

Climate Services for Scottish Policy

- Andrew Harding. ICCS4, Montevideo, 2014



THE UNIVERSITY *of* EDINBURGH climate **X**change



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Forest Research
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Crichton Carbon Centre
www.carboncentre.org



Sniffer
www.sniffer.org.uk



Biomathematics & Statistics Scotland
www.bioss.ac.uk

Call-down service



- Housing Futures
- Peatland Restoration
- Review of Adaptation Strategies
- Blue Carbon
- Research on Adaptation in Agriculture
- Current and Future Windstorms



Hurricane Friedhelm



What is needed?

A short response setting out: 1) what current evidence tells us about current and future windstorms in Scotland; and 2) what work is planned to improve our understanding of this/the evidence base.

Why is this needed?

To enable the Scottish Government to provide an evidence-based reply to a query about future storminess in Scotland. More widely, the response is likely to be used to answer future queries on storminess in Scotland.

The Met Office should be consulted in agreeing the final response.

Timescale

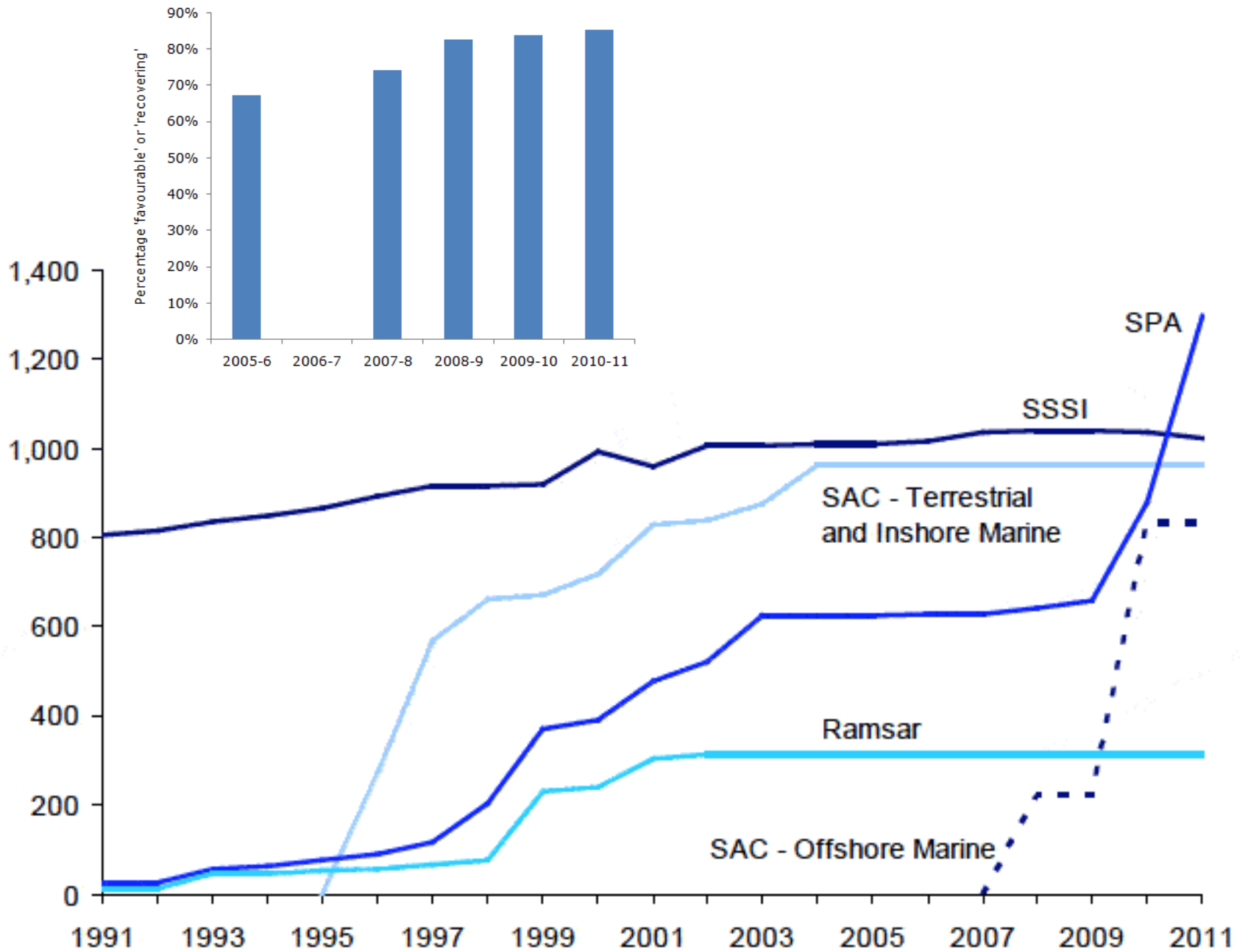
A response is required by Thursday 2 February

Agency support



Scottish Natural Heritage





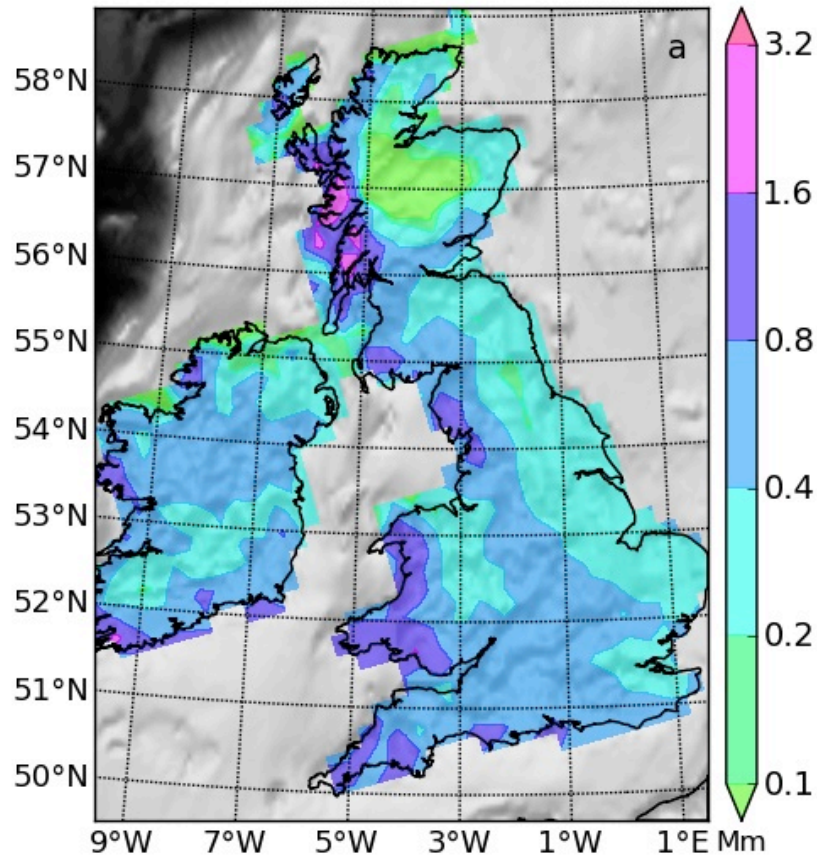
Site Code	Feature id	Site name	Feature	Sensitivity	Ad cap	Vulnerability	Exposure	Risk
771	11056	Hells Glen	Lichen assemblage	86	133	5	8	1
1172	11860	Moffat Hills	Upland assemblage	1	503	10	59	2
1168	11850	Minto Craigs	Lichen assemblage	86	17	1	883	3
771	11055	Hells Glen	Bryophyte assemblage	86	313	20	8	4
717		Ant	Lichen assemblage	86	358	26	12	5
1334	12234	Ravenshall Wood	Lichen assemblage	86	266	17	465	6
208		Aberfeldy	Lichen assemblage	86	81	2	1631	7
487		Oakwood	Lichen assemblage	86	391	42	34	8
1573		nuir Hills	Lichen assemblage	1	543	14	848	9
169	9780	Beinn Iadain and Beinn na h-Uamha	Upland assemblage	1	484	8	1064	10
736	10978	Glenkinnon Burn	Lichen assemblage	86	213	15	788	11
8158	13181	Knapdale Woods	Lichen assemblage	86	362	28	246	12
8161	13188	North Lowther Uplands	Upland assemblage	1	540	13	1047	13
520	10499	Doire Dhonn	Lichen assemblage	86	315	21	403	14
432	10313	Craighall Gorge	Lichen assemblage	86	216	16	1142	15
816	11164	Inverneil Burn	Lichen assemblage	86	305	19	437	16
1597	12880	Water of Ken Woods	Lichen assemblage	86	329	23	496	17
1160	11837	Milton Loch	Beetle assemblage	230	50	29	496	18
420	16596	Craig Leith and Myreton Hill	Upland assemblage	1	1079	55	131	19

SEPA



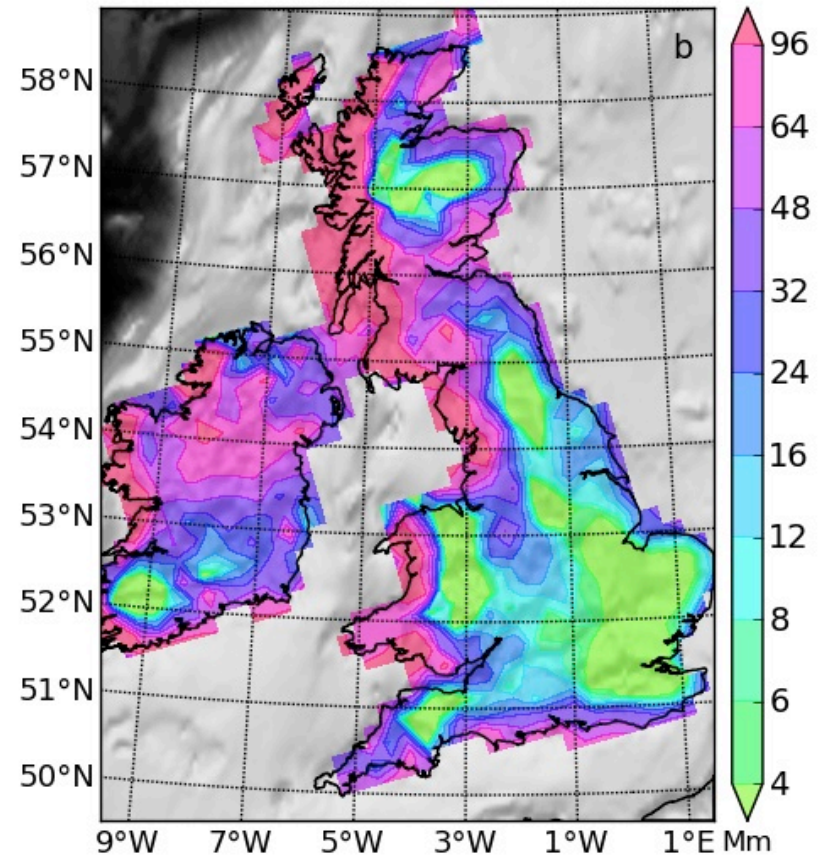
Average Winter Rainfall:

Delta between avg(1961-1990) and avg(2061-2090)

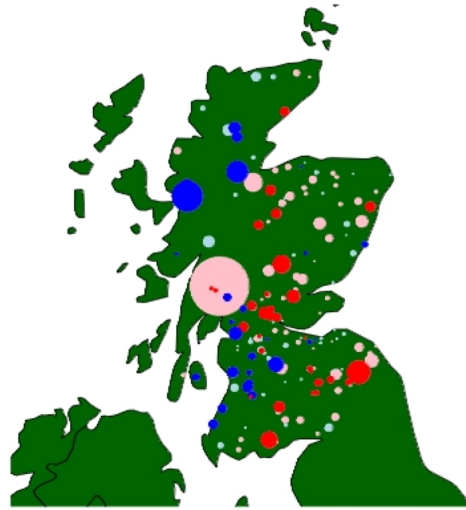


Total Rainfall:

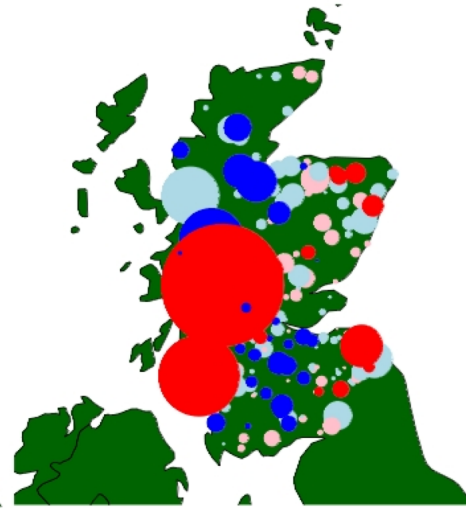
Delta between avg(1961-1990) and avg(2061-2090)



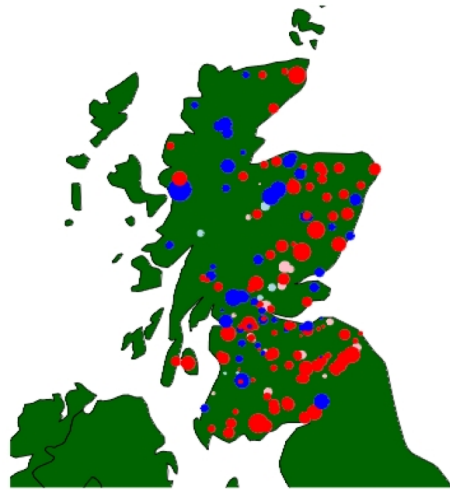
A – Discharge (95th Percentile)



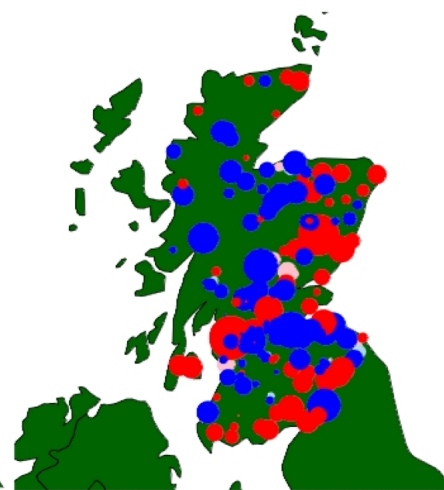
B – Discharge (99.6th Percentile)



C – Stage (95th Percentile)



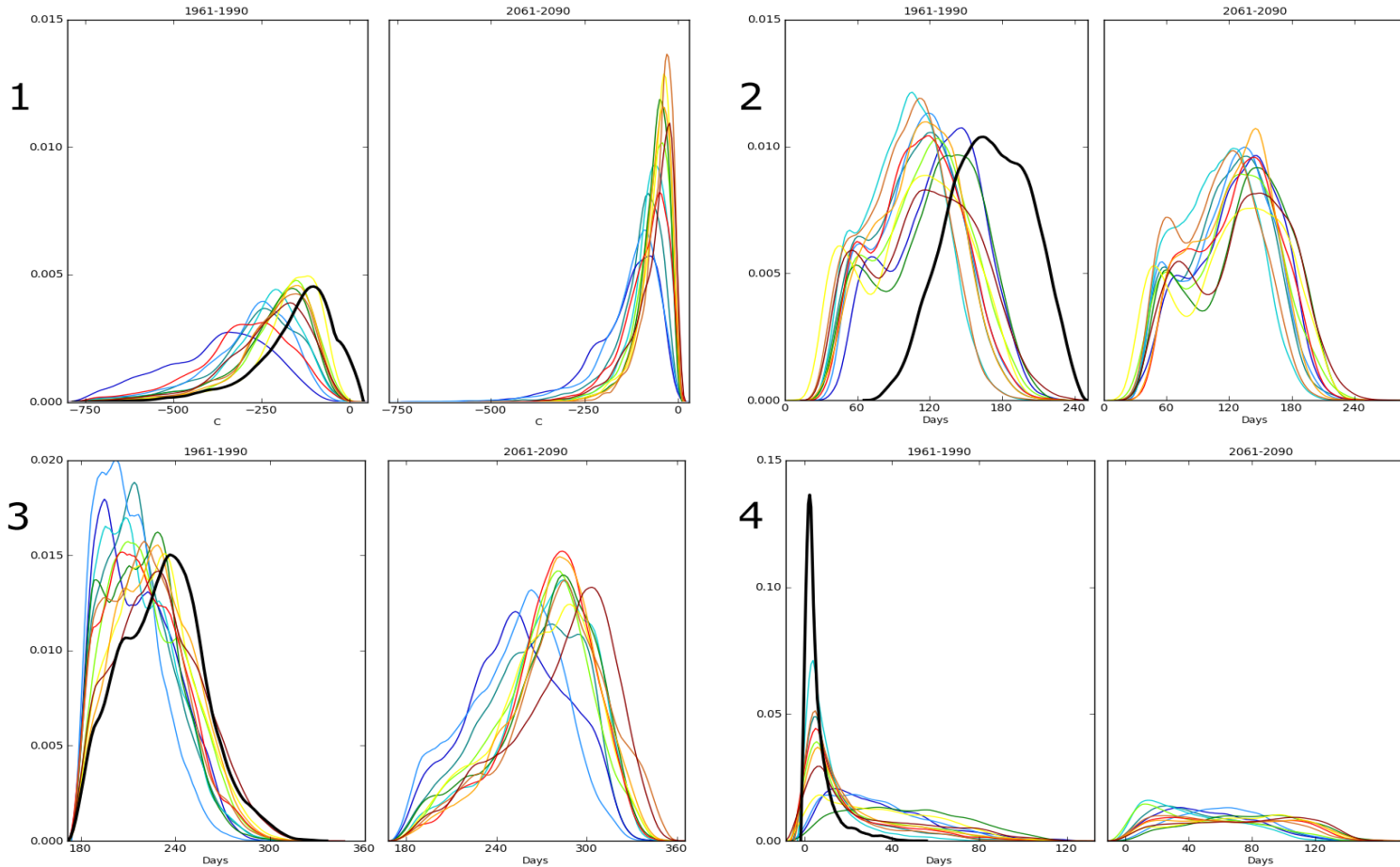
D – Stage (99.6th Percentile)



Horizon Scanning

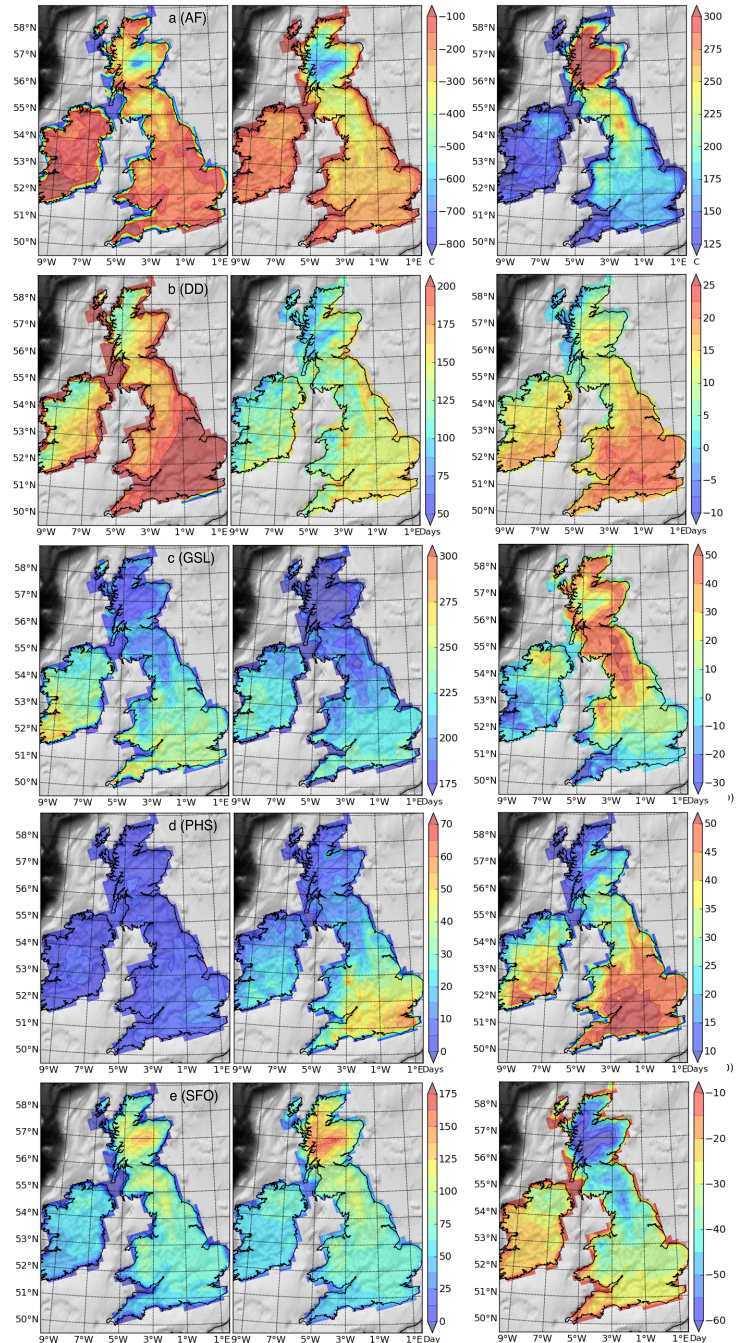


Agrimet Indices



1- Accumulated Frost 2- Dry Days 3- Growing Season Length 4- Plant Heat Stress

Observed past (1961-1990) Modelled past (1961-1990) Delta between modelled past and future (2061-2090)



Risks to Scottish whisky



Thank you.

Andrew.e.harding@gmail.com



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