



Towards a multi-determinant framework for assessing the risks of climate change to cultural heritage

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Historic England



Arts and
Humanities
Research Council

Multi-determinant

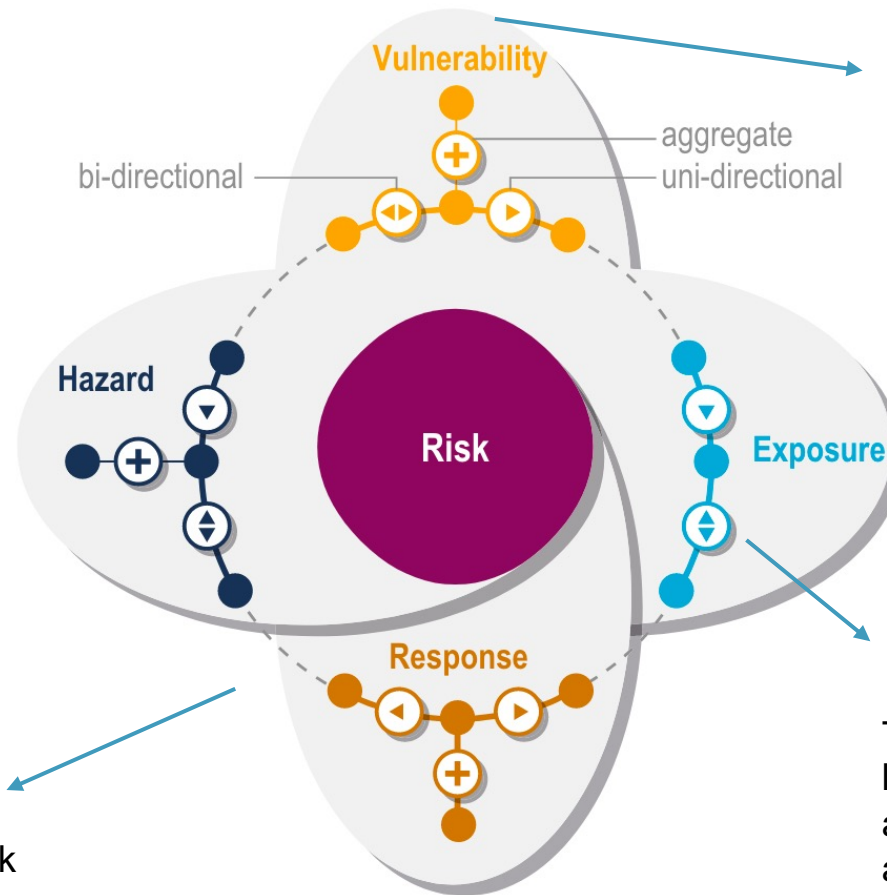
climate change risk assessment for

multiple sites

Multi-determinants - IPCC Risk Framework

The potential occurrence of a natural or human-induced physical event or trend that may cause loss of life, damage etc..

The predisposition to be adversely affected, determined by two concepts sensitivity and adaptive capacity.



Actions (or lack of actions) and directly decrease or increase risk

The presence of people, livelihoods, cultural assets in places and settings that could be adversely affected.

The re-triangulation of Great Britain (1935-1962)



© Ordnance Survey

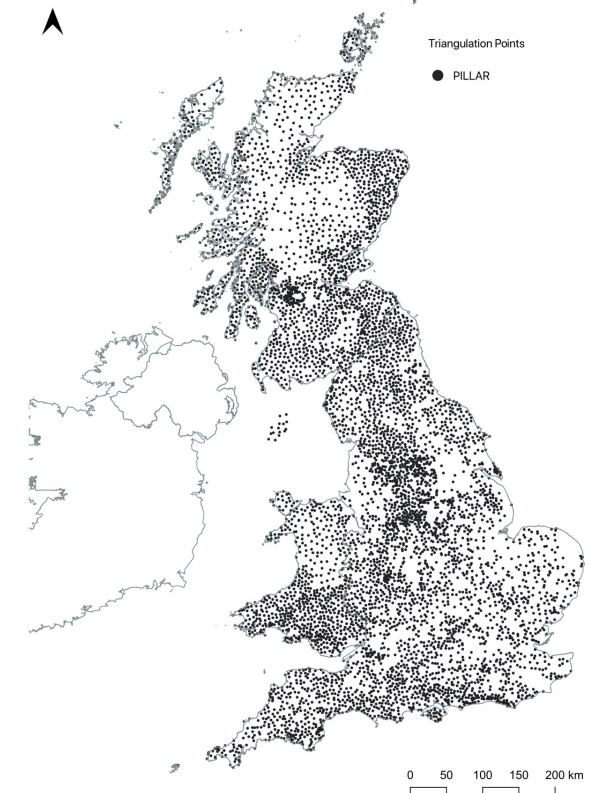
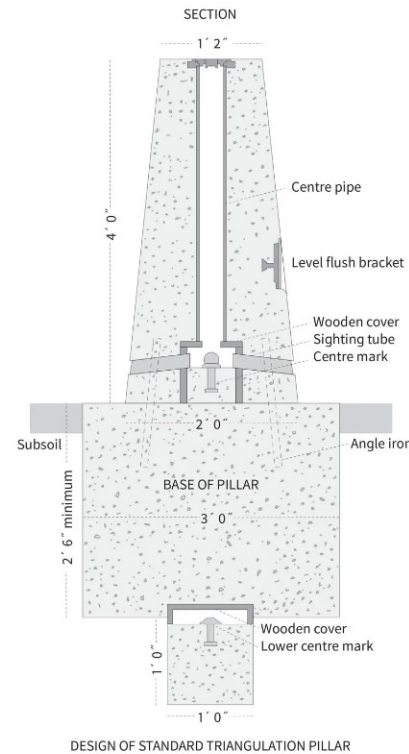


© Ordnance Survey

A heritage object of the same dimensions



Ordnance Survey. (1967). *The History of the Retriangulation of Great Britain 1935-1962.*



Trigpointing UK

TP4352 - Langley Hill

Grid reference : [SP 00805 29070](#)
Type : [Pillar](#)
Condition : [Damaged](#)
OSGB36 Station : [S5017](#)
OSGB36 Station : [SO92/T12](#)
Current use : none
Historic use : [3rd order](#)
T:UK waypoint : TP4352
County : Gloucestershire
Nearest town : CHELTENHAM

[OSGB36 trig archive spreadsheet - IW](#)

Trig Name	Original Name	New Name	EASTING	NORTHING	HEIGHT	ORDER	TYPE OF MARK
Langley Hill	SO92/T12	SO92T012	400804.69	229069.92	274.310	3	PILLAR



Nearby trigpoints, placenames

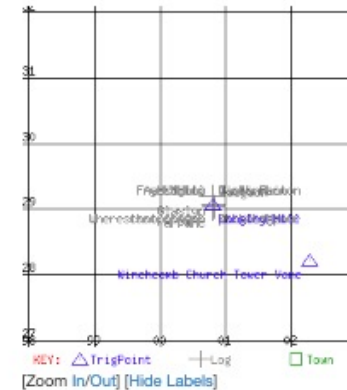
There are 52 photos for this trigpoint ([view album](#)).

This trigpoint:

Is ranked **joint 6388th** with **83 other trigs** ([more](#)).
 Has a mean score of **5.44/10** (from 66 logged visits)
 Was First logged: **1st Sep 1983**
 Was Last found intact: **23rd Oct 2022**
 Was Last logged: **9th Oct 2023**

Of the 66 logged visits,

17 recorded a location and of these....
 All were within 130m
 The average error was 17m
 4 were exact



You have not yet logged this trigpoint. You may [log your visit](#) here.

If you notice a problem with the data on this page, you may [flag this trig](#) for attention by the site admins.

Logged Visits:

[📷 9th Oct 2023 12:14](#) by [painterman61](#)

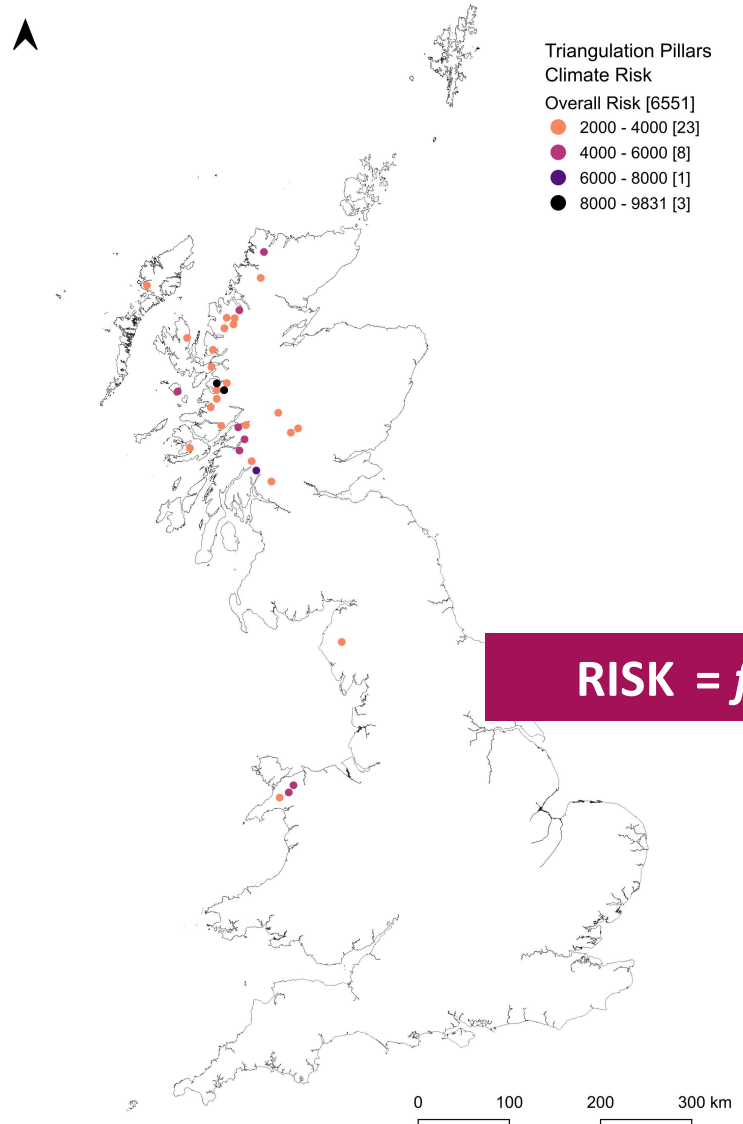
FB Number: S5017 **Condition:** Damaged **Score:** 6/10

Nice walk up on ~~pro~~ to ~~re~~ ~~men~~ ~~un~~ ~~direct~~ to the trig no real views long range. Sun coming out now very warm again will be glad of the good shade on the way down. Spider has been forcibly removed.

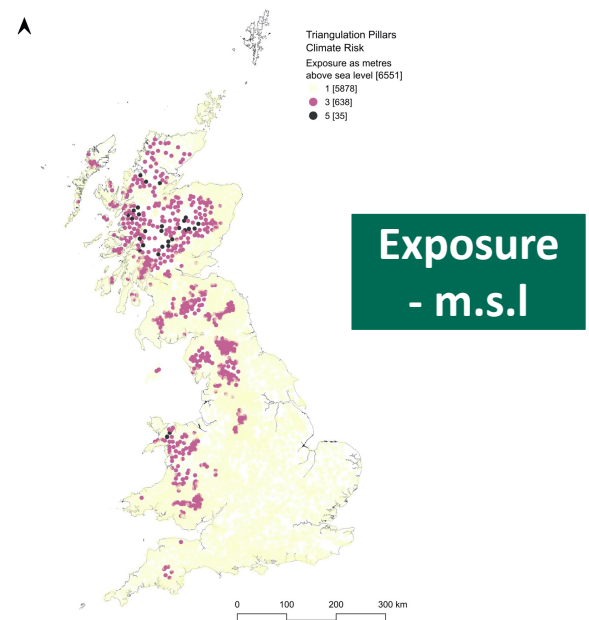
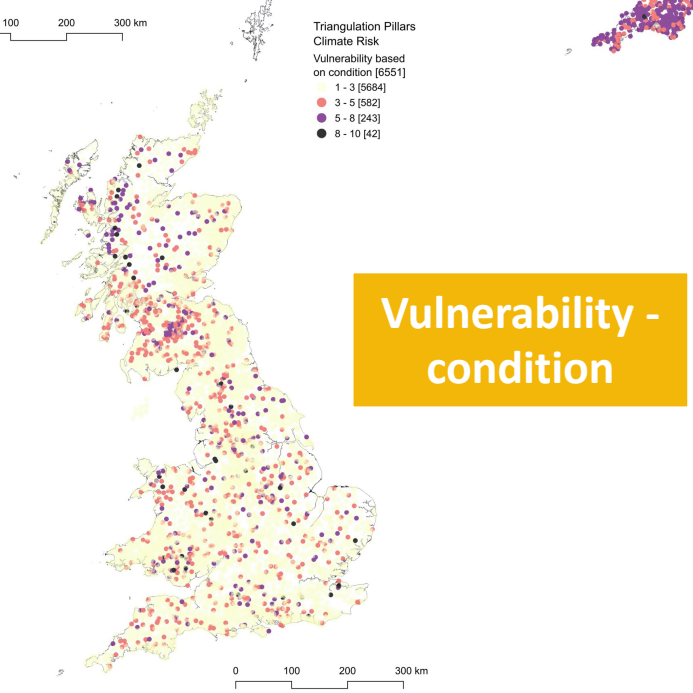
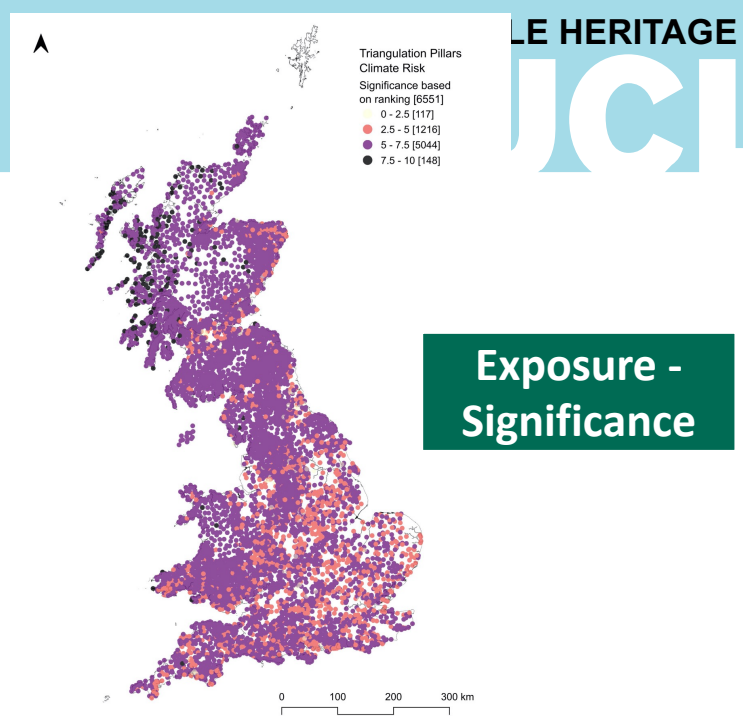
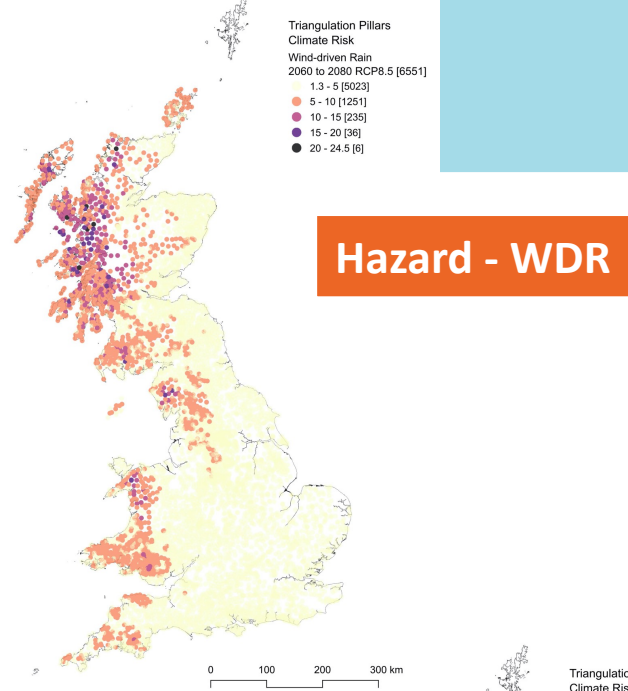
Selection of photos for this Pillar:



©Bridgeman



$$\text{RISK} = f(h^*, v^*, e^*)$$



In conclusion

- Multi-determinant risk frameworks pushes assessment methods past climate hazards and material degradation
- Citizen science recording can fill essential data gaps
- and highlights the information we do not yet have for other datasets:
 - condition
 - local significance
- Still incomplete areas of knowledge, for example:
 - damage functions
 - compounding hazards, tipping points, cascading risks



(TP2476) © [raypool](#) in 2010