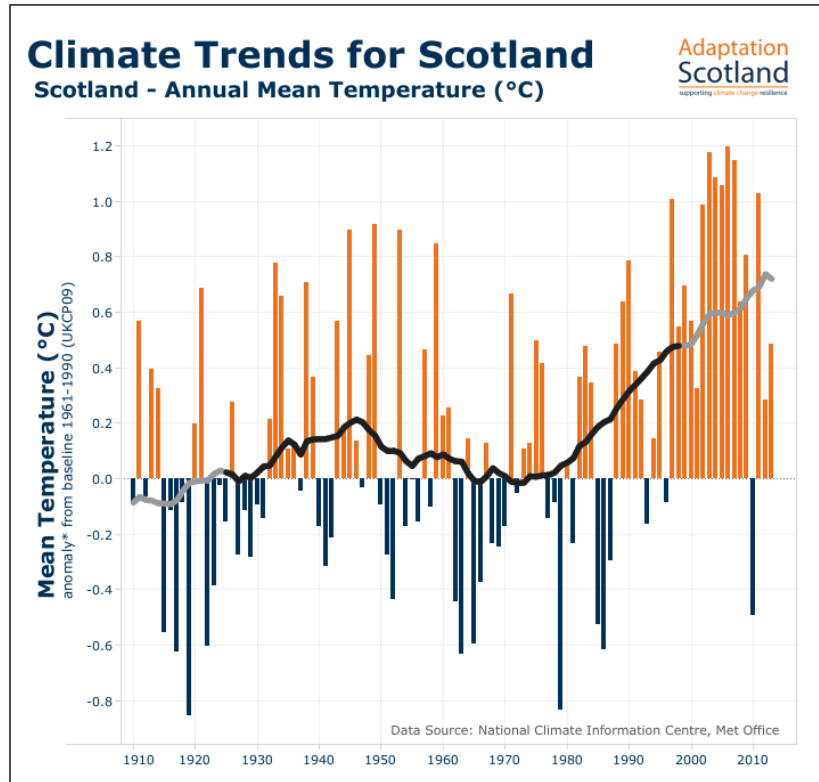
1892, 1888, 1885, 1963, 1919

5 warmest years

2014, 2006, 2011, 2007, 2017

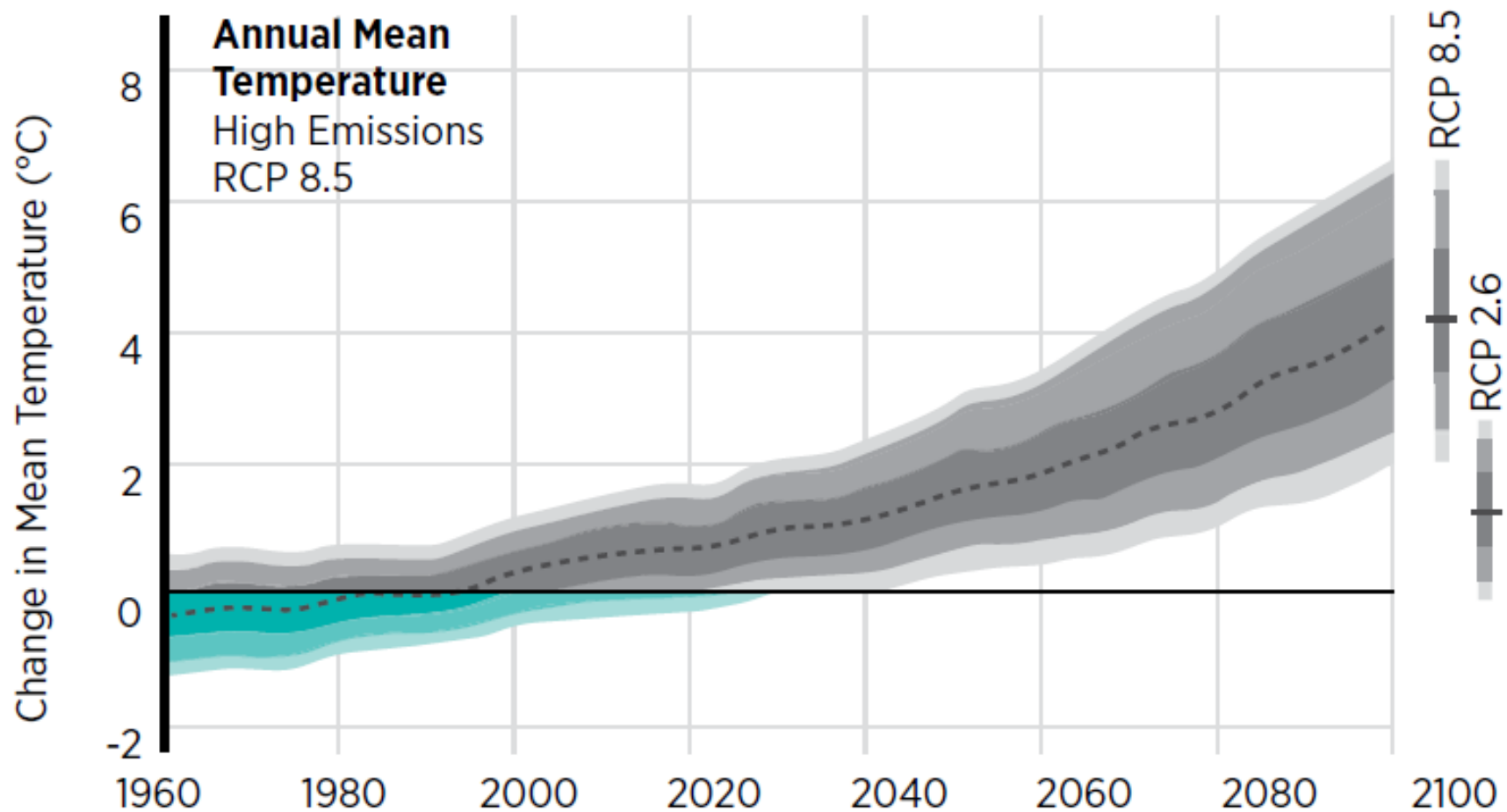


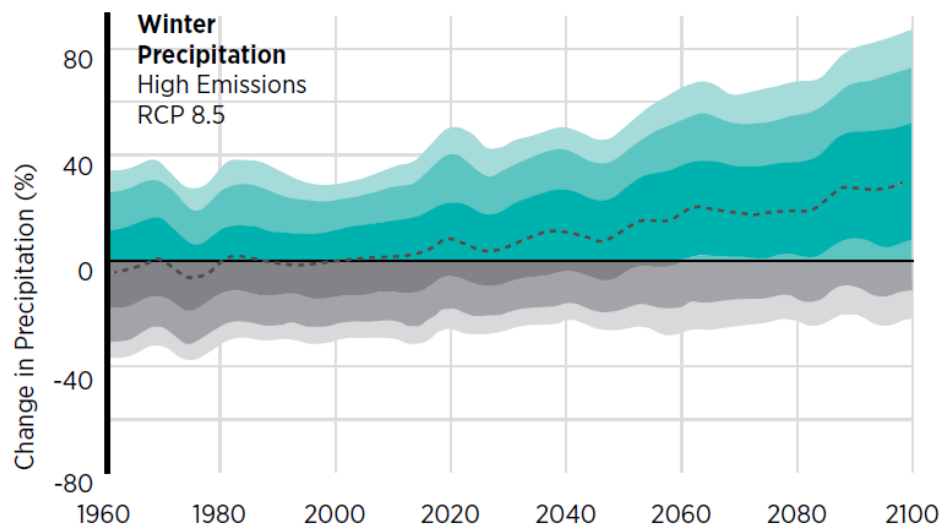
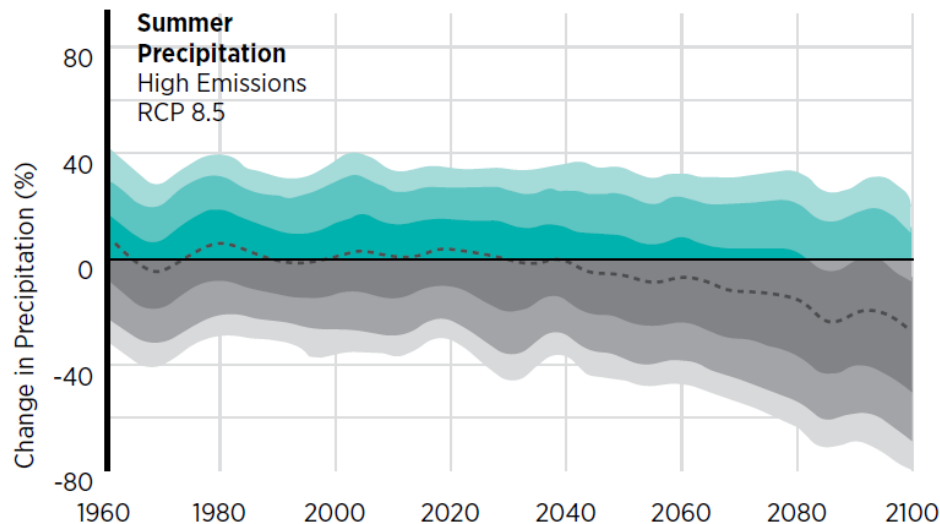
Change that has happened already



Observed trends compared to 1961 to 1990 baseline (Adaptation Scotland: Climate Trends Tool).

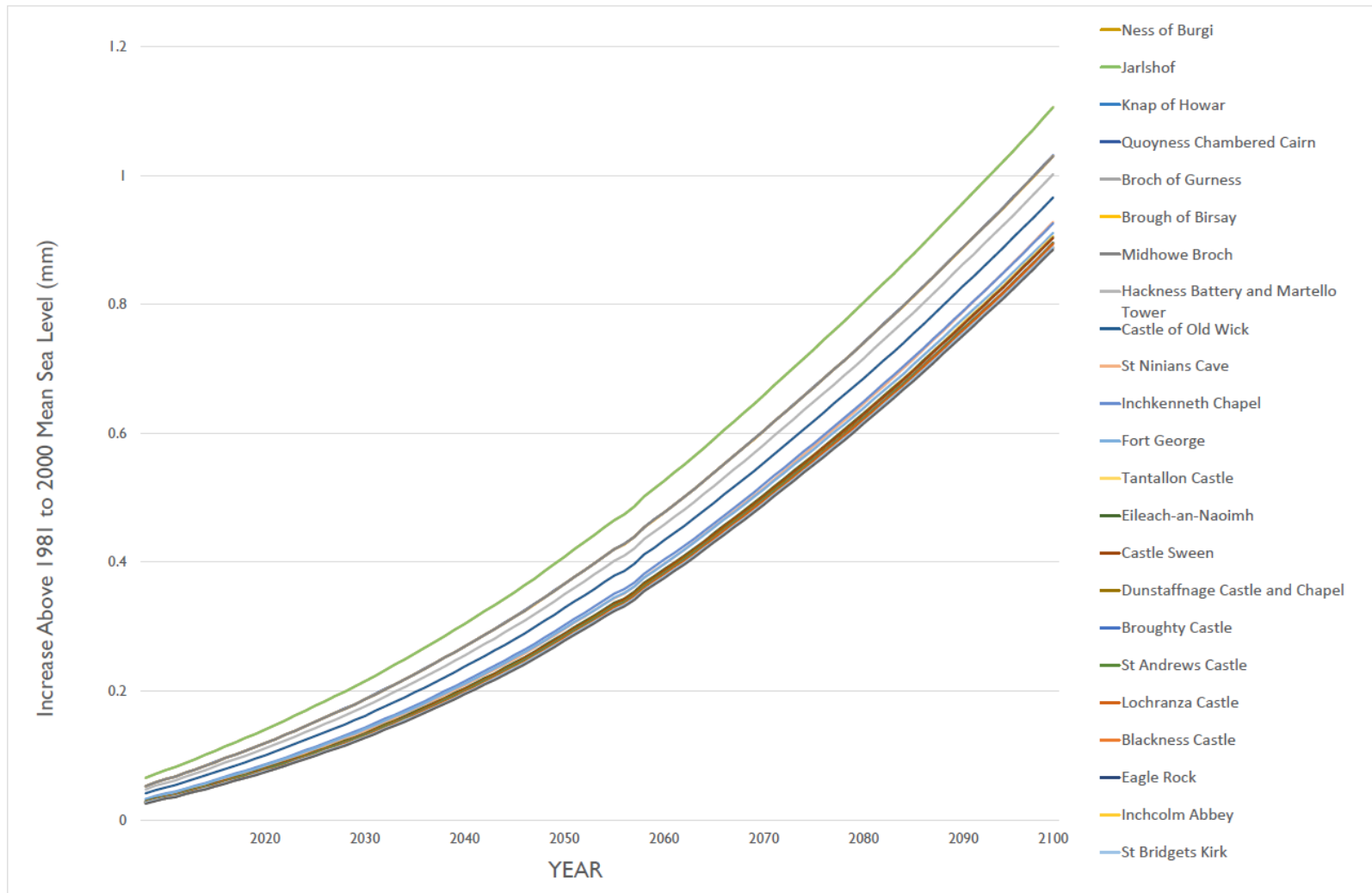
Future change – high emission scenario – UKCP18





Future change – high emission
scenario – UKCP18

Future change predicted to happen



SLR at the coastal HES Properties. Data used is the 95th percentile of RCP 8.5 UKCP18 dataset (the very worst case scenario).

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IMPACTS ON THE HISTORIC
ENVIRONMENT



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The Historic Environment is on the frontline
of our changing climate



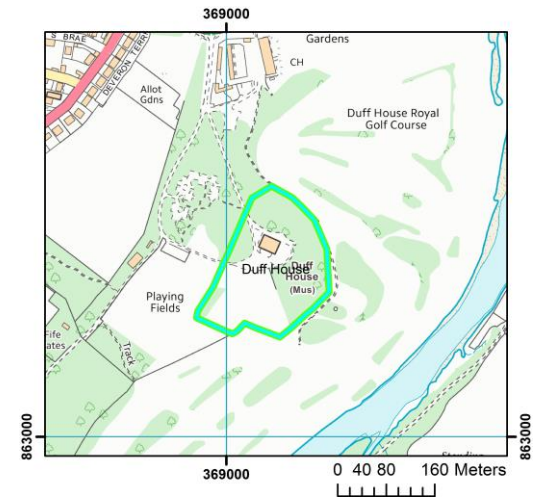
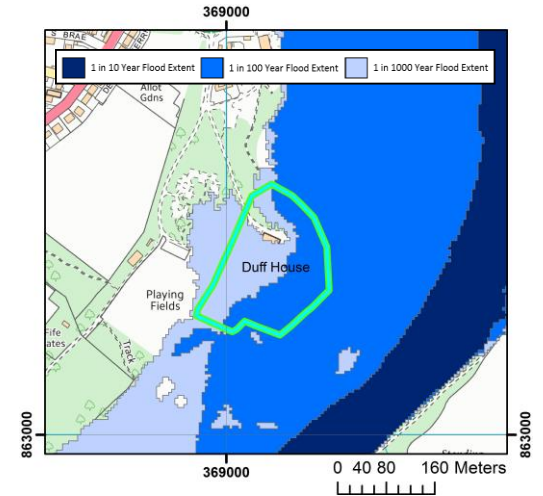
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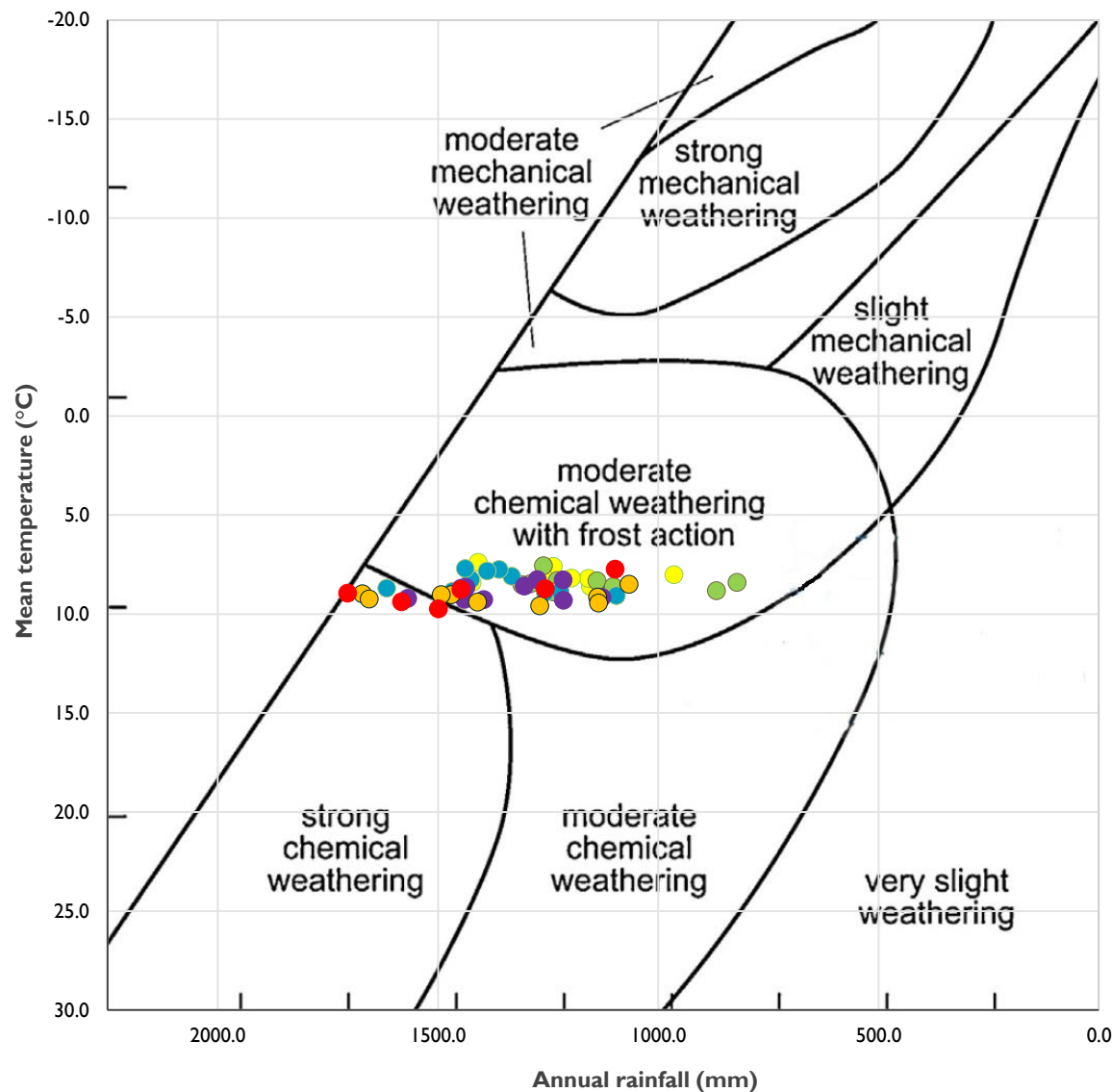
IMPACTS



Fluvial flooding risk at Duff House – hazard maps ©SEPA



Is the way our building stone is
decaying / weathering changing?



Threave Castle – historic
weather data from 1960's to
2010's overlaid onto Peltier,
1950 diagram.

● 1960's ● 1970's ● 1980's ● 1990's ● 2000's ● 2010's



Caerlaverock Castle

Iona Nunnery



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GET IN TOUCH



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