

## Supplementary Material

### **Non-compliance and under-performance in Australian human-induced regeneration projects**

*Andrew Macintosh<sup>A,\*</sup>, Megan C. Evans<sup>B,\*</sup>, Don Butler<sup>A,\*</sup>, Pablo Larraondo<sup>C</sup>, Chamith Edirisinghe<sup>C</sup>, Kristen B. Hunter<sup>D</sup>, Maldwyn J. Evans<sup>A,E</sup>, Dean Ansell<sup>A</sup>, Marie Waschka<sup>A</sup> and David Lindenmayer<sup>A,E</sup>*

<sup>A</sup>The Australian National University, Canberra, ACT, Australia

<sup>B</sup>University of New South Wales Canberra at ADFA, School of Business, Canberra, ACT, Australia

<sup>C</sup>Haizea Analytics, Canberra, ACT, Australia

<sup>D</sup>University of New South Wales - Kensington Campus, School of Mathematics & Statistics, Kensington, NSW, Australia

<sup>E</sup>Australian National University, Fenner School of Environment and Society, Canberra, ACT, Australia

\*Correspondence to: Email: [andrew.macintosh@anu.edu.au](mailto:andrew.macintosh@anu.edu.au), [megan.evans@unsw.edu.au](mailto:megan.evans@unsw.edu.au), [donald.butler@anu.edu.au](mailto:donald.butler@anu.edu.au)

### Supplementary Materials - Figures

Figure S1. Baseline forest test compliance, proportion of cells per project (n=116)

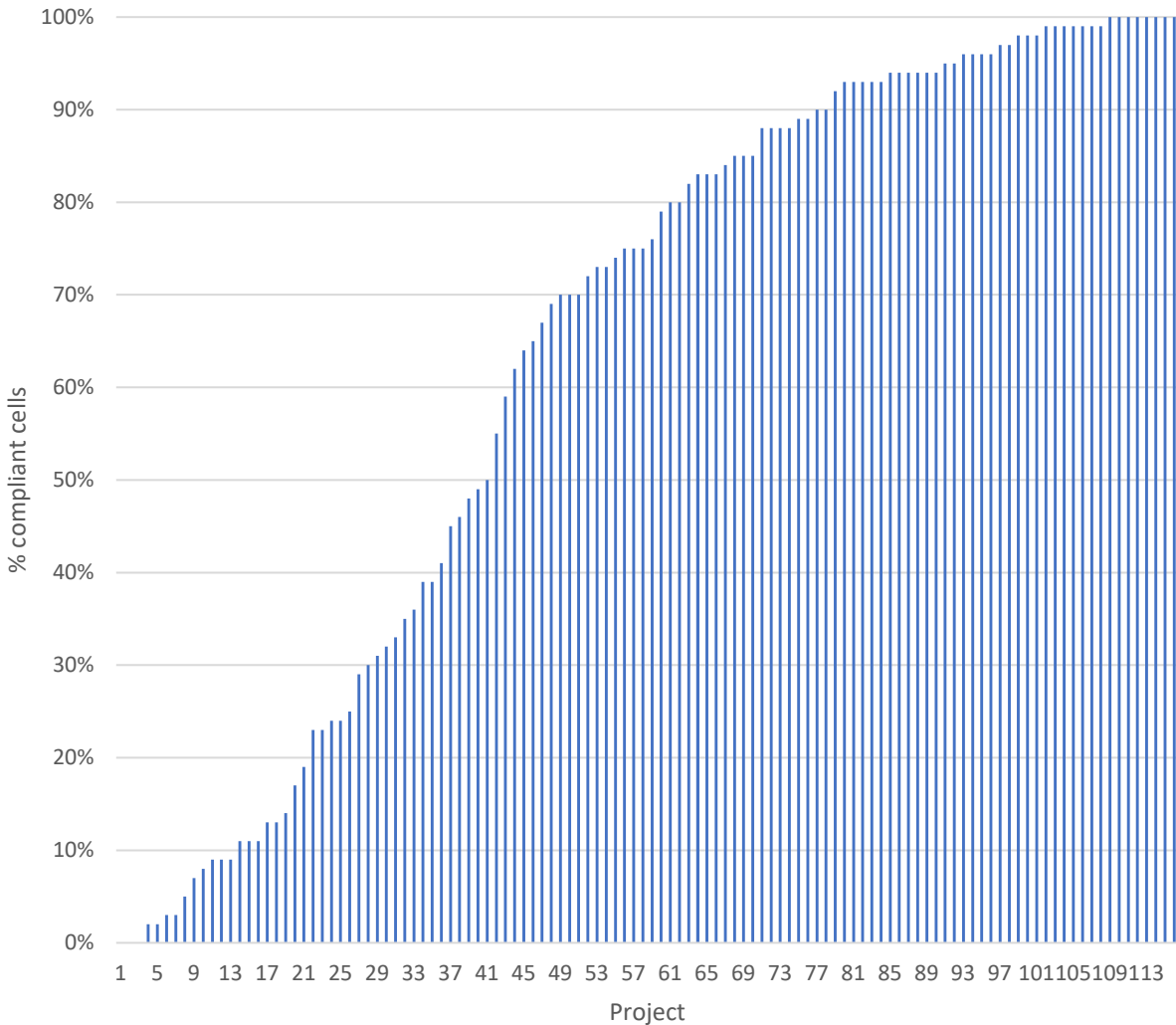
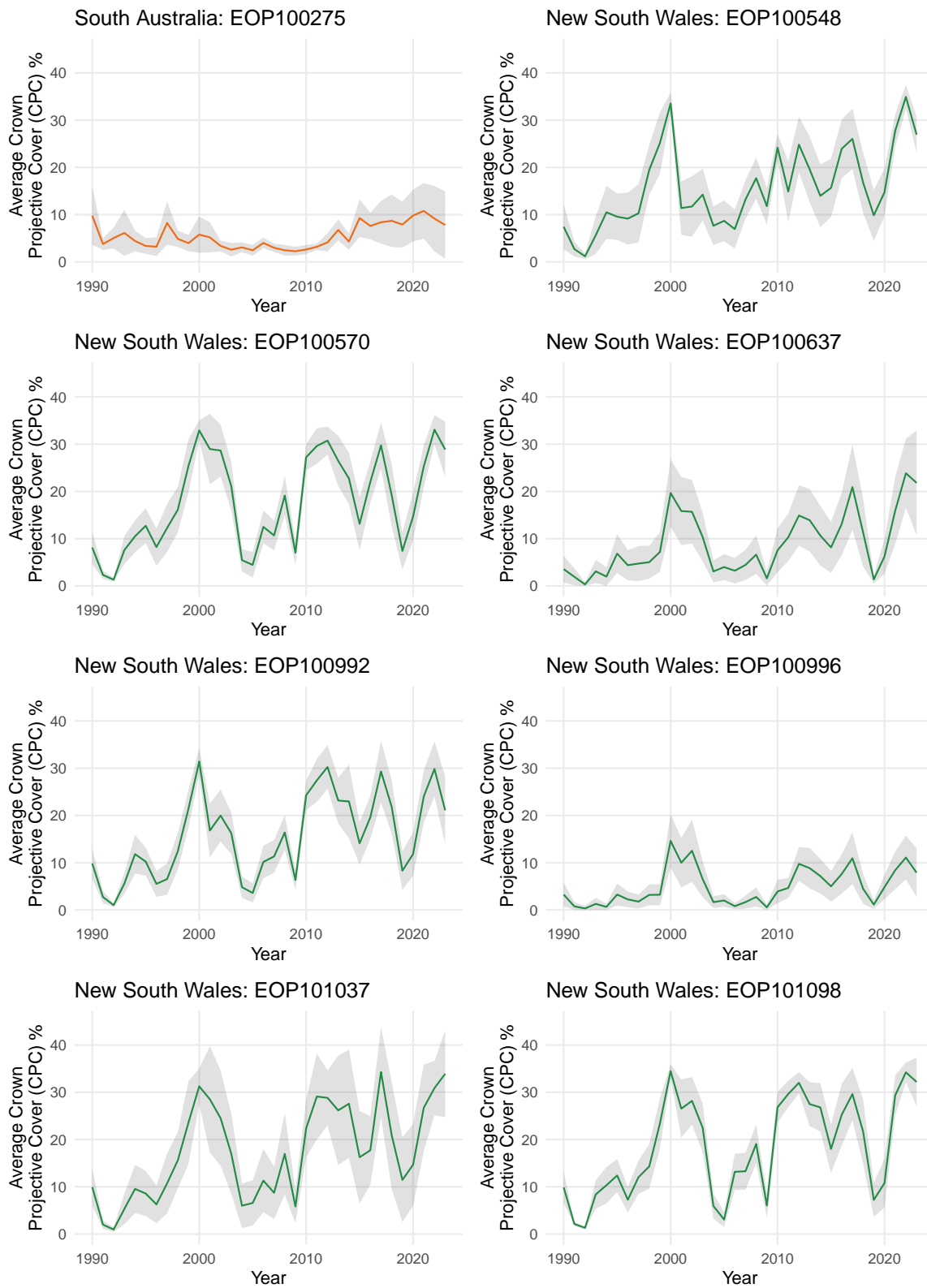
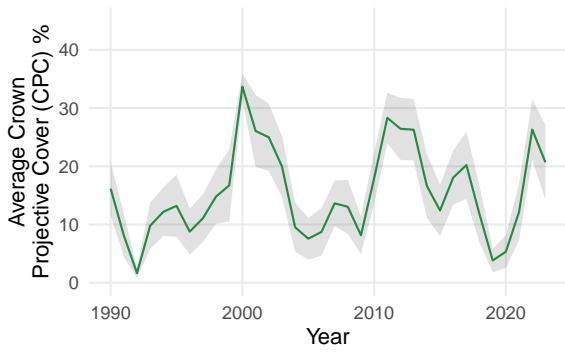


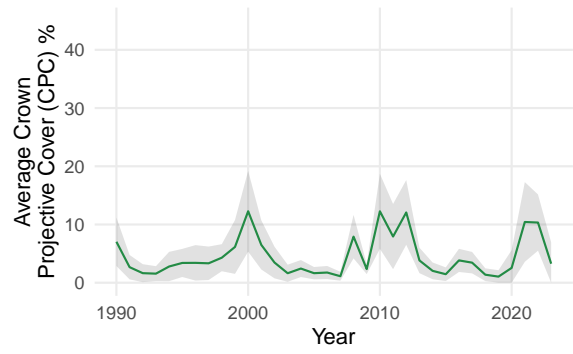
Figure S2. Project Crown Projective Cover (CPC) over time



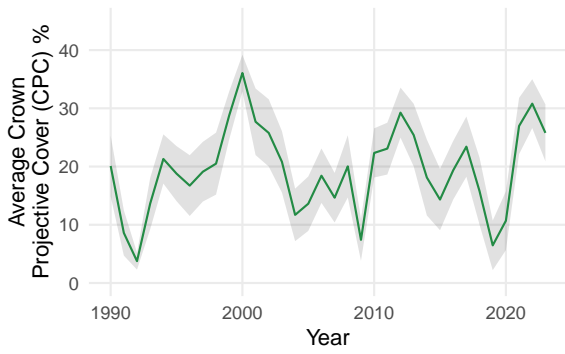
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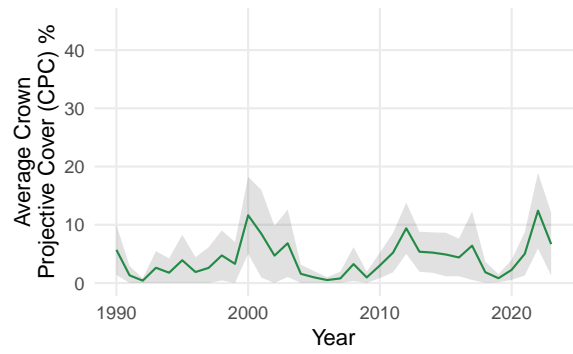
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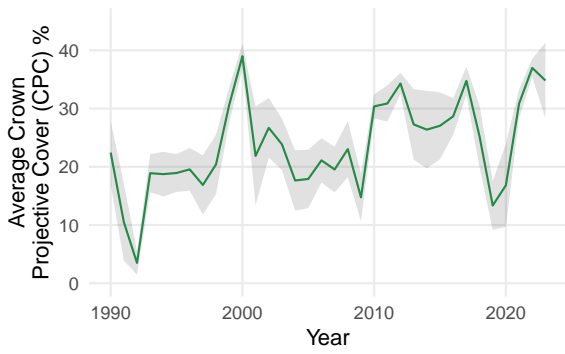
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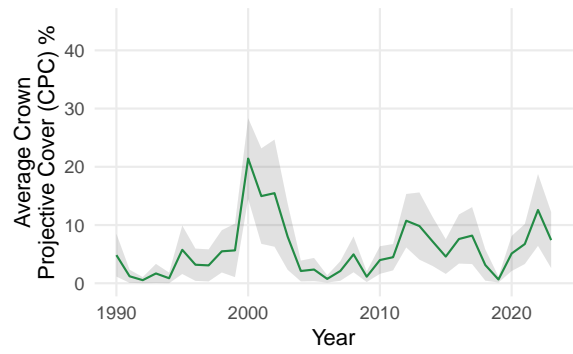
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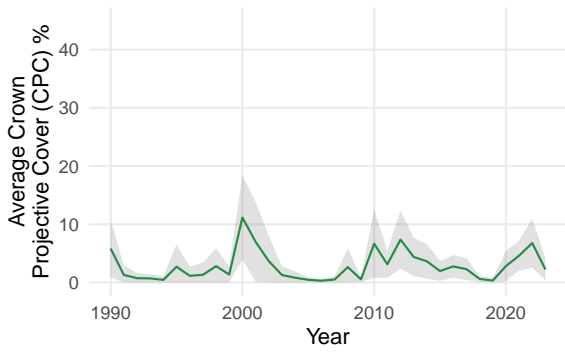
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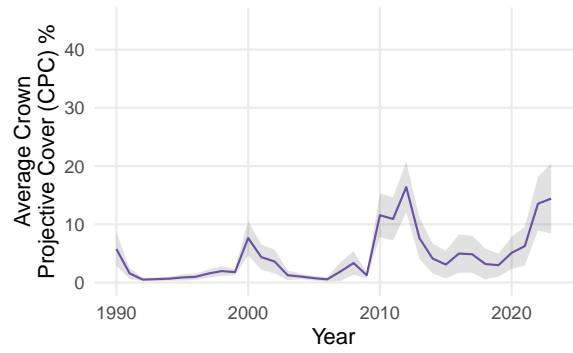
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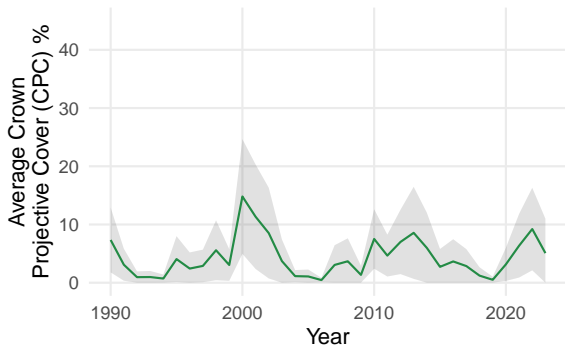
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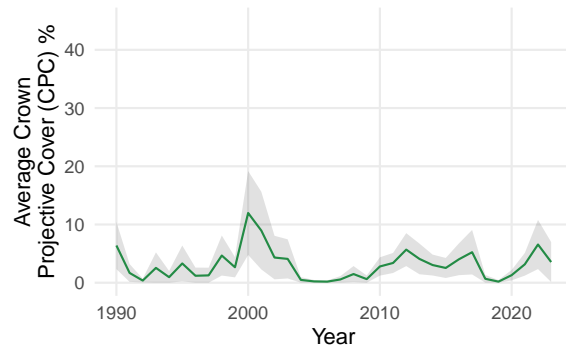
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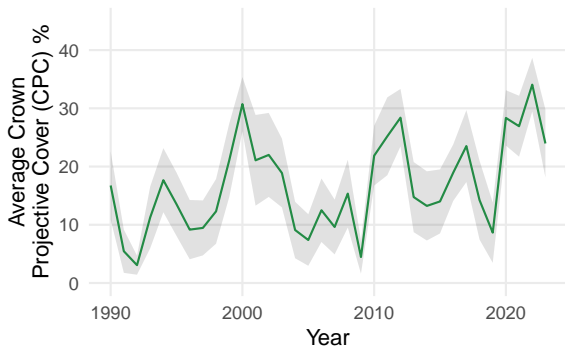
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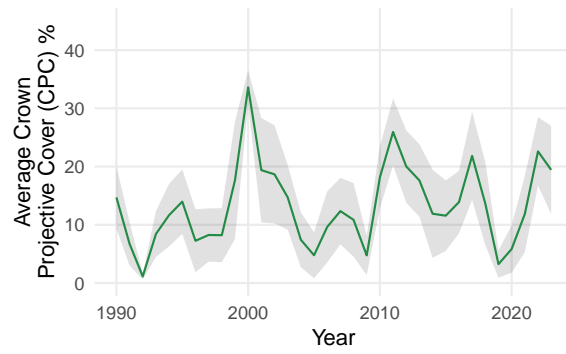
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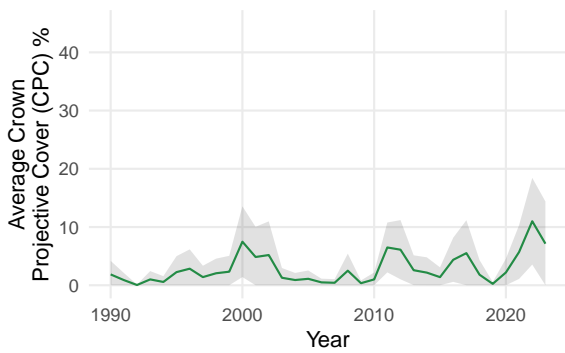
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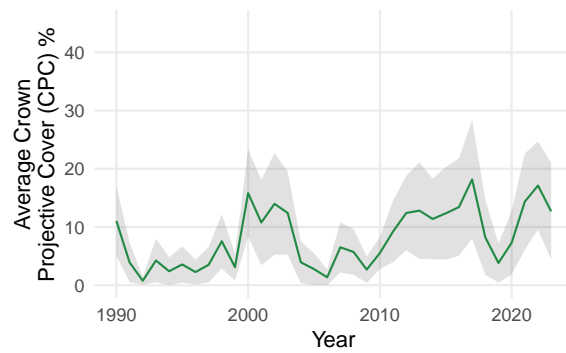
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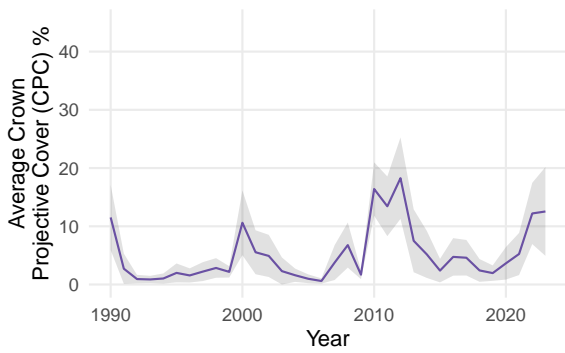
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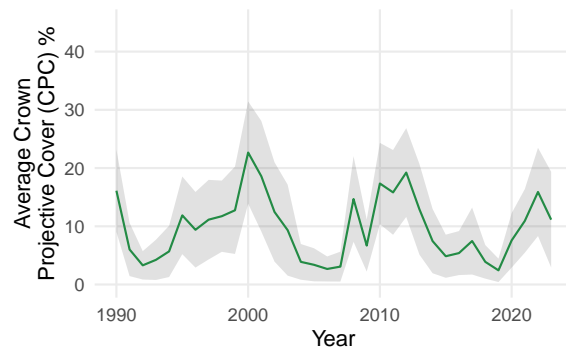
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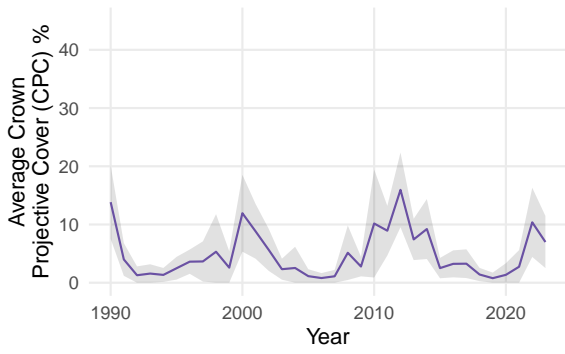
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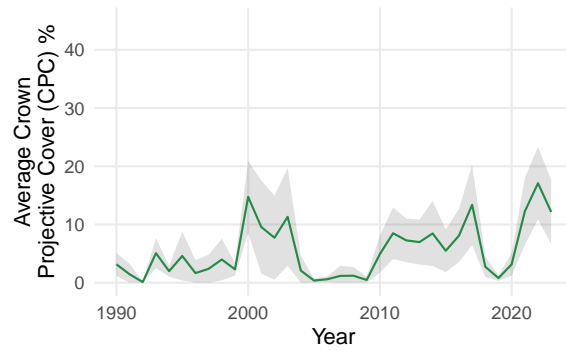
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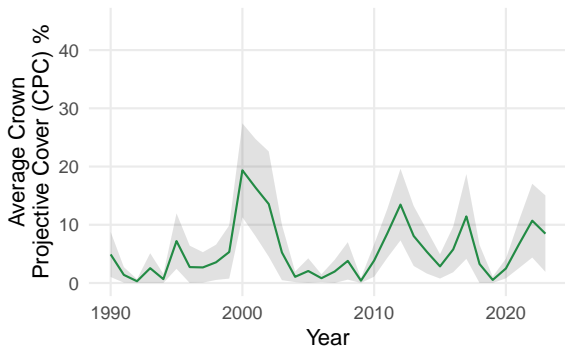
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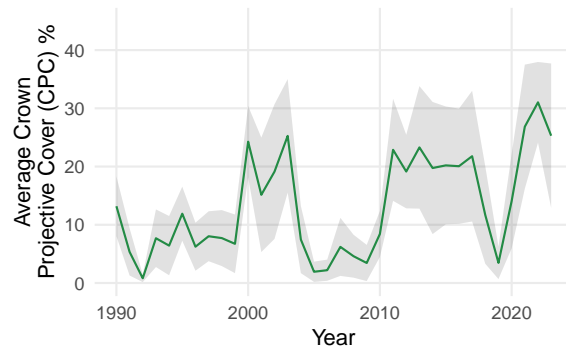
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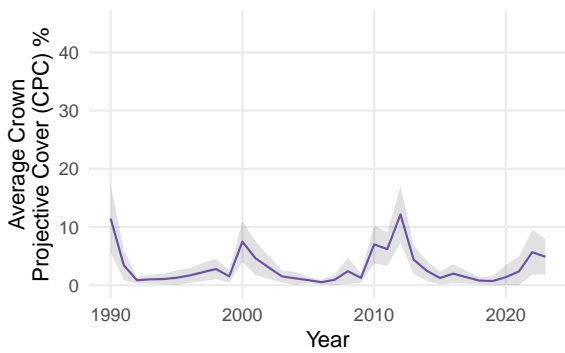
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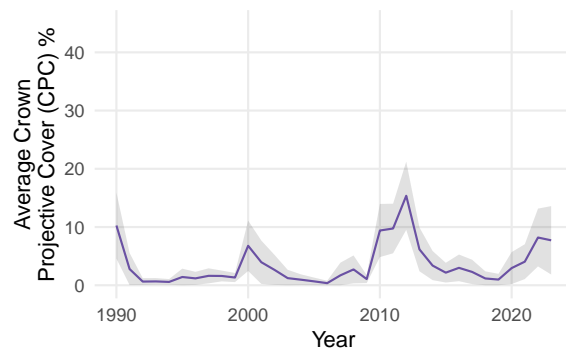
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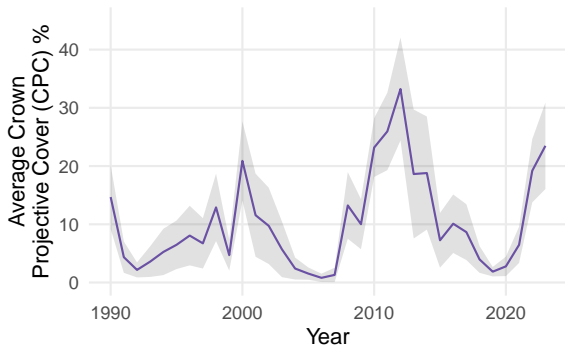
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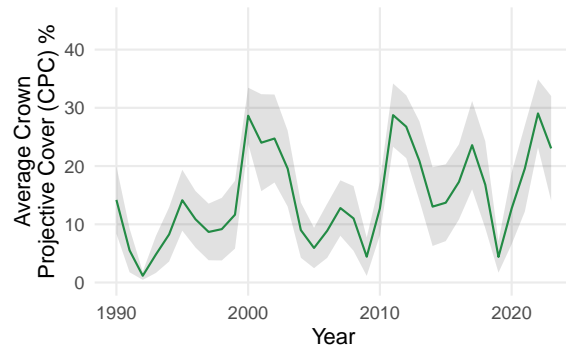
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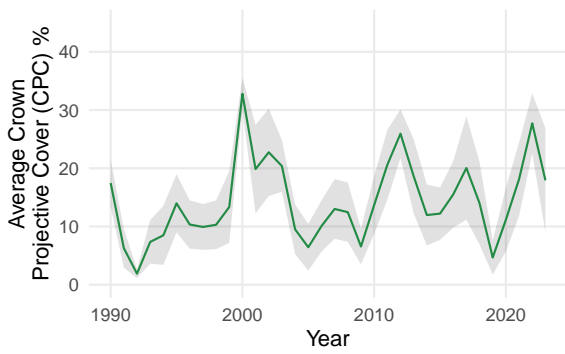
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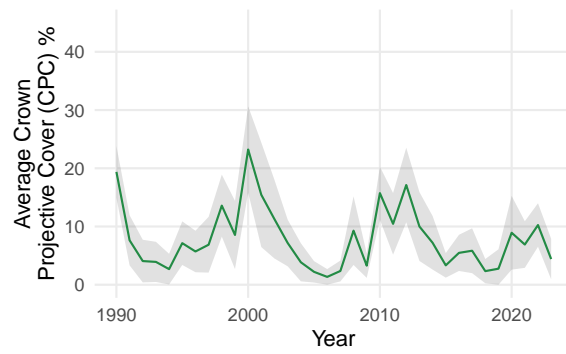
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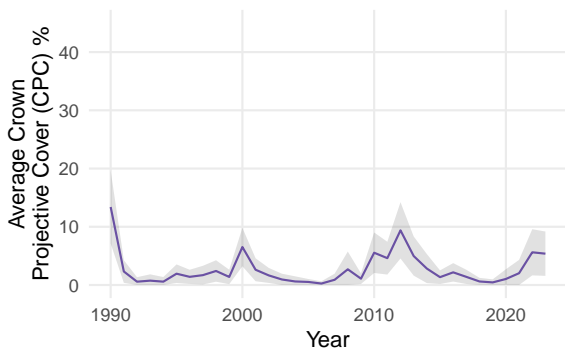
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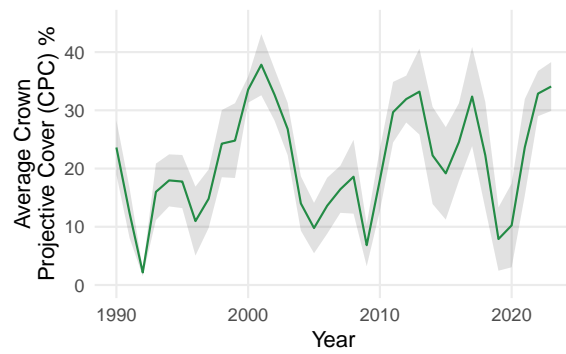
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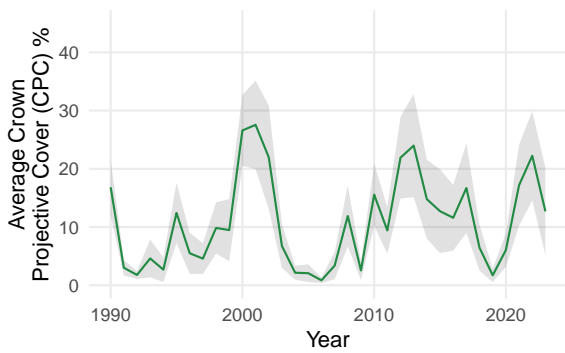
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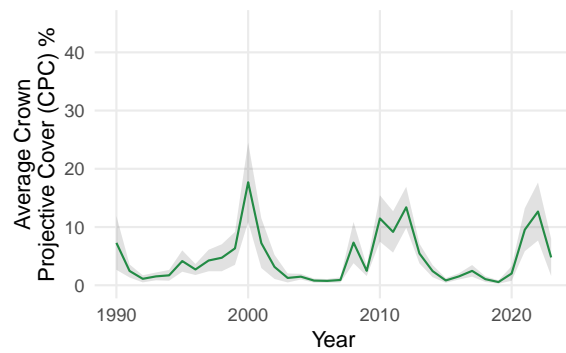
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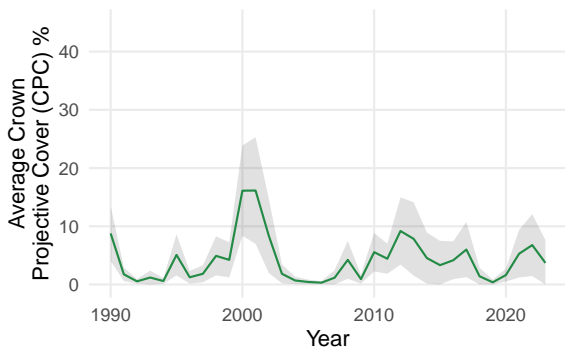
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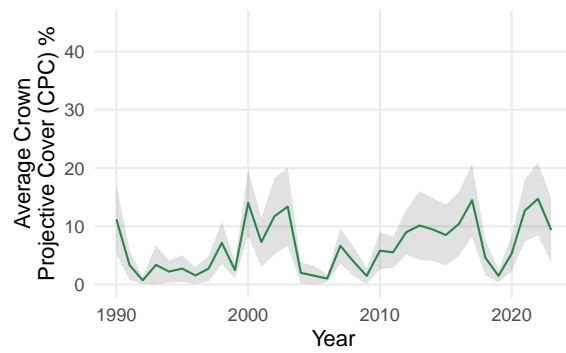
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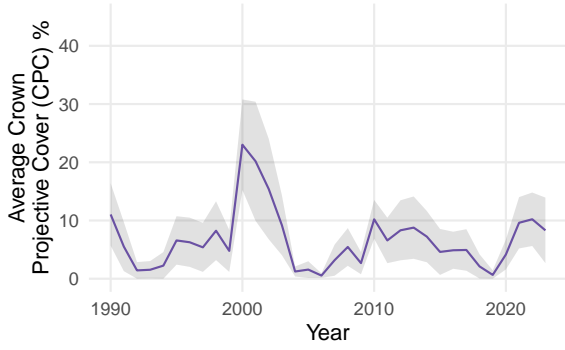
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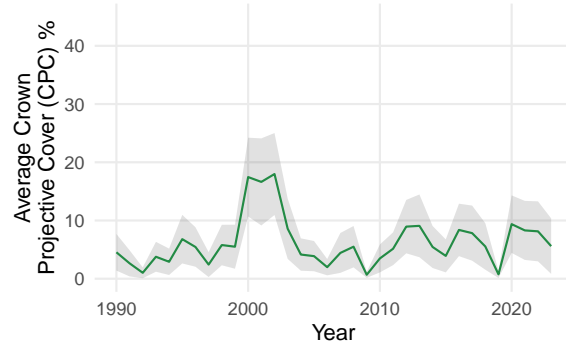
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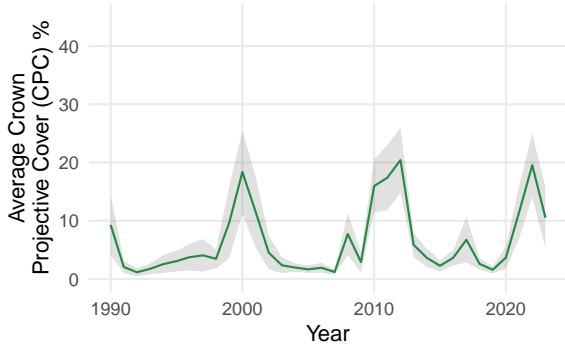
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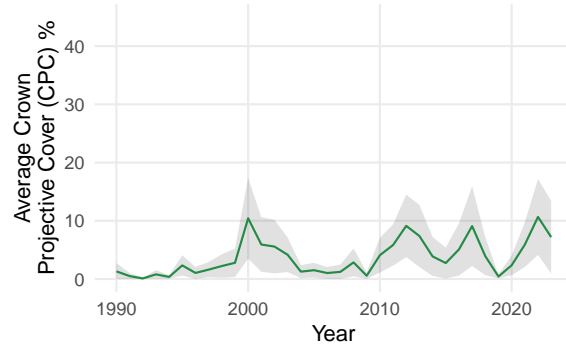
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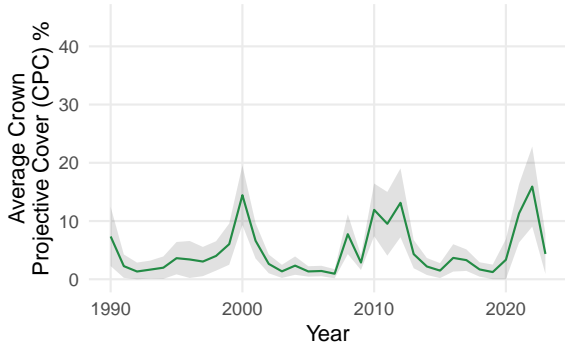
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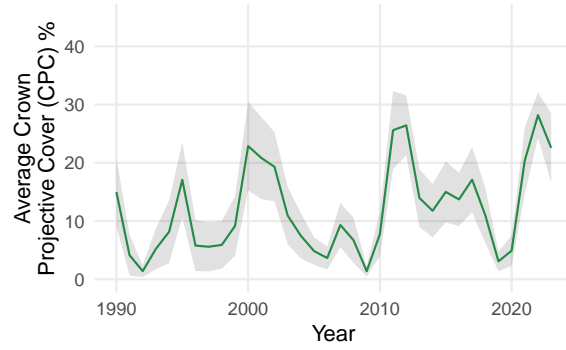
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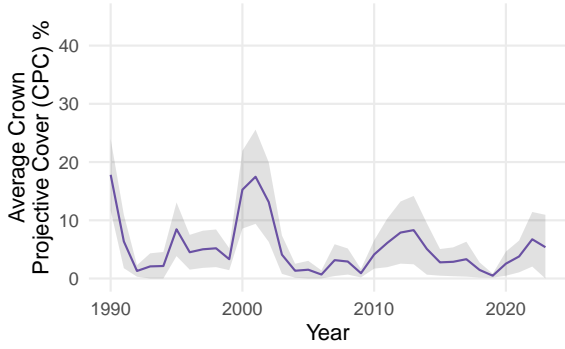
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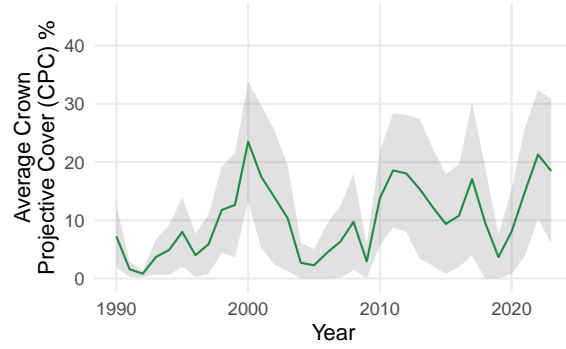
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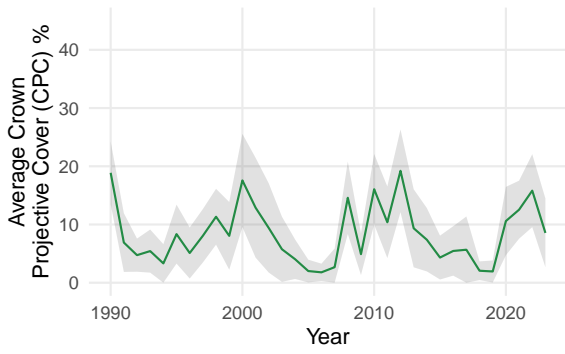


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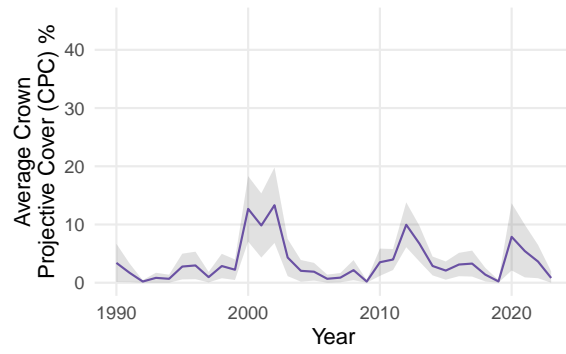




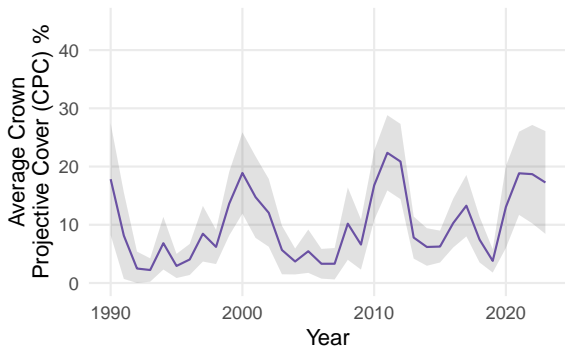
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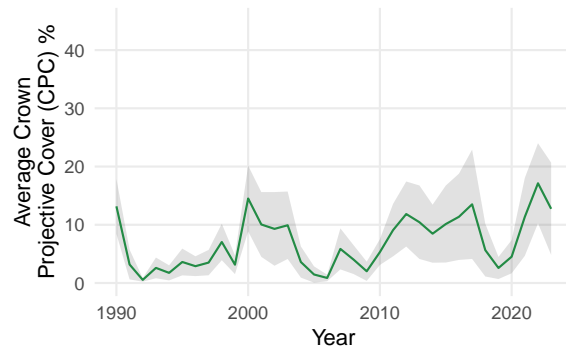
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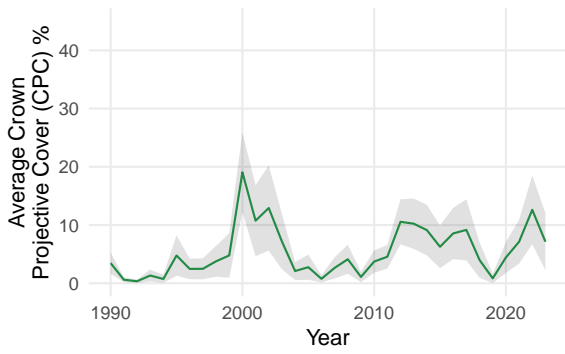
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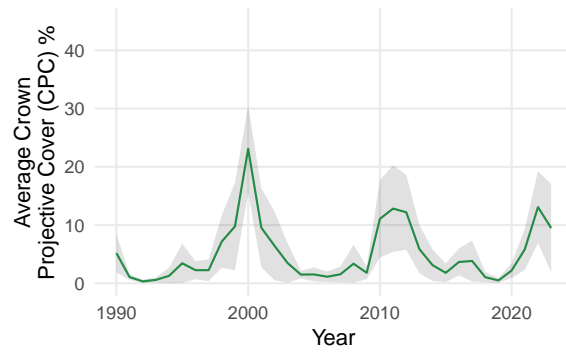
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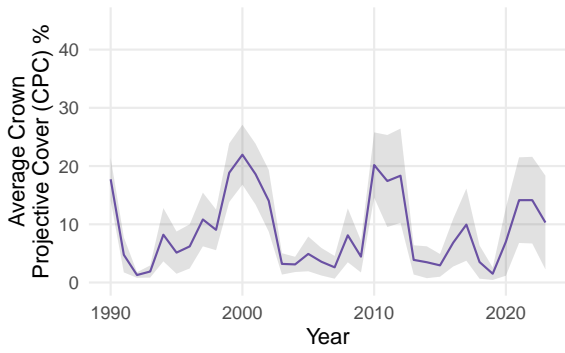
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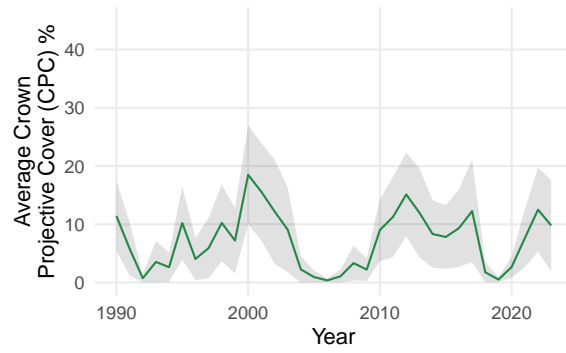
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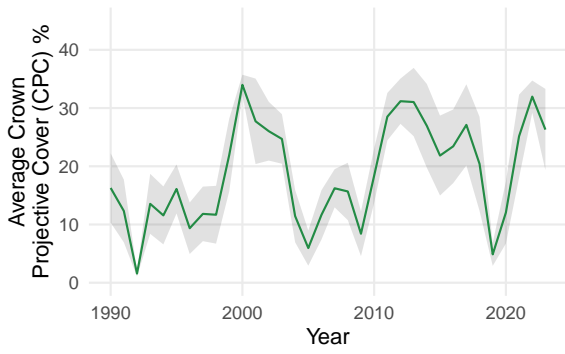
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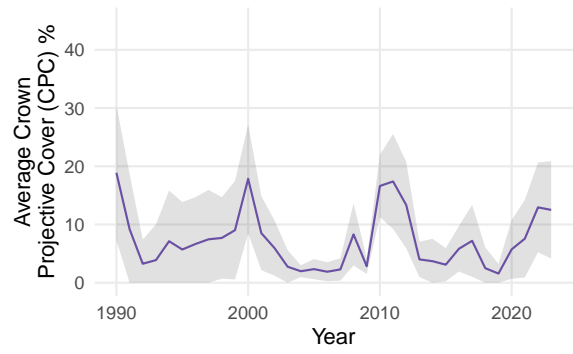
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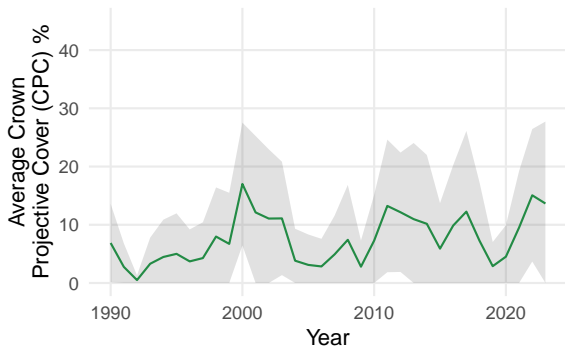
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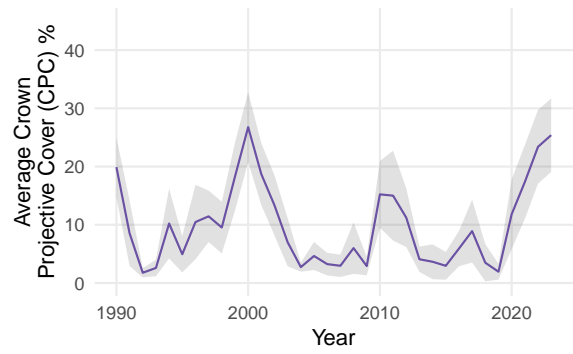
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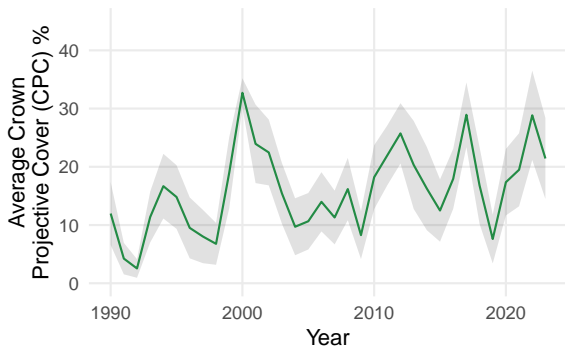
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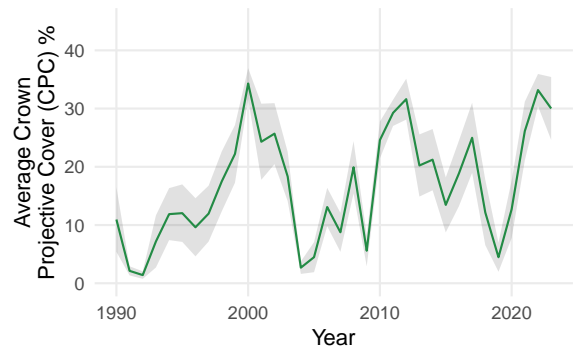
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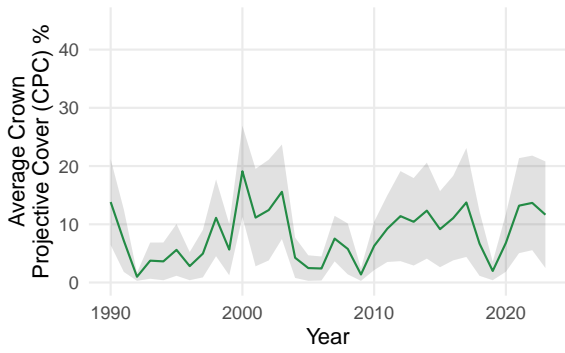
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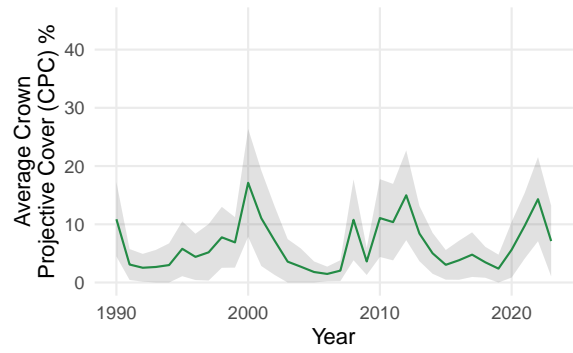
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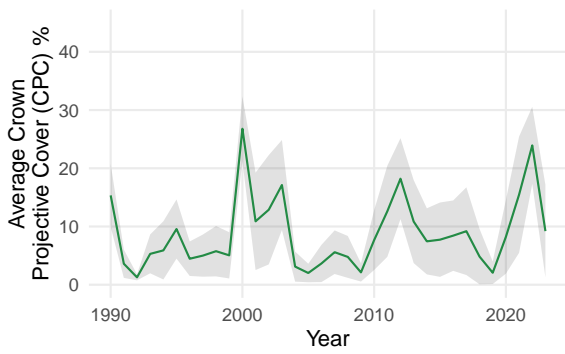
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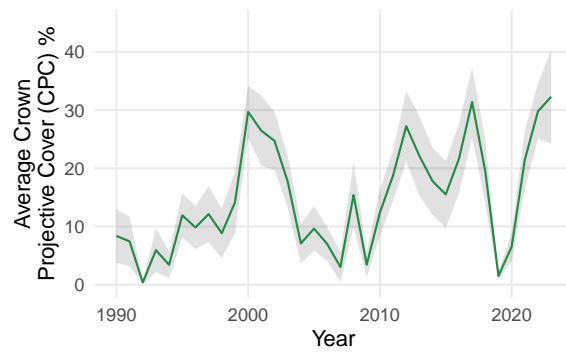
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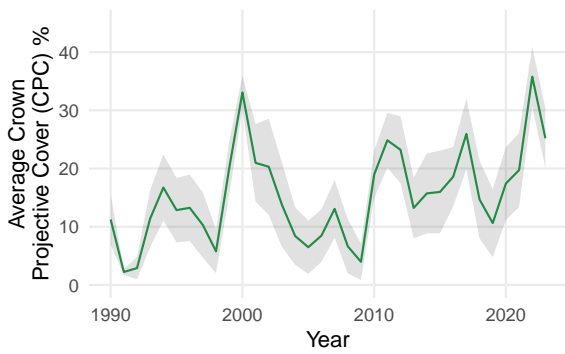
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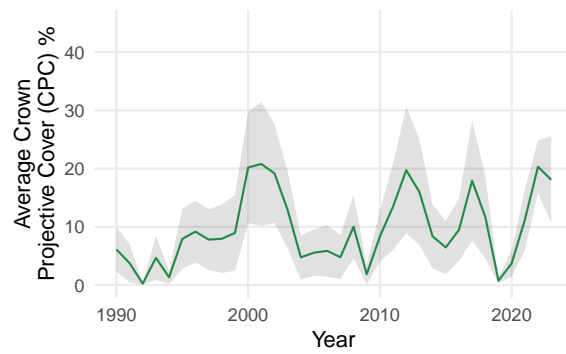
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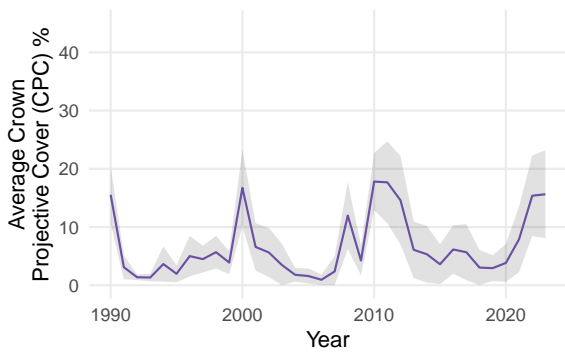
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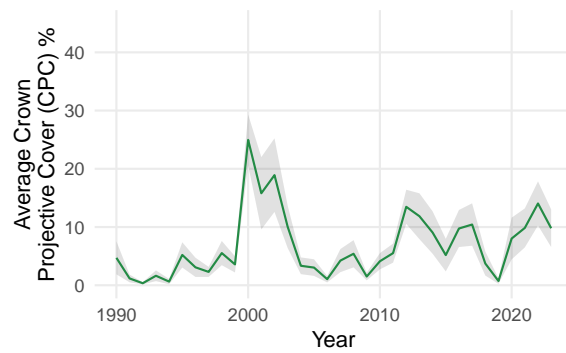
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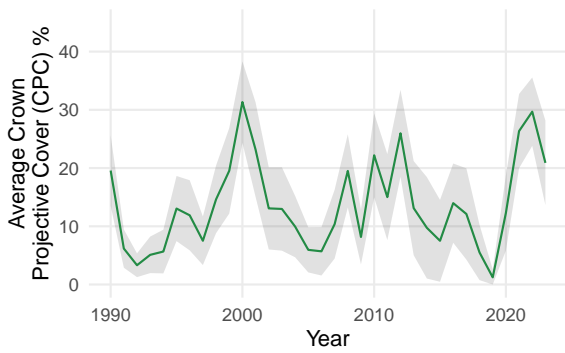
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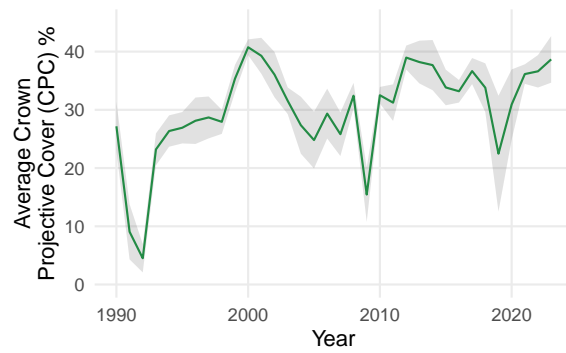
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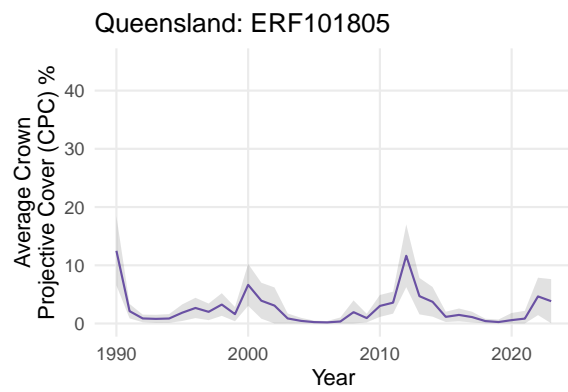
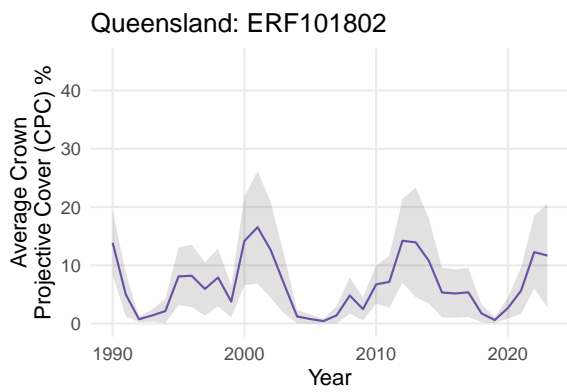
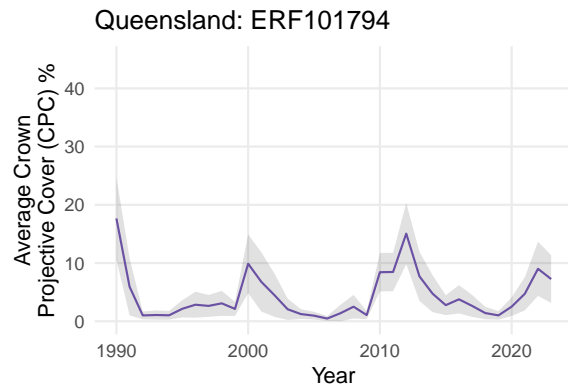
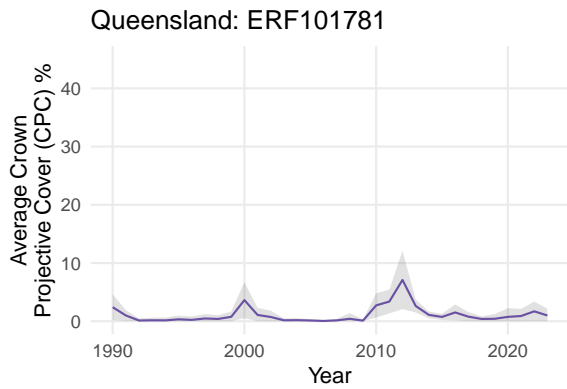
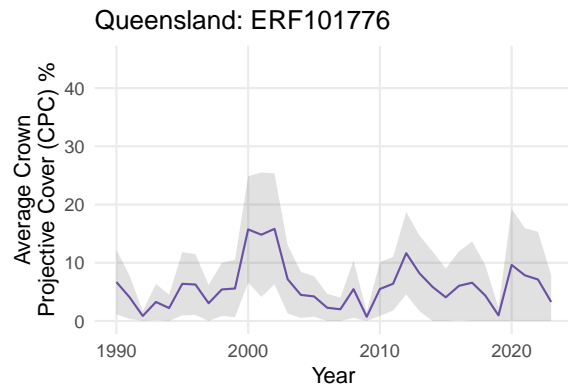
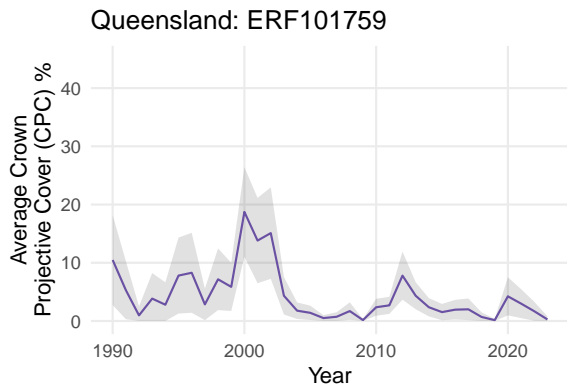
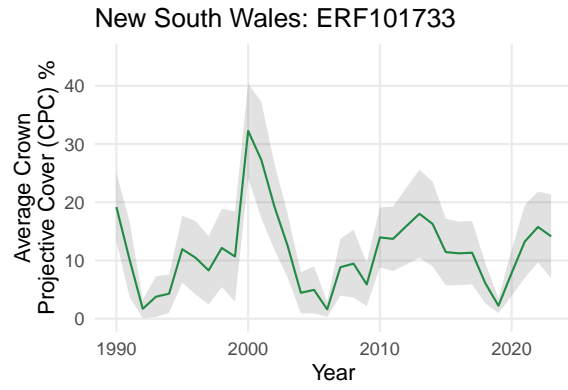
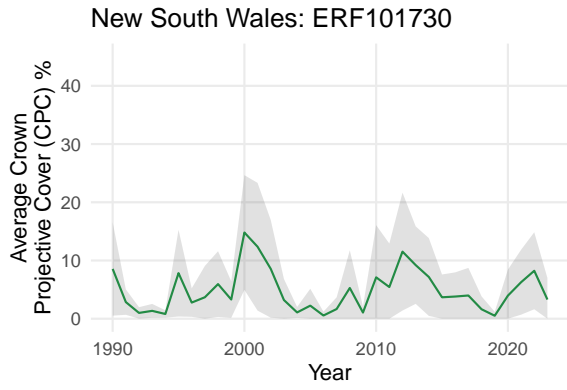


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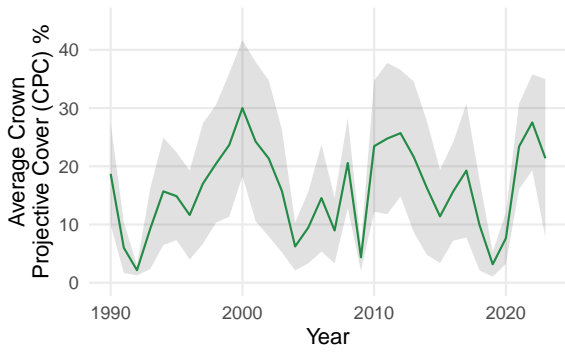


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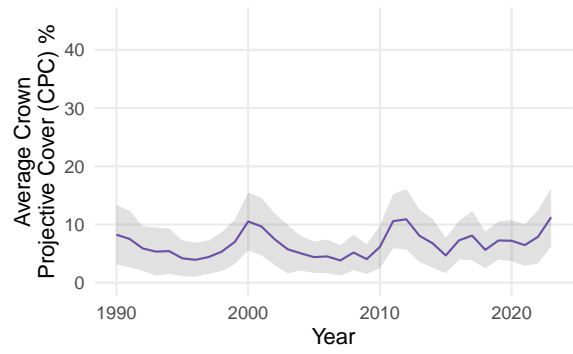




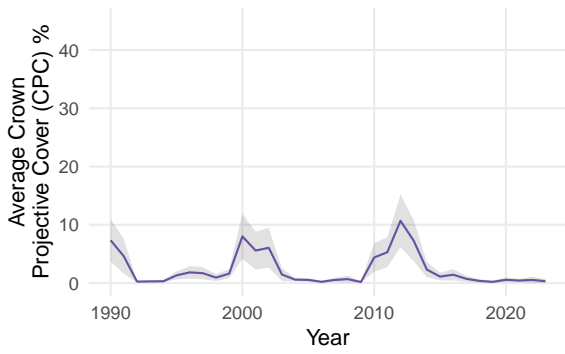
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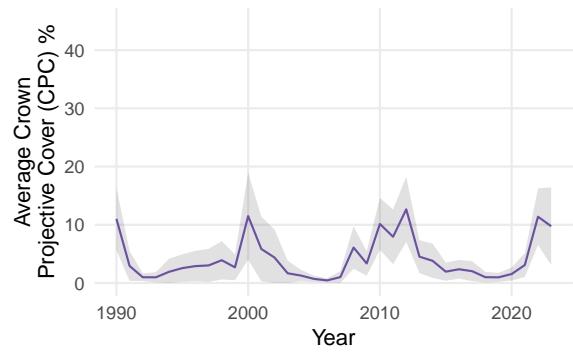
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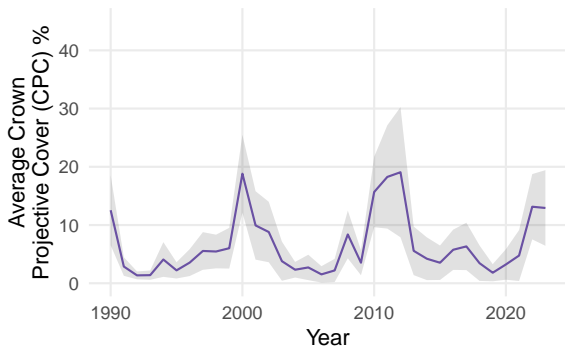
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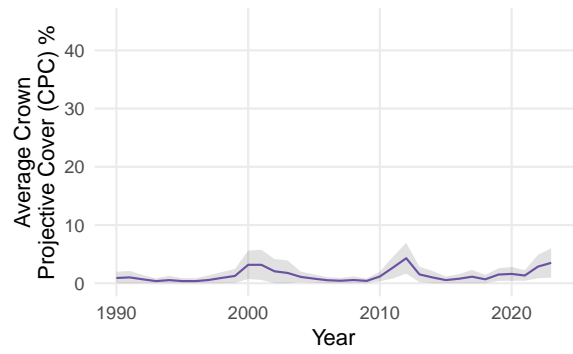
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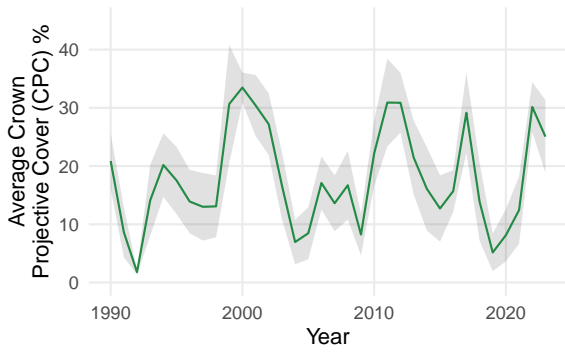
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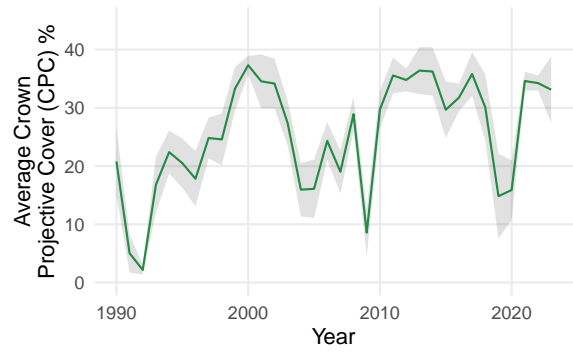
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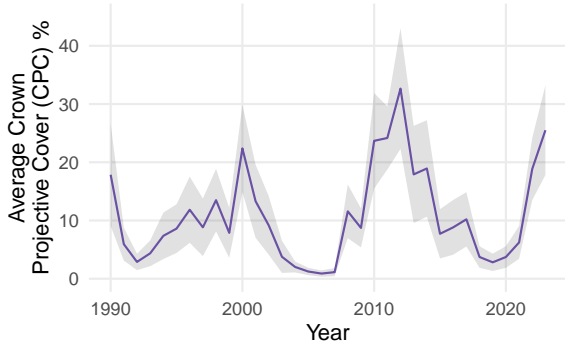
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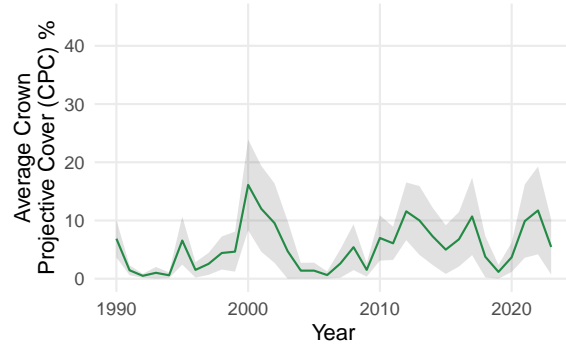
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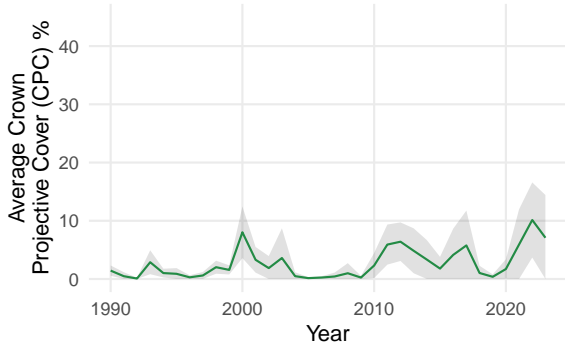
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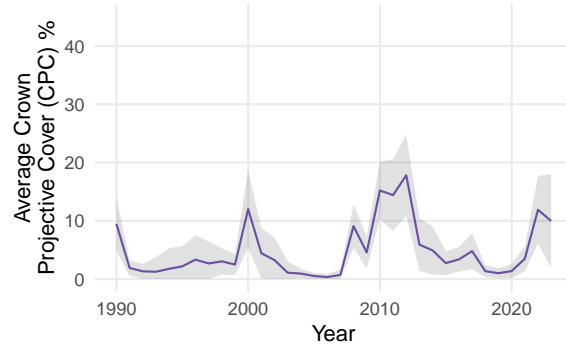
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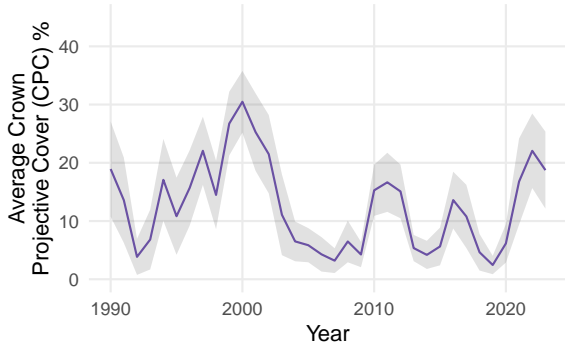
New South Wales: ERF103005



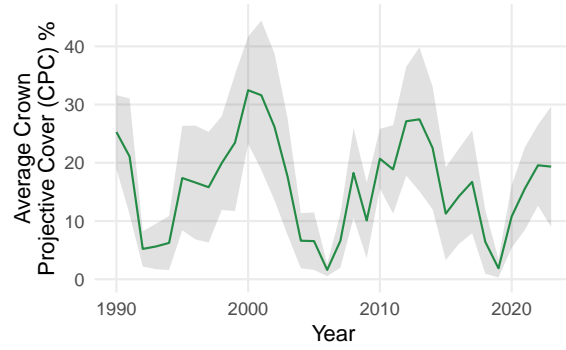
Queensland: ERF103026



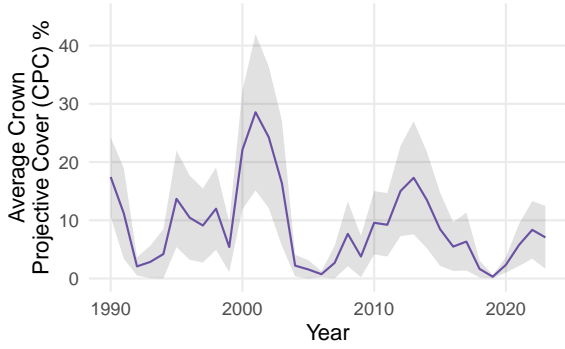
Queensland: ERF103066



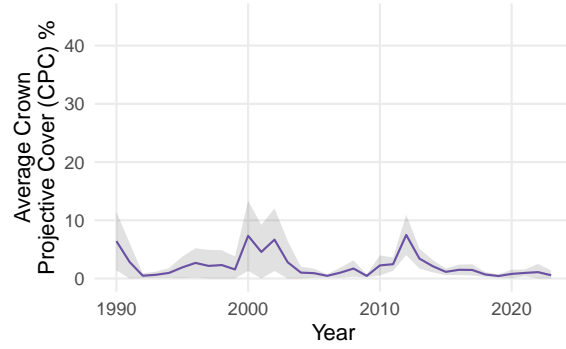
New South Wales: ERF103081



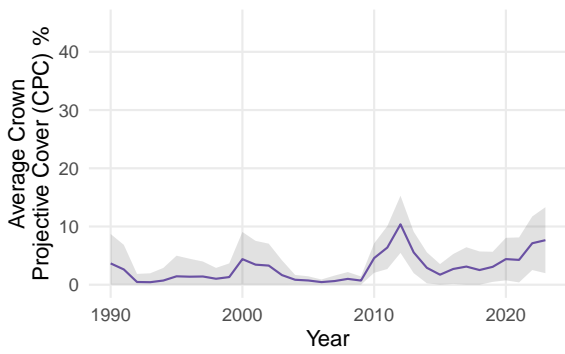
Queensland: ERF103091



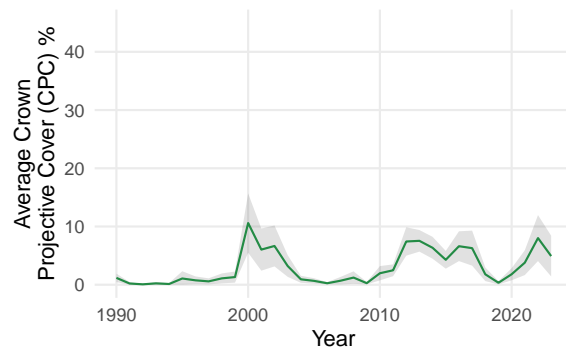
Queensland: ERF103100



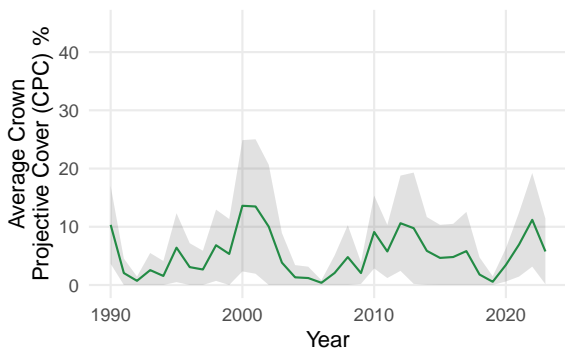
Queensland: ERF103108



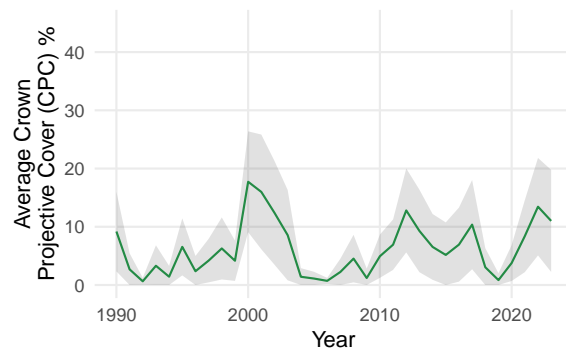
New South Wales: ERF103139



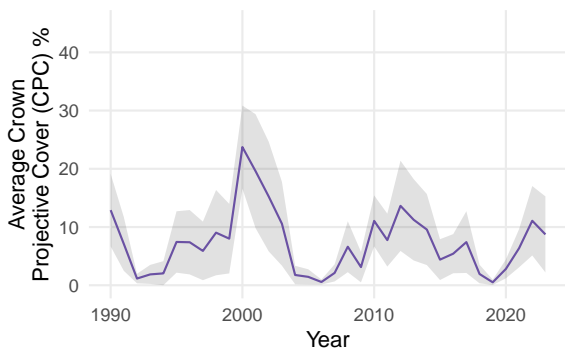
New South Wales: ERF103140



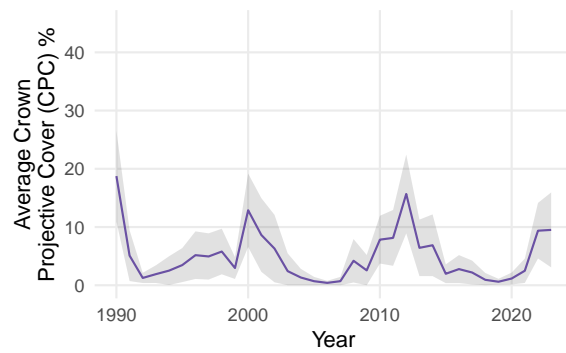
New South Wales: ERF103181



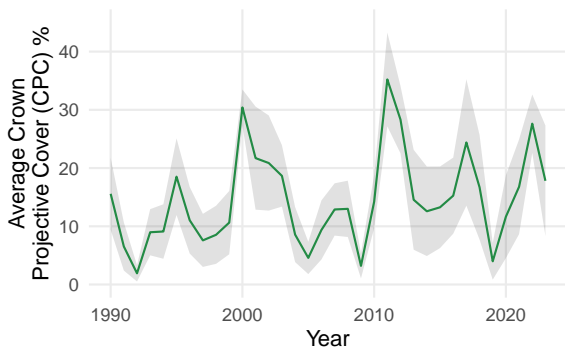
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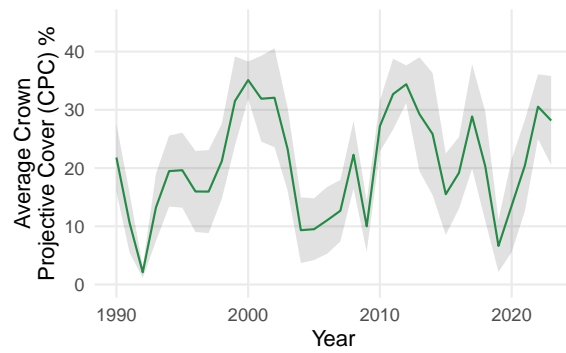
Queensland: ERF103197



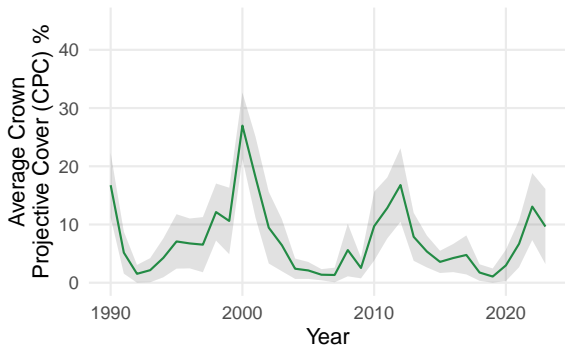
New South Wales: ERF103209



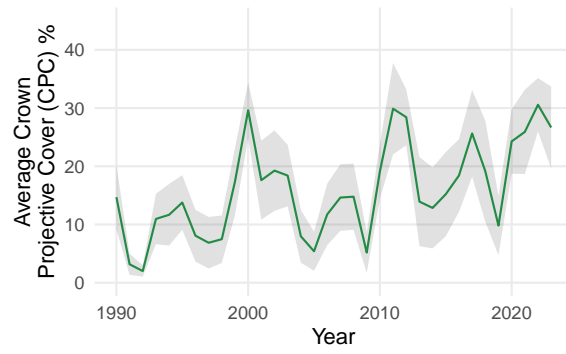
New South Wales: ERF103258



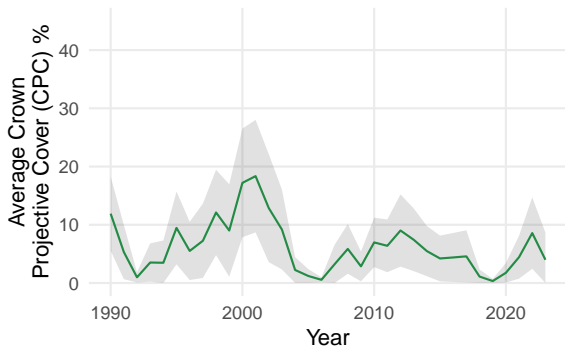
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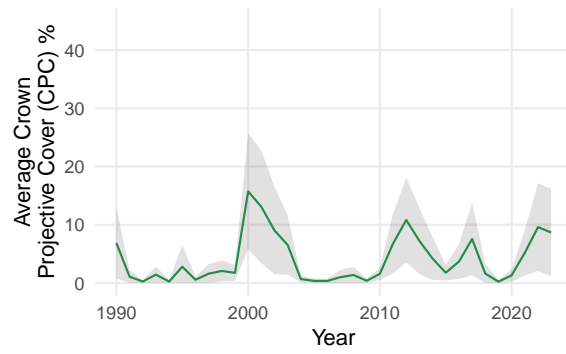
New South Wales: ERF103313



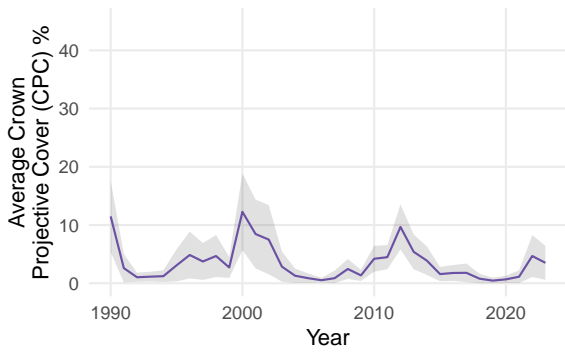
New South Wales: ERF103326



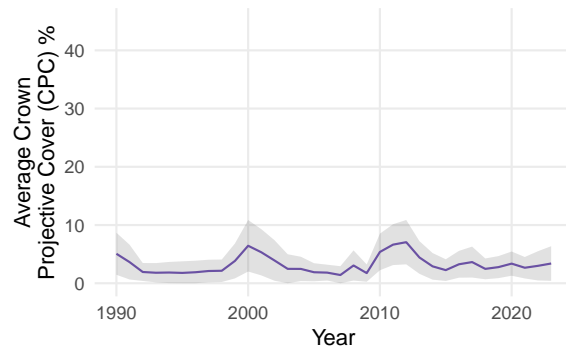
New South Wales: ERF103367



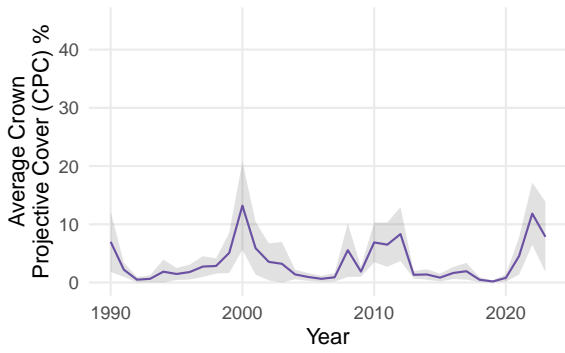
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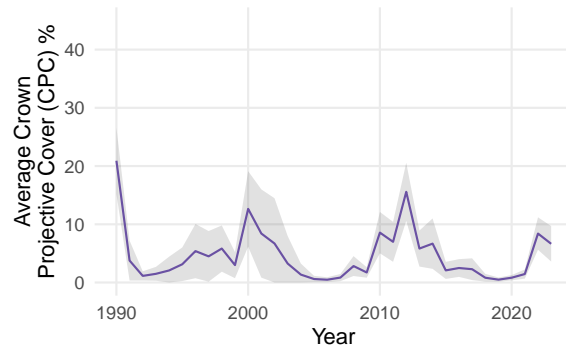
Queensland: ERF104962



Queensland: ERF105022

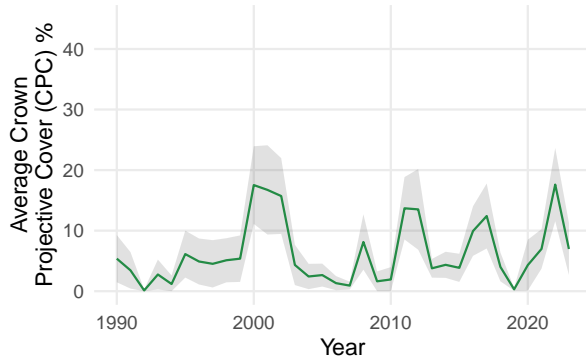


Queensland: ERF105094

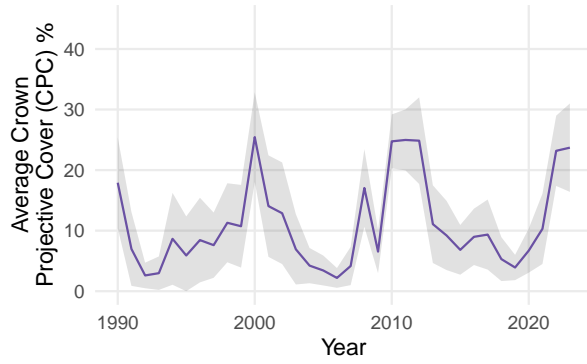




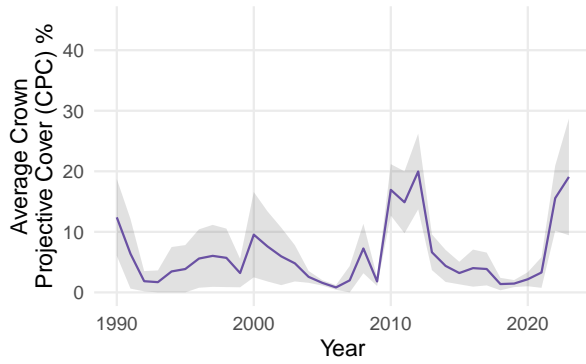
New South Wales: ERF105116



Queensland: ERF105136



Queensland: ERF105137



Queensland: ERF105188

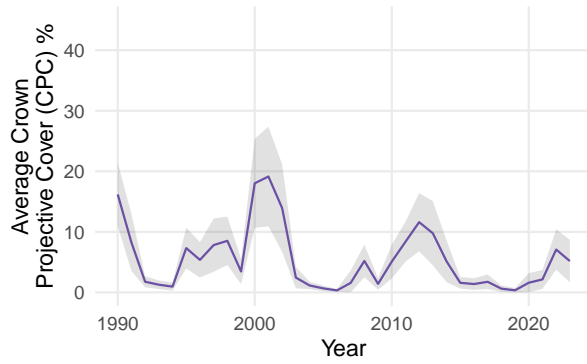


Figure S3. Model predictions for CPC for six projects within the study. Error bands standard errors. Project ERF101647, for example, shows an increase in CPC for project cells compared to comparison cells over time.

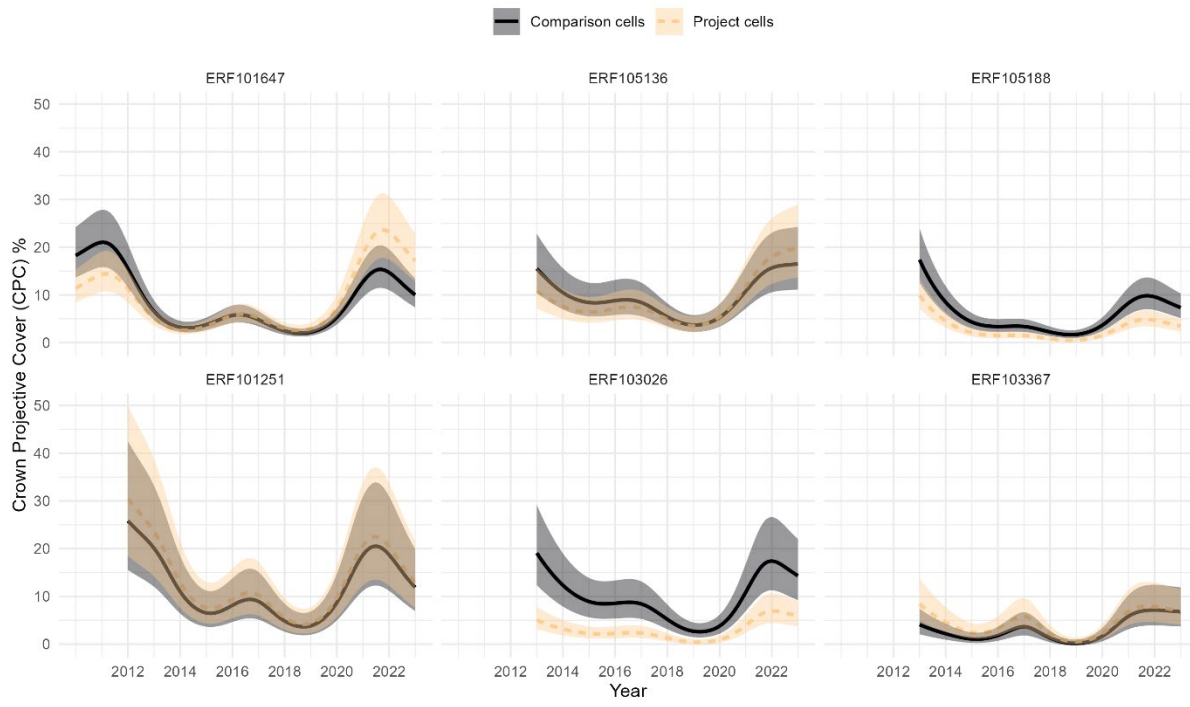


Figure S4. Change between project cells and comparison cells (project level effect size) and the observed change in canopy cover between project commencement and 2023 for n=49 projects with positive linear differences

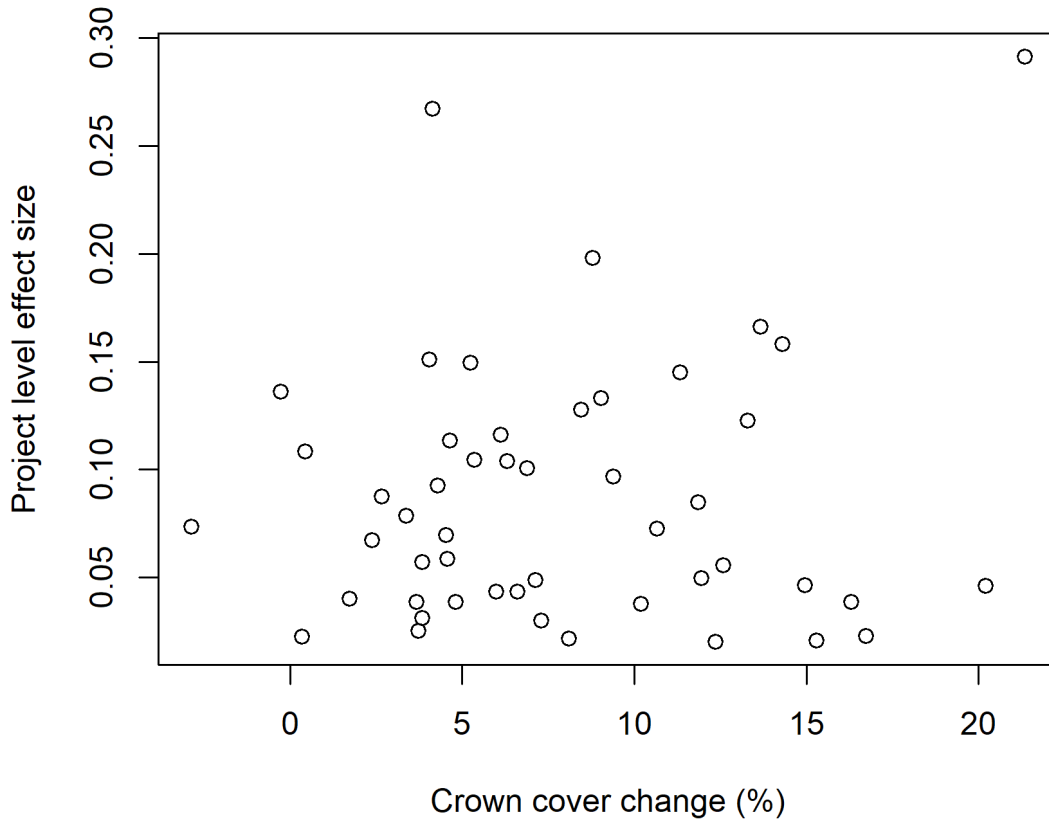


Figure S5. Credited abatement and the observed change in canopy cover between project commencement and 2023 for n=49 projects with positive linear differences

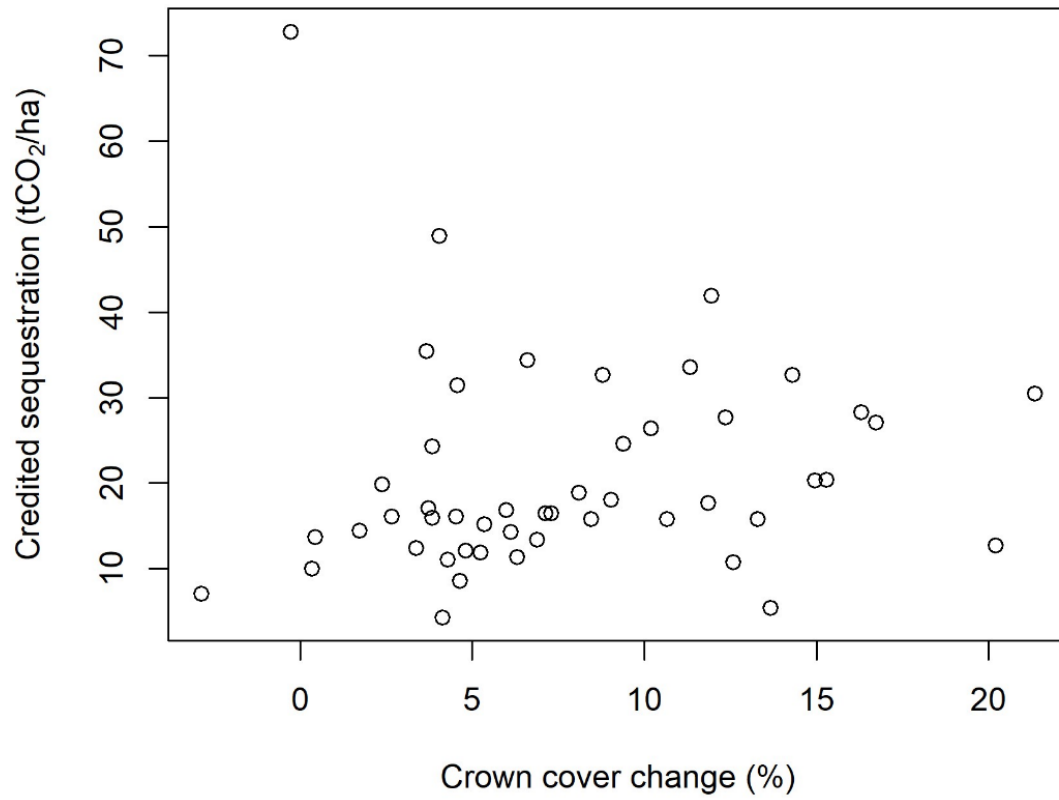
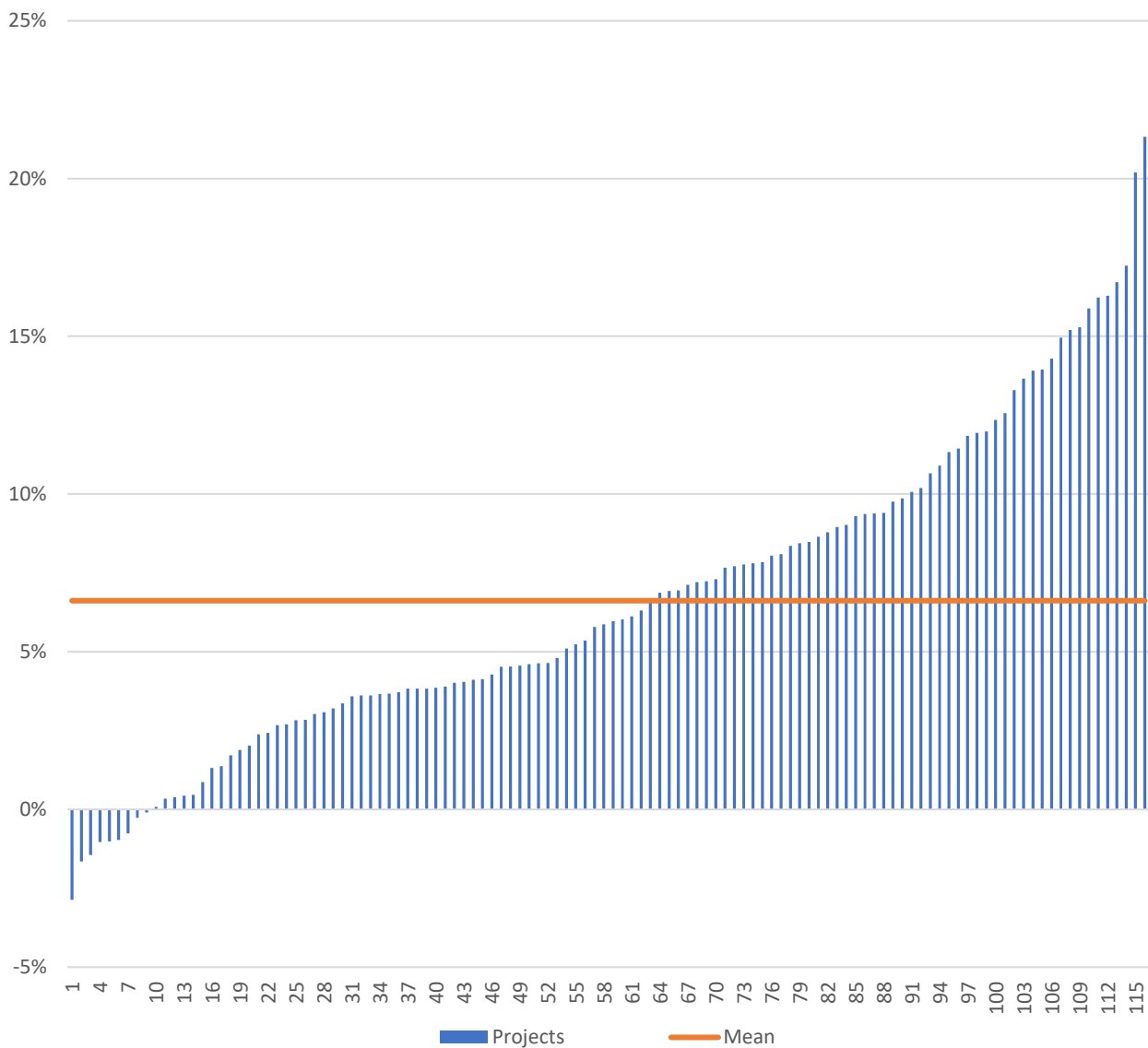


Figure S6. Average change in canopy cover from project commencement to 2023 (n=116)



Macintosh A, Evans MC, Butler D, Larraondo P, Edirisinghe C, Hunter K, Evans MJ, Ansell D, Waschka M, Lindenmayer D (2024) Non-compliance and under-performance in Australian human-induced regeneration projects. *The Rangeland Journal* **46**, RJ24024. doi:10.1071/RJ24024.

## Supplementary Materials – Tables

Table S1. Number and proportion of cells that were compliant and non-compliant with T1, T2 and T3-a or T3-b, by jurisdiction

Jurisdiction		Projects	Cells	Compliant	Non-compliant
<b>Cleared land rule compliance test (T1)</b>					
<b>New South Wales</b>	no.	74	19,765	221	19,544
	%			1%	99%
<b>Queensland</b>	no.	41	15,525	1,455	14,070
	%			9%	91%
<b>South Australia</b>	no.	1	72	16	56
	%			22%	78%
<b>Total</b>	no.	116	35,362	1,692	33,670
	%			5%	95%
<b>Baseline forest test (T2)</b>					
<b>New South Wales</b>	no.	74	19,765	12,298	7,467
	%			62%	38%
<b>Queensland</b>	no.	41	15,525	12,681	2,844
	%			82%	18%
<b>South Australia</b>	no.	1	72	72	0
	%			100%	0%
<b>Total</b>	no.	116	35,362	25,051	10,311
	%			71%	29%
<b>First regeneration gateway check (T3-a or T3-b)</b>					
<b>New South Wales</b>	no.	74	19,765	12,219	7,546
	%			62%	38%
<b>Queensland</b>	no.	41	15,525	7,303	8,222
	%			47%	53%
<b>South Australia</b>	no.	1	72	22	50
	%			31%	69%
<b>Total</b>	no.	116	35,362	19,544	15,818
	%			55%	45%

Table S2. Number and proportion of cells that were compliant and non-compliant with T1, T2 and T3-a or T3-b, by year of project registration

Year of registration		Projects	Cells	Compliant	Non-compliant
<b>Cleared land rule compliance test (T1)</b>					
<b>2013</b>	no.	1	72	16	56
	%			22%	78%
<b>2014</b>	no.	3	1,127	1	1,126
	%			0%	100%
<b>2015</b>	no.	85	23,626	1,097	22,529
	%			5%	95%
<b>2016</b>	no.	27	10,537	578	9,959
	%			5%	95%
<b>Total</b>	no.	116	35,362	1692	33,670
	%			5%	95%
<b>Baseline forest test (T2)</b>					
<b>2013</b>	no.	1	72	72	0
	%			100%	0%
<b>2014</b>	no.	3	1,127	720	407
	%			64%	36%
<b>2015</b>	no.	85	23,626	16,125	7,501
	%			68%	32%
<b>2016</b>	no.	27	10,537	8,134	2,403
	%			77%	23%
<b>Total</b>	no.	116	35,362	25,051	10,311
	%			71%	29%
<b>First regeneration gateway check (T3-a or T3-b)</b>					
<b>2013</b>	no.	1	72	22	50
	%			31%	69%
<b>2014</b>	no.	3	1,127	997	130
	%			88%	12%
<b>2015</b>	no.	85	23,626	13,311	10,315
	%			56%	44%
<b>2016</b>	no.	27	10,537	5,214	5,323
	%			49%	51%
<b>Total</b>	no.	116	35,362	19,544	15,818
	%			55%	45%

Table S3 Number of cells that were compliant and non-compliant with the first and second limb of the first regeneration gateway check (T3-a & T3-b), by jurisdiction

<b>Jurisdiction</b>		<b>Projects</b>	<b>Cells</b>	<b>Compliant</b>	<b>Non-compliant</b>
<b>1<sup>st</sup> limb of first regeneration gateway check (T3-a)</b>					
<b>New South Wales</b>	no.	74	19,765	12,053	7,712
	%			61%	39%
<b>Queensland</b>	no.	41	15,525	6,913	8,612
	%			45%	55%
<b>South Australia</b>	no.	1	72	21	51
	%			29%	71%
<b>Total</b>	no.	116	35,362	18,987	16,375
	%			54%	46%
<b>2<sup>nd</sup> limb of first regeneration gateway check (T3-b)</b>					
<b>New South Wales</b>	no.	74	19,765	9,658	10,107
	%			49%	51%
<b>Queensland</b>	no.	41	15,525	6,378	9,147
	%			41%	59%
<b>South Australia</b>	no.	1	72	17	55
	%			24%	76%
<b>Total</b>	no.	116	35,362	16,053	19,309
	%			45%	55%



Table S4 Number of cells that were compliant and non-compliant with the first and second limb of the first regeneration gateway check (T3-a & T3-b), by year of project registration

<b>Year of registration</b>		<b>Projects</b>	<b>Cells</b>	<b>Compliant</b>	<b>Non-compliant</b>
<b>1<sup>st</sup> limb of first regeneration gateway check (T3-a)</b>					
<b>2013</b>	no.	1	72	21	51
	%			29%	71%
<b>2014</b>	no.	3	1,127	993	134
	%			88%	12%
<b>2015</b>	no.	85	23,626	12,845	10,781
	%			54%	46%
<b>2016</b>	no.	27	10,537	5,128	5,409
	%			49%	51%
<b>Total</b>	no.	116	35,362	18,987	16,375
	%			54%	46%
<b>2<sup>nd</sup> limb of first regeneration gateway check (T3-b)</b>					
<b>2013</b>	no.	1	72	17	55
	%			24%	76%
<b>2014</b>	no.	3	1,127	885	242
	%			79%	21%
<b>2015</b>	no.	85	23,626	11,556	12,070
	%			49%	51%
<b>2016</b>	no.	27	10,537	3,595	6,942
	%			34%	66%
<b>Total</b>	no.	116	35,362	16,053	19,309
	%			45%	55%

Table S5: Model estimates for the parametric component of the project-level GAMMs. SE = standard error. Project cells is the effect of project cells relative to comparison cells.

Project	Variable	Estimate	SE	P
EOP100275	Intercept	1.924	0.100	< 0.001
	Year	-1.018	0.135	< 0.001
	Project cells	-0.031	0.136	0.84
	Year:Project cells	0.151	0.017	< 0.001
EOP100570	Intercept	3.006	0.061	< 0.001
	Year	-0.014	0.083	0.88
	Project cells	0.094	0.073	0.227
	Year:Project cells	0.044	0.011	< 0.001
EOP100992	Intercept	3.360	0.091	< 0.001
	Year	-0.355	0.102	< 0.001
	Project cells	-0.347	0.115	0.004
	Year:Project cells	-0.033	0.014	0.03
EOP100996	Intercept	1.732	0.075	< 0.001
	Year	-0.139	0.072	0.069
	Project cells	0.063	0.094	0.535
	Year:Project cells	0.070	0.010	< 0.001
EOP100548	Intercept	2.870	0.077	< 0.001
	Year	0.274	0.114	0.023
	Project cells	0.224	0.095	0.025
	Year:Project cells	0.085	0.014	< 0.001
EOP100637	Intercept	2.178	0.054	< 0.001
	Year	0.417	0.045	< 0.001
	Project cells	0.139	0.061	0.029
	Year:Project cells	0.123	0.007	< 0.001
EOP101037	Intercept	3.222	0.078	< 0.001
	Year	-0.236	0.128	0.084
	Project cells	-0.129	0.101	0.23
	Year:Project cells	0.019	0.017	0.283
EOP101114	Intercept	1.662	0.107	< 0.001
	Year	-3.955	0.111	< 0.001
	Project cells	-0.138	0.142	0.367
	Year:Project cells	-0.103	0.015	< 0.001
EOP101098	Intercept	3.266	0.072	< 0.001
	Year	-0.137	0.080	0.106
	Project cells	-0.262	0.083	0.002
	Year:Project cells	0.011	0.013	0.462
EOP101101	Intercept	2.973	0.054	< 0.001
	Year	-1.343	0.050	< 0.001
	Project cells	-0.154	0.063	0.019
	Year:Project cells	-0.059	0.008	< 0.001

Project	Variable	Estimate	SE	P
ERF101228	Intercept	3.003	0.083	< 0.001
	Year	-0.498	0.085	< 0.001
	Project cells	-0.395	0.094	< 0.001
	Year:Project cells	-0.068	0.012	< 0.001
EOP101115	Intercept	3.311	0.074	< 0.001
	Year	-0.473	0.071	< 0.001
	Project cells	-0.342	0.086	< 0.001
	Year:Project cells	0.000	0.011	0.996
EOP101140	Intercept	3.365	0.106	< 0.001
	Year	-1.152	0.117	< 0.001
	Project cells	-0.149	0.133	0.297
	Year:Project cells	0.019	0.016	0.29
EOP101143	Intercept	1.232	0.106	< 0.001
	Year	-2.852	0.118	< 0.001
	Project cells	-0.221	0.099	0.034
	Year:Project cells	0.023	0.016	0.195
EOP101165	Intercept	1.938	0.083	< 0.001
	Year	-1.794	0.063	< 0.001
	Project cells	-0.119	0.094	0.233
	Year:Project cells	0.073	0.011	< 0.001
EOP101242	Intercept	1.207	0.080	< 0.001
	Year	-1.585	0.073	< 0.001
	Project cells	0.106	0.097	0.312
	Year:Project cells	0.067	0.011	< 0.001
EOP101262	Intercept	1.173	0.088	< 0.001
	Year	-2.221	0.069	< 0.001
	Project cells	-0.124	0.093	0.212
	Year:Project cells	-0.060	0.010	< 0.001
EOP101263	Intercept	3.218	0.067	< 0.001
	Year	-2.040	0.071	< 0.001
	Project cells	-0.209	0.083	0.016
	Year:Project cells	0.145	0.010	< 0.001
EOP101133	Intercept	1.806	0.104	< 0.001
	Year	-1.938	0.092	< 0.001
	Project cells	-0.309	0.143	0.04
	Year:Project cells	0.039	0.013	0.004
EOP101142	Intercept	1.952	0.076	< 0.001
	Year	-1.678	0.068	< 0.001
	Project cells	-0.179	0.105	0.106
	Year:Project cells	0.057	0.010	< 0.001

Project	Variable	Estimate	SE	P
ERF101230	Intercept	1.728	0.113	< 0.001
	Year	-0.399	0.073	< 0.001
	Project cells	0.372	0.136	0.009
	Year:Project cells	0.030	0.011	0.008
ERF101249	Intercept	2.057	0.056	< 0.001
	Year	-1.997	0.045	< 0.001
	Project cells	-0.376	0.062	< 0.001
	Year:Project cells	-0.021	0.008	0.013
ERF101251	Intercept	2.143	0.066	< 0.001
	Year	-1.449	0.069	< 0.001
	Project cells	0.119	0.086	0.201
	Year:Project cells	-0.026	0.009	0.006
ERF101261	Intercept	1.546	0.092	< 0.001
	Year	-2.828	0.074	< 0.001
	Project cells	-0.364	0.087	< 0.001
	Year:Project cells	-0.063	0.011	< 0.001
ERF101269	Intercept	1.688	0.098	< 0.001
	Year	-1.299	0.100	< 0.001
	Project cells	0.081	0.091	0.406
	Year:Project cells	-0.042	0.016	0.012
ERF101278	Intercept	1.561	0.093	< 0.001
	Year	-1.744	0.064	< 0.001
	Project cells	-0.137	0.113	0.257
	Year:Project cells	-0.060	0.010	< 0.001
ERF101280	Intercept	2.958	0.051	< 0.001
	Year	-0.351	0.063	< 0.001
	Project cells	-0.274	0.062	< 0.001
	Year:Project cells	0.023	0.009	0.02
ERF101304	Intercept	0.875	0.072	< 0.001
	Year	-2.097	0.058	< 0.001
	Project cells	0.393	0.087	< 0.001
	Year:Project cells	-0.118	0.009	< 0.001
ERF101308	Intercept	1.727	0.098	< 0.001
	Year	-1.842	0.056	< 0.001
	Project cells	-0.262	0.112	0.026
	Year:Project cells	-0.091	0.010	< 0.001
ERF101229	Intercept	1.045	0.078	< 0.001
	Year	-1.673	0.067	< 0.001
	Project cells	-0.035	0.090	0.734
	Year:Project cells	0.105	0.012	< 0.001

Project	Variable	Estimate	SE	P
ERF101318	Intercept	2.405	0.075	< 0.001
	Year	-1.781	0.093	< 0.001
	Project cells	-0.380	0.100	< 0.001
	Year:Project cells	0.047	0.012	< 0.001
ERF101319	Intercept	3.086	0.058	< 0.001
	Year	-0.533	0.068	< 0.001
	Project cells	-0.123	0.076	0.126
	Year:Project cells	-0.015	0.010	0.141
ERF101323	Intercept	2.771	0.047	< 0.001
	Year	-1.712	0.078	< 0.001
	Project cells	-0.117	0.069	0.109
	Year:Project cells	-0.043	0.011	< 0.001
ERF101326	Intercept	2.466	0.125	< 0.001
	Year	-2.598	0.122	< 0.001
	Project cells	-0.690	0.149	< 0.001
	Year:Project cells	-0.094	0.018	< 0.001
ERF101341	Intercept	1.312	0.151	< 0.001
	Year	-1.391	0.085	< 0.001
	Project cells	-0.315	0.169	0.078
	Year:Project cells	-0.012	0.015	0.459
ERF101369	Intercept	3.282	0.089	< 0.001
	Year	0.131	0.101	0.227
	Project cells	-0.111	0.111	0.352
	Year:Project cells	0.021	0.014	0.153
ERF101380	Intercept	2.728	0.181	< 0.001
	Year	-1.002	0.077	< 0.001
	Project cells	-0.350	0.193	0.087
	Year:Project cells	-0.002	0.016	0.908
ERF101395	Intercept	1.535	0.039	< 0.001
	Year	-3.366	0.076	< 0.001
	Project cells	-0.118	0.050	0.026
	Year:Project cells	0.002	0.010	0.834
ERF101403	Intercept	1.574	0.094	< 0.001
	Year	-1.598	0.074	< 0.001
	Project cells	-0.271	0.110	0.019
	Year:Project cells	0.015	0.012	0.227
ERF101409	Intercept	2.083	0.106	< 0.001
	Year	-1.418	0.076	< 0.001
	Project cells	-0.081	0.127	0.556
	Year:Project cells	0.039	0.011	< 0.001

Project	Variable	Estimate	SE	P
ERF101425	Intercept	2.558	0.274	< 0.001
	Year	-0.563	0.074	< 0.001
	Project cells	-0.790	0.295	0.011
	Year:Project cells	0.267	0.017	< 0.001
ERF101430	Intercept	1.816	0.091	< 0.001
	Year	-0.054	0.092	0.588
	Project cells	-0.206	0.125	0.12
	Year:Project cells	-0.015	0.012	0.227
ERF101437	Intercept	1.951	0.081	< 0.001
	Year	-3.571	0.074	< 0.001
	Project cells	-0.163	0.070	0.028
	Year:Project cells	0.038	0.011	< 0.001
ERF101477	Intercept	2.011	0.161	< 0.001
	Year	-1.471	0.100	< 0.001
	Project cells	-0.413	0.187	0.036
	Year:Project cells	0.150	0.015	< 0.001
ERF101492	Intercept	1.692	0.054	< 0.001
	Year	-4.290	0.079	< 0.001
	Project cells	-0.069	0.066	0.333
	Year:Project cells	-0.024	0.011	0.044
ERF101494	Intercept	2.610	0.039	< 0.001
	Year	-1.803	0.042	< 0.001
	Project cells	-0.102	0.045	0.033
	Year:Project cells	0.006	0.006	0.404
ERF101507	Intercept	1.515	0.105	< 0.001
	Year	-0.342	0.099	< 0.001
	Project cells	-0.048	0.131	0.747
	Year:Project cells	-0.001	0.014	0.938
ERF101511	Intercept	2.235	0.086	< 0.001
	Year	-1.371	0.058	< 0.001
	Project cells	0.026	0.069	0.742
	Year:Project cells	-0.036	0.009	< 0.001
ERF101517	Intercept	1.935	0.083	< 0.001
	Year	-2.661	0.086	< 0.001
	Project cells	0.173	0.101	0.106
	Year:Project cells	0.059	0.012	< 0.001
ERF101519	Intercept	1.539	0.105	< 0.001
	Year	-1.705	0.079	< 0.001
	Project cells	-0.319	0.116	0.009
	Year:Project cells	-0.001	0.014	0.972

Project	Variable	Estimate	SE	P
ERF101647	Intercept	2.049	0.083	< 0.001
	Year	0.757	0.110	< 0.001
	Project cells	0.039	0.101	0.734
	Year:Project cells	0.292	0.014	< 0.001
ERF101535	Intercept	1.793	0.119	< 0.001
	Year	0.560	0.078	< 0.001
	Project cells	0.037	0.137	0.813
	Year:Project cells	-0.010	0.012	0.449
ERF101525	Intercept	2.558	0.085	< 0.001
	Year	-1.920	0.067	< 0.001
	Project cells	-0.133	0.104	0.231
	Year:Project cells	0.158	0.010	< 0.001
ERF101532	Intercept	1.881	0.186	< 0.001
	Year	-1.507	0.087	< 0.001
	Project cells	0.277	0.216	0.229
	Year:Project cells	0.022	0.016	0.208
ERF101557	Intercept	1.609	0.107	< 0.001
	Year	-3.485	0.100	< 0.001
	Project cells	0.514	0.126	< 0.001
	Year:Project cells	0.198	0.015	< 0.001
ERF101626	Intercept	1.950	0.194	< 0.001
	Year	-1.678	0.098	< 0.001
	Project cells	-0.180	0.213	0.433
	Year:Project cells	-0.106	0.016	< 0.001
ERF101630	Intercept	3.008	0.116	< 0.001
	Year	-0.528	0.106	< 0.001
	Project cells	-0.147	0.161	0.398
	Year:Project cells	-0.026	0.013	0.071
ERF101634	Intercept	2.088	0.074	< 0.001
	Year	-2.597	0.063	< 0.001
	Project cells	-0.471	0.084	< 0.001
	Year:Project cells	0.097	0.010	< 0.001
ERF101641	Intercept	2.980	0.513	< 0.001
	Year	-1.205	0.084	< 0.001
	Project cells	-0.222	0.072	0.003
	Year:Project cells	-0.026	0.013	0.048
ERF101545	Intercept	1.481	0.058	< 0.001
	Year	-0.452	0.074	< 0.001
	Project cells	-0.089	0.069	0.227
	Year:Project cells	0.125	0.015	< 0.001

Project	Variable	Estimate	SE	P
ERF101651	Intercept	2.912	0.065	< 0.001
	Year	-0.007	0.094	0.951
	Project cells	0.028	0.087	0.78
	Year:Project cells	-0.028	0.011	0.02
ERF101702	Intercept	1.874	0.086	< 0.001
	Year	0.659	0.091	< 0.001
	Project cells	0.372	0.100	< 0.001
	Year:Project cells	0.056	0.013	< 0.001
ERF101654	Intercept	2.935	0.070	< 0.001
	Year	-1.494	0.132	< 0.001
	Project cells	-0.189	0.109	0.102
	Year:Project cells	0.039	0.016	0.02
ERF101667	Intercept	2.175	0.114	< 0.001
	Year	-1.024	0.088	< 0.001
	Project cells	-0.241	0.154	0.141
	Year:Project cells	0.011	0.012	0.365
ERF101671	Intercept	1.769	0.051	< 0.001
	Year	-2.799	0.076	< 0.001
	Project cells	-0.136	0.070	0.067
	Year:Project cells	-0.060	0.010	< 0.001
ERF101674	Intercept	2.103	0.152	< 0.001
	Year	-2.742	0.107	< 0.001
	Project cells	0.203	0.155	0.222
	Year:Project cells	0.031	0.016	0.071
ERF101684	Intercept	2.763	0.076	< 0.001
	Year	0.005	0.095	0.963
	Project cells	0.085	0.093	0.394
	Year:Project cells	0.046	0.013	< 0.001
ERF101698	Intercept	2.939	0.092	< 0.001
	Year	-2.667	0.114	< 0.001
	Project cells	0.036	0.123	0.8
	Year:Project cells	0.020	0.015	0.208
ERF101706	Intercept	2.347	0.113	< 0.001
	Year	-2.061	0.086	< 0.001
	Project cells	-0.557	0.141	< 0.001
	Year:Project cells	-0.029	0.012	0.024
ERF101710	Intercept	2.356	0.113	< 0.001
	Year	-0.644	0.105	< 0.001
	Project cells	-0.220	0.126	0.101
	Year:Project cells	0.044	0.017	0.017



Project	Variable	Estimate	SE	P
ERF101718	Intercept	2.676	0.081	< 0.001
	Year	0.855	0.126	< 0.001
	Project cells	-0.118	0.107	0.305
	Year:Project cells	0.050	0.015	0.002
ERF101730	Intercept	1.371	0.065	< 0.001
	Year	0.035	0.086	0.716
	Project cells	0.019	0.085	0.841
	Year:Project cells	-0.092	0.011	< 0.001
ERF101727	Intercept	3.511	0.018	< 0.001
	Year	-0.042	0.039	0.315
	Project cells	0.049	0.021	0.026
	Year:Project cells	-0.004	0.006	0.562
ERF101733	Intercept	2.857	0.111	< 0.001
	Year	0.232	0.065	< 0.001
	Project cells	-0.371	0.129	0.006
	Year:Project cells	-0.099	0.010	< 0.001
ERF101759	Intercept	1.022	0.056	< 0.001
	Year	-1.655	0.071	< 0.001
	Project cells	-0.088	0.066	0.213
	Year:Project cells	-0.003	0.010	0.796
ERF101776	Intercept	1.354	0.103	< 0.001
	Year	-1.568	0.062	< 0.001
	Project cells	0.172	0.116	0.165
	Year:Project cells	0.136	0.011	< 0.001
ERF101781	Intercept	0.755	0.050	< 0.001
	Year	-1.986	0.052	< 0.001
	Project cells	-0.176	0.059	0.004
	Year:Project cells	0.007	0.008	0.406
ERF101805	Intercept	1.328	0.112	< 0.001
	Year	-2.695	0.086	< 0.001
	Project cells	-0.241	0.128	0.074
	Year:Project cells	0.088	0.015	< 0.001
ERF101794	Intercept	1.762	0.097	< 0.001
	Year	-1.305	0.050	< 0.001
	Project cells	-0.317	0.101	0.003
	Year:Project cells	-0.006	0.013	0.685
ERF101802	Intercept	1.911	0.064	< 0.001
	Year	-0.820	0.044	< 0.001
	Project cells	-0.435	0.067	< 0.001
	Year:Project cells	0.074	0.014	< 0.001

Project	Variable	Estimate	SE	P
ERF101812	Intercept	2.869	1.080	0.011
	Year	-1.697	0.106	< 0.001
	Project cells	-0.049	0.059	0.437
	Year:Project cells	-0.095	0.015	< 0.001
ERF101824	Intercept	1.949	0.050	< 0.001
	Year	-0.210	0.040	< 0.001
	Project cells	0.160	0.059	0.01
	Year:Project cells	-0.012	0.006	0.051
ERF101830	Intercept	1.006	0.052	< 0.001
	Year	-0.574	0.083	< 0.001
	Project cells	-0.386	0.073	< 0.001
	Year:Project cells	-0.182	0.011	< 0.001
ERF101849	Intercept	1.244	0.115	< 0.001
	Year	-2.871	0.049	< 0.001
	Project cells	-0.119	0.060	0.061
	Year:Project cells	0.049	0.008	< 0.001
ERF101865	Intercept	2.586	0.071	< 0.001
	Year	-2.440	0.071	< 0.001
	Project cells	-0.715	0.095	< 0.001
	Year:Project cells	-0.044	0.009	< 0.001
ERF101927	Intercept	0.868	0.053	< 0.001
	Year	-1.426	0.058	< 0.001
	Project cells	-0.030	0.071	0.706
	Year:Project cells	-0.014	0.007	0.071
ERF101971	Intercept	3.087	0.075	< 0.001
	Year	-1.469	0.119	< 0.001
	Project cells	-0.261	0.092	0.006
	Year:Project cells	-0.070	0.016	< 0.001
ERF102171	Intercept	3.311	0.035	< 0.001
	Year	0.156	0.084	0.078
	Project cells	0.088	0.043	0.05
	Year:Project cells	-0.019	0.016	0.25
ERF102983	Intercept	2.284	0.157	< 0.001
	Year	-1.590	0.064	< 0.001
	Project cells	-0.575	0.171	0.001
	Year:Project cells	-0.115	0.012	< 0.001
ERF102626	Intercept	2.346	0.088	< 0.001
	Year	0.381	0.068	< 0.001
	Project cells	-0.243	0.107	0.03
	Year:Project cells	-0.004	0.016	0.836

Project	Variable	Estimate	SE	P
ERF103005	Intercept	1.244	0.051	< 0.001
	Year	-1.613	0.061	< 0.001
	Project cells	-0.045	0.061	0.496
	Year:Project cells	-0.039	0.010	< 0.001
ERF103026	Intercept	2.576	0.130	< 0.001
	Year	-1.203	0.064	< 0.001
	Project cells	-1.024	0.142	< 0.001
	Year:Project cells	0.128	0.014	< 0.001
ERF103066	Intercept	2.191	0.064	< 0.001
	Year	-1.067	0.062	< 0.001
	Project cells	-0.076	0.080	0.376
	Year:Project cells	0.114	0.010	< 0.001
ERF103100	Intercept	0.842	0.033	< 0.001
	Year	-0.896	0.038	< 0.001
	Project cells	-0.172	0.039	< 0.001
	Year:Project cells	0.017	0.006	0.006
ERF103108	Intercept	1.932	0.104	< 0.001
	Year	-1.119	0.055	< 0.001
	Project cells	-0.241	0.135	0.092
	Year:Project cells	0.104	0.008	< 0.001
ERF103139	Intercept	1.749	0.131	< 0.001
	Year	-1.277	0.080	< 0.001
	Project cells	-0.242	0.140	0.104
	Year:Project cells	-0.052	0.015	0.001
ERF103140	Intercept	1.922	0.083	< 0.001
	Year	-2.301	0.076	< 0.001
	Project cells	-0.263	0.104	0.016
	Year:Project cells	0.109	0.011	< 0.001
ERF103181	Intercept	1.794	0.046	< 0.001
	Year	-1.211	0.035	< 0.001
	Project cells	-0.031	0.050	0.562
	Year:Project cells	-0.018	0.008	0.028
ERF103081	Intercept	2.935	0.167	< 0.001
	Year	0.137	0.073	0.075
	Project cells	-0.500	0.178	0.007
	Year:Project cells	-0.019	0.025	0.493
ERF103091	Intercept	1.601	0.087	< 0.001
	Year	-0.064	0.063	0.349
	Project cells	-0.019	0.112	0.88
	Year:Project cells	0.040	0.016	0.016

Project	Variable	Estimate	SE	P
ERF103193	Intercept	1.908	0.172	< 0.001
	Year	-0.766	0.077	< 0.001
	Project cells	-0.131	0.185	0.514
	Year:Project cells	0.079	0.018	< 0.001
ERF103197	Intercept	1.435	0.043	< 0.001
	Year	-0.262	0.048	< 0.001
	Project cells	-0.145	0.048	0.004
	Year:Project cells	0.101	0.009	< 0.001
ERF103209	Intercept	3.040	0.052	< 0.001
	Year	-1.340	0.060	< 0.001
	Project cells	-0.346	0.059	< 0.001
	Year:Project cells	0.025	0.011	0.028
ERF103258	Intercept	3.357	0.059	< 0.001
	Year	-0.442	0.072	< 0.001
	Project cells	-0.359	0.077	< 0.001
	Year:Project cells	-0.025	0.011	0.029
ERF103313	Intercept	3.003	0.076	< 0.001
	Year	-0.891	0.064	< 0.001
	Project cells	0.022	0.081	0.812
	Year:Project cells	0.133	0.011	< 0.001
ERF103326	Intercept	1.994	0.143	< 0.001
	Year	-1.903	0.088	< 0.001
	Project cells	-0.608	0.165	< 0.001
	Year:Project cells	-0.059	0.015	< 0.001
ERF103367	Intercept	0.818	0.200	< 0.001
	Year	-0.846	0.079	< 0.001
	Project cells	0.375	0.214	0.098
	Year:Project cells	-0.188	0.021	< 0.001
ERF104962	Intercept	1.985	0.100	< 0.001
	Year	-0.421	0.031	< 0.001
	Project cells	-0.541	0.103	< 0.001
	Year:Project cells	-0.030	0.010	0.004
ERF103310	Intercept	1.920	0.069	< 0.001
	Year	-0.322	0.046	< 0.001
	Project cells	-0.239	0.077	0.003
	Year:Project cells	0.042	0.013	0.002
ERF104559	Intercept	1.421	0.086	< 0.001
	Year	-0.410	0.045	< 0.001
	Project cells	-0.463	0.090	< 0.001
	Year:Project cells	-0.105	0.017	< 0.001

Project	Variable	Estimate	SE	P
ERF105022	Intercept	1.076	0.079	< 0.001
	Year	-1.369	0.063	< 0.001
	Project cells	0.020	0.093	0.846
	Year:Project cells	0.116	0.011	< 0.001
ERF105094	Intercept	1.508	0.081	< 0.001
	Year	-0.496	0.061	< 0.001
	Project cells	-0.133	0.097	0.201
ERF105116	Year:Project cells	0.093	0.010	< 0.001
	Intercept	1.595	0.058	< 0.001
	Year	-2.046	0.071	< 0.001
	Project cells	0.007	0.070	0.933
ERF105136	Year:Project cells	0.074	0.011	< 0.001
	Intercept	2.410	0.064	< 0.001
	Year	-0.692	0.049	< 0.001
	Project cells	-0.105	0.078	0.211
ERF105137	Year:Project cells	0.166	0.008	< 0.001
	Intercept	1.932	0.089	< 0.001
	Year	-1.122	0.090	< 0.001
	Project cells	-0.156	0.116	0.212
ERF105188	Year:Project cells	0.090	0.014	< 0.001
	Intercept	1.739	0.079	< 0.001
	Year	-1.989	0.113	< 0.001
	Project cells	-0.546	0.101	< 0.001
	Year:Project cells	-0.033	0.020	0.127

Table S6: Model estimates for the smoothed and random components of the project-level GAMMs. EDF = estimated degrees of freedom. R.EDF = reference estimated degrees of freedom.

Project	Variable	Estimate	SE	P
EOP100275	Intercept	1.924	0.100	< 0.001
	Year	-1.018	0.135	< 0.001
	Project cells	-0.031	0.136	0.84
	Year:Project cells	0.151	0.017	< 0.001
EOP100570	Intercept	3.006	0.061	< 0.001
	Year	-0.014	0.083	0.88
	Project cells	0.094	0.073	0.227
	Year:Project cells	0.044	0.011	< 0.001
EOP100992	Intercept	3.360	0.091	< 0.001
	Year	-0.355	0.102	< 0.001
	Project cells	-0.347	0.115	0.004
	Year:Project cells	-0.033	0.014	0.03
EOP100996	Intercept	1.732	0.075	< 0.001
	Year	-0.139	0.072	0.069
	Project cells	0.063	0.094	0.535
	Year:Project cells	0.070	0.010	< 0.001
EOP100548	Intercept	2.870	0.077	< 0.001
	Year	0.274	0.114	0.023
	Project cells	0.224	0.095	0.025
	Year:Project cells	0.085	0.014	< 0.001
EOP100637	Intercept	2.178	0.054	< 0.001
	Year	0.417	0.045	< 0.001
	Project cells	0.139	0.061	0.029
	Year:Project cells	0.123	0.007	< 0.001
EOP101037	Intercept	3.222	0.078	< 0.001
	Year	-0.236	0.128	0.084
	Project cells	-0.129	0.101	0.23
	Year:Project cells	0.019	0.017	0.283
EOP101114	Intercept	1.662	0.107	< 0.001
	Year	-3.955	0.111	< 0.001
	Project cells	-0.138	0.142	0.367
	Year:Project cells	-0.103	0.015	< 0.001
EOP101098	Intercept	3.266	0.072	< 0.001
	Year	-0.137	0.080	0.106
	Project cells	-0.262	0.083	0.002
	Year:Project cells	0.011	0.013	0.462
EOP101101	Intercept	2.973	0.054	< 0.001
	Year	-1.343	0.050	< 0.001
	Project cells	-0.154	0.063	0.019
	Year:Project cells	-0.059	0.008	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF101228	Year	7.981	8.000	1222.598	< 0.001
	lat,lon	16.527	16.738	17.101	< 0.001
	Cell ID	153.916	178.000	14.029	< 0.001
EOP101115	Year	7.980	8.000	1279.428	< 0.001
	lat,lon	5.616	5.685	7.266	< 0.001
	Cell ID	156.733	166.000	27.072	< 0.001
EOP101140	Year	7.894	7.997	262.075	< 0.001
	lat,lon	8.589	8.763	5.638	< 0.001
	Cell ID	67.692	79.000	11.658	< 0.001
EOP101143	Year	7.946	7.999	594.434	< 0.001
	lat,lon	8.443	8.555	5.691	< 0.001
	Cell ID	134.594	148.000	17.711	< 0.001
EOP101165	Year	7.978	8.000	2506.375	< 0.001
	lat,lon	23.403	23.560	10.846	< 0.001
	Cell ID	296.060	331.000	20.748	< 0.001
EOP101242	Year	7.974	8.000	1535.193	< 0.001
	lat,lon	22.935	23.115	25.575	< 0.001
	Cell ID	417.667	460.000	19.170	< 0.001
EOP101262	Year	7.987	8.000	1611.356	< 0.001
	lat,lon	24.727	24.845	8.144	< 0.001
	Cell ID	355.710	398.000	17.361	< 0.001
EOP101263	Year	7.978	8.000	702.012	< 0.001
	lat,lon	23.119	23.344	5.432	< 0.001
	Cell ID	327.143	375.000	11.708	< 0.001
EOP101133	Year	7.970	8.000	845.921	< 0.001
	lat,lon	22.721	22.854	10.211	< 0.001
	Cell ID	167.114	195.000	22.427	< 0.001
EOP101142	Year	7.986	8.000	1577.660	< 0.001
	lat,lon	20.822	20.963	11.212	< 0.001
	Cell ID	295.347	327.000	22.737	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF101230	Year	7.980	8.000	1101.793	< 0.001
	lat,lon	26.320	26.393	33.402	< 0.001
	Cell ID	314.124	349.000	27.644	< 0.001
ERF101249	Year	7.992	8.000	5167.325	< 0.001
	lat,lon	26.231	26.324	32.387	< 0.001
	Cell ID	788.694	844.000	25.442	< 0.001
ERF101251	Year	7.976	8.000	1979.951	< 0.001
	lat,lon	18.784	18.915	10.552	< 0.001
	Cell ID	414.748	445.000	30.384	< 0.001
ERF101261	Year	7.990	8.000	2343.335	< 0.001
	lat,lon	23.115	23.247	10.659	< 0.001
	Cell ID	389.102	432.000	16.417	< 0.001
ERF101269	Year	7.981	8.000	1374.216	< 0.001
	lat,lon	17.905	18.368	56.668	< 0.001
	Cell ID	142.524	181.000	5.673	< 0.001
ERF101278	Year	7.992	8.000	2615.234	< 0.001
	lat,lon	21.752	21.845	10.260	< 0.001
	Cell ID	491.616	526.000	36.895	< 0.001
ERF101280	Year	7.987	8.000	2269.220	< 0.001
	lat,lon	25.066	25.286	49.124	< 0.001
	Cell ID	486.531	552.000	11.152	< 0.001
ERF101304	Year	7.973	8.000	3054.273	< 0.001
	lat,lon	25.896	26.024	12.209	< 0.001
	Cell ID	460.876	510.000	18.887	< 0.001
ERF101308	Year	7.975	8.000	3560.732	< 0.001
	lat,lon	24.613	24.740	29.497	< 0.001
	Cell ID	516.371	564.000	20.370	< 0.001
ERF101229	Year	7.978	8.000	1383.586	< 0.001
	lat,lon	22.413	22.696	48.282	< 0.001
	Cell ID	421.881	475.000	12.917	< 0.001



Project	Variable	EDF	R.EDF	F	P
ERF101318	Year	7.971	8.000	1921.374	< 0.001
	lat,lon	21.865	22.085	10.263	< 0.001
	Cell ID	202.458	235.000	14.851	< 0.001
ERF101319	Year	7.982	8.000	1250.457	< 0.001
	lat,lon	21.179	21.388	14.545	< 0.001
	Cell ID	355.681	399.000	15.894	< 0.001
ERF101323	Year	7.973	8.000	1044.334	< 0.001
	lat,lon	20.491	20.722	14.862	< 0.001
	Cell ID	292.896	332.000	13.295	< 0.001
ERF101326	Year	7.967	8.000	546.221	< 0.001
	lat,lon	14.965	15.239	8.158	< 0.001
	Cell ID	171.153	197.000	12.750	< 0.001
ERF101341	Year	7.934	7.999	1228.321	< 0.001
	lat,lon	21.242	21.451	6.287	< 0.001
	Cell ID	277.186	311.000	17.366	< 0.001
ERF101369	Year	7.954	7.999	611.890	< 0.001
	lat,lon	14.522	14.780	7.101	< 0.001
	Cell ID	76.698	95.000	10.404	< 0.001
ERF101380	Year	7.986	8.000	2116.941	< 0.001
	lat,lon	22.136	22.292	19.466	< 0.001
	Cell ID	178.651	208.000	17.102	< 0.001
ERF101395	Year	7.981	8.000	2978.807	< 0.001
	lat,lon	20.577	21.149	6.997	< 0.001
	Cell ID	251.994	309.000	5.993	< 0.001
ERF101403	Year	7.980	8.000	1341.490	< 0.001
	lat,lon	26.701	26.774	20.409	< 0.001
	Cell ID	310.775	349.000	21.279	< 0.001
ERF101409	Year	7.986	8.000	1506.508	< 0.001
	lat,lon	19.597	19.726	13.809	< 0.001
	Cell ID	256.732	284.000	26.954	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF101425	Year	7.981	8.000	1957.476	< 0.001
	lat,lon	21.190	21.374	17.629	< 0.001
	Cell ID	319.711	356.000	17.434	< 0.001
ERF101430	Year	7.979	8.000	653.782	< 0.001
	lat,lon	22.511	22.693	15.520	< 0.001
	Cell ID	274.660	310.000	17.214	< 0.001
ERF101437	Year	7.986	8.000	2774.803	< 0.001
	lat,lon	17.842	18.029	4.286	< 0.001
	Cell ID	296.453	333.000	14.067	< 0.001
ERF101477	Year	7.974	8.000	941.212	< 0.001
	lat,lon	22.415	22.614	19.065	< 0.001
	Cell ID	193.296	225.000	15.559	< 0.001
ERF101492	Year	7.983	8.000	2291.258	< 0.001
	lat,lon	18.027	18.277	8.510	< 0.001
	Cell ID	273.419	308.000	13.448	< 0.001
ERF101494	Year	7.996	8.000	6446.640	< 0.001
	lat,lon	25.794	25.937	11.108	< 0.001
	Cell ID	790.125	860.000	17.574	< 0.001
ERF101507	Year	7.937	7.999	762.788	< 0.001
	lat,lon	23.990	24.195	8.055	< 0.001
	Cell ID	171.814	205.000	14.046	< 0.001
ERF101511	Year	7.983	8.000	1978.762	< 0.001
	lat,lon	23.518	23.604	63.501	< 0.001
	Cell ID	619.203	665.000	24.956	< 0.001
ERF101517	Year	7.977	8.000	1525.431	< 0.001
	lat,lon	23.368	23.564	12.928	< 0.001
	Cell ID	321.770	362.000	16.809	< 0.001
ERF101519	Year	7.986	8.000	1485.263	< 0.001
	lat,lon	22.347	22.600	6.348	< 0.001
	Cell ID	447.054	499.000	13.177	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF101647	Year	7.982	8.000	1516.782	< 0.001
	lat,lon	23.957	24.256	9.310	< 0.001
	Cell ID	178.532	221.000	10.337	< 0.001
ERF101535	Year	7.985	8.000	1485.014	< 0.001
	lat,lon	25.543	25.680	17.901	< 0.001
	Cell ID	260.619	299.000	17.440	< 0.001
ERF101525	Year	7.985	8.000	1600.010	< 0.001
	lat,lon	23.259	23.424	23.149	< 0.001
	Cell ID	277.289	314.000	16.338	< 0.001
ERF101532	Year	7.962	8.000	1042.531	< 0.001
	lat,lon	22.715	22.870	17.043	< 0.001
	Cell ID	156.007	184.000	17.343	< 0.001
ERF101557	Year	7.982	8.000	1182.250	< 0.001
	lat,lon	20.980	21.280	18.459	< 0.001
	Cell ID	169.986	202.000	11.539	< 0.001
ERF101626	Year	7.975	8.000	1250.251	< 0.001
	lat,lon	26.177	26.261	10.371	< 0.001
	Cell ID	234.967	269.000	25.979	< 0.001
ERF101630	Year	7.951	7.999	631.576	< 0.001
	lat,lon	15.802	16.023	10.550	< 0.001
	Cell ID	142.245	166.000	13.332	< 0.001
ERF101634	Year	7.988	8.000	2339.452	< 0.001
	lat,lon	23.236	23.378	16.562	< 0.001
	Cell ID	600.136	646.000	24.317	< 0.001
ERF101641	Year	7.958	7.999	764.010	< 0.001
	lat,lon	19.699	19.798	95.509	< 0.001
	Cell ID	331.782	366.000	18.543	< 0.001
ERF101545	Year	5.978	6.000	1053.688	< 0.001
	lat,lon	6.300	6.336	39.438	< 0.001
	Cell ID	269.264	297.000	14.371	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF101651	Year	7.971	8.000	491.351	< 0.001
	lat,lon	13.917	14.067	2.980	< 0.001
	Cell ID	165.495	184.000	21.578	< 0.001
ERF101702	Year	7.992	8.000	2156.219	< 0.001
	lat,lon	22.733	23.061	27.399	< 0.001
	Cell ID	174.286	213.000	8.840	< 0.001
ERF101654	Year	7.958	7.999	539.722	< 0.001
	lat,lon	14.356	14.624	10.186	< 0.001
	Cell ID	60.875	78.000	8.738	< 0.001
ERF101667	Year	7.979	8.000	949.154	< 0.001
	lat,lon	20.286	20.358	7.669	< 0.001
	Cell ID	242.636	267.000	36.197	< 0.001
ERF101671	Year	7.966	8.000	1420.182	< 0.001
	lat,lon	21.624	21.772	15.912	< 0.001
	Cell ID	294.173	326.000	23.504	< 0.001
ERF101674	Year	7.954	7.999	809.564	< 0.001
	lat,lon	18.141	18.366	26.608	< 0.001
	Cell ID	137.409	164.000	11.401	< 0.001
ERF101684	Year	7.990	8.000	1940.354	< 0.001
	lat,lon	23.695	24.137	6.865	< 0.001
	Cell ID	98.601	135.000	5.393	< 0.001
ERF101698	Year	7.963	8.000	282.788	< 0.001
	lat,lon	20.170	20.526	7.706	< 0.001
	Cell ID	114.799	144.000	8.916	< 0.001
ERF101706	Year	7.958	7.999	1201.650	< 0.001
	lat,lon	23.246	23.412	15.517	< 0.001
	Cell ID	180.062	210.000	19.706	< 0.001
ERF101710	Year	7.982	8.000	962.752	< 0.001
	lat,lon	15.846	16.188	4.601	< 0.001
	Cell ID	118.782	143.000	10.084	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF101718	Year	7.983	8.000	1074.404	< 0.001
	lat,lon	15.830	16.174	12.541	< 0.001
	Cell ID	143.211	170.000	10.603	< 0.001
ERF101730	Year	7.973	8.000	1111.898	< 0.001
	lat,lon	23.450	23.643	26.904	< 0.001
	Cell ID	397.136	443.000	15.977	< 0.001
ERF101727	Year	7.966	8.000	429.586	< 0.001
	lat,lon	20.150	21.108	9.583	< 0.001
	Cell ID	293.975	398.000	3.193	< 0.001
ERF101733	Year	7.984	8.000	1916.168	< 0.001
	lat,lon	15.475	15.588	5.798	< 0.001
	Cell ID	207.790	227.000	34.469	< 0.001
ERF101759	Year	7.984	8.000	1384.247	< 0.001
	lat,lon	19.571	19.865	7.802	< 0.001
	Cell ID	426.573	475.000	16.421	< 0.001
ERF101776	Year	7.988	8.000	1384.527	< 0.001
	lat,lon	21.539	21.646	26.872	< 0.001
	Cell ID	750.256	791.000	34.097	< 0.001
ERF101781	Year	7.973	8.000	1637.713	< 0.001
	lat,lon	24.611	24.784	9.948	< 0.001
	Cell ID	551.495	606.000	17.657	< 0.001
ERF101805	Year	7.979	8.000	1546.683	< 0.001
	lat,lon	21.047	21.298	4.163	< 0.001
	Cell ID	258.892	295.000	14.012	< 0.001
ERF101794	Year	7.968	8.000	2818.474	< 0.001
	lat,lon	23.210	23.375	17.159	< 0.001
	Cell ID	506.794	556.000	18.242	< 0.001
ERF101802	Year	5.992	6.000	3378.184	< 0.001
	lat,lon	6.921	6.924	31.363	< 0.001
	Cell ID	912.075	968.000	18.187	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF101812	Year	7.961	8.000	788.558	< 0.001
	lat,lon	14.597	14.832	67.568	< 0.001
	Cell ID	313.811	373.000	6.355	< 0.001
ERF101824	Year	7.988	8.000	1074.008	< 0.001
	lat,lon	23.535	23.599	18.630	< 0.001
	Cell ID	624.563	660.000	42.071	< 0.001
ERF101830	Year	7.907	7.997	680.305	< 0.001
	lat,lon	20.278	20.665	17.145	< 0.001
	Cell ID	187.494	231.000	7.382	< 0.001
ERF101849	Year	7.993	8.000	5791.166	< 0.001
	lat,lon	17.786	17.876	14.561	< 0.001
	Cell ID	770.265	815.000	26.901	< 0.001
ERF101865	Year	7.977	8.000	1864.662	< 0.001
	lat,lon	23.599	23.721	17.149	< 0.001
	Cell ID	307.584	341.000	27.675	< 0.001
ERF101927	Year	7.975	8.000	1074.260	< 0.001
	lat,lon	16.689	16.803	11.035	< 0.001
	Cell ID	251.482	273.000	36.209	< 0.001
ERF101971	Year	7.954	7.999	583.728	< 0.001
	lat,lon	6.983	7.157	11.578	< 0.001
	Cell ID	94.565	107.000	11.601	< 0.001
ERF102171	Year	7.964	8.000	496.805	< 0.001
	lat,lon	16.679	18.529	25.146	< 0.001
	Cell ID	61.253	135.000	0.906	< 0.001
ERF102983	Year	7.985	8.000	1653.707	< 0.001
	lat,lon	23.998	24.119	27.660	< 0.001
	Cell ID	286.492	320.000	23.852	< 0.001
ERF102626	Year	5.950	5.999	1002.131	< 0.001
	lat,lon	5.544	5.569	11.864	< 0.001
	Cell ID	124.970	135.000	20.143	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF103005	Year	7.984	8.000	2144.809	< 0.001
	lat,lon	23.517	23.738	38.023	< 0.001
	Cell ID	449.985	506.000	12.586	< 0.001
ERF103026	Year	7.983	8.000	2077.068	< 0.001
	lat,lon	25.984	26.100	19.763	< 0.001
	Cell ID	343.579	385.000	20.646	< 0.001
ERF103066	Year	7.979	8.000	1880.169	< 0.001
	lat,lon	16.215	16.412	20.105	< 0.001
	Cell ID	285.685	314.000	19.927	< 0.001
ERF103100	Year	7.954	7.999	657.015	< 0.001
	lat,lon	21.435	21.688	8.307	< 0.001
	Cell ID	648.909	713.000	14.664	< 0.001
ERF103108	Year	7.958	7.999	740.371	< 0.001
	lat,lon	25.336	25.394	15.373	< 0.001
	Cell ID	322.433	353.000	42.151	< 0.001
ERF103139	Year	7.972	8.000	1274.865	< 0.001
	lat,lon	22.389	22.632	9.250	< 0.001
	Cell ID	168.773	204.000	11.030	< 0.001
ERF103140	Year	7.978	8.000	1420.616	< 0.001
	lat,lon	24.241	24.383	34.544	< 0.001
	Cell ID	291.116	329.000	17.642	< 0.001
ERF103181	Year	7.996	8.000	6699.677	< 0.001
	lat,lon	28.307	28.356	89.471	< 0.001
	Cell ID	1644.360	1740.000	23.653	< 0.001
ERF103081	Year	5.984	6.000	1039.060	< 0.001
	lat,lon	6.255	6.288	18.955	< 0.001
	Cell ID	205.807	225.000	13.872	< 0.001
ERF103091	Year	5.974	6.000	1142.960	< 0.001
	lat,lon	5.696	5.740	36.804	< 0.001
	Cell ID	249.387	269.000	17.433	< 0.001

Project	Variable	EDF	R.EDF	F	P
ERF103193	Year	7.981	8.000	1840.431	< 0.001
	lat,lon	19.431	19.587	8.743	< 0.001
	Cell ID	223.015	251.000	21.990	< 0.001
ERF103197	Year	7.990	8.000	4575.818	< 0.001
	lat,lon	26.020	26.159	15.101	< 0.001
	Cell ID	880.843	958.000	16.474	< 0.001
ERF103209	Year	7.989	8.000	1229.711	< 0.001
	lat,lon	24.142	24.375	28.456	< 0.001
	Cell ID	469.810	529.000	13.175	< 0.001
ERF103258	Year	7.959	8.000	701.684	< 0.001
	lat,lon	19.796	20.040	13.841	< 0.001
	Cell ID	263.265	298.000	15.530	< 0.001
ERF103313	Year	7.980	8.000	441.257	< 0.001
	lat,lon	20.972	21.162	16.672	< 0.001
	Cell ID	335.997	379.000	14.078	< 0.001
ERF103326	Year	7.958	7.999	939.397	< 0.001
	lat,lon	23.532	23.656	6.746	< 0.001
	Cell ID	216.633	246.000	24.349	< 0.001
ERF103367	Year	7.976	8.000	1442.931	< 0.001
	lat,lon	22.446	22.667	27.894	< 0.001
	Cell ID	396.663	443.000	14.355	< 0.001
ERF104962	Year	7.971	8.000	458.984	< 0.001
	lat,lon	17.215	17.266	8.313	< 0.001
	Cell ID	624.422	649.000	69.124	< 0.001
ERF103310	Year	5.978	6.000	1716.950	< 0.001
	lat,lon	4.672	4.698	8.536	< 0.001
	Cell ID	443.322	466.000	21.899	< 0.001
ERF104559	Year	5.979	6.000	1142.103	< 0.001
	lat,lon	6.175	6.212	22.255	< 0.001
	Cell ID	523.965	563.000	16.246	< 0.001



Project	Variable	EDF	R.EDF	F	P
ERF105022	Year	7.980	8.000	2056.854	< 0.001
	lat,lon	25.457	25.628	7.887	< 0.001
	Cell ID	325.291	370.000	13.853	< 0.001
ERF105094	Year	7.989	8.000	2901.190	< 0.001
	lat,lon	22.641	22.808	8.976	< 0.001
	Cell ID	265.092	299.000	19.833	< 0.001
ERF105116	Year	7.989	8.000	2359.520	< 0.001
	lat,lon	26.452	26.709	20.889	< 0.001
	Cell ID	323.408	390.000	7.466	< 0.001
ERF105136	Year	7.974	8.000	2067.868	< 0.001
	lat,lon	23.083	23.200	16.953	< 0.001
	Cell ID	539.171	582.000	24.073	< 0.001
ERF105137	Year	7.970	8.000	1215.536	< 0.001
	lat,lon	17.847	18.116	6.820	< 0.001
	Cell ID	167.492	195.000	12.637	< 0.001
ERF105188	Year	7.950	7.999	667.767	< 0.001
	lat,lon	14.363	14.845	5.157	< 0.001
	Cell ID	181.209	220.000	6.040	< 0.001