



UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO  
POSGRADO EN CIENCIAS DE LA TIERRA  
CENTRO DE CIENCIAS DE LA ATMOSFERA

EMULACIÓN DE MODELOS AGRÍCOLAS MEDIANTE MÉTODOS ESTADÍSTICOS PARA  
PROYECTAR LOS IMPACTOS DEL CAMBIO CLIMÁTICO EN LA PRODUCCIÓN DE  
CULTIVOS A NIVEL GLOBAL

# A N E X O S

CIUDAD DE MEXICO, FEBRERO DE 2020

Tabla A1. Cultivos y disponibilidad de proyecciones del modelo EPIC

	CO2-FIRR	CO2_NOIRR	NOCO2-FIRR	NOCO2_NOIRR
Arroz	-	RCP2.6	-	RCP2.6
	RCP4.5	RCP4.5	RCP4.5	RCP4.5
	RCP6.0	RCP6.0	RCP6.0	RCP6.0
	RCP8.5	RCP8.5	RCP8.5	RCP8.5
Canola	-	-	-	-
	-	RCP4.5	-	-
	-	-	-	-
		RCP8.5	RCP8.5	RCP8.5
Caña	-	-	-	-
	RCP4.5	RCP4.5	-	-
	-	-	-	-
	RCP8.5	RCP8.5	RCP8.5	RCP8.5
Cebada	-	-	-	-
	RCP4.5	RCP4.5	-	-
	-	-	-	-
	RCP8.5		RCP8.5	RCP8.5
Maíz	RCP2.6	RCP2.6	-	RCP2.6
	RCP4.5	RCP4.5	RCP4.5	RCP4.5
	-	RCP6.0	RCP6.0	RCP6.0
	RCP8.5	RCP8.5	RCP8.5	RCP8.5
Mijo	-	-	-	-
	RCP4.5	RCP4.5	-	-
	-	-	-	-
	RCP8.5	RCP8.5		RCP8.5
Sorgo	-	-	-	
	RCP4.5	RCP4.5	RCP4.5	RCP4.5
	-	-	-	-
	RCP8.5		RCP8.5	RCP8.5
Soya	RCP2.6	RCP2.6	-	RCP2.6
	RCP4.5	RCP4.5	RCP4.5	RCP4.5
	-	RCP6.0	RCP6.0	RCP6.0
	RCP8.5	RCP8.5	RCP8.5	RCP8.5
Trigo	RCP2.6	RCP2.6	RCP2.6	RCP2.6
	RCP4.5	RCP4.5	RCP4.5	RCP4.5
	RCP6.0	RCP6.0	RCP6.0	RCP6.0
	RCP8.5	RCP8.5	RCP8.5	RCP8.5

Tabla A2. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de arroz

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	9012.9082 (0.0000)	13221.6738 (0.0000)	20511.9453 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	8944.52637 (0.0000)	6540.93164 (0.0000)	8582.74902 (0.0000)
e1 CO <sub>2</sub> - NOIRR	5733.72607 (0.0000)	9936.97266 (0.0000)	9016.2168 (0.0000)	20383.5625 (0.0000)
e2 CO <sub>2</sub> - NOIRR	3188.28003 (0.0000)	11241.1895 (0.0000)	8147.6416 (0.0000)	14761.7861 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	71068.4844 (0.0000)	88167.9219 (0.0000)	89679.5078 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	71728.2813 (0.0000)	86019.0078 (0.0000)	314849.375 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	16213.9072 (0.0000)	41664.7227 (0.0000)	52692.5625 (0.0000)	307625.094 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	11794.3613 (0.0000)	51953.4961 (0.0000)	55477.3945 (0.0000)	339079.344 (0.0000)

Tabla A3. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de canola

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	-	-	-
e2 CO <sub>2</sub> - FIRR	-	-	-	-
e1 CO <sub>2</sub> - NOIRR	-	6835.05859 (0.0000)	-	9270.37598 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	4700.38184 (0.0000)	-	6219.16602 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	22584.7012 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	59695.8242 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	10965.835 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	10616.5039 (0.0000)

Tabla A4. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de caña

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	333192.6563 (0.0000)	-	70481.88281 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	55716.72266 (0.0000)	-	71361.46875 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	535225 (0.0000)	-	131417.8906 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	64622.06641 (0.0000)	-	18659.86719 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	132831.0938 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	174131.0625 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	343007.75 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	23746.98438 (0.0000)

Tabla A5. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de cebada

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	4472.547852 (0.0000)	-	3545.962891 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	3336.954102 (0.0000)	-	2900.666748 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	2931.967773 (0.0000)	-	-
e2 CO <sub>2</sub> - NOIRR	-	1238.348633 (0.0000)	-	-
e1 NOCO <sub>2</sub> - FIRR	-	-	-	28616.10938 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	25143.20117 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	10694.24609 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	18837.57813 (0.0000)

Tabla A6. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de maíz

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	1589.443848 (0.0000)	22335.96289 (0.0000)	-	101884.8906 (0.0000)
e2 CO <sub>2</sub> - FIRR	766.9540405 (0.0000)	25005.49805 (0.0000)	-	102148.6094 (0.0000)
e1 CO <sub>2</sub> - NOIRR	2616.310547 (0.0000)	14032.7832 (0.0000)	14570.73926 (0.0000)	43544.80469 (0.0000)
e2 CO <sub>2</sub> - NOIRR	1625.5354 (0.0000)	16597.5625 (0.0000)	14545.7207 (0.0000)	85907.80469 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	54371.51563 (0.0000)	63751.46875 (0.0000)	221242.5156 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	56986.44922 (0.0000)	65783.98438 (0.0000)	412142.625 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	6684.789551 (0.0000)	37870.39453 (0.0000)	43595.46094 (0.0000)	34582.61328 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	5103.171387 (0.0000)	50433.96875 (0.0000)	55894.36719 (0.0000)	2543970.5 (0.0000)

Tabla A7. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de mijo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	6915.09082 (0.0000)	-	16160.90625 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	7132.490234 (0.0000)	-	20349.69336 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	7754.313477 (0.0000)	-	9712.042969 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	7934.34668 (0.0000)	-	41799.75781 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	-
e2 NOCO <sub>2</sub> - FIRR	-	-	-	-
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	27585.55664 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	48685.36328 (0.0000)

Tabla A8. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de sorgo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	23241.04297 (0.0000)	-	123127.125 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	25301.47266 (0.0000)	-	125670.2969 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	22487.88086 (0.0000)	-	-
e2 CO <sub>2</sub> - NOIRR	-	51384.85938 (0.0000)	-	-
e1 NOCO <sub>2</sub> - FIRR	-	-	-	47478.11719 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	57155.02734 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	39937.80469 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	68641.94531 (0.0000)

Tabla A9. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de soya

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	3962.501953 (0.0000)	2169.650635 (0.0000)	-	6862.92041 (0.0000)
e2 CO <sub>2</sub> - FIRR	1812.357178 (0.0000)	1276.440063 (0.0000)	-	5355.512695 (0.0000)
e1 CO <sub>2</sub> - NOIRR	6064.855957 (0.0000)	6391.27002 (0.0000)	5054.617676 (0.0000)	7610.79248 (0.0000)
e2 CO <sub>2</sub> - NOIRR	3790.445313 (0.0000)	5020.491211 (0.0000)	2947.943115 (0.0000)	11902.0752 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	35654.84375 (0.0000)	36393.83203 (0.0000)	73040.01563 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	32074.13672 (0.0000)	33305.08203 (0.0000)	72179.03125 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	8430.041992 (0.0000)	33573.43359 (0.0000)	35334.9375 (0.0000)	54396.28906 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	6603.564453 (0.0000)	21137.97461 (0.0000)	14860.16309 (0.0000)	92158.33594 (0.0000)

Tabla A10. Resultados de la prueba Hausman para las especificaciones e1 y e2 del cultivo de trigo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	4267.826172 (0.0000)	7533.820801 (0.0000)	4431.039063 (0.0000)	6812.992188 (0.0000)
e2 CO <sub>2</sub> - FIRR	1850.427856 (0.0000)	5978.194336 (0.0000)	3054.654053 (0.0000)	6079.217285 (0.0000)
e1 CO <sub>2</sub> - NOIRR	1830.862915 (0.0000)	2929.195557 (0.0000)	4746.47168 (0.0000)	7498.226563 (0.0000)
e2 CO <sub>2</sub> - NOIRR	781.1159668 (0.0000)	1679.09729 (0.0000)	1701.042358 (0.0000)	3376.75708 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	10024.07422 (0.0000)	20640.01172 (0.0000)	32445.45508 (0.0000)	36294.8125 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	7899.47998 (0.0000)	38750.26172 (0.0000)	28630.73242 (0.0000)	110326.9141 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	1601.249634 (0.0000)	9235.779297 (0.0000)	7044.724609 (0.0000)	7702.205566 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	748.9317017 (0.0000)	11723.61426 (0.0000)	8098.852051 (0.0000)	9692.912109 (0.0000)

Tabla A11. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de arroz

[illegible]



Sección Cruzada/Periodo (F- statistic)	- a - 54.606164b (0.0000) 143.79651c (0.0000) 23.984707d (0.0000)	- a - 64.914911b (0.0000) 173.331942c (0.0000) 27.600232d (0.0000)	256.186236a (0.0000) 61.167297b (0.0000) 44.354242c (0.0000) 29.325182d (0.0000)	376.366123a (0.0000) 107.770723b (0.0000) 78.641702c (0.0000) 48.482257d (0.0000)	- a - 47.298602b (0.0000) 35.863076c (0.0000) 22.597485d (0.0000)	- a - 56.731702b (0.0000) 43.473284c (0.0000) 26.151327d (0.0000)	243.347609a (0.0000) 51.097211b (0.0000) 37.984959c (0.0000) 22.597485d (0.0000)	361.448561a (0.0000) 88.041059b (0.0000) 63.596823c (0.0000) 37.833663d (0.0000)
Sección Cruzada/Periodo Chi <sup>2</sup>	- a - 315001.095b (0.0000) 404146.148c (0.0000) 241636.813d (0.0000)	- a - 330760.85b (0.0000) 421523.147c (0.0000) 253907.681d (0.0000)	457992.35a (0.0000) 325334.58b (0.0000) 296174.555c (0.0000) 259248.786d (0.0000)	493998.543a (0.0000) 377399.198b (0.0000) 348342.536c (0.0000) 304208.449d (0.0000)	- a - 301977.179b (0.0000) 277109.479c (0.0000) 236467.249d (0.0000)	- a - 318470.028b (0.0000) 294362.289c (0.0000) 249178.763d (0.0000)	453186.436a (0.0000) 308971.343b (0.0000) 282247.267c (0.0000) 236467.249d (0.0000)	490208.425a (0.0000) 358730.743b (0.0000) 328886.299c (0.0000) 281885.785d (0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A12. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de canola

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	85.481257b (0.0000)	89.068333b (0.0000)	63.098718b (0.0000)	75.435614b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	23.027394d (0.0000)	24.116173d (0.0000)	23.701839d (0.0000)	27.821194d (0.0000)	28.124504d (0.0000)	29.384421d (0.0000)	24.367016d (0.0000)	28.956331d (0.0000)
Sección Cruzada Chi <sup>2</sup>	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	356011.737b (0.0000)	359793.788b (0.0000)	328166.629b (0.0000)	344514.098b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	238094.347d (0.0000)	242102.633d (0.0000)	240599.925d (0.0000)	254602.848d (0.0000)	255560.559d (0.0000)	259416.976d (0.0000)	243007.485d (0.0000)	258122.893d (0.0000)
Periodo (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
	353.825986b (0.0000)	290.919389b (0.0000)	529.835515b (0.0000)	453.077993b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	(0.0000)	(0.0000)	(0.0000)	(0.0000)
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	-c	-c	-c	-c
	3068.05729d (0.0000)	3065.17703d (0.0000)	50.290027d (0.0000)	16.8583d (0.0000)	809.37128d (0.0000)	860.107841d (0.0000)	328.968809d (0.0000)	572.07303d (0.0000)
Periodo Chi <sup>2</sup>	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	1055.66044b (0.0000)	868.796023b (0.0000)	1576.42261b (0.0000)	1349.60873b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	8782.84252d (0.0000)	8774.5694d (0.0000)	150.766213d (0.0000)	50.564551d (0.0000)	2397.6192d (0.0000)	2545.78446d (0.0000)	981.882634d (0.0000)	1700.88384d (0.0000)

Sección Cruzada/Periodo (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	85.626536b	89.205034b	63.152694b	75.441632b	-b	-b	-b	-b
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	-	-	-	-
	-c	-c	-c	-c	-c	-c	-c	-c
Sección Cruzada/Periodo Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	23.40685d	24.45909d	23.797496d	27.828538d	28.675966d	29.91978d	24.370639d	29.018527d
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	356173.947b	359940.988b	328250.538b	344527.266b	-b	-b	-b	-b
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	-	-	-	-
	-c	-c	-c	-c	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
	239517.751d	243337.332d	240955.495d	254631.647d	257275.452d	261016.331d	243025.976d	258317.626d
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A13. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de caña

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	20.736695b (0.0000)	30.654408b (0.0000)	18.508323b (0.0000)	35.390876b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	7.29602d (0.0000)	8.946821d (0.0000)	7.050191d (0.0000)	11.08544d (0.0000)	-	-	-	-
	6.688912d (0.0000)	8.69273d (0.0000)	6.505308d (0.0000)	9.985141d (0.0000)				
Sección Cruzada Chi <sup>2</sup>	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	229049.647b (0.0000)	263154.682b (0.0000)	219330.429b (0.0000)	275917.05b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	144775.332d (0.0000)	160174.014d (0.0000)	142250.034d (0.0000)	176988.475d (0.0000)	-	-	-	-
	138411.4552d (0.0000)	157961.1429d (0.0000)	136399.055d (0.0000)	168712.502d (0.0000)				
Periodo (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	1424.15067b (0.0000)	1217.70929b (0.0000)	1067.54748b (0.0000)	804.012421b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	2882.02124d (0.0000)	2296.09252d (0.0000)	2449.40004d (0.0000)	1812.1901d (0.0000)	-	-	-	-
	2850.11738d (0.0000)	2667.020161d (0.0000)	2236.12359d (0.0000)	1906.5157d (0.0000)				
Periodo Chi <sup>2</sup>	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	4178.87542b (0.0000)	3584.3135b (0.0000)	3149.762b (0.0000)	2381.83116b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	8272.97229d (0.0000)	6648.53688d (0.0000)	7076.50633d (0.0000)	5285.84041d (0.0000)	-	-	-	-
	8185.255358d (0.0000)	7679.907657d (0.0000)	6481.02611d (0.0000)	5553.01754d (0.0000)				

Sección Cruzada/Periodo (F- statistic)	-a - 22.89904b (0.0000) -c - 8.547731d (0.0000)	-a - 32.923649b (0.0000) -c - 10.316693d (0.0000)	-a - 20.67263b (0.0000) -c - 8.53945d (0.0000)	-a - 37.712592b (0.0000) -c - 12.811154d (0.0000)	-a - -b - -c - 8.68917d (0.0000)	-a - -b - -c - 10.826886d (0.0000)	-a - -b - -c - 8.614599d (0.0000)	-a - -b - -c - 12.243934d (0.0000)
Sección Cruzada/Periodo Chi <sup>2</sup>	-a - 237615.388b (0.0000) -c - 156683.174d (0.0000)	-a - 269490.732b (0.0000) -c - 171288.708d (0.0000)	-a - 228789.247b (0.0000) -c - 156609.175d (0.0000)	-a - 281598.962b (0.0000) -c - 188666.219d (0.0000)	-a - -b - -c - 157938.3026d (0.0000)	-a - -b - -c - 175113.1275d (0.0000)	-a - -b - -c - 157278.643d (0.0000)	-a - -b - -c - 184986.7789d (0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A14. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de cebada

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	85.633412b (0.0000)	82.562293b (0.0000)	64.768793b (0.0000)	73.236279b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
Sección Cruzada Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	26.065991d (0.0000)	25.848155d (0000)	-d	-d	28.300722d (0.0000)	29.008655d (0.0000)	25.860726d (0.0000)	28.32186d (0.0000)
	-	-	-	-	-	-	-	-
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
Periodo (F-statistic)	356175.478b (0.0000)	352809.742b (0.0000)	330553.418b (0.0000)	341799.196b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
	248891.312d (0.0000)	248152.951d (0.0000)	-d	-d	256110.1343d (0.0000)	258282.0201d (0.0000)	248199.653d (0.0000)	256171.639d (0.0000)
Periodo Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	2794.22418b (0.0000)	2229.0458b (0.0000)	3161.80414b (0.0000)	2612.27622b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
Periodo	-	-	-	-	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
	1102.9298d (0.0000)	689.325778d (0.0000)	-d	-d	253.453146d (0.0000)	389.336268d (0.0000)	98.52326d (0.0000)	336.91379d (0.0000)
	-	-	-	-	-	-	-	-
	-a	-a	-a	-a	-a	-a	-a	-a
Periodo Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	8031.38464b (0.0000)	6460.90159b (0.0000)	9038.73345b (0.0000)	7528.39947b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
Periodo	3252.37481d (0.0000)	2045.73945d (0.0000)	-d	-d	757.391972d (0.0000)	1160.902183d (0.0000)	295.140001d (0.0000)	1005.4224d (0.0000)
	-	-	-	-	-	-	-	-
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	8031.38464b (0.0000)	6460.90159b (0.0000)	9038.73345b (0.0000)	7528.39947b (0.0000)	-b	-b	-b	-b
Periodo	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
	3252.37481d (0.0000)	2045.73945d (0.0000)	-d	-d	757.391972d (0.0000)	1160.902183d (0.0000)	295.140001d (0.0000)	1005.4224d (0.0000)
	-	-	-	-	-	-	-	-

Sección Cruzada/Periodo (F- statistic)	-a - 85.671351b (0.0000) -c - 26.082568d (0.0000)	-a - 82.587302b (0.0000) -c - 25.853d (0.0000)	-a - 64.864621b (0.0000) -c - -d -	-a - 73.251201b (0.0000) -c - -d -	-a - -b - -c - 29.647459d (0.0000)	-a - -b - -c - 30.290028d (0.0000)	-a - -b - -c - 26.041996d (0.0000)	-a - -b - -c - 28.736725d (0.0000)
Sección Cruzada/Periodo Chi <sup>2</sup>	-a - 356222.125b (0.0000) -c - 248952.522d (0.0000)	-a - 352843.462b (0.0000) -c - 248174.914d (0.0000)	-a - 330694.375b (0.0000) -c - -d -	-a - 341823.722b (0.0000) -c - -d -	-a - -b - -c - 260213.231d (0.0000)	-a - -b - -c - 262102.984d (0.0000)	-a - -b - -c - 248816.292d (0.0000)	-a - -b - -c - 257457.688d (0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A15. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de maíz

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	321.815529a (0.0000)	347.528024a (0.0000)	298.63174a (0.0000)	404.139616a (0.0000)	-a -	-a -	293.255388a (0.0000)	400.078272a (0.0000)
	70.253071b (0.0000)	81.632766b (0.0000)	97.217143b (0.0000)	159.628142b (0.0000)	60.21033b (0.0000)	70.249141b (0.0000)	85.326605b (0.0000)	141.035483b (0.0000)
	-c -	-c -	66.882901c (0.0000)	111.095377c (0.0000)	41.439953c (0.0000)	49.380073c (0.0000)	58.131818c (0.0000)	96.679744c (0.0000)
	26.379506d (0.0000)	30.506191d (0.0000)	36.77528d (0.0000)	55.530108d (0.0000)	24.186455d (0.0000)	28.274909d (0.0000)	32.479349d (0.0000)	48.539128d (0.0000)
Sección Cruzada Chi <sup>2</sup>	479327.469a (0.0000)	486522.63a (0.0000)	472327.759a (0.0000)	500666.902a (0.0000)	-a -	-a -	470627.452a (0.0000)	499719.931a (0.0000)
	337991.386b (0.0000)	351768.276b (0.0000)	367873.264b (0.0000)	413849.008b (0.0000)	323890.376b (0.0000)	337981.885b (0.0000)	355845.018b (0.0000)	402334.308b (0.0000)
	-c -	-c -	333490.592c (0.0000)	380204.733c (0.0000)	290050.527c (0.0000)	305863.714c (0.0000)	320688.452c (0.0000)	367357.112c (0.0000)
	249938.025d (0.0000)	262726.028d (0.0000)	279346.952d (0.0000)	316516.506d (0.0000)	242360.016d (0.0000)	256025.625d (0.0000)	268282.901d (0.0000)	304308.775d (0.0000)
Periodo (F-statistic)	1181.23319a (0.0000)	2249.08394a (0.0000)	718.385452a (0.0000)	1960.51285a (0.0000)	-a -	-a -	355.278229a (0.0000)	1071.12023a (0.0000)
	1255.53874b (0.0000)	1409.86332b (0.0000)	1284.83741b (0.0000)	1262.59889b (0.0000)	140.531947b (0.0000)	216.283384b (0.0000)	243.43456b (0.0000)	238.961342b (0.0000)
	-c -	-c -	702.512553c (0.0000)	801.259484c (0.0000)	153.969351c (0.0000)	64.154232c (0.0000)	190.353182c (0.0000)	112.581195c (0.0000)
	1574.76349d (0.0000)	1575.3473d (0.0000)	1946.16568d (0.0000)	1389.29947d (0.0000)	143.115974d (0.0000)	163.188947d (0.0000)	248.899626d (0.0000)	91.99075d (0.0000)
Periodo Chi <sup>2</sup>	3479.0672a (0.0000)	6517.01898a (0.0000)	2131.11356a (0.0000)	5705.62411a (0.0000)	-a -	-a -	1059.96902a (0.0000)	3159.98002a (0.0000)
	3693.68247b (0.0000)	4137.66594b (0.0000)	3778.17104b (0.0000)	3713.87481b (0.0000)	420.702228b (0.0000)	646.667321b (0.0000)	727.568797b (0.0000)	714.215957b (0.0000)
	-c -	-c -	2084.5431c (0.0000)	2373.77765c (0.0000)	460.830776c (0.0000)	192.278633c (0.0000)	569.399268c (0.0000)	337.161142c (0.0000)
	4610.1721d (0.0000)	4611.6251d (0.0000)	5665.36291d (0.0000)	4078.60257d (0.0000)	428.420318d (0.0000)	488.330405d (0.0000)	743.838291d (0.0000)	275.586414d (0.0000)



Sección Cruzada/Periodo (F- statistic)	321.796557a (0.0000)	347.507598a (0.0000)	298.614982a (0.0000)	404.116375a (0.0000)	-a -	-a -	293.366944a (0.0000)	400.156368a (0.0000)
	70.985021b (0.0000)	82.4676b (0.0000)	97.72378b (0.0000)	160.572005b (0.0000)	62.084641b (0.0000)	72.253611b (0.0000)	86.712276b (0.0000)	143.034088b (0.0000)
	-c -	-c -	67.487785c (0.0000)	112.110588c (0.0000)	43.58941c (0.0000)	51.644383c (0.0000)	59.860895c (0.0000)	98.967581c (0.0000)
	28.812479d (0.0000)	33.343154d (0.0000)	38.431838d (0.0000)	58.251035d (0.0000)	27.969219d (0.0000)	32.549839d (0.0000)	35.465721d (0.0000)	52.67469d (0.0000)
Sección Cruzada/Periodo Chi <sup>2</sup>	479327.911a (0.0000)	486523.089a (0.0000)	472328.466a (0.0000)	500667.48a (0.0000)	-a -	-a -	470669.005a (0.0000)	499744.201a (0.0000)
	338946.945b (0.0000)	352710.028b (0.0000)	368359.06b (0.0000)	414403.576b (0.0000)	326693.109b (0.0000)	340566.257b (0.0000)	357334.264b (0.0000)	403647.685b (0.0000)
	-c -	-c -	334320.222c (0.0000)	381052.665c (0.0000)	294606.909c (0.0000)	309933.033c (0.0000)	323365.433c (0.0000)	369522.589c (0.0000)
	257693.838d (0.0000)	270615.818d (0.0000)	283294.496d (0.0000)	320876.526d (0.0000)	255079.196d (0.0000)	268476.75d (0.0000)	276115.409d (0.0000)	311725.57d (0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A16. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de mijo

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	26.754363b (0.0000)	33.045041b (0.0000)	43.119988b (0.0000)	80.166953b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
Sección Cruzada Chi <sup>2</sup>	15.047453d (0.0000)	18.033008d (0.0000)	13.604108d (0.0000)	17.089589d (0.0000)	-d	-d	19.347472d (0.0000)	34.638929d (0.0000)
	-	-	-	-	-	-	-	-
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	251174.461b (0.0000)	269812.022b (0.0000)	293625.939b (0.0000)	350102.188b (0.0000)	-b	-b	-b	-b
Periodo (F-statistic)	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	201914.86d (0.0000)	217116.858d (0.0000)	193579.102d (0.0000)	212571.648d (0.0000)	-d	-d	223109.081d (0.0000)	274002.848d (0.0000)
	-	-	-	-	-	-	-	-
	-a	-a	-a	-a	-a	-a	-a	-a
Periodo Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	1329.58352b (0.0000)	1316.77053b (0.0000)	1447.97549b (0.0000)	1416.08458b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	1847.65425d (0.0000)	1626.84067d (0.0000)	421.958207d (0.0000)	399.999818d (0.0000)	-d	-d	414.179866d (0.0000)	227.785422d (0.0000)
Periodo Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	3907.05939b (0.0000)	3869.9893b (0.0000)	4247.23204b (0.0000)	4155.52733b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	5386.63151d (0.0000)	4758.62115d (0.0000)	1257.58589d (0.0000)	1192.49782d (0.0000)	-d	-d	1234.55486d (0.0000)	680.933378d (0.0000)

Sección Cruzada/Periodo (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	26.858938b	33.182342b	43.1541b	80.316041b	-b	-b	-b	-b
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	-	-	-	-
	-c	-c	-c	-c	-c	-c	-c	-c
Sección Cruzada/Periodo Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	15.587823d	18.750635d	14.96179d	18.762948d	-d	-d	20.531534d	36.665392d
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	-	-	(0.0000)	(0.0000)
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	251522.103b	270186.115b	293702.883b	350278.852b	-b	-b	-b	-b
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	-	-	-	-
	-c	-c	-c	-c	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
	204860.558d	220438.554d	201445.484d	220494.449d	-d	-d	228201.031d	279080.965d
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	-	-	(0.0000)	(0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A17. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de sorgo

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	26.521009b (0.0000)	31.230142b (0.0000)	42.428466b (0.0000)	80.079765b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
Sección Cruzada Chi <sup>2</sup>	-	-	-	-	-	-	-	-
	12.542789d (0.0000)	14.624753d (0.0000)	-d	-d	13.016008d (0.0000)	15.452714d (0.0000)	19.037565d (0.0000)	34.857083d (0.0000)
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	250406.67b (0.0000)	264801.485b (0.0000)	292170.649b (0.0000)	350002.152b (0.0000)	-b	-b	-b	-b
Periodo (F-statistic)	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
	186941.996d (0.0000)	199545.094d (0.0000)	-d	-d	189959.225d (0.0000)	204124.628d (0.0000)	221731.168d (0.0000)	274562.21d (0.0000)
	-	-	-	-	-	-	-	-
Periodo Chi <sup>2</sup>	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	684.250238b (0.0000)	726.769711b (0.0000)	1049.59687b (0.0000)	1003.36246b (0.0000)	-b	-b	-b	-b
	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
Periodo	-	-	-	-	-	-	-	-
	533.589676d (0.0000)	496.150165d (0.0000)	-d	-d	444.707807d (0.0000)	480.84903d (0.0000)	485.25493d (0.0000)	287.049556d (0.0000)
	-a	-a	-a	-a	-a	-a	-a	-a
	-	-	-	-	-	-	-	-
	2030.93369b (0.0000)	2155.60157b (0.0000)	3097.66038b (0.0000)	2963.19294b (0.0000)	-b	-b	-b	-b
Periodo	-c	-c	-c	-c	-	-	-	-
	-	-	-	-	-c	-c	-c	-c
	-	-	-	-	-	-	-	-
	1587.49881d (0.0000)	1476.90969d (0.0000)	-d	-d	1324.91328d (0.0000)	1431.70647d (0.0000)	1444.79326d (0.0000)	857.291642d (0.0000)
	-	-	-	-	-	-	-	-

Sección Cruzada/Periodo (F- statistic)	-a - 27.176568b (0.0000) -c - 15.629689d (0.0000)	-a - 31.934533b (0.0000) -c - 18.024829d (0.0000)	-a - 42.816661b (0.0000) -c - -d -	-a - 80.758612b (0.0000) -c - -d -	-a - -b - -c - 14.765102d (0.0000)	-a - -b - -c - 17.463023d (0.0000)	-a - -b - -c - 20.507994d (0.0000)	-a - -b - -c - 37.269251d (0.0000)
Sección Cruzada/Periodo Chi <sup>2</sup>	-a - 252553.505b (0.0000) -c - 205084.586d (0.0000)	-a - 266783.561b (0.0000) -c - 217083.781d (0.0000)	-a - 292996.094b (0.0000) -c - -d -	-a - 350784.09b (0.0000) -c - -d -	-a - -b - -c - 200346.464d (0.0000)	-a - -b - -c - 214402.467d (0.0000)	-a - -b - -c - 228102.54d (0.0000)	-a - -b - -c - 280541.149d (0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A18. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de soya

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	190.915199a (0.0000)	205.901071a (0.0000)	186.744066a (0.0000)	269.889554a (0.0000)	-a -	-a -	181.727674a (0.0000)	270.465574a (0.0000)
	39.018387b (0.0000)	41.944048b (0.0000)	58.041893b (0.0000)	98.246254b (0.0000)	30.407695b (0.0000)	32.198047b (0.0000)	46.763197b (0.0000)	81.786219b (0.0000)
	-c -	-c -	39.600174c (0.0000)	68.743718c (0.0000)	20.507446c (0.0000)	22.206416c (0.0000)	31.310968c (0.0000)	56.697409c (0.0000)
	13.882743d (0.0000)	15.093589d (0.0000)	22.829478d (0.0000)	39.13826d (0.0000)	11.277418d (0.0000)	12.409031d (0.0000)	16.937979d (0.0000)	29.182979d (0.0000)
Sección Cruzada Chi <sup>2</sup>	430526.634a (0.0000)	437571.234a (0.0000)	428467.012a (0.0000)	462854.705a (0.0000)	-a -	-a -	425928.868a (0.0000)	463054.115a (0.0000)
	284645.895b (0.0000)	291133.352b (0.0000)	320547.438b (0.0000)	368841.141b (0.0000)	262444.312b (0.0000)	267506.772b (0.0000)	300942.506b (0.0000)	351941.004b (0.0000)
	-c -	-c -	285972.943c (0.0000)	335997.837c (0.0000)	228094.778c (0.0000)	234947.519c (0.0000)	265034.62c (0.0000)	318409.2c (0.0000)
	195246.787d (0.0000)	202165.546d (0.0000)	237346.261d (0.0000)	284916.575d (0.0000)	178364.631d (0.0000)	186067.467d (0.0000)	211824.351d (0.0000)	258810.244d (0.0000)
Periodo (F-statistic)	2552.67602a (0.0000)	3451.36891a (0.0000)	2255.39423a (0.0000)	3769.33274a (0.0000)	-a -	-a -	700.819555a (0.0000)	1590.40285a (0.0000)
	2372.45201b (0.0000)	2530.89552b (0.0000)	2388.64415b (0.0000)	2507.25829b (0.0000)	548.874575b (0.0000)	695.702234b (0.0000)	606.782922b (0.0000)	638.912134b (0.0000)
	-c -	-c -	987.587708c (0.0000)	1246.16813c (0.0000)	5.478389c (0.0000)	36.008758c (0.0000)	128.72854c (0.0000)	117.109241c (0.0000)
	1963.98762d (0.0000)	2181.23939d (0.0000)	2387.22464d (0.0000)	2361.40545d (0.0000)	220.090579d (0.0000)	362.38476d (0.0000)	256.392445d (0.0000)	158.480028d (0.0000)
Periodo Chi <sup>2</sup>	7363.51205a (0.0000)	9824.32225a (0.0000)	6534.98577a (0.0000)	10679.9234a (0.0000)	-a -	-a -	2079.57455a (0.0000)	4654.6273a (0.0000)
	6862.09665b (0.0000)	7302.72073b (0.0000)	6907.25535b (0.0000)	7237.07034b (0.0000)	1632.58165b (0.0000)	2064.4573b (0.0000)	1803.18704b (0.0000)	1897.621b (0.0000)
	-c -	-c -	2917.45693c (0.0000)	3666.47268c (0.0000)	16.435564c (0.0000)	107.971266c (0.0000)	385.439231c (0.0000)	350.696648c (0.0000)
	5715.7009d (0.0000)	6326.88316d (0.0000)	6903.29731d (0.0000)	6830.96147d (0.0000)	658.042146d (0.0000)	1080.99877d (0.0000)	766.139839d (0.0000)	474.274728d (0.0000)

Sección Cruzada/Periodo (F-statistic)	190.993133a (0.0000)	205.97462a (0.0000)	186.817714a (0.0000)	269.945299a (0.0000)	-a -	-a -	181.756925a (0.0000)	270.484931a (0.0000)
	39.040009b (0.0000)	41.960861b (0.0000)	58.051995b (0.0000)	98.317446b (0.0000)	31.525168b (0.0000)	33.249159b (0.0000)	47.510546b (0.0000)	82.90323b (0.0000)
	-c -	-c -	39.623936c (0.0000)	68.77494c (0.0000)	21.71877c (0.0000)	23.349465c (0.0000)	32.217032c (0.0000)	57.968757c (0.0000)
	14.094896d (0.0000)	15.301519d (0.0000)	22.942516d (0.0000)	39.582746d (0.0000)	13.499476d (0.0000)	14.690201d (0.0000)	18.810014d (0.0000)	31.961326d (0.0000)
Sección Cruzada/Periodo Chi <sup>2</sup>	430570.628a (0.0000)	437610.504a (0.0000)	428509.708a (0.0000)	462879.977a (0.0000)	-a -	-a -	425949.803a (0.0000)	463066.764a (0.0000)
	284701.259b (0.0000)	291175.123b (0.0000)	320569.091b (0.0000)	368913.913b (0.0000)	265644.215b (0.0000)	270364.893b (0.0000)	302381.4b (0.0000)	353194.728b (0.0000)
	-c -	-c -	286032.461c (0.0000)	336045.243c (0.0000)	233039.576c (0.0000)	239300.544c (0.0000)	267568.953c (0.0000)	320434.046c (0.0000)
	196502.315d (0.0000)	203310.103d (0.0000)	237779.768d (0.0000)	285934.89d (0.0000)	192950.386d (0.0000)	199920.589d (0.0000)	220711.868d (0.0000)	266857.925d (0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A19. Prueba de variables redundantes para los efectos fijos de sección cruzada y de periodo temporal bajo las especificaciones e1 y e2 del cultivo de trigo

	CO <sub>2</sub> - FIRR		CO <sub>2</sub> - NOIRR		NOCO <sub>2</sub> - FIRR		NOCO <sub>2</sub> - NOIRR	
Effects test	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)	Test statistic (e1)	Test statistic (e2)
Sección Cruzada (F-statistic)	418.652741a (0.0000)	411.165907a (0.0000)	181.264546a (0.0000)	208.343766a (0.0000)	398.192093a (0.0000)	395.259185a (0.0000)	184.711718a (0.0000)	213.407423a (0.0000)
	101.528681b (0.0000)	99.0832b (0.0000)	72.227197b (0.0000)	82.825486b (0.0000)	96.330104b (0.0000)	97.812066b (0.0000)	74.156084b (0.0000)	85.422909b (0.0000)
	69.770051c (0.0000)	65.06443c (0.0000)	49.111546c (0.0000)	54.868901c (0.0000)	67.958517c (0.0000)	67.486703c (0.0000)	54.044833c (0.0000)	60.614319c (0.0000)
	34.373261d (0.0000)	33.975295d (0.0000)	26.578771d (0.0000)	28.440287d (0.0000)	34.705286d (0.0000)	35.519523d (0.0000)	30.412114d (0.0000)	33.129722d (0.0000)
Sección Cruzada Chi <sup>2</sup>	503979.649a (0.0000)	502283.055a (0.0000)	425691.055a (0.0000)	438671.849a (0.0000)	499281.357a (0.0000)	498583.792a (0.0000)	427446.929a (0.0000)	440913.255a (0.0000)
	371881.358b (0.0000)	369624.543b (0.0000)	340531.274b (0.0000)	353102.55b (0.0000)	367027.076b (0.0000)	368432.15b (0.0000)	342948.535b (0.0000)	355944.474b (0.0000)
	337359.372c (0.0000)	330965.335c (0.0000)	305374.304c (0.0000)	315427.294c (0.0000)	334950.547c (0.0000)	334308.556c (0.0000)	314056.275c (0.0000)	324495.926c (0.0000)
	273321.395d (0.0000)	272280.539d (0.0000)	250597.303d (0.0000)	256538.929d (0.0000)	274177.599d (0.0000)	276240.682d (0.0000)	262457.161d (0.0000)	270039.427d (0.0000)
Periodo (F-statistic)	61.650158a (0.0000)	89.671236a (0.0000)	976.700758a (0.0000)	1376.68364a (0.0000)	826.075252a (0.0000)	727.770305a (0.0000)	728.879201a (0.0000)	940.620791a (0.0000)
	3963.986b (0.0000)	3238.72624b (0.0000)	3584.95615b (0.0000)	2910.24285b (0.0000)	1584.183b (0.0000)	1398.28942b (0.0000)	1787.23212b (0.0000)	1450.42881b (0.0000)
	2573.5324c (0.0000)	1315.94108c (0.0000)	2493.14397c (0.0000)	1499.21984c (0.0000)	1095.95661c (0.0000)	628.332893c (0.0000)	890.078935c (0.0000)	356.52058c (0.0000)
	2551.70586d (0.0000)	1813.50568d (0.0000)	3145.39563d (0.0000)	2186.15325d (0.0000)	915.178081d (0.0000)	743.477565d (0.0000)	914.217997d (0.0000)	611.295471d (0.0000)
Periodo Chi <sup>2</sup>	184.789767a (0.0000)	268.647498a (0.0000)	2885.78301a (0.0000)	4042.34913a (0.0000)	2446.46485a (0.0000)	2158.5356a (0.0000)	2161.88918a (0.0000)	2780.6068a (0.0000)
	11200.4072b (0.0000)	9247.76106b (0.0000)	10185.1968b (0.0000)	8350.11553b (0.0000)	4637.08043b (0.0000)	4104.428b (0.0000)	5215.26238b (0.0000)	4254.06945b (0.0000)
	7421.36633c (0.0000)	3867.60089c (0.0000)	7198.1782c (0.0000)	4393.88611c (0.0000)	3232.1606c (0.0000)	1866.50895c (0.0000)	2633.38993c (0.0000)	1063.6042c (0.0000)
	7360.82002d (0.0000)	5289.57201d (0.0000)	8993.995d (0.0000)	6340.66726d (0.0000)	2706.5918d (0.0000)	2204.58184d (0.0000)	2703.79275d (0.0000)	1816.3827d (0.0000)



Sección Cruzada/Periodo (F-statistic)	418.630202a (0.0000)	411.143611a (0.0000)	181.332501a (0.0000)	208.404304a (0.0000)	398.442181a (0.0000)	395.49905a (0.0000)	184.735345a (0.0000)	213.429065a (0.0000)
	101.585071b (0.0000)	99.108764b (0.0000)	72.271595b (0.0000)	82.827233b (0.0000)	97.104694b (0.0000)	98.487528b (0.0000)	74.28727b (0.0000)	85.710039b (0.0000)
	69.765664c (0.0000)	65.063543c (0.0000)	49.325618c (0.0000)	54.936488c (0.0000)	68.48694c (0.0000)	67.940977c (0.0000)	54.090113c (0.0000)	60.766264c (0.0000)
	34.383291d (0.0000)	33.980593d (0.0000)	26.974151d (0.0000)	28.593557d (0.0000)	35.197686d (0.0000)	35.906172d (0.0000)	30.448211d (0.0000)	33.271593d (0.0000)
Sección Cruzada/Periodo Chi <sup>2</sup>	503980.572a (0.0000)	502283.941a (0.0000)	425731.921a (0.0000)	438704.906a (0.0000)	499346.191a (0.0000)	498646.637a (0.0000)	427464.788a (0.0000)	440928.665a (0.0000)
	371938.551b (0.0000)	369654.25b (0.0000)	340593.455b (0.0000)	353110.35b (0.0000)	367772.292b (0.0000)	369073.529b (0.0000)	343116.547b (0.0000)	356259.297b (0.0000)
	337359.445c (0.0000)	330969.909c (0.0000)	305773.889c (0.0000)	315544.999c (0.0000)	335665.414c (0.0000)	334928.377c (0.0000)	314138.157c (0.0000)	324730.109c (0.0000)
	273353.046d (0.0000)	272300.08d (0.0000)	251897.526d (0.0000)	257017.774d (0.0000)	275438.89d (0.0000)	277212.402d (0.0000)	262567.667d (0.0000)	270424.844d (0.0000)

Nota: a, b, c y d indican los valores de prueba calculados para las regresiones de panel basadas en los conjuntos de datos RCP2.6, RCP4.5, RCP6.0 Y RCP8.5 respectivamente.

Tabla A20. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de arroz

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	2.96E+10 (0.0000)	4.69E+09 (0.0000)	1.63E+10 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	7.38E+12 (0.0000)	1.03E+11 (0.0000)	4E+12 (0.0000)
e1 CO <sub>2</sub> - NOIRR	5.45E+10 (0.0000)	1.41E+11 (0.0000)	3.46E+12 (0.0000)	1.76E+10 (0.0000)
e2 CO <sub>2</sub> - NOIRR	2.37E+11 (0.0000)	5.36E+12 (0.0000)	6.43E+14 (0.0000)	1.18E+11 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	1.25E+12 (0.0000)	5.73E+10 (0.0000)	4.46E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	9.05E+11 (0.0000)	1.46E+11 (0.0000)	1.16E+13 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	2E+10 (0.0000)	3.66E+12 (0.0000)	4.07E+10 (0.0000)	7.15E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	8.33E+09 (0.0000)	7.91E+11 (0.0000)	4.14E+11 (0.0000)	2.32E+10 (0.0000)

Tabla A21. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de canola

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	-	-	-
e2 CO <sub>2</sub> - FIRR	-	-	-	-
e1 CO <sub>2</sub> - NOIRR	-	2.6E+12 (0.0000)	-	2.03E+14 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	8.57E+11 (0.0000)	-	2.94E+10 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	6.89E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	1.16E+12 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	8.78E+11 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	5.18E+10 (0.0000)

Tabla A22. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de caña

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	3.67E+10 (0.0000)	-	7.14E+10 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	8.3E+09 (0.0000)	-	9.85E+10 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	8.72E+10 (0.0000)	-	1.66E+11 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	2.73E+14 (0.0000)	-	1.73E+11 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	1.2E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	6.83E+11 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	1.94E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	5.22E+11 (0.0000)

Tabla A23. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de cebada

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	4.67E+10 } (0.0000)	-	6.46E+10 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	1.36E+10 (0.0000)	-	3.16E+10 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	2.85E+10 (0.0000)	-	-
e2 CO <sub>2</sub> - NOIRR	-	2.53E+10 (0.0000)	-	-
e1 NOCO <sub>2</sub> - FIRR	-	-	-	6.21E+11 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	2.08E+12 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	1.38E+11 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	1.29E+12 (0.0000)

Tabla A24. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de maíz

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	1.57E+10 (0.0000)	8.05E+11 (0.0000)	-	1.98E+11 (0.0000)
e2 CO <sub>2</sub> - FIRR	5.45E+11 (0.0000)	1.04E+14 (0.0000)	-	3.06E+11 (0.0000)
e1 CO <sub>2</sub> - NOIRR	5.92E+11 (0.0000)	7.51E+10 (0.0000)	1.33E+10 (0.0000)	1.91E+11 (0.0000)
e2 CO <sub>2</sub> - NOIRR	2.78E+10 (0.0000)	4.91E+11 (0.0000)	3.26E+11 (0.0000)	8.26E+12 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	2.67E+11 (0.0000)	1.7E+10 (0.0000)	5.43E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	3.85E+11 (0.0000)	3.78E+11 (0.0000)	2.18E+11 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	2.25E+11 (0.0000)	1.67E+14 (0.0000)	1.12E+11 (0.0000)	1.16E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	2.5E+10 (0.0000)	8.18E+10 (0.0000)	8.23E+09 (0.0000)	4.12E+10 (0.0000)

Tabla A25. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de mijo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	1.19E+12 (0.0000)	-	1.52E+11 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	1.03E+12 (0.0000)	-	2.27E+11 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	1.41E+11 (0.0000)	-	9.49E+13 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	4.13E+11 (0.0000)	-	4.48E+11 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	-
e2 NOCO <sub>2</sub> - FIRR	-	-	-	-
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	6.62E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	1.96E+11 (0.0000)

Tabla A26. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de sorgo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	7.26E+11 (0.0000)	-	9.31E+10 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	6.82E+10 (0.0000)	-	4.72E+10 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	2.75E+10 (0.0000)	-	-
e2 CO <sub>2</sub> - NOIRR	-	4.96E+12 (0.0000)	-	-
e1 NOCO <sub>2</sub> - FIRR	-	-	-	6.53E+11 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	5.67E+13 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	7.06E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	2.2E+11 (0.0000)

Tabla A27. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de soya

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	3.63E+11 (0.0000)	1.56E+11 (0.0000)	-	2.61E+11 (0.0000)
e2 CO <sub>2</sub> - FIRR	9.86E+10 (0.0000)	2.77E+12 (0.0000)	-	4.71E+11 (0.0000)
e1 CO <sub>2</sub> - NOIRR	1.24E+11 (0.0000)	6.25E+11 (0.0000)	2.6E+10 (0.0000)	2.81E+10 (0.0000)
e2 CO <sub>2</sub> - NOIRR	8.02E+10 (0.0000)	9.16E+11 (0.0000)	8.73E+11 (0.0000)	5.58E+13 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	1.52E+12 (0.0000)	5.45E+10 (0.0000)	3.3E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	7.05E+10 (0.0000)	4.08E+12 (0.0000)	1.73E+13 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	4.8E+09 (0.0000)	1.08E+11 (0.0000)	8.06E+09 (0.0000)	4.02E+11 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	2.58E+10 (0.0000)	1.12E+11 (0.0000)	3.46E+11 (0.0000)	3.95E+10 (0.0000)

Tabla A28. Resultados de la prueba de Wald modificada para heterocedasticidad grupal para las especificaciones e1 y e2 del cultivo de trigo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	1.42E+13 (0.0000)	7.73E+10 (0.0000)	5.58E+10 (0.0000)	7.46E+11 (0.0000)
e2 CO <sub>2</sub> - FIRR	3.92E+13 (0.0000)	3.53E+10 (0.0000)	3.74E+10 (0.0000)	5.27E+10 (0.0000)
e1 CO <sub>2</sub> - NOIRR	1.09E+11 (0.0000)	1.41E+11 (0.0000)	4.49E+10 (0.0000)	3.62E+10 (0.0000)
e2 CO <sub>2</sub> - NOIRR	4.78E+10 (0.0000)	5.05E+10 (0.0000)	8.99E+11 (0.0000)	5.11E+10 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	1.4E+12 (0.0000)	2.03E+10 (0.0000)	1.93E+11 (0.0000)	4.44E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	5.7E+11 (0.0000)	2.03E+12 (0.0000)	2.39E+13 (0.0000)	5.62E+10 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	1.34E+12 (0.0000)	8.72E+11 (0.0000)	4E+11 (0.0000)	6.27E+10 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	5.33E+11 (0.0000)	6.78E+11 (0.0000)	1.9E+11 (0.0000)	1.74E+10 (0.0000)

Tabla A29. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de arroz

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	19645.74 (0.0000)	37658.84 (0.0000)	15577.16 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	19592.87 (0.0000)	46211.91 (0.0000)	15152.84 (0.0000)
e1 CO <sub>2</sub> - NOIRR	1784.381 (0.0000)	8940.848 (0.0000)	8091.365 (0.0000)	11901.92 (0.0000)
e2 CO <sub>2</sub> - NOIRR	1479.676 (0.0000)	7051.981 (0.0000)	6233.492 (0.0000)	10800.7 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	23038.65 (0.0000)	16038.38 (0.0000)	16293.78 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	23741.94 (0.0000)	16506.95 (0.0000)	15895.43 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	2514.995 (0.0000)	12884.81 (0.0000)	14019 (0.0000)	13763.18 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	2663.346 (0.0000)	10783.25 (0.0000)	11118.53 (0.0000)	15973.14 (0.0000)

Tabla A30. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de canola

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	-	-	-
e2 CO <sub>2</sub> - FIRR	-	-	-	-
e1 CO <sub>2</sub> - NOIRR	-	8515.602 (0.0000)	-	9888.048 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	8616.286 (0.0000)	-	10318.95 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	24994.7 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	24881.11 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	10857.53 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	11385.88 (0.0000)

Tabla A31. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de caña

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	45241.8 (0.0000)	-	22419.62 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	48542.35 (0.0000)	-	23741.45 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	52407.7 (0.0000)	-	19301.41 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	63085.66 (0.0000)	-	23736.73 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	22047.43 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	23354.12 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	20603.99 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	26480.41 (0.0000)

Tabla A32. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de cebada

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	31621.64 (0.0000)	-	24017.14 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	35397.27 (0.0000)	-	26069.23 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	16525.16 (0.0000)	-	-
e2 CO <sub>2</sub> - NOIRR	-	18309.62 (0.0000)	-	-
e1 NOCO <sub>2</sub> - FIRR	-	-	-	19176.7 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	19310.74 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	12984.9 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	16153.05 (0.0000)



Tabla A33. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de maíz

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	2074.804 (0.0000)	23366.22 (0.0000)	-	14514.62 (0.0000)
e2 CO <sub>2</sub> - FIRR	1857.786 (0.0000)	21465.6 (0.0000)	-	13563.73 (0.0000)
e1 CO <sub>2</sub> - NOIRR	1823.636 (0.0000)	12971.02 (0.0000)	7477.61 (0.0000)	10013.13 (0.0000)
e2 CO <sub>2</sub> - NOIRR	1289.056 (0.0000)	8379.35 (0.0000)	5572.371 (0.0000)	9062.501 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	35404.61 (0.0000)	14736.42 (0.0000)	18022.95 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	34678.98 (0.0000)	15703.18 (0.0000)	16412.09 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	2170.81 (0.0000)	19521.06 (0.0000)	11900.88 (0.0000)	13605 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	1757.296 (0.0000)	12997.83 (0.0000)	8679.262 (0.0000)	12299.95 (0.0000)

Tabla A34. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de mijo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	17719.29 (0.0000)	-	9153.692 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	18027.19 (0.0000)	-	9448.787 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	9869.13 (0.0000)	-	8016.473 (0.0000)
e2 CO <sub>2</sub> - NOIRR	-	8903.202 (0.0000)	-	8514.004 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	-	-	-
e2 NOCO <sub>2</sub> - FIRR	-	-	-	-
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	5270.699 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	6013.092 (0.0000)

Tabla A35. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de sorgo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	-	23811.62 (0.0000)	-	11737.21 (0.0000)
e2 CO <sub>2</sub> - FIRR	-	23830.87 (0.0000)	-	12124.17 (0.0000)
e1 CO <sub>2</sub> - NOIRR	-	18522.21 (0.0000)	-	-
e2 CO <sub>2</sub> - NOIRR	-	16643.73 (0.0000)	-	-
e1 NOCO <sub>2</sub> - FIRR	-	-	-	11723.88 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	12369.7 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	-	-	-	8956.825 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	-	-	10047 (0.0000)

Tabla A36. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de soya

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	3553.417 (0.0000)	18836.13 (0.0000)	-	14102.08 (0.0000)
e2 CO <sub>2</sub> - FIRR	2944.081 (0.0000)	19918.5 (0.0000)	-	14700.53 (0.0000)
e1 CO <sub>2</sub> - NOIRR	2051.082 (0.0000)	11634.4 (0.0000)	4897.462 (0.0000)	11029.4 (0.0000)
e2 CO <sub>2</sub> - NOIRR	1456.054 (0.0000)	8992.558 (0.0000)	4077.713 (0.0000)	9807.461 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	-	38227.41 (0.0000)	18156.82 (0.0000)	21280.93 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	-	44222.57 (0.0000)	22351.17 (0.0000)	22134.63 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	2373.9 (0.0000)	22642.57 (0.0000)	10887.45 (0.0000)	17400.78 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	2044.73 (0.0000)	18375.11 (0.0000)	8330.242 (0.0000)	15708.41 (0.0000)

Tabla A37. Resultados de la prueba de Wooldridge para identificar autocorrelación especificaciones e1 y e2 cultivo de trigo

Especificación	Test statistic (RCP2.6)	Test statistic (RCP4.5)	Test statistic (RCP6)	Test statistic (RCP8.5)
e1 CO <sub>2</sub> - FIRR	8144.449 (0.0000)	45081.52 (0.0000)	31357.78 (0.0000)	46529.83 (0.0000)
e2 CO <sub>2</sub> - FIRR	9643.779 (0.0000)	51815.14 (0.0000)	30507.66 (0.0000)	45566.04 (0.0000)
e1 CO <sub>2</sub> - NOIRR	2702.831 (0.0000)	14941.31 (0.0000)	13061.08 (0.0000)	19572.46 (0.0000)
e2 CO <sub>2</sub> - NOIRR	3445.485 (0.0000)	16936.4 (0.0000)	11624.47 (0.0000)	21067.4 (0.0000)
e1 NOCO <sub>2</sub> - FIRR	8769.914 (0.0000)	53453.43 (0.0000)	40845.74 (0.0000)	42861.56 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	9634.055 (0.0000)	55231.72 (0.0000)	41450 (0.0000)	40607.22 (0.0000)
e1 NOCO <sub>2</sub> - NOIRR	2155.412 (0.0000)	16156.69 (0.0000)	15769.51 (0.0000)	17862.38 (0.0000)
e2 NOCO <sub>2</sub> - FIRR	3024.043 (0.0000)	18806.37 (0.0000)	16046.47 (0.0000)	21259.09 (0.0000)

Tabla A38. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estándar para el cultivo de arroz.

CO <sub>2</sub> - FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 4.5	-0.021494672	-0.007141293	-0.00158633	6.54712E-07	0.000136669	0.296963125	0.512484014	5.314254761	94224	0.978001	0.966999
	0.002418602	4.32732E-05	0.000372539	6.62785E-07	1.20202E-05	0.003822454	0.006583397	0.050134588			
	0.002881542	5.28504E-05	0.000497199	8.60345E-07	1.79827E-05	0.004403554	0.007737644	0.060661692			
e2 RCP 4.5	-0.019690424	-0.006958171	-	-	-	0.302674443	0.520287037	5.321838856	94224	0.977851	0.966774
	0.002418602	4.32732E-05	-	-	-	0.003818085	0.006585497	0.046380196			
	0.002881542	5.28504E-05	-	-	-	0.004337234	0.007646097	0.054925982			
e1 RCP 6.0	0.001087567	-0.002762633	0.000718896	-5.17733E-06	8.06758E-05	0.115911819	0.261814415	3.217089176	94224	0.991903	0.987853
	0.00153168	2.09594E-05	0.000197594	3.86289E-07	6.45251E-06	0.001895562	0.004641984	0.030004896			
	0.001688368	2.33133E-05	0.000225559	4.79834E-07	7.92651E-06	0.002101047	0.005149902	0.033756003			
e2 RCP 6.0	-0.002211654	-0.002678226	-	-	-	0.123033807	0.282241493	3.383956909	94224	0.991844	0.987765
	0.00153168	2.09594E-05	-	-	-	0.001853147	0.00448407	0.027324701			
	0.001688368	2.33133E-05	-	-	-	0.002003745	0.004850608	0.030086594			
e1 RCP 8.5	-0.10068544	-0.005874817	0.007567404	-1.74288E-06	-0.000141168	0.530115962	1.184590101	5.937422752	94224	0.94662	0.919922
	0.00225109	3.13568E-05	0.000343286	6.38837E-07	9.44962E-06	0.004941952	0.011204544	0.044107582			
	0.002594832	3.96515E-05	0.000410725	5.80914E-07	1.3133E-05	0.005741559	0.013868095	0.051882114			
e2 RCP 8.5	-0.098067299	-0.006185025	-	-	-	0.522634387	1.173103094	6.399677753	94224	0.945837	0.918751
	0.00225109	3.13568E-05	-	-	-	0.004905376	0.011142584	0.04115041			
	0.002594832	3.96515E-05	-	-	-	0.005621787	0.013629418	0.04980984			
CO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	0.110237487	-0.005308887	0.017819496	-2.14182E-05	-0.000163987	0.07377626	0.069624141	0.82214272	94224	0.996555	0.994832
	0.001947535	4.72691E-05	0.000230234	3.54847E-07	9.46151E-06	0.00141914	0.001392279	0.035602923			
	0.002499719	5.52588E-05	0.000299816	1.26902E-06	1.73471E-05	0.001575648	0.001619306	0.041960794			
e2 RCP 2.6	0.09679807	-0.006433674	-	-	-	0.113988094	0.109443963	2.486762285	94224	0.99572	0.99358
	0.001947535	4.72691E-05	-	-	-	0.001535019	0.001506562	0.036073651			
	0.002499719	5.52588E-05	-	-	-	0.001839172	0.001844879	0.04588633			
e1 RCP 4.5	-0.018698057	-0.005117593	0.011584868	-5.73389E-06	-0.000162554	0.246204242	0.417441636	3.323189974	94224	0.98552	0.978277
	0.002080464	3.72233E-05	0.000320455	5.70123E-07	1.03397E-05	0.003288048	0.005662992	0.043125417			
	0.002589907	4.5531E-05	0.00045558	7.47555E-07	1.70779E-05	0.003781686	0.006621127	0.052534714			
e2 RCP 4.5	-0.014672126	-0.005479691	-	-	-	0.245021492	0.417940378	4.041153908	94224	0.984922	0.977381
	0.002080464	3.72233E-05	-	-	-	0.003340013	0.005760911	0.040572818			
	0.002589907	4.5531E-05	-	-	-	0.003736326	0.006553259	0.048805736			
e1 RCP 6.0	-0.015123632	-0.004745775	0.018417485	-9.45641E-06	-0.000332565	0.222264796	0.520332277	2.865376711	94224	0.980587	0.970877
	0.002441179	3.34049E-05	0.000314924	6.15665E-07	1.0284E-05	0.003021132	0.007398356	0.047821559			
	0.003332152	4.27947E-05	0.000482884	8.97759E-07	1.8888E-05	0.00392474	0.01021353	0.066074207			

e2 RCP 6.0	-0.023946259	-0.005328563	-	-	-	0.230107784	0.548873603	4.137216568	94224	0.979249	0.968872
	0.002441179	3.34049E-05	-	-	-	0.003042439	0.007361805	0.044860832			
	0.003332152	4.27947E-05	-	-	-	0.003880304	0.010057287	0.063809626			
e1 RCP 8.5	-0.079271682	-0.004117107	0.018211877	-6.42694E-06	-0.000378085	0.430886447	0.96509093	3.819274902	94224	0.968505	0.952753
	0.001799656	2.50685E-05	0.000274443	5.10725E-07	7.55459E-06	0.003950891	0.00895758	0.035262231			
	0.002202126	3.25419E-05	0.00042806	8.87468E-07	1.20285E-05	0.004736127	0.011465435	0.04591075			
e2 RCP 8.5	-0.072295882	-0.004846648	-	-	-	0.405373871	0.919596493	4.819881916	94224	0.965355	0.94803
	0.001799656	2.50685E-05	-	-	-	0.004083215	0.009275042	0.034253441			
	0.002202126	3.25419E-05	-	-	-	0.004796645	0.011675266	0.043689601			
NOCO <sub>2</sub> -FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	$N$	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-			
	-	-	-	-	-	-	-	-			
e2 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-			
	-	-	-	-	-	-	-	-			
e1 RCP 4.5	0.017119879	-0.00735511	-0.001619045	-1.41298E-07	0.000173707	0.084474117	0.181103334	4.598402023	94224	0.974269	0.961399
	0.002501025	4.47479E-05	0.000385234	6.85372E-07	1.24298E-05	0.003952718	0.006807751	0.05184311			
	0.002952424	5.65416E-05	0.000512662	8.79537E-07	1.89694E-05	0.004510554	0.007943765	0.063076116			
e2 RCP 4.5	0.01963889	-0.007128799	-	-	-	0.09172973	0.191204026	4.629636288	94224	0.974001	0.960999
	0.002501025	4.47479E-05	-	-	-	0.003955212	0.006822016	0.048045948			
	0.002952424	5.65416E-05	-	-	-	0.004469471	0.007891154	0.056938469			
e1 RCP 6.0	0.012638329	-0.00698994	0.003367773	-3.42556E-06	2.41998E-05	0.083406411	0.205728412	4.398760319	94224	0.966192	0.949282
	0.00292007	3.9958E-05	0.000376703	7.3644E-07	1.23014E-05	0.003613792	0.008849704	0.057202794			
	0.003757675	5.46269E-05	0.000501527	7.7425E-07	2.08724E-05	0.00451908	0.011711408	0.077023797			
e2 RCP 6.0	0.003686639	-0.007008481	-	-	-	0.095975943	0.24377583	4.851293564	94224	0.965966	0.948947
	0.00292007	3.9958E-05	-	-	-	0.003531727	0.008545737	0.052075393			
	0.003757675	5.46269E-05	-	-	-	0.004326098	0.011144866	0.069265909			
e1 RCP 8.5	-0.042322606	-0.005514069	0.009371925	-5.07851E-06	-0.000120619	0.130824655	0.40724054	4.54005909	94224	0.941547	0.912311
	0.002251563	3.13634E-05	0.000343358	6.38971E-07	9.4516E-06	0.004942989	0.011206896	0.044116843			
	0.00263848	4.27635E-05	0.000447554	7.13212E-07	1.40028E-05	0.005947033	0.014352346	0.054320529			
e2 RCP 8.5	-0.03853875	-0.005858731	-	-	-	0.125163853	0.401926786	5.149490356	94224	0.940054	0.910076
	0.002251563	3.13634E-05	-	-	-	0.004932596	0.011204414	0.041378759			
	0.00263848	4.27635E-05	-	-	-	0.005965965	0.014472681	0.052808408			
NOCO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	$N$	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	0.13396427	-0.005567385	0.019061567	-1.86678E-05	-0.000266302	0.004710506	0.020364329	0.492133498	94224	0.996378	0.994567
	0.001918499	4.65644E-05	0.000226801	3.49557E-07	9.32045E-06	0.001397982	0.001371522	0.035072129			
	0.002431924	5.61345E-05	0.000299327	1.07626E-06	1.56299E-05	0.001545835	0.001584946	0.041946109			
e2 RCP 2.6	0.121009074	-0.006820973	-	-	-	0.042208374	0.057621647	2.157989979	94224	0.995541	0.993311
	0.001918499	4.65644E-05	-	-	-	0.001505483	0.001477572	0.035379522			
	0.002431924	5.61345E-05	-	-	-	0.001786627	0.001799425	0.044589553			
e1 RCP 4.5	0.010947914	-0.005004912	0.016856598	7.62421E-07	-0.00047561	0.107946955	0.202579349	2.725260019	94224	0.982478	0.973714
	0.002146156	3.83986E-05	0.000330574	5.88125E-07	1.06661E-05	0.003391869	0.005841803	0.044487119			
	0.002602137	4.85606E-05	0.00048552	8.98534E-07	1.87569E-05	0.003823214	0.006719489	0.054710813			

e2 RCP 4.5	0.012192533	-0.005804785	-	-	-	0.097303361	0.189349279	3.642407417	94224	0.981471	0.972205
	0.002146156	3.83986E-05	-	-	-	0.003472124	0.005988778	0.04217764			
	0.002602137	4.85606E-05	-	-	-	0.003796461	0.006685441	0.049921192			
e1 RCP 6.0	0.01421822	-0.004493139	0.024352279	1.38407E-06	-0.000722701	0.090021446	0.220322505	2.251444578	94224	0.976746	0.965115
	0.002497334	3.41734E-05	0.000322168	6.29827E-07	1.05205E-05	0.003090626	0.007568539	0.048921593			
	0.003258673	4.60774E-05	0.000509906	8.1068E-07	2.02783E-05	0.003914617	0.010225905	0.067122295			
e2 RCP 6.0	0.012596696	-0.005585263	-	-	-	0.078612059	0.19604136	3.55171442	94224	0.974173	0.961258
	0.002497334	3.41734E-05	-	-	-	0.003172559	0.007676659	0.046779469			
	0.003258673	4.60774E-05	-	-	-	0.003948751	0.010286915	0.064804696			
e1 RCP 8.5	-0.032627981	-0.003512136	0.02583649	-3.98778E-06	-0.000676317	0.167448044	0.406620592	2.543037891	94224	0.96209	0.943129
	0.001830183	2.54937E-05	0.000279098	5.19388E-07	7.68274E-06	0.004017911	0.009109529	0.035860389			
	0.002189737	3.44609E-05	0.000460702	9.53334E-07	1.38421E-05	0.004802318	0.011594144	0.047237705			
e2 RCP 8.5	-0.023536587	-0.004623929	-	-	-	0.119171672	0.312604904	3.819156408	94224	0.955135	0.932699
	0.001830183	2.54937E-05	-	-	-	0.004307082	0.009783557	0.036131423			
	0.002189737	3.44609E-05	-	-	-	0.005088228	0.012403132	0.046221104			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A39. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estándar para el cultivo de canola

[illegible]

[illegible]



e2 RCP 4.5	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 8.5	-0.03875	0.001596	0.012337	-9E-06	-0.00033	-0.09114	-0.21376	0.430545	94224	0.953717	0.930569
	0.001684	2.35E-05	0.000257	4.78E-07	7.07E-06	0.003698	0.008384	0.033003			
	0.002039	2.65E-05	0.000579	1.63E-06	7.92E-06	0.004521	0.010818	0.044791			
e2 RCP 8.5	-0.03264	0.001138	-	-	-	-0.12354	-0.28051	0.882534	94224	0.951658	0.927483
	0.001684	2.35E-05	-	-	-	0.003724	0.008459	0.031239			
	0.002039	2.65E-05	-	-	-	0.004413	0.010648	0.037294			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A40. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estándar para el cultivo de caña

[illegible]



e2 RCP 4.5	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 8.5	0.312214	-0.0294	0.256598	-6.8E-05	-0.007	0.240239	2.373325	3.796619	94224	0.904347	0.856506
	0.014861	0.000207	0.002266	4.22E-06	6.24E-05	0.032626	0.073971	0.291194			
	0.015778	0.000255	0.004166	1E-05	0.000104	0.035425	0.083174	0.366851			
e2 RCP 8.5	0.410392	-0.04019	-	-	-	-0.30844	1.275681	15.40691	94224	0.880243	0.820355
	0.014861	0.000207	-	-	-	0.035973	0.081713	0.301773			
	0.015778	0.000255	-	-	-	0.041333	0.09865	0.351774			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A41. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estándar para el cultivo de cebada

[illegible]



e2 RCP 4.5	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 8.5	-0.08849	0.001451	0.03989	-1.4E-05	-0.00112	-0.09424	-0.171	1.706278	94224	0.957484	0.93622
	0.003218	4.48E-05	0.000491	9.13E-07	1.35E-05	0.007064	0.016016	0.06305			
	0.00397	5.36E-05	0.001079	3E-06	1.64E-05	0.008607	0.020579	0.086396			
e2 RCP 8.5	-0.07223	-0.0002	-	-	-	-0.18828	-0.36234	3.376811	94224	0.952052	0.928074
	0.003218	4.48E-05	-	-	-	0.007392	0.016792	0.062014			
	0.00397	5.36E-05	-	-	-	0.008636	0.02085	0.075233			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A42. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estandar para el cultivo de maíz

CO <sub>2</sub> - FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	0.298294	-0.01787	0.025401	-6E-05	0.000292	0.198996	0.204167	7.151648	94224	0.996275	0.994412
	0.005914	0.000144	0.000699	1.08E-06	2.87E-05	0.004309	0.004228	0.108113			
	0.007157	0.000171	0.000889	3.34E-06	4.76E-05	0.004765	0.004813	0.121824			
e2 RCP 2.6	0.274854	-0.01916	-	-	-	0.28285	0.287076	10.0561	94224	0.99586	0.993789
	0.005914	0.000144	-	-	-	0.004409	0.004328	0.103621			
	0.007157	0.000171	-	-	-	0.005048	0.005036	0.127267			
e1 RCP 4.5	-0.13825	-0.01563	-0.01362	-3.4E-05	0.001175	0.528516	0.889837	15.35593	94224	0.982509	0.973762
	0.006703	0.00012	0.001032	1.84E-06	3.33E-05	0.010593	0.018245	0.138938			
	0.008707	0.000155	0.001531	4.19E-06	3.93E-05	0.012768	0.022845	0.185582			
e2 RCP 4.5	-0.12412	-0.01408	-	-	-	0.565568	0.945704	14.99951	94224	0.982073	0.973109
	0.006703	0.00012	-	-	-	0.010676	0.018414	0.129683			
	0.008707	0.000155	-	-	-	0.012711	0.022728	0.16749			
e1 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-			
	-	-	-	-	-	-	-	-			
e2 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-			
	-	-	-	-	-	-	-	-			
e1 RCP 8.5	-0.24106	-0.01144	0.018037	-3.5E-05	0.000101	0.761923	1.367892	14.69812	94224	0.954363	0.931538
	0.006552	9.13E-05	0.000999	1.86E-06	2.75E-05	0.014383	0.032611	0.128374			
	0.007634	0.000115	0.001808	4.59E-06	3.6E-05	0.017256	0.041608	0.154796			
e2 RCP 8.5	-0.22876	-0.01179	-	-	-	0.765327	1.394149	15.96209	94224	0.953583	0.930371
	0.006552	9.13E-05	-	-	-	0.014294	0.032469	0.11991			
	0.007634	0.000115	-	-	-	0.016442	0.039932	0.146821			
CO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	0.194541	-0.01121	0.064037	-7.4E-05	-0.00073	0.156622	0.163828	2.79131	94224	0.996799	0.995198
	0.006061	0.000147	0.000716	1.1E-06	2.94E-05	0.004416	0.004333	0.110797			
	0.006978	0.000158	0.000979	3.77E-06	4.93E-05	0.00474	0.004781	0.123436			
e2 RCP 2.6	0.150807	-0.01532	-	-	-	0.289464	0.295928	8.51812	94224	0.995889	0.993833
	0.006061	0.000147	-	-	-	0.004857	0.004767	0.114151			
	0.006978	0.000158	-	-	-	0.005654	0.005591	0.136121			
e1 RCP 4.5	-0.10681	-0.01032	0.035553	-5E-05	-6.6E-05	0.443128	0.723172	8.638624	94224	0.990263	0.985393
	0.005531	9.9E-05	0.000852	1.52E-06	2.75E-05	0.008742	0.015056	0.114653			
	0.007331	0.000127	0.001873	5.99E-06	3.64E-05	0.010295	0.018408	0.163522			
e2 RCP 4.5	-0.08664	-0.01095	-	-	-	0.450891	0.745542	10.90557	94224	0.989635	0.984452
	0.005531	9.9E-05	-	-	-	0.008978	0.015486	0.109061			
	0.007331	0.000127	-	-	-	0.010388	0.018493	0.137903			
e1 RCP 6.0	0.018729	-0.00879	0.046214	-5.4E-05	-0.00029	0.262053	0.425875	5.423633	94224	0.986194	0.979289
	0.006657	9.11E-05	0.000859	1.68E-06	2.8E-05	0.008238	0.020174	0.130402			
	0.008461	0.000116	0.001381	4.28E-06	4.11E-05	0.010019	0.026072	0.172232			



e2 RCP 6.0	-0.01743	-0.00962	-	-	-	0.318105	0.599664	9.22072	94224	0.985087	0.977629
	0.006657	9.11E-05	-	-	-	0.00834	0.02018	0.122974			
	0.008461	0.000116	-	-	-	0.010036	0.025752	0.159787			
e1 RCP 8.5	-0.19529	-0.00773	0.063799	-4.4E-05	-0.00103	0.716425	1.403763	8.395647	94224	0.974263	0.961391
	0.005297	7.38E-05	0.000808	1.5E-06	2.22E-05	0.011628	0.026364	0.103786			
	0.006269	9.34E-05	0.002125	5.91E-06	3.32E-05	0.014276	0.033814	0.143408			
e2 RCP 8.5	-0.16647	-0.01001	-	-	-	0.640299	1.278086	11.99044	94224	0.970695	0.95604
	0.005297	7.38E-05	-	-	-	0.012227	0.027774	0.102572			
	0.006269	9.34E-05	-	-	-	0.014044	0.033662	0.124009			
NOCO <sub>2</sub> -FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	$N$	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 4.5	-0.0828	-0.01602	-0.01869	-4.2E-05	0.001545	0.188114	0.314524	14.30671	94224	0.979979	0.969965
	0.007118	0.000127	0.001096	1.95E-06	3.54E-05	0.01125	0.019376	0.147554			
	0.009095	0.000166	0.001736	5.05E-06	4.32E-05	0.013274	0.023828	0.196477			
e2 RCP 4.5	-0.0646	-0.01398	-	-	-	0.237321	0.388072	13.81241	94224	0.979215	0.968821
	0.007118	0.000127	-	-	-	0.011411	0.019681	0.138611			
	0.009095	0.000166	-	-	-	0.013286	0.023818	0.175927			
e1 RCP 6.0	0.088471	-0.01401	-0.01833	-4.9E-05	0.00158	-0.07134	-0.32942	10.58872	94224	0.971988	0.957978
	0.00856	0.000117	0.001104	2.16E-06	3.61E-05	0.010594	0.025942	0.167687			
	0.01065	0.000155	0.001424	4.06E-06	4.75E-05	0.012924	0.033262	0.210779			
e2 RCP 6.0	0.047997	-0.01202	-	-	-	0.022197	-0.06796	11.12618	94224	0.970956	0.956432
	0.00856	0.000117	-	-	-	0.010507	0.025424	0.154927			
	0.01065	0.000155	-	-	-	0.012459	0.03182	0.196958			
e1 RCP 8.5	-0.16238	-0.01132	0.01611	-4.7E-05	0.000448	0.224638	0.382316	12.85113	94224	0.952897	0.929338
	0.006653	9.27E-05	0.001015	1.89E-06	2.79E-05	0.014605	0.033113	0.130353			
	0.007735	0.000121	0.002168	5.88E-06	3.65E-05	0.017362	0.041699	0.162573			
e2 RCP 8.5	-0.14853	-0.0114	-	-	-	0.254733	0.472185	14.28048	94224	0.95129	0.926931
	0.006653	9.27E-05	-	-	-	0.014635	0.033244	0.122773			
	0.007735	0.000121	-	-	-	0.016869	0.040897	0.150146			
NOCO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	$N$	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	0.217911	-0.01128	0.064458	-7E-05	-0.00082	0.046267	0.085373	2.402688	94224	0.996741	0.995112
	0.006032	0.000146	0.000713	1.1E-06	2.93E-05	0.004395	0.004312	0.110267			
	0.006905	0.000159	0.000971	3.52E-06	4.71E-05	0.004731	0.004772	0.123938			
e2 RCP 2.6	0.175308	-0.01546	-	-	-	0.174506	0.213046	8.053156	94224	0.995852	0.993777
	0.006032	0.000146	-	-	-	0.004813	0.004724	0.11311			
	0.006905	0.000159	-	-	-	0.005596	0.005551	0.134686			
e1 RCP 4.5	-0.05838	-0.00989	0.040337	-4.2E-05	-0.00036	0.198372	0.340457	7.557984	94224	0.989002	0.983502
	0.005755	0.000103	0.000886	1.58E-06	2.86E-05	0.009095	0.015664	0.119287			
	0.007473	0.000133	0.001768	5.35E-06	3.89E-05	0.010572	0.018959	0.165863			

e2 RCP 4.5	-0.04094	-0.01092	-	-	-	0.19747	0.349996	10.0127	94224	0.988366	0.982549
	0.005755	0.000103	-	-	-	0.009312	0.016061	0.113113			
	0.007473	0.000133	-	-	-	0.010686	0.019085	0.14228			
e1 RCP 6.0	0.082354	-0.00815	0.051699	-4.1E-05	-0.00063	0.010238	-0.14222	3.975407	94224	0.984338	0.976505
	0.006938	9.49E-05	0.000895	1.75E-06	2.92E-05	0.008586	0.021027	0.135912			
	0.00852	0.000123	0.00134	3.56E-06	4.46E-05	0.010285	0.026804	0.177193			
e2 RCP 6.0	0.046182	-0.00944	-	-	-	0.056384	0.00675	7.971263	94224	0.983096	0.974642
	0.006938	9.49E-05	-	-	-	0.008689	0.021024	0.128116			
	0.00852	0.000123	-	-	-	0.010315	0.026556	0.1641			
e1 RCP 8.5	-0.11407	-0.00668	0.070102	-4.5E-05	-0.00121	0.259677	0.495512	6.24794	94224	0.971869	0.957799
	0.005427	7.56E-05	0.000828	1.54E-06	2.28E-05	0.011914	0.027013	0.106338			
	0.006377	9.71E-05	0.002266	6.36E-06	3.58E-05	0.014578	0.034364	0.147338			
e2 RCP 8.5	-0.0831	-0.00924	-	-	-	0.170417	0.343602	10.13735	94224	0.967511	0.951265
	0.005427	7.56E-05	-	-	-	0.012617	0.02866	0.105842			
	0.006377	9.71E-05	-	-	-	0.014561	0.034853	0.128092			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A43. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estandar para el cultivo de mijo

[illegible]



e2 RCP 4.5	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 8.5	0.005235	-0.00217	0.014057	-6.8E-06	-0.00032	0.082396	0.196975	1.152298	94224	0.957872	0.936801
	0.001378	1.92E-05	0.00021	3.91E-07	5.78E-06	0.003024	0.006857	0.026993			
	0.001761	2.44E-05	0.000458	1.17E-06	9.39E-06	0.003644	0.008799	0.037601			
e2 RCP 8.5	0.011154	-0.00272	-	-	-	0.057333	0.149112	1.843564	94224	0.954386	0.931575
	0.001378	1.92E-05	-	-	-	0.003101	0.007044	0.026014			
	0.001761	2.44E-05	-	-	-	0.003669	0.008982	0.033536			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A44. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estandar para el cultivo de sorgo

[illegible]



e2 RCP 4.5	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 8.5	0.006986	-0.00653	0.03525	-2E-05	-0.00075	0.235292	0.54905	3.877361	94224	0.957449	0.936168
	0.003568	4.97E-05	0.000544	1.01E-06	1.5E-05	0.007832	0.017757	0.069901			
	0.004706	6.74E-05	0.001222	3.23E-06	2.18E-05	0.009399	0.022626	0.100798			
e2 RCP 8.5	0.022473	-0.00786	-	-	-	0.175068	0.435613	5.632946	94224	0.954203	0.931301
	0.003568	4.97E-05	-	-	-	0.008007	0.018187	0.067166			
	0.004706	6.74E-05	-	-	-	0.009443	0.023088	0.087177			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.



Tabla A45. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estandar para el cultivo de soya

CO <sub>2</sub> - FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	0.153954	-0.00765	0.004104	-1.3E-05	8.86E-05	0.103311	0.095229	2.195624	94224	0.993761	0.99064
	0.00199	4.83E-05	0.000235	3.63E-07	9.67E-06	0.00145	0.001422	0.036374			
	0.002828	6.27E-05	0.000297	8.75E-07	1.46E-05	0.001648	0.001647	0.042774			
e2 RCP 2.6	0.150368	-0.00784	-	-	-	0.118208	0.110031	2.688564	94224	0.99355	0.990324
	0.00199	4.83E-05	-	-	-	0.001431	0.001404	0.033622			
	0.002828	6.27E-05	-	-	-	0.0017	0.001683	0.044057			
e1 RCP 4.5	0.038742	-0.00733	-0.01345	-1.5E-06	0.000466	0.246161	0.426541	4.787682	94224	0.968544	0.952811
	0.002299	4.11E-05	0.000354	6.3E-07	1.14E-05	0.003633	0.006257	0.047649			
	0.0031	5.4E-05	0.000357	4.75E-07	1.15E-05	0.004332	0.0077	0.061045			
e2 RCP 4.5	0.039495	-0.00659	-	-	-	0.258583	0.442792	4.127224	94224	0.967593	0.951386
	0.002299	4.11E-05	-	-	-	0.003671	0.006331	0.04459			
	0.0031	5.4E-05	-	-	-	0.004344	0.007736	0.057485			
e1 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e2 RCP 6.0	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
e1 RCP 8.5	-0.00084	-0.00532	-0.00876	1.05E-06	0.000221	0.319843	0.690762	4.713863	94224	0.911559	0.867324
	0.002331	3.25E-05	0.000355	6.61E-07	9.78E-06	0.005117	0.011601	0.045668			
	0.002795	4.17E-05	0.000363	5.19E-07	1.05E-05	0.005779	0.013984	0.051873			
e2 RCP 8.5	-0.00382	-0.00494	-	-	-	0.334742	0.719128	4.259489	94224	0.910332	0.865491
	0.002331	3.25E-05	-	-	-	0.005077	0.011532	0.042589			
	0.002795	4.17E-05	-	-	-	0.005828	0.014147	0.05362			
CO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	0.107694	-0.00586	0.018758	-2.3E-05	-0.00021	0.103133	0.097196	1.064781	94224	0.994938	0.992407
	0.002124	5.15E-05	0.000251	3.87E-07	1.03E-05	0.001547	0.001518	0.038823			
	0.0028	6.09E-05	0.000345	1.41E-06	1.89E-05	0.001692	0.001726	0.044818			
e2 RCP 2.6	0.096316	-0.00705	-	-	-	0.140144	0.134227	2.695156	94224	0.993985	0.990978
	0.002124	5.15E-05	-	-	-	0.001637	0.001607	0.038473			
	0.0028	6.09E-05	-	-	-	0.001963	0.001955	0.048991			
e1 RCP 4.5	0.015948	-0.00551	0.002383	-1.3E-05	0.000181	0.215326	0.37166	3.115272	94224	0.983588	0.975379
	0.002	3.58E-05	0.000308	5.48E-07	9.94E-06	0.00316	0.005443	0.041452			
	0.002864	4.69E-05	0.000545	1.74E-06	1.05E-05	0.003811	0.006781	0.057615			
e2 RCP 4.5	0.020781	-0.00534	-	-	-	0.221942	0.383212	3.337313	94224	0.983256	0.974882
	0.002	3.58E-05	-	-	-	0.003178	0.005481	0.038602			
	0.002864	4.69E-05	-	-	-	0.003812	0.006781	0.051773			
e1 RCP 6.0	0.071655	-0.00466	0.007934	-1.9E-05	0.0001	0.131922	0.276881	1.559671	94224	0.976776	0.965161
	0.002423	3.32E-05	0.000313	6.11E-07	1.02E-05	0.002999	0.007344	0.047469			
	0.003486	4.41E-05	0.000492	1.67E-06	1.24E-05	0.003765	0.009706	0.065339			

e2 RCP 6.0	0.064744	-0.00462	-	-	-	0.148153	0.324345	2.300704	94224	0.976025	0.964035
	0.002423	3.32E-05	-	-	-	0.002968	0.007182	0.043762			
	0.003486	4.41E-05	-	-	-	0.003667	0.009309	0.060179			
e1 RCP 8.5	-0.01523	-0.00391	0.006921	-1.1E-05	-1.9E-05	0.286747	0.628409	2.998937	94224	0.958225	0.937331
	0.001902	2.65E-05	0.00029	5.4E-07	7.98E-06	0.004175	0.009465	0.037261			
	0.002431	3.48E-05	0.000546	1.45E-06	8.85E-06	0.005039	0.012065	0.048598			
e2 RCP 8.5	-0.01078	-0.00407	-	-	-	0.282756	0.625597	3.419338	94224	0.957478	0.936214
	0.001902	2.65E-05	-	-	-	0.00415	0.009428	0.034817			
	0.002431	3.48E-05	-	-	-	0.004794	0.011579	0.044287			
NOCO <sub>2</sub> -FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	$N$	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-			
	-	-	-	-	-	-	-	-			
e2 RCP 2.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-			
	-	-	-	-	-	-	-	-			
e1 RCP 4.5	0.010133	-0.00784	-0.01948	-5.2E-06	0.000782	0.130843	0.226688	5.426912	94224	0.961067	0.941595
	0.00254	4.54E-05	0.000391	6.96E-07	1.26E-05	0.004014	0.006914	0.052652			
	0.003355	5.75E-05	0.000422	7.46E-07	1.37E-05	0.004685	0.008371	0.067725			
e2 RCP 4.5	0.013338	-0.00664	-	-	-	0.153188	0.256822	4.538934	94224	0.958642	0.93796
	0.00254	4.54E-05	-	-	-	0.004119	0.007104	0.050032			
	0.003355	5.75E-05	-	-	-	0.004755	0.008501	0.063692			
e1 RCP 6.0	0.072357	-0.00667	-0.01796	-1.2E-05	0.000763	0.005498	0.001055	3.884178	94224	0.944962	0.917434
	0.003091	4.23E-05	0.000399	7.8E-07	1.3E-05	0.003825	0.009368	0.06055			
	0.004214	5.47E-05	0.000459	1.16E-06	1.51E-05	0.004749	0.0122	0.080875			
e2 RCP 6.0	0.064582	-0.00561	-	-	-	0.032494	0.07208	3.255406	94224	0.941864	0.912791
	0.003091	4.23E-05	-	-	-	0.003829	0.009266	0.056465			
	0.004214	5.47E-05	-	-	-	0.004661	0.011942	0.075361			
e1 RCP 8.5	-0.0177	-0.00531	-0.00998	-6.1E-06	0.000435	0.11263	0.227479	4.744483	94224	0.904816	0.85721
	0.002455	3.42E-05	0.000374	6.97E-07	1.03E-05	0.00539	0.01222	0.048105			
	0.00311	4.51E-05	0.000431	7.19E-07	1.2E-05	0.006574	0.015957	0.059369			
e2 RCP 8.5	-0.01989	-0.00477	-	-	-	0.144818	0.296987	4.404263	94224	0.902089	0.853125
	0.002455	3.42E-05	-	-	-	0.005387	0.012236	0.045188			
	0.00311	4.51E-05	-	-	-	0.006605	0.016085	0.0602			
NOCO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	$N$	$R^2$	$R_{adj.}^2$
e1 RCP 2.6	0.119371	-0.00586	0.018348	-2.1E-05	-0.00024	0.043814	0.054003	0.883337	94224	0.99489	0.992334
	0.00209	5.07E-05	0.000247	3.81E-07	1.02E-05	0.001523	0.001494	0.038198			
	0.002697	6.03E-05	0.000333	1.24E-06	1.72E-05	0.001652	0.001688	0.044303			
e2 RCP 2.6	0.10871	-0.00705	-	-	-	0.077922	0.088185	2.435088	94224	0.99402	0.991029
	0.00209	5.07E-05	-	-	-	0.001599	0.001569	0.037569			
	0.002697	6.03E-05	-	-	-	0.001872	0.001882	0.04737			
e1 RCP 4.5	0.017598	-0.00531	0.004818	-9.1E-06	4.08E-05	0.108305	0.199497	2.949963	94224	0.980481	0.970719
	0.002106	3.77E-05	0.000324	5.77E-07	1.05E-05	0.003328	0.005731	0.043645			
	0.00292	4.96E-05	0.000489	1.36E-06	1.17E-05	0.00396	0.007107	0.060105			

e2 RCP 4.5	0.021276	-0.00534	-	-	-	0.111087	0.205314	3.279287	94224	0.980235	0.970351
	0.002106	3.77E-05	-	-	-	0.003333	0.005749	0.040492			
	0.00292	4.96E-05	-	-	-	0.003957	0.007096	0.054216			
e1 RCP 6.0	0.078322	-0.00434	0.009088	-1.1E-05	-6.7E-05	0.021904	0.004036	1.379291	94224	0.972165	0.958243
	0.002548	3.49E-05	0.000329	6.43E-07	1.07E-05	0.003153	0.007722	0.049911			
	0.003531	4.74E-05	0.000448	1.16E-06	1.36E-05	0.003985	0.010355	0.069579			
e2 RCP 6.0	0.073421	-0.00451	-	-	-	0.03016	0.02986	2.06698	94224	0.971647	0.957468
	0.002548	3.49E-05	-	-	-	0.0031	0.007501	0.045706			
	0.003531	4.74E-05	-	-	-	0.003869	0.009935	0.063166			
e1 RCP 8.5	-0.00364	-0.00333	0.01467	-1.1E-05	-0.00024	0.098273	0.192165	2.242306	94224	0.949569	0.924345
	0.002003	2.79E-05	0.000305	5.68E-07	8.41E-06	0.004398	0.009971	0.039251			
	0.00256	3.75E-05	0.000643	1.7E-06	1.13E-05	0.00549	0.013138	0.054415			
e2 RCP 8.5	0.003286	-0.00384	-	-	-	0.078536	0.158001	3.033658	94224	0.947251	0.920872
	0.002003	2.79E-05	-	-	-	0.004432	0.010067	0.03718			
	0.00256	3.75E-05	-	-	-	0.005224	0.012618	0.047534			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A46. Resultado de la estimación por efectos fijos para las especificaciones e1 y e2 bajo diferentes métodos de estimación del error estándar para el cultivo de trigo

CO <sub>2</sub> - FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	0.059865	-0.00349	0.025895	-3.6E-06	-0.00098	0.030273	0.026967	3.437793	94224	0.9968	0.9951
	0.003741	9.08E-05	0.000442	6.82E-07	1.82E-05	0.002726	0.002675	0.068396			
	0.004498	0.00011	0.000527	6.32E-07	2.09E-05	0.002881	0.002813	0.076713			
e2 RCP 2.6	0.057578	-0.00551	-	-	-	0.035919	0.034433	4.729112	94224	0.9966	0.9948
	0.003741	9.08E-05	-	-	-	0.002721	0.002671	0.063953			
	0.004498	0.00011	-	-	-	0.002825	0.002794	0.073368			
e1 RCP 4.5	-0.30095	-0.00524	0.026628	3.11E-05	-0.00145	0.580036	1.011002	10.69569	94224	0.9871	0.9806
	0.004205	7.52E-05	0.000648	1.15E-06	2.09E-05	0.006645	0.011445	0.08716			
	0.004885	9.43E-05	0.001109	3.34E-06	2.98E-05	0.007595	0.013325	0.115191			
e2 RCP 4.5	-0.31242	-0.00731	-	-	-	0.537996	0.95004	11.8039	94224	0.9861	0.9791
	0.004205	7.52E-05	-	-	-	0.006872	0.011853	0.08348			
	0.004885	9.43E-05	-	-	-	0.00802	0.014045	0.101172			
e1 RCP 6.0	-0.23773	-0.00402	0.026253	4.3E-05	-0.00181	0.424807	1.123286	9.645345	94224	0.9815	0.9723
	0.005168	7.07E-05	0.000667	1.3E-06	2.18E-05	0.006396	0.015663	0.101242			
	0.006106	8.92E-05	0.000901	2.54E-06	3.02E-05	0.007128	0.018611	0.127406			
e2 RCP 6.0	-0.18717	-0.00634	-	-	-	0.31652	0.819691	9.275044	94224	0.9792	0.9688
	0.005168	7.07E-05	-	-	-	0.006614	0.016004	0.097524			
	0.006106	8.92E-05	-	-	-	0.007484	0.019387	0.119795			
e1 RCP 8.5	-0.25852	-0.00356	0.026728	1.83E-05	-0.00132	0.661745	1.650663	9.27583	94224	0.9634	0.9451
	0.004646	6.47E-05	0.000709	1.32E-06	1.95E-05	0.0102	0.023127	0.091039			
	0.005249	7.43E-05	0.000868	1.31E-06	2.48E-05	0.010981	0.026053	0.109802			
e2 RCP 8.5	-0.25261	-0.00505	-	-	-	0.558144	1.422539	9.95754	94224	0.9606	0.9409
	0.004646	6.47E-05	-	-	-	0.010434	0.023701	0.08753			
	0.005249	7.43E-05	-	-	-	0.011216	0.026676	0.099404			
CO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	-0.03248	-0.00247	0.042831	-1.1E-05	-0.00142	0.102444	0.121273	2.57774	94224	0.9941	0.9911
	0.003907	9.48E-05	0.000462	7.12E-07	1.9E-05	0.002847	0.002793	0.071431			
	0.004709	0.000106	0.000615	9.99E-07	2.29E-05	0.003155	0.003044	0.080422			
e2 RCP 2.6	-0.04344	-0.00571	-	-	-	0.129674	0.150454	5.106493	94224	0.9932	0.9899
	0.003907	9.48E-05	-	-	-	0.002947	0.002893	0.069259			
	0.004709	0.000106	-	-	-	0.003196	0.003164	0.078586			
e1 RCP 4.5	-0.24532	-0.00294	0.037074	7.55E-06	-0.00132	0.424923	0.785946	6.565322	94224	0.9850	0.9775
	0.003415	6.11E-05	0.000526	9.36E-07	1.7E-05	0.005396	0.009294	0.070778			
	0.003809	7.32E-05	0.000701	1.16E-06	2.22E-05	0.006203	0.010956	0.088689			
e2 RCP 4.5	-0.24812	-0.00502	-	-	-	0.389677	0.739241	8.383512	94224	0.9834	0.9751
	0.003415	6.11E-05	-	-	-	0.005658	0.009759	0.068733			
	0.003809	7.32E-05	-	-	-	0.006518	0.011507	0.080763			
e1 RCP 6.0	-0.19401	-0.00245	0.039508	9.62E-06	-0.00155	0.351578	0.904015	5.659091	94224	0.9786	0.9680
	0.004242	5.81E-05	0.000547	1.07E-06	1.79E-05	0.00525	0.012857	0.083105			
	0.004719	6.63E-05	0.000665	9.19E-07	2.2E-05	0.005678	0.014607	0.099454			

e2 RCP 6.0	-0.16326	-0.00462	-	-	-	0.282606	0.715789	6.770299	94224	0.9759	0.9638
	0.004242	5.81E-05	-	-	-	0.005434	0.013148	0.08012			
	0.004719	6.63E-05	-	-	-	0.006008	0.015305	0.093908			
e1 RCP 8.5	-0.1994	-0.00208	0.039793	-1.7E-06	-0.00131	0.532249	1.427921	5.329885	94224	0.9594	0.9390
	0.003696	5.15E-05	0.000564	1.05E-06	1.55E-05	0.008114	0.018395	0.072415			
	0.004053	5.77E-05	0.000867	1.87E-06	1.87E-05	0.008647	0.020455	0.086753			
e2 RCP 8.5	-0.18561	-0.00388	-	-	-	0.428578	1.21229	6.913744	94224	0.9546	0.9318
	0.003696	5.15E-05	-	-	-	0.008455	0.019205	0.070925			
	0.004053	5.77E-05	-	-	-	0.008932	0.02122	0.078536			
NOCO <sub>2</sub> -FIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	0.036096	-0.00228	0.021822	-8.6E-06	-0.00073	-0.10515	-0.07904	3.269462	94224	0.9966	0.9949
	0.003751	9.1E-05	0.000443	6.83E-07	1.82E-05	0.002733	0.002681	0.068563			
	0.004487	0.000109	0.000522	7.74E-07	2.12E-05	0.00293	0.002862	0.077268			
e2 RCP 2.6	0.033285	-0.00393	-	-	-	-0.09524	-0.06767	4.461429	94224	0.9964	0.9947
	0.003751	9.1E-05	-	-	-	0.002704	0.002654	0.063555			
	0.004487	0.000109	-	-	-	0.002822	0.002788	0.07319			
e1 RCP 4.5	-0.32357	-0.00454	0.014799	1.92E-05	-0.0008	0.352422	0.635942	10.75644	94224	0.9864	0.9796
	0.004152	7.43E-05	0.000639	1.14E-06	2.06E-05	0.006561	0.011301	0.086057			
	0.00469	9.26E-05	0.000913	2.12E-06	2.67E-05	0.007436	0.013059	0.108563			
e2 RCP 4.5	-0.32971	-0.00568	-	-	-	0.330013	0.603138	11.39969	94224	0.9860	0.9790
	0.004152	7.43E-05	-	-	-	0.006613	0.011406	0.08033			
	0.00469	9.26E-05	-	-	-	0.007613	0.013336	0.094651			
e1 RCP 6.0	-0.28337	-0.00346	0.011055	2.5E-05	-0.00096	0.197592	0.651538	10.1821	94224	0.9810	0.9716
	0.004994	6.83E-05	0.000644	1.26E-06	2.1E-05	0.00618	0.015134	0.097825			
	0.005831	8.34E-05	0.000745	1.52E-06	2.54E-05	0.006905	0.018074	0.120694			
e2 RCP 6.0	-0.24997	-0.00465	-	-	-	0.131282	0.463416	9.634421	94224	0.9802	0.9703
	0.004994	6.83E-05	-	-	-	0.006153	0.014889	0.090731			
	0.005831	8.34E-05	-	-	-	0.006865	0.017796	0.108594			
e1 RCP 8.5	-0.2581	-0.00276	0.010167	6.28E-06	-0.00058	0.272982	0.832018	9.140006	94224	0.9638	0.9456
	0.004327	6.03E-05	0.00066	1.23E-06	1.82E-05	0.0095	0.021539	0.084789			
	0.004811	7.05E-05	0.000808	1.31E-06	2.14E-05	0.010464	0.024829	0.10071			
e2 RCP 8.5	-0.25543	-0.00334	-	-	-	0.222904	0.719661	9.250887	94224	0.9630	0.9445
	0.004327	6.03E-05	-	-	-	0.009459	0.021486	0.07935			
	0.004811	7.05E-05	-	-	-	0.010517	0.024993	0.090654			
NOCO <sub>2</sub> - NOIRR	$T_{it}$	$T_{it}^2$	$P_{it}$	$P_{it}^2$	$P_{it}T_{it}$	$\lambda_1$	$\lambda_2$	C	N	R <sup>2</sup>	R <sup>2</sup> <sub>adj.</sub>
e1 RCP 2.6	-0.06243	-0.00094	0.041898	-1E-05	-0.00138	0.029136	0.067423	2.468727	94224	0.9942	0.9912
	0.003782	9.18E-05	0.000447	6.89E-07	1.84E-05	0.002756	0.002703	0.069133			
	0.004553	0.000103	0.0006	9.6E-07	2.26E-05	0.003047	0.002941	0.078194			
e2 RCP 2.6	-0.07337	-0.00411	-	-	-	0.056196	0.096357	4.952108	94224	0.9933	0.9900
	0.003782	9.18E-05	-	-	-	0.002856	0.002803	0.067123			
	0.004553	0.000103	-	-	-	0.003069	0.003046	0.076132			
e1 RCP 4.5	-0.26752	-0.0008	0.037436	5.72E-06	-0.00131	0.247689	0.501739	6.043184	94224	0.9854	0.9781
	0.003223	5.77E-05	0.000496	8.83E-07	1.6E-05	0.005094	0.008774	0.066817			
	0.003611	7E-05	0.000695	1.07E-06	2.18E-05	0.005818	0.010277	0.084492			

e2 RCP 4.5	-0.26995	-0.00287	-	-	-	0.212635	0.455616	7.880251	94224	0.9836	0.9754
	0.003223	5.77E-05	-	-	-	0.005371	0.009264	0.065246			
	0.003611	7E-05	-	-	-	0.006116	0.010782	0.075906			
e1 RCP 6.0	-0.2338	0.000199	0.038969	8.6E-06	-0.00149	0.177519	0.489564	5.231088	94224	0.9805	0.9708
	0.003837	5.25E-05	0.000495	9.68E-07	1.62E-05	0.004749	0.011629	0.07517			
	0.004313	6.1E-05	0.000633	8.89E-07	2.11E-05	0.005113	0.013254	0.090832			
e2 RCP 6.0	-0.20667	-0.0019	-	-	-	0.11443	0.318447	6.424173	94224	0.9777	0.9665
	0.003837	5.25E-05	-	-	-	0.004953	0.011985	0.073032			
	0.004313	6.1E-05	-	-	-	0.005364	0.013747	0.085078			
e1 RCP 8.5	-0.19541	0.000627	0.037271	-5.6E-06	-0.00118	0.169731	0.568399	4.192341	94224	0.9642	0.9462
	0.003188	4.44E-05	0.000486	9.05E-07	1.34E-05	0.006999	0.015867	0.062464			
	0.003518	5.04E-05	0.000895	2.23E-06	1.68E-05	0.007562	0.017809	0.076362			
e2 RCP 8.5	-0.18166	-0.00101	-	-	-	0.073525	0.368926	5.671313	94224	0.9594	0.9391
	0.003188	4.44E-05	-	-	-	0.007337	0.016665	0.061545			
	0.003518	5.04E-05	-	-	-	0.007755	0.018416	0.067895			

Nota: Para cada conjunto compuesto por la especificación y RCP el primer valor de la columna corresponde al coeficiente, el segundo es el valor del error estándar y el tercero es el error estándar bajo una estimación robusta. Todos los coeficientes presentan un valor de  $p < 0.01$ , N es el número total de observaciones.

Tabla A47. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de arroz

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	-	0.114339221	-	0.090718347
e1-RCP4.5	0.68409905	0.571039404	0.403959411	0.416101282
e1-RCP6	0.63759814	0.464539889	0.358145544	0.31031974
e1-RCP8.5	1.12924042	0.81741217	0.52524207	0.419312564
e2-RCP2.6	-	0.151850938	-	0.113782117
e2-RCP4.5	0.69981532	0.605049284	0.425070939	0.426859303
e2-RCP6	0.6790907	0.60559766	0.380593407	0.383141352
e2-RCP8.5	1.14946572	0.824902453	0.557572237	0.398190422

Tabla A48. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de canola

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	-	-	-	-
e1-RCP4.5	-	0.239466574	-	-
e1-RCP6	-	-	-	-
e1-RCP8.5	-	0.470556823	0.454289016	0.31385836
e2-RCP2.6	-	-	-	-
e2-RCP4.5	-	0.242396603	-	-
e2-RCP6	-	-	-	-
e2-RCP8.5	-	0.433312737	0.4338008	0.329519413

Tabla A49. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de caña

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	-	-	-	-
e1-RCP4.5	2.892200891	2.265175206	-	-
e1-RCP6	-	-	-	-
e1-RCP8.5	6.365673065	5.162808067	4.797271204	4.276760077
e2-RCP2.6	-	-	-	-
e2-RCP4.5	2.661351554	2.104252904	-	-
e2-RCP6	-	-	-	-
e2-RCP8.5	5.261358356	4.027193442	3.907298973	3.254281845

Tabla A50. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de cebada

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	-	-	-	-
e1-RCP4.5	1.130489425	0.864081653	-	-
e1-RCP6	-	-	-	-
e1-RCP8.5	2.312599829	-	0.880166816	0.775449837
e2-RCP2.6	-	-	-	-
e2-RCP4.5	1.06803642	0.868177483	-	-
e2-RCP6	-	-	-	-
e2-RCP8.5	2.040465905	6.088722194	0.85377341	0.70127765

Tabla A51. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de maíz

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	0.318663189	-	0.286915537	0.318663189
e1-RCP4.5	1.294490048	1.075734776	1.029496813	1.294490048
e1-RCP6	-	1.124855374	0.875435456	-
e1-RCP8.5	1.167897707	1.190123577	0.989640911	1.167897707
e2-RCP2.6	0.43021187	-	0.371253846	0.43021187
e2-RCP4.5	1.395646068	1.165000882	1.102956067	1.395646068
e2-RCP6	-	1.020264649	0.793515585	
e2-RCP8.5	1.259481514	1.302135053	1.05622044	1.259481514

Tabla A52. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de mijo

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	-	-	-	-
e1-RCP4.5	0.484135737	0.359626315	-	-
e1-RCP6	-	-	-	-
e1-RCP8.5	0.768727324	0.554994005	-	0.312972816
e2-RCP2.6	-	-	-	-
e2-RCP4.5	0.485220524	0.375956568	-	-
e2-RCP6	-	-	-	-
e2-RCP8.5	0.737423369	0.542287855	-	0.292686781



Tabla A53. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de sorgo

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	-	-	-	-
e1-RCP4.5	0.964281332	0.8724657	-	-
e1-RCP6	-	-	-	-
e1-RCP8.5	1.175390783	-	1.353356393	0.847282883
e2-RCP2.6	-	-	-	-
e2-RCP4.5	0.989080867	0.88850734	-	-
e2-RCP6	-	-	-	-
e2-RCP8.5	1.201948794	-	1.423090271	0.822096747

Tabla A54. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de soya

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	0.142561219	0.140697722	-	0.110518924
e1-RCP4.5	0.601957332	0.536773959	0.449686514	0.417556844
e1-RCP6	-	0.325161046	0.377644001	0.310575847
e1-RCP8.5	1.011891203	0.772015248	0.715298907	0.410274144
e2-RCP2.6	0.160014004	0.17815041	-	0.138313544
e2-RCP4.5	0.602776781	0.560898058	0.470728477	0.43173589
e2-RCP6	-	0.437909128	0.364154699	0.283453334
e2-RCP8.5	1.043424344	0.804017598	0.811165695	0.426447626

Tabla A55. Resultado de la evaluación fuera de la muestra, valores del RMSE para el cultivo de trigo

Emulador	CO <sub>2</sub> -FIRR	CO <sub>2</sub> -NOIRR	NOCO <sub>2</sub> -FIRR	NOCO <sub>2</sub> -NOIRR
e1-RCP2.6	0.162657847	0.23100304	0.174698967	0.19279784
e1-RCP4.5	1.177405623	0.802112307	0.79477383	0.570667456
e1-RCP6	0.857476222	0.873862953	0.734733998	0.683511797
e1-RCP8.5	2.444243022	2.014330648	1.747600614	1.215660681
e2-RCP2.6	0.163451304	0.24139865	0.181679416	0.205535377
e2-RCP4.5	1.080560109	0.775450117	0.73812149	0.555089858
e2-RCP6	0.832482605	0.931043879	0.724225027	0.733626115
e2-RCP8.5	2.130746303	1.766314809	1.602712851	1.028078076

Tabla A56. Resultado de la validación cruzada general, valores del RMSE para el cultivo de arroz

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.362901906	0.71752655	0.821113069	1.534309903	e2-RCP4.5	0.351194658	0.681348293	0.780677624	1.467736275
e1-RCP6	0.420868139	0.687715861	0.755795953	1.365781175	e2-RCP6	0.382288356	0.548103527	0.599450022	1.076150837
e1-RCP8.5	0.554427713	0.602515464	0.660490966	1.12224846	e2-RCP8.5	0.547666375	0.56887405	0.612779632	0.999775898
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.153653499	0.350568228	0.391182317	0.686975152	e2-RCP2.6	0.174499853	0.366032254	0.417134805	0.734971023
e1-RCP4.5	0.284836607	0.554045344	0.632565915	1.170637331	e2-RCP4.5	0.275700979	0.52737482	0.601445345	1.107925322
e1-RCP6	0.339378425	0.566461308	0.612032515	1.091035165	e2-RCP6	0.318801134	0.47724466	0.515981773	0.895518931
e1-RCP8.5	0.436486746	0.53007327	0.581680549	0.950757272	e2-RCP8.5	0.424082963	0.493435817	0.532304352	0.834461225
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.320075129	0.486452213	0.581617999	1.211986719	e2-RCP4.5	0.316519427	0.468513485	0.561345781	1.176288224
e1-RCP6	0.380686815	0.439612409	0.488867543	1.021385329	e2-RCP6	0.382006325	0.371487004	0.406938648	0.848091809
e1-RCP8.5	0.625065592	0.441263659	0.452598264	0.658498014	e2-RCP8.5	0.629816127	0.449465371	0.454253981	0.609068993
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.1266647	0.284939605	0.320264604	0.569783244	e2-RCP2.6	0.142816349	0.297712256	0.342602959	0.611895551
e1-RCP4.5	0.248678684	0.375222793	0.447297678	0.898041488	e2-RCP4.5	0.23555621	0.353737778	0.419065205	0.836001525
e1-RCP6	0.287279646	0.351227337	0.374534132	0.759889063	e2-RCP6	0.280609819	0.292152402	0.308800483	0.58456375
e1-RCP8.5	0.449407294	0.328057493	0.346040647	0.462509322	e2-RCP8.5	0.443396026	0.345502135	0.349890878	0.395620703

Tabla A57. Resultado de la validación cruzada general, valores del RMSE para el cultivo de canola

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	-	-	-	-	e2-RCP8.5	-	-	-	-
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.121129978	0.154498114	0.171283176	0.285606466	e2-RCP4.5	0.11800608	0.1496592	0.16294957	0.265898641
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.204636842	0.186011542	0.186778894	0.18243676	e2-RCP8.5	0.203653204	0.191910299	0.191012274	0.183579818
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.359532439	0.34884819	0.348909495	0.338538976	e2-RCP8.5	0.360596132	0.351135783	0.351443594	0.343011275
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.232825243	0.219087168	0.22149996	0.212065246	e2-RCP8.5	0.232927833	0.234104822	0.236059853	0.243903902

Tabla A58. Resultado de la validación cruzada general, valores del RMSE para el cultivo de caña

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	1.565130548	2.012530416	2.486756931	5.372007794	e2-RCP4.5	1.557277887	1.910075316	2.372339907	5.152807437
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	2.995602271	2.199460507	2.244407435	3.409945824	e2-RCP8.5	2.98977568	2.219186867	2.20532278	2.931528177
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	1.432375565	1.610432656	1.998873996	4.413015289	e2-RCP4.5	1.418387778	1.506111532	1.871227925	4.130263707
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	2.736064207	1.913751357	1.898404865	2.73661242	e2-RCP8.5	2.718413318	1.971187028	1.912473813	2.315979991
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	3.319097192	2.24704801	2.170579726	2.271032388	e2-RCP8.5	3.321406028	2.388966618	2.271919107	2.059700103
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	2.963376069	1.980409947	1.891955999	1.999145177	e2-RCP8.5	2.953029884	2.151211977	2.037345822	1.789716528

Tabla A59. Resultado de la validación cruzada general, valores del RMSE para el cultivo de cebada

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.35819303	0.652421741	0.742698561	1.378932188	e2-RCP4.5	0.350802974	0.618965302	0.704077019	1.30715736
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.588797323	0.57184032	0.595420577	0.890932217	e2-RCP8.5	0.586564323	0.555672733	0.567559543	0.786798394
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.311392702	0.577273614	0.65297312	1.182389595	e2-RCP4.5	0.305605968	0.554683862	0.625108141	1.121690153
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	-	-	-	-	e2-RCP8.5	-	-	-	-
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.794603512	0.663143747	0.645846789	0.500413706	e2-RCP8.5	0.799771764	0.690029918	0.672343291	0.54177366
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.53323743	0.432166668	0.427648618	0.33338866	e2-RCP8.5	0.531532348	0.477910561	0.470750515	0.408165116

Tabla A60. Resultado de la validación cruzada general, valores del RMSE para el cultivo de maíz

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.248866715	0.573354602	0.653237172	1.238384484	e2-RCP2.6	0.304733904	0.686680196	0.798745638	1.456108777
e1-RCP4.5	0.500545917	0.717325917	0.832669213	1.596179027	e2-RCP4.5	0.498592369	0.752448048	0.870084434	1.639730271
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	1.043868061	0.751101415	0.725027315	1.106940128	e2-RCP8.5	1.035280417	0.746156021	0.719270571	1.12169633
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.231763784	0.510580194	0.553751065	1.013251416	e2-RCP2.6	0.322667972	0.665517435	0.759193669	1.34705651
e1-RCP4.5	0.428378978	0.589100914	0.68553998	1.289907839	e2-RCP4.5	0.41401439	0.605988476	0.693609603	1.276592782
e1-RCP6	0.481629154	0.502645426	0.483174705	0.877891496	e2-RCP6	0.474959103	0.535907599	0.56191508	0.970636312
e1-RCP8.5	0.836001528	0.650787433	0.653028098	1.046268469	e2-RCP8.5	0.815143833	0.636546807	0.628654191	0.992413854
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.569500716	0.471617491	0.565912718	1.184771799	e2-RCP4.5	0.554689975	0.503392529	0.600207961	1.23216557
e1-RCP6	0.764114364	0.571468284	0.53487364	0.624338571	e2-RCP6	0.731397315	0.534402533	0.50898858	0.738110532
e1-RCP8.5	1.303225891	0.907144099	0.845267479	0.697368051	e2-RCP8.5	1.285051637	0.882956558	0.814709615	0.728754616
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.198456915	0.453398498	0.498687496	0.941245139	e2-RCP2.6	0.267246394	0.589720648	0.685904389	1.254193502
e1-RCP4.5	0.457794719	0.409706121	0.501545982	1.006117496	e2-RCP4.5	0.432701206	0.420295878	0.495093733	0.9813169
e1-RCP6	0.600370578	0.467096375	0.412117781	0.580190941	e2-RCP6	0.563473531	0.438428288	0.420797831	0.617132505
e1-RCP8.5	1.037939483	0.717395711	0.681921611	0.619951855	e2-RCP8.5	1.015908807	0.729390667	0.680199135	0.610270903

Tabla A61. Resultado de la validación cruzada general, valores del RMSE para el cultivo de mijo

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.185395003	0.255696439	0.288345994	0.514702032	e2-RCP4.5	0.185880331	0.254698987	0.287627093	0.509682015
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.248772806	0.234779279	0.241644265	0.379400148	e2-RCP8.5	0.248964048	0.230014342	0.235562237	0.360808047
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.139630965	0.192348947	0.216226792	0.381151185	e2-RCP4.5	0.139535246	0.192927878	0.216318207	0.374492549
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.278906911	0.206710676	0.199035918	0.235979129	e2-RCP8.5	0.278631576	0.206818706	0.198379917	0.231142526
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	-	-	-	-	e2-RCP8.5	-	-	-	-
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.212724963	0.158217162	0.153797098	0.182315808	e2-RCP8.5	0.210925837	0.160544997	0.153830496	0.16746028

Tabla A62. Resultado de la validación cruzada general, valores del RMSE para el cultivo de sorgo

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.43442829	0.48991002	0.57655969	1.16137167	e2-RCP4.5	0.433130843	0.499625964	0.587864844	1.170746958
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.88403746	0.61318695	0.55863341	0.51233063	e2-RCP8.5	0.883167797	0.613792173	0.557395961	0.507970209
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.33784022	0.42644128	0.49954675	0.97620767	e2-RCP4.5	0.335333826	0.423164644	0.494421062	0.955092243
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	-	-	-	-	e2-RCP8.5	-	-	-	-
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.76670078	0.5426424	0.51346068	0.60168597	e2-RCP8.5	0.763929321	0.539566912	0.510421143	0.610573239
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	-	-	-	-	e2-RCP4.5	-	-	-	-
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.59665773	0.42389707	0.4074922	0.48983442	e2-RCP8.5	0.592573675	0.429675396	0.406818378	0.451330248



Tabla A63. Resultado de la validación cruzada general, valores del RMSE para el cultivo de soya

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.102587615	0.224408617	0.260209299	0.483857337	e2-RCP2.6	0.113005022	0.245507211	0.286860291	0.522452424
e1-RCP4.5	0.222856441	0.315230162	0.35631975	0.609538628	e2-RCP4.5	0.221217556	0.32669483	0.367520816	0.628436632
e1-RCP6	-	-	-	-	e2-RCP6	-	-	-	-
e1-RCP8.5	0.312407554	0.320509291	0.334745344	0.494769573	e2-RCP8.5	0.310593477	0.326085308	0.341367711	0.511951715
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.105769131	0.22987887	0.256150684	0.467469927	e2-RCP2.6	0.133755961	0.277563644	0.318165034	0.564527931
e1-RCP4.5	0.187194103	0.274806992	0.30873293	0.534031599	e2-RCP4.5	0.188451114	0.282265351	0.316785961	0.540018892
e1-RCP6	0.193428076	0.219630086	0.226377298	0.354374386	e2-RCP6	0.199814316	0.235562587	0.250834609	0.382411132
e1-RCP8.5	0.255976889	0.27477865	0.288077745	0.439796091	e2-RCP8.5	0.255333184	0.273814365	0.287757306	0.438294933
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	-	-	-	-	e2-RCP2.6	-	-	-	-
e1-RCP4.5	0.199838707	0.213203131	0.257370747	0.528137477	e2-RCP4.5	0.197276058	0.232027964	0.276568134	0.55583626
e1-RCP6	0.250468427	0.184396706	0.179931827	0.267649032	e2-RCP6	0.243688847	0.188919214	0.190448099	0.314214295
e1-RCP8.5	0.410671588	0.294370234	0.275467908	0.280681335	e2-RCP8.5	0.405444015	0.28731209	0.271384905	0.308768215
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.077208635	0.193473506	0.221143817	0.423305977	e2-RCP2.6	0.098520781	0.233783624	0.275335108	0.509915018
e1-RCP4.5	0.160204825	0.180884009	0.216344398	0.431050085	e2-RCP4.5	0.157975021	0.184128659	0.218966391	0.431207211
e1-RCP6	0.197168169	0.156585008	0.148849408	0.221310402	e2-RCP6	0.19356429	0.153681604	0.151657996	0.227827412
e1-RCP8.5	0.336780521	0.24191015	0.231336316	0.231689573	e2-RCP8.5	0.33392121	0.243553104	0.22961005	0.224238113

Tabla A64. Resultado de la validación cruzada general, valores del RMSE para el cultivo de trigo

CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.120380445	0.213233421	0.244932271	0.4360413	e2-RCP2.6	0.124803156	0.207999651	0.242767314	0.438259173
e1-RCP4.5	0.362901906	0.71752655	0.821113069	1.534309903	e2-RCP4.5	0.351194658	0.681348293	0.780677624	1.467736275
e1-RCP6	0.420868139	0.687715861	0.755795953	1.365781175	e2-RCP6	0.382288356	0.548103527	0.599450022	1.076150837
e1-RCP8.5	0.554427713	0.602515464	0.660490966	1.12224846	e2-RCP8.5	0.547666375	0.56887405	0.612779632	0.999775898
CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	CO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.153653499	0.350568228	0.391182317	0.686975152	e2-RCP2.6	0.174499853	0.366032254	0.417134805	0.734971023
e1-RCP4.5	0.284836607	0.554045344	0.632565915	1.170637331	e2-RCP4.5	0.275700979	0.52737482	0.601445345	1.107925322
e1-RCP6	0.339378425	0.566461308	0.612032515	1.091035165	e2-RCP6	0.318801134	0.47724466	0.515981773	0.895518931
e1-RCP8.5	0.436486746	0.53007327	0.581680549	0.950757272	e2-RCP8.5	0.424082963	0.493435817	0.532304352	0.834461225
NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -FIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.140642305	0.144954665	0.163987976	0.268932104	e2-RCP2.6	0.138266462	0.144292652	0.166869404	0.283878701
e1-RCP4.5	0.320075129	0.486452213	0.581617999	1.211986719	e2-RCP4.5	0.316519427	0.468513485	0.561345781	1.176288224
e1-RCP6	0.380686815	0.439612409	0.488867543	1.021385329	e2-RCP6	0.382006325	0.371487004	0.406938648	0.848091809
e1-RCP8.5	0.625065592	0.441263659	0.452598264	0.658498014	e2-RCP8.5	0.629816127	0.449465371	0.454253981	0.609068993
NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5	NOCO <sub>2</sub> -NOIRR	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	0.1266647	0.284939605	0.320264604	0.569783244	e2-RCP2.6	0.142816349	0.297712256	0.342602959	0.611895551
e1-RCP4.5	0.248678684	0.375222793	0.447297678	0.898041488	e2-RCP4.5	0.23555621	0.353737778	0.419065205	0.836001525
e1-RCP6	0.287279646	0.351227337	0.374534132	0.759889063	e2-RCP6	0.280609819	0.292152402	0.308800483	0.58456375
e1-RCP8.5	0.449407294	0.328057493	0.346040647	0.462509322	e2-RCP8.5	0.443396026	0.345502135	0.349890878	0.395620703

Tabla A65. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de arroz

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	0.07023957	0.08680465	0.08058691	0.08659886
	2035-2065	-	-	-	-		2035-2065	0.12752159	0.19650455	0.17236349	0.30737462
	2069-2099	-	-	-	-		2069-2099	0.09314596	0.27360567	0.32330062	0.62483074
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.18489699	0.17613338	0.180133	0.18514979	e1-RCP4.5	2005-2035	0.15656334	0.14641395	0.15289294	0.15496631
	2035-2065	0.20686812	0.30916312	0.26268583	0.49817888		2035-2065	0.17385113	0.253734	0.21905749	0.40209561
	2069-2099	0.27885893	0.53770983	0.6564075	1.22157803		2069-2099	0.23548622	0.44085085	0.5327255	0.9897543
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	0.12169435	0.12247647	0.11841299	0.12257095	e1-RCP6	2005-2035	0.16399825	0.16538438	0.15177866	0.16448063
	2035-2065	0.13608677	0.16324044	0.14516956	0.21979874		2035-2065	0.20544101	0.29269993	0.24239964	0.43703552
	2069-2099	0.13126551	0.23053622	0.26917705	0.46986014		2069-2099	0.29139931	0.47814818	0.55044432	0.99441143
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.2574356	0.2555682	0.25823104	0.25254767	e1-RCP8.5	2005-2035	0.20829358	0.20901647	0.21034386	0.20099413
	2035-2065	0.24622668	0.3471681	0.29018164	0.53331609		2035-2065	0.19969592	0.27595277	0.23500756	0.41679647
	2069-2099	0.49696241	0.55592572	0.64145099	1.21361498		2069-2099	0.39938462	0.46065767	0.52852511	0.98738049
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	0.07014102	0.08642661	0.07979531	0.08534092
	2035-2065	-	-	-	-		2035-2065	0.06991413	0.13214864	0.11008535	0.24212647
	2069-2099	-	-	-	-		2069-2099	0.06282885	0.23934865	0.290147	0.59023907
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.19153593	0.18478942	0.18738813	0.19206436	e1-RCP4.5	2005-2035	0.1606258	0.1536138	0.1574006	0.15873713
	2035-2065	0.11129333	0.11136659	0.10094269	0.27625991		2035-2065	0.0964847	0.11563968	0.10264104	0.25322046
	2069-2099	0.29669788	0.24576294	0.34194771	0.84486237		2069-2099	0.24252952	0.24934254	0.33478171	0.76849662
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	0.19608286	0.19458382	0.18757862	0.19625728	e1-RCP6	2005-2035	0.17175154	0.17495313	0.15929769	0.17156269
	2035-2065	0.11892301	0.17399818	0.11920397	0.3396472		2035-2065	0.10740934	0.1464718	0.10736714	0.26694266
	2069-2099	0.40556636	0.25163465	0.298067	0.76390259		2069-2099	0.32405001	0.24153116	0.28583461	0.69467996
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.2642013	0.26282254	0.26262785	0.25981813	e1-RCP8.5	2005-2035	0.21653669	0.21983243	0.21710399	0.20898889
	2035-2065	0.24725177	0.16011065	0.19145634	0.1618529		2035-2065	0.18260523	0.12854704	0.14733334	0.14905958
	2069-2099	0.73473534	0.41222475	0.34083048	0.48230932		2069-2099	0.57867004	0.31802112	0.27668613	0.45814748

Tabla A66. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de canola

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	-	-	-	-	e1-RCP4.5	2005-2035	0.13586366	0.13427035	0.14078204	0.13583892
	2035-2065	-	-	-	-		2035-2065	0.07760113	0.1086918	0.08964645	0.17720219
	2069-2099	-	-	-	-		2069-2099	0.1338854	0.19634275	0.23145948	0.40998
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	-	-	-	-	e1-RCP8.5	2005-2035	0.19137618	0.19197133	0.19451496	0.19060019
	2035-2065	-	-	-	-		2035-2065	0.10280292	0.09619759	0.09885643	0.09655637
	2069-2099	-	-	-	-		2069-2099	0.27657187	0.25154229	0.24806746	0.23446305
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	-	-	-	-	e1-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.23814542	0.23872614	0.23937011	0.23810153	e1-RCP8.5	2005-2035	0.18065004	0.1800696	0.18291763	0.17958602
	2035-2065	0.2207151	0.21357255	0.22208055	0.20666863		2035-2065	0.14036166	0.12707485	0.13590746	0.12028174
	2069-2099	0.53242159	0.51593228	0.51407273	0.50201839		2069-2099	0.33011782	0.33257006	0.33583042	0.35115988

Tabla A67. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de caña

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	1.36726995	1.33723256	1.37284555	1.34079284	e1-RCP4.5	2005-2035	1.17432811	1.17041021	1.18043844	1.16023739
	2035-2065	0.80940003	1.41801652	1.09619532	3.07612667		2035-2065	0.74085501	1.11134193	0.87419862	2.51373864
	2069-2099	2.19643925	2.88996095	3.93262394	8.67842857		2069-2099	2.05601231	2.27498111	3.13509707	7.12454062
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	2.0277685	2.03956266	2.04227631	1.9626529	e1-RCP8.5	2005-2035	1.75274061	1.78850134	1.75719829	1.69309541
	2035-2065	1.69535802	1.13475334	1.32604804	1.51130399		2035-2065	1.61672722	1.0351278	1.23451044	1.2224435
	2069-2099	4.4648421	3.01088003	3.03031323	5.36163645		2069-2099	4.09539198	2.59173806	2.48999221	4.25513836
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	-	-	-	-	e1-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	2.02951948	2.04200854	2.03389356	1.97453811	e1-RCP8.5	2005-2035	1.76481748	1.79874919	1.76344929	1.71413731
	2035-2065	2.23644116	1.45385613	1.76120081	0.80208625		2035-2065	1.96110421	1.24159031	1.51011611	0.74085958
	2069-2099	4.89168684	2.9772769	2.62596606	3.306149		2069-2099	4.40275853	2.64367652	2.31263669	2.91592261

Tabla A68. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de cebada

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.33891965	0.32105017	0.34325824	0.32870377	e1-RCP4.5	2005-2035	0.27741482	0.26364458	0.29233396	0.27371474
	2035-2065	0.30818143	0.5410647	0.4267324	0.89608314		2035-2065	0.27804544	0.467402	0.37694358	0.76276182
	2069-2099	0.418407	0.9386896	1.16399171	2.18937223		2069-2099	0.36963224	0.84365952	1.02546383	1.88080039
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.54274335	0.54285881	0.55273924	0.53331312	e1-RCP8.5	2005-2035	-	-	-	-
	2035-2065	0.29793045	0.38189291	0.32922537	0.56633866		2035-2065	-	-	-	-
	2069-2099	0.8103789	0.73516404	0.80601922	1.33271088		2069-2099	-	-	-	-
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	-	-	-	-	e1-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.4587578	0.45989763	0.46126853	0.45551045	e1-RCP8.5	2005-2035	0.34552307	0.34688956	0.35331893	0.34166151
	2035-2065	0.46340025	0.37806586	0.42401212	0.27293737		2035-2065	0.32683806	0.25105539	0.28730948	0.17744553
	2069-2099	1.21201721	0.98226232	0.92671424	0.6850234		2069-2099	0.79171785	0.61395676	0.58418235	0.43037715

Tabla A69. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de maíz

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	0.22006491	0.25870046	0.24760593	0.25853225	e1-RCP2.6	2005-2035	0.21597866	0.274428	0.25422609	0.27259792
	2035-2065	0.25674194	0.45580656	0.40564784	0.74362756		2035-2065	0.22652637	0.42432062	0.39910743	0.64125733
	2069-2099	0.26731805	0.84351701	1.02678992	1.99523621		2069-2099	0.25136104	0.72575319	0.83426799	1.61074974
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.52249807	0.50126918	0.52017573	0.52940583	e1-RCP4.5	2005-2035	0.42525271	0.39995594	0.4333727	0.42599171
	2035-2065	0.3772728	0.56245795	0.482454	0.98937165		2035-2065	0.34967814	0.48082376	0.44641508	0.82889702
	2069-2099	0.57991349	0.9879472	1.25565497	2.5267045		2069-2099	0.49740424	0.80620309	1.0113342	2.03052887
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	0.42978675	0.44306957	0.41862061	0.43680928
	2035-2065	-	-	-	-		2035-2065	0.35227277	0.43491654	0.33827332	0.64277933
	2069-2099	-	-	-	-		2069-2099	0.6221633	0.61032306	0.64085984	1.3069479
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.75696302	0.74886735	0.7632904	0.74728258	e1-RCP8.5	2005-2035	0.59856059	0.60853569	0.62076322	0.58209941
	2035-2065	0.4409178	0.51670744	0.46466222	0.81902623		2035-2065	0.4228178	0.49933651	0.48178329	0.76737105
	2069-2099	1.58163841	0.92987694	0.88230981	1.5641976		2069-2099	1.24885788	0.80679626	0.81355699	1.53503586
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	0.21730429	0.27404412	0.25461697	0.27100626
	2035-2065	-	-	-	-		2035-2065	0.16974971	0.34030894	0.32746508	0.54313878
	2069-2099	-	-	-	-		2069-2099	0.20522993	0.6525337	0.75763083	1.51307075
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.55315205	0.5360403	0.55169579	0.56010627	e1-RCP4.5	2005-2035	0.44026453	0.42117546	0.44894232	0.44048069
	2035-2065	0.29574597	0.2713085	0.27870558	0.63598773		2035-2065	0.28854795	0.26836475	0.3005949	0.57589223
	2069-2099	0.76128203	0.55346334	0.7607408	1.86891766		2069-2099	0.5929884	0.50415168	0.68024894	1.58465837
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	0.55852082	0.55792022	0.55188963	0.56224286	e1-RCP6	2005-2035	0.45511814	0.46997349	0.44362667	0.45963662
	2035-2065	0.32674107	0.26066059	0.23797457	0.34666714		2035-2065	0.32938355	0.28543708	0.20888173	0.39933785
	2069-2099	1.15451594	0.77492521	0.70502154	0.85621307		2069-2099	0.87504768	0.59345401	0.51873596	0.79945484
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.78425025	0.77930508	0.78833561	0.77477633	e1-RCP8.5	2005-2035	0.62659874	0.63981832	0.64502517	0.60990919
	2035-2065	0.60520351	0.42284315	0.49989899	0.37464383		2035-2065	0.51895439	0.35938254	0.44884261	0.36729629
	2069-2099	2.02826858	1.29715786	1.12785606	0.84754365		2069-2099	1.60312678	1.00271956	0.88177894	0.80381909

Tabla A70. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de mijo

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.1790088	0.17367997	0.17515351	0.17810063	e1-RCP4.5	2005-2035	0.12585653	0.12204533	0.12464976	0.12519631
	2035-2065	0.13475669	0.18895649	0.16570979	0.31292729		2035-2065	0.10727427	0.1465077	0.13324313	0.23860024
	2069-2099	0.23002261	0.36093313	0.43736912	0.81554351		2069-2099	0.17647318	0.27319367	0.32706388	0.60268108
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.21043017	0.2086747	0.20925457	0.20815389	e1-RCP8.5	2005-2035	0.21354152	0.21195454	0.21246903	0.21192216
	2035-2065	0.16775024	0.19034886	0.17448843	0.25986798		2035-2065	0.16601513	0.13259553	0.14242989	0.1356358
	2069-2099	0.33651557	0.29255104	0.31771397	0.56654568		2069-2099	0.40025765	0.25628423	0.23112016	0.32210305
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	-	-	-	-	e1-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	-	-	-	-	e1-RCP8.5	2005-2035	0.16020899	0.16120012	0.1606439	0.1569655
	2035-2065	-	-	-	-		2035-2065	0.12389444	0.10140397	0.1103207	0.11170359
	2069-2099	-	-	-	-		2069-2099	0.30779697	0.19705271	0.18161366	0.25020252



Tabla A71. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de sorgo

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.42525955	0.4098894	0.41579054	0.42449813	e1-RCP4.5	2005-2035	0.31598266	0.3051025	0.31269306	0.31335774
	2035-2065	0.25795642	0.32709221	0.28915771	0.65140296		2035-2065	0.22701726	0.31036734	0.27776861	0.57641452
	2069-2099	0.56462077	0.66711083	0.86067954	1.85521643		2069-2099	0.43706539	0.59677557	0.75743548	1.55836372
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.53018332	0.5241984	0.52639541	0.52550013	e1-RCP8.5	2005-2035	-	-	-	-
	2035-2065	0.44171123	0.34491607	0.37264595	0.35380889		2035-2065	-	-	-	-
	2069-2099	1.36688095	0.85688019	0.72128825	0.62138306		2069-2099	-	-	-	-
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	-	-	-	-	e1-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.53332575	0.52665317	0.52962462	0.52941565	e1-RCP8.5	2005-2035	0.41117051	0.41259662	0.41224514	0.40076671
	2035-2065	0.44243402	0.34124539	0.37054878	0.3422967		2035-2065	0.33986476	0.27429614	0.29933509	0.30744587
	2069-2099	1.13283097	0.69969303	0.610833	0.82983737		2069-2099	0.88511701	0.54184116	0.48846917	0.68167174

Tabla A72. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de soya

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	0.0779974	0.08599513	0.08440618	0.08601695	e1-RCP2.6	2005-2035	0.07784996	0.09517327	0.08959826	0.09579283
	2035-2065	0.11512587	0.1844685	0.16377118	0.297121		2035-2065	0.11678408	0.19713174	0.17672982	0.30050667
	2069-2099	0.11061237	0.33114029	0.41131647	0.77889278		2069-2099	0.1177378	0.33258685	0.39696126	0.74572372
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.17765361	0.17007678	0.17512904	0.17890442	e1-RCP4.5	2005-2035	0.15171238	0.1432711	0.15099971	0.15070302
	2035-2065	0.19696157	0.25400449	0.2297637	0.39028586		2035-2065	0.16611707	0.22515106	0.2041503	0.34835436
	2069-2099	0.28042881	0.45240002	0.54537121	0.96451136		2069-2099	0.23348099	0.3941282	0.47060579	0.84350879
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	-	-	-	-	e1-RCP6	2005-2035	0.1540991	0.1555342	0.15101622	0.15558785
	2035-2065	-	-	-	-		2035-2065	0.14556737	0.17261553	0.15371462	0.23876156
	2069-2099	-	-	-	-		2069-2099	0.25943568	0.30120611	0.32757589	0.54362575
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.26007159	0.25562815	0.26040376	0.26059493	e1-RCP8.5	2005-2035	0.21251029	0.21063667	0.21497515	0.20896896
	2035-2065	0.21631609	0.24991383	0.22862671	0.33894086		2035-2065	0.18155233	0.22184631	0.20342098	0.3041683
	2069-2099	0.42233347	0.42470689	0.46484734	0.7426979		2069-2099	0.34416657	0.36459063	0.40171128	0.66638984
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	-	-	-	-	e1-RCP2.6	2005-2035	0.07704169	0.09308157	0.08838894	0.0928092
	2035-2065	-	-	-	-		2035-2065	0.06981484	0.14348355	0.12609291	0.24225337
	2069-2099	-	-	-	-		2069-2099	0.08410699	0.28817405	0.35071603	0.68575769
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.19952996	0.19042868	0.19680439	0.20152687	e1-RCP4.5	2005-2035	0.16096064	0.15437708	0.16147627	0.15980031
	2035-2065	0.11779486	0.14563813	0.1309642	0.29864515		2035-2065	0.09785816	0.12490291	0.11595712	0.24770553
	2069-2099	0.25713555	0.28087929	0.37793586	0.84082434		2069-2099	0.20374545	0.24233046	0.31763824	0.68594341
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	0.2036299	0.1978076	0.1985331	0.20383409	e1-RCP6	2005-2035	0.16467759	0.16680738	0.1627567	0.16494675
	2035-2065	0.10663889	0.0877473	0.08010899	0.14756365		2035-2065	0.09813699	0.09410133	0.07782316	0.14238517
	2069-2099	0.36792161	0.23490211	0.22648078	0.38933873		2069-2099	0.28262393	0.19203341	0.18417995	0.31536315
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.28282074	0.27850581	0.28301377	0.28264601	e1-RCP8.5	2005-2035	0.2318664	0.23230152	0.2346057	0.22605048
	2035-2065	0.19577024	0.15009363	0.16421341	0.15835097		2035-2065	0.1680272	0.12837811	0.14620685	0.13694497
	2069-2099	0.62260734	0.39983487	0.34725331	0.36246688		2069-2099	0.50820093	0.32421695	0.29005723	0.30197257

Tabla A73. Resultado de la validación cruzada por horizonte especificación e1, valores del RMSE para el cultivo de trigo

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	0.14736185	0.15965804	0.15770117	0.15339392	e1-RCP2.6	2005-2035	0.14282142	0.17341819	0.17647837	0.16186643
	2035-2065	0.09975743	0.15334646	0.1290729	0.24843876		2035-2065	0.14865578	0.27456206	0.21971766	0.42700753
	2069-2099	0.10866137	0.29563432	0.3720833	0.69652318		2069-2099	0.16832022	0.51306535	0.61615773	1.09875766
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.32781528	0.30537307	0.32786644	0.31048991	e1-RCP4.5	2005-2035	0.25327566	0.23969084	0.26463874	0.24440081
	2035-2065	0.32796027	0.59184369	0.45785246	0.98745186		2035-2065	0.24377367	0.44031159	0.34408001	0.74179468
	2069-2099	0.4243496	1.04928613	1.30596889	2.44762241		2069-2099	0.34615244	0.81827424	1.00597922	1.87114515
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	0.33287285	0.32400038	0.32641736	0.32479347	e1-RCP6	2005-2035	0.26713934	0.27372208	0.26671235	0.26488711
	2035-2065	0.3600786	0.59217876	0.44297396	0.92903479		2035-2065	0.30120838	0.49092784	0.37089533	0.7534757
	2069-2099	0.53937838	0.9814313	1.18781663	2.15115741		2069-2099	0.42830273	0.80417741	0.9565838	1.71265361
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.51243069	0.51246752	0.52538661	0.49501366	e1-RCP8.5	2005-2035	0.39112669	0.39901528	0.40885624	0.37994606
	2035-2065	0.2688817	0.40581486	0.32889638	0.68175124		2035-2065	0.24281694	0.34629578	0.29192795	0.55589911
	2069-2099	0.76634698	0.81349001	0.96153057	1.75171389		2069-2099	0.59968483	0.75086554	0.87331061	1.50280915
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP2.6	2005-2035	0.14926951	0.15964259	0.15649268	0.15314171	e1-RCP2.6	2005-2035	0.13799425	0.16762844	0.16977071	0.15597404
	2035-2065	0.1421153	0.11360126	0.1257774	0.12500363		2035-2065	0.1095509	0.20060771	0.15826179	0.32641751
	2069-2099	0.12985618	0.15698587	0.20091355	0.42177617		2069-2099	0.13072117	0.41860362	0.50382473	0.91819526
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP4.5	2005-2035	0.32538948	0.30655389	0.32361519	0.30726948	e1-RCP4.5	2005-2035	0.2430659	0.23066685	0.25026712	0.23351045
	2035-2065	0.18278319	0.37033607	0.26512992	0.72627095		2035-2065	0.15842697	0.27082522	0.205855	0.5301018
	2069-2099	0.40994665	0.6919416	0.91641575	1.94546945		2069-2099	0.31834435	0.54389607	0.70371566	1.44357213
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP6	2005-2035	0.32629139	0.3185496	0.32121643	0.31652527	e1-RCP6	2005-2035	0.25091313	0.25665351	0.2449752	0.24677241
	2035-2065	0.1922125	0.36161433	0.22712362	0.66404336		2035-2065	0.18234427	0.31726784	0.20722314	0.53270259
	2069-2099	0.53977369	0.58952391	0.74980617	1.60889469		2069-2099	0.38907834	0.4511674	0.56380242	1.17797517
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e1-RCP8.5	2005-2035	0.48495038	0.48616883	0.49428099	0.47194951	e1-RCP8.5	2005-2035	0.35292603	0.3586283	0.36190081	0.34345932
	2035-2065	0.28352491	0.18970954	0.2375161	0.3092862		2035-2065	0.24991119	0.16309258	0.21129816	0.21496034
	2069-2099	0.92550404	0.55838249	0.56018566	0.99119353		2069-2099	0.64721586	0.40945294	0.4285012	0.69106611

Tabla A74. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de arroz

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	0.07855998	0.08628938	0.08302544	0.08639867
	2035-2065	-	-	-	-		2035-2065	0.12752159	0.19650455	0.17236349	0.30737462
	2069-2099	-	-	-	-		2069-2099	0.12890776	0.35165523	0.43397252	0.78644848
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.18584566	0.17670147	0.18043414	0.18641772	e2-RCP4.5	2005-2035	0.15604872	0.14932075	0.15176905	0.15678511
	2035-2065	0.20686812	0.30916312	0.26268583	0.49817888		2035-2065	0.17385113	0.253734	0.21905749	0.40209561
	2069-2099	0.27944281	0.54539227	0.66658206	1.22855566		2069-2099	0.2355533	0.44208324	0.5361907	0.9747803
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	0.12195402	0.12215821	0.11904325	0.12323084	e2-RCP6	2005-2035	0.16386536	0.1629821	0.15723494	0.16618842
	2035-2065	0.13608677	0.16324044	0.14516956	0.21979874		2035-2065	0.20544101	0.29269993	0.24239964	0.43703552
	2069-2099	0.13617308	0.24654586	0.28908406	0.49656266		2069-2099	0.30076315	0.49494206	0.57919644	1.01297533
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.25675494	0.25517397	0.25783295	0.25473383	e2-RCP8.5	2005-2035	0.21063438	0.21084743	0.21242421	0.20964965
	2035-2065	0.24622668	0.3471681	0.29018164	0.53331609		2035-2065	0.19969592	0.27595277	0.23500756	0.41679647
	2069-2099	0.49773255	0.55343881	0.63982904	1.20276883		2069-2099	0.39476386	0.44728416	0.51444521	0.94547618
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	0.07817048	0.08585475	0.08239153	0.08544685
	2035-2065	-	-	-	-		2035-2065	0.06991413	0.13214864	0.11008535	0.24212647
	2069-2099	-	-	-	-		2069-2099	0.08744089	0.30270688	0.38454057	0.73278329
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.19294202	0.18582478	0.18822139	0.19373663	e2-RCP4.5	2005-2035	0.16171023	0.15814766	0.15890468	0.16285237
	2035-2065	0.11129333	0.11136659	0.10094269	0.27625991		2035-2065	0.0964847	0.11563968	0.10264104	0.25322046
	2069-2099	0.29298467	0.25400213	0.35269876	0.85195899		2069-2099	0.23702049	0.24118004	0.32379418	0.73422137
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	0.19593099	0.19329183	0.18803505	0.19732649	e2-RCP6	2005-2035	0.17183958	0.17321918	0.16712473	0.17406743
	2035-2065	0.11892301	0.17399818	0.11920397	0.3396472		2035-2065	0.10740934	0.1464718	0.10736714	0.26694266
	2069-2099	0.39964696	0.26679233	0.32604368	0.81085376		2069-2099	0.31866728	0.23015625	0.27485685	0.63738473
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.26399011	0.26271503	0.26334695	0.26294577	e2-RCP8.5	2005-2035	0.2265125	0.22885706	0.22811673	0.22643564
	2035-2065	0.24725177	0.16011065	0.19145634	0.1618529		2035-2065	0.18260523	0.12854704	0.14733334	0.14905958
	2069-2099	0.7319483	0.41080302	0.33591113	0.47974788		2069-2099	0.57146992	0.33382809	0.28330978	0.389219

Tabla A75. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de canola

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	-	-	-	-	e2-RCP4.5	2005-2035	0.13692261	0.13709469	0.13912136	0.13681965
	2035-2065	-	-	-	-		2035-2065	0.07143671	0.09923809	0.0820332	0.1590693
	2069-2099	-	-	-	-		2069-2099	0.1338854	0.19634275	0.23145948	0.40998
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	-	-	-	-	e2-RCP8.5	2005-2035	0.19359087	0.19423927	0.19445552	0.19353332
	2035-2065	-	-	-	-		2035-2065	0.10224705	0.09739746	0.10053186	0.09314815
	2069-2099	-	-	-	-		2069-2099	0.27657187	0.25154229	0.24806746	0.23446305
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	-	-	-	-	e2-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.23900547	0.2389465	0.23932568	0.2386474	e2-RCP8.5	2005-2035	0.18309444	0.18272379	0.18323406	0.18267787
	2035-2065	0.22246875	0.21588764	0.22133739	0.20975023		2035-2065	0.14235441	0.14291388	0.14427741	0.14759022
	2069-2099	0.53242159	0.51593228	0.51407273	0.50201839		2069-2099	0.33011782	0.33257006	0.33583042	0.35115988

Tabla A76. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de caña

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	1.3822653	1.37102556	1.39452606	1.35730747	e2-RCP4.5	2005-2035	1.21167441	1.23096965	1.23457225	1.20161247
	2035-2065	0.76711204	1.2657691	0.99991078	2.87066808		2035-2065	0.67265516	0.9244387	0.73499896	2.25299168
	2069-2099	2.18545762	2.73190055	3.73355935	8.34093848		2069-2099	2.02850975	2.10600158	2.90518325	6.68261856
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	2.11556136	2.13695485	2.14068129	2.07703703	e2-RCP8.5	2005-2035	1.87808076	1.91468441	1.9056193	1.85558792
	2035-2065	1.6924895	1.13592777	1.34384966	1.10796605		2035-2065	1.56698714	1.03116976	1.23668521	0.84036931
	2069-2099	4.41317972	2.98621217	2.86389549	4.49887772		2069-2099	4.02326694	2.63199685	2.41078681	3.45570005
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	-	-	-	-	e2-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	2.10763012	2.12506733	2.12343939	2.07981395	e2-RCP8.5	2005-2035	1.91556344	1.94613951	1.93539387	1.89962425
	2035-2065	2.23910749	1.61951867	1.86567337	0.87357771		2035-2065	1.9214459	1.37930991	1.59178476	0.73774887
	2069-2099	4.86204761	3.15954627	2.73772119	2.76375278		2069-2099	4.33587579	2.86237386	2.4845132	2.33589599

Tabla A77. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de cebada

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.34509755	0.335627	0.34925395	0.34013955	e2-RCP4.5	2005-2035	0.28270348	0.27695949	0.28888107	0.28211952
	2035-2065	0.29318921	0.49685024	0.39456902	0.83414569		2035-2065	0.2672048	0.43479783	0.34877228	0.70934193
	2069-2099	0.40513696	0.88873421	1.0997774	2.07713436		2069-2099	0.35897821	0.81071996	0.98345624	1.78656346
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.55838272	0.56096382	0.56543924	0.55371332	e2-RCP8.5	2005-2035	-	-	-	-
	2035-2065	0.27490756	0.32784853	0.29196455	0.47141586		2035-2065	-	-	-	-
	2069-2099	0.80299918	0.71003626	0.74927076	1.1525293		2069-2099	-	-	-	-
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	-	-	-	-	e2-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.46119998	0.46219655	0.46229912	0.45927677	e2-RCP8.5	2005-2035	0.36396601	0.36579097	0.36574039	0.36429526
	2035-2065	0.46958904	0.40393466	0.43808271	0.31316403		2035-2065	0.32335798	0.28973084	0.30822709	0.24444464
	2069-2099	1.21888692	1.02549256	0.97493567	0.75600875		2069-2099	0.78137589	0.68370207	0.66033943	0.55437538

Tabla A78. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de maíz

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	0.23282474	0.25529152	0.2495401	0.25761638	e2-RCP2.6	2005-2035	0.24491999	0.27065522	0.26141845	0.27203436
	2035-2065	0.3300567	0.54571045	0.47169483	0.88416353		2035-2065	0.34446085	0.5395032	0.46684674	0.84313236
	2069-2099	0.33976973	1.02548302	1.27640805	2.34790267		2069-2099	0.36565665	0.98205011	1.20118258	2.1584274
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.52993759	0.50654154	0.52485621	0.53563243	e2-RCP4.5	2005-2035	0.41987189	0.40789193	0.42027704	0.42886296
	2035-2065	0.37891548	0.59721397	0.49972704	1.0275765		2035-2065	0.33744832	0.49485825	0.42950742	0.82072562
	2069-2099	0.56689704	1.04177029	1.32134008	2.59293859		2069-2099	0.47334974	0.83090648	1.04027565	2.00787286
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	0.43300441	0.43667875	0.43228246	0.44394706
	2035-2065	-	-	-	-		2035-2065	0.35590835	0.47488888	0.39346523	0.69873523
	2069-2099	-	-	-	-		2069-2099	0.60215851	0.66737027	0.77817907	1.46324456
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.7510354	0.74142741	0.75557337	0.7511335	e2-RCP8.5	2005-2035	0.60114999	0.60463242	0.61254501	0.60734371
	2035-2065	0.43523137	0.51794095	0.46044794	0.82633506		2035-2065	0.39310288	0.465881	0.4251725	0.710642
	2069-2099	1.5690558	0.92318416	0.87701029	1.58983546		2069-2099	1.21551109	0.79558158	0.79349558	1.44248998
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	0.24480827	0.26943737	0.26087682	0.2706576
	2035-2065	-	-	-	-		2035-2065	0.25394676	0.43202048	0.366951	0.72512416
	2069-2099	-	-	-	-		2069-2099	0.29973632	0.88547904	1.09940199	2.02976438
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.5656571	0.54517529	0.56137869	0.5705665	e2-RCP4.5	2005-2035	0.4361639	0.42840315	0.43812052	0.44491205
	2035-2065	0.26650939	0.30663937	0.28248673	0.67835053		2035-2065	0.24579702	0.27969751	0.26689676	0.55826931
	2069-2099	0.72941599	0.60742762	0.82813284	1.94138878		2069-2099	0.5577059	0.5178667	0.68714624	1.54251004
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	0.57174351	0.56645877	0.56755566	0.57635487	e2-RCP6	2005-2035	0.45534384	0.45948302	0.45538927	0.46425647
	2035-2065	0.28411567	0.27293401	0.2225637	0.45871036		2035-2065	0.26544064	0.27606292	0.23516727	0.41147135
	2069-2099	1.09417263	0.67925672	0.63683129	1.04490255		2069-2099	0.82140764	0.53788726	0.51819823	0.87046818
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.78271969	0.77339091	0.78475825	0.78368642	e2-RCP8.5	2005-2035	0.63419019	0.63849587	0.64274228	0.64029881
	2035-2065	0.57824731	0.41160273	0.48628546	0.40553818		2035-2065	0.48088934	0.36081088	0.41796498	0.34087907
	2069-2099	2.00176249	1.25350969	1.06720954	0.90256537		2069-2099	1.56931844	1.02867428	0.89453911	0.76883719



Tabla A79. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de mijo

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.8076088	0.8076088	0.8076088	0.8076088	e2-RCP4.5	2005-2035	0.125524502	0.123546913	0.123882987	0.125988946
	2035-2065	0.8076088	0.8076088	0.8076088	0.8076088		2035-2065	0.10749212	0.146167265	0.129446503	0.233636744
	2069-2099	0.8076088	0.8076088	0.8076088	0.8076088		2069-2099	0.176349931	0.273924787	0.329055176	0.591840068
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.21088727	0.21011367	0.21023234	0.21000404	e2-RCP8.5	2005-2035	0.213665477	0.212607827	0.212806814	0.213249538
	2035-2065	0.16663003	0.18169838	0.16889154	0.2443547		2035-2065	0.164957282	0.130678296	0.14104559	0.130436936
	2069-2099	0.33720956	0.28558315	0.30618085	0.53547775		2069-2099	0.400053527	0.256988379	0.229963422	0.312716232
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	-	-	-	-	e2-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	-	-	-	-	e2-RCP8.5	2005-2035	0.16273776	0.16356085	0.16319262	0.16289997
	2035-2065	-	-	-	-		2035-2065	0.11935918	0.09664746	0.10437672	0.09673994
	2069-2099	-	-	-	-		2069-2099	0.30453068	0.20305469	0.18293478	0.21962199

Tabla A80. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de sorgo

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.42501947	0.41094803	0.41495201	0.42481494	e2-RCP4.5	2005-2035	0.31487447	0.3085588	0.31072338	0.31625529
	2035-2065	0.25647033	0.33760597	0.29234277	0.6609935		2035-2065	0.22332853	0.3042431	0.26567011	0.55965522
	2069-2099	0.56248413	0.68265822	0.88266968	1.86937561		2069-2099	0.43396401	0.5911282	0.75248052	1.5242612
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.52917735	0.52478821	0.52617999	0.52715078	e2-RCP8.5	2005-2035	-	-	-	-
	2035-2065	0.44018916	0.34191542	0.37131785	0.34632684		2035-2065	-	-	-	-
	2069-2099	1.366075	0.85901902	0.71925548	0.61340931		2069-2099	-	-	-	-
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	-	-	-	-	e2-RCP4.5	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	-	-	-	-
	2035-2065	-	-	-	-		2035-2065	-	-	-	-
	2069-2099	-	-	-	-		2069-2099	-	-	-	-
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.533529	0.5279255	0.53019368	0.53179698	e2-RCP8.5	2005-2035	0.41418481	0.41546089	0.41548443	0.4142904
	2035-2065	0.43757829	0.3375542	0.367314	0.34561105		2035-2065	0.33144296	0.26361094	0.28642304	0.26972148
	2069-2099	1.12899781	0.69336079	0.60461915	0.84625292		2069-2099	0.87865078	0.55835863	0.49177039	0.60556648

Tabla A81. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de soya

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	0.07946879	0.08488565	0.08424115	0.08556326	e2-RCP2.6	2005-2035	0.0847655	0.09341518	0.09087014	0.0939678
	2035-2065	0.12916708	0.2022012	0.17867289	0.32287857		2035-2065	0.15275383	0.23377505	0.20545847	0.36038419
	2069-2099	0.12373755	0.36432194	0.4559012	0.84101008		2069-2099	0.15216126	0.40956997	0.50320612	0.90408442
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.18093638	0.17227182	0.17908447	0.17978545	e2-RCP4.5	2005-2035	0.15115888	0.14402886	0.14965233	0.15100414
	2035-2065	0.19456067	0.26589032	0.23622421	0.40629837		2035-2065	0.1692251	0.23210007	0.20697123	0.35365411
	2069-2099	0.27607933	0.4688425	0.56333074	0.99367833		2069-2099	0.23463871	0.40547063	0.48562035	0.85263575
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	-	-	-	-	e2-RCP6	2005-2035	0.15623063	0.15457448	0.15436683	0.15696635
	2035-2065	-	-	-	-		2035-2065	0.15489076	0.1876618	0.16942557	0.25779539
	2069-2099	-	-	-	-		2069-2099	0.26716685	0.32765679	0.36907975	0.58959132
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.26337404	0.25869723	0.26453315	0.2616669	e2-RCP8.5	2005-2035	0.21061171	0.20787186	0.21212111	0.20975515
	2035-2065	0.21414345	0.25724589	0.23328605	0.35262738		2035-2065	0.1820663	0.22015723	0.20066136	0.30184627
	2069-2099	0.41735072	0.43115564	0.47454776	0.77036877		2069-2099	0.34362723	0.36502466	0.40392135	0.66422809
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	-	-	-	-	e2-RCP2.6	2005-2035	0.08293511	0.09084645	0.08901373	0.0914669
	2035-2065	-	-	-	-		2035-2065	0.09784998	0.17289122	0.14746802	0.29409762
	2069-2099	-	-	-	-		2069-2099	0.11254413	0.35471101	0.44469991	0.82775623
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.2070368	0.19628438	0.20474006	0.20568813	e2-RCP4.5	2005-2035	0.1603676	0.15466736	0.15999338	0.16079411
	2035-2065	0.11116992	0.16529059	0.13926232	0.32294945		2035-2065	0.095138	0.12843699	0.11434754	0.24830866
	2069-2099	0.2480535	0.30929338	0.41006989	0.88332208		2069-2099	0.20024814	0.24757228	0.32429246	0.68578936
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	0.20924425	0.20499492	0.20722901	0.2084975	e2-RCP6	2005-2035	0.16511706	0.16421205	0.16402241	0.16581339
	2035-2065	0.09651802	0.10035927	0.07979484	0.18551054		2035-2065	0.09273733	0.09510995	0.08427791	0.1454646
	2069-2099	0.35362958	0.23447069	0.24392695	0.46723281		2069-2099	0.2766542	0.18666175	0.18706771	0.32720323
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.28828506	0.28299153	0.28881857	0.28649753	e2-RCP8.5	2005-2035	0.22947552	0.22855175	0.23115589	0.22920537
	2035-2065	0.18676562	0.14863018	0.15991058	0.18224163		2035-2065	0.16386753	0.12810715	0.14272062	0.12900966
	2069-2099	0.61250704	0.38140474	0.33460685	0.41318348		2069-2099	0.5049738	0.33061609	0.29044811	0.28577894

Tabla A82. Resultado de la validación cruzada por horizonte especificación e2, valores del RMSE para el cultivo de trigo

CO <sub>2</sub> -FIRR						CO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	0.15373131	0.1575611	0.1582998	0.15498855	e2-RCP2.6	2005-2035	0.15453028	0.1681918	0.17099026	0.16189217
	2035-2065	0.10085627	0.14299117	0.12623325	0.24269122		2035-2065	0.16889588	0.27573531	0.23084831	0.44164914
	2069-2099	0.11367577	0.29072253	0.36852984	0.70234808		2069-2099	0.19734531	0.54554596	0.66292965	1.18291343
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.33291928	0.31829629	0.33811644	0.31943547	e2-RCP4.5	2005-2035	0.25648896	0.25164524	0.26637584	0.25358078
	2035-2065	0.30874431	0.54863472	0.4274169	0.93083279		2035-2065	0.23098264	0.40437881	0.31420143	0.68664229
	2069-2099	0.40478979	0.99518536	1.23748322	2.34398392		2069-2099	0.32999019	0.77943893	0.95683378	1.77389817
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	0.3463032	0.34530061	0.34843332	0.33858215	e2-RCP6	2005-2035	0.28149555	0.28811166	0.28737022	0.28192243
	2035-2065	0.27256385	0.44332302	0.33937406	0.71254266		2035-2065	0.25688469	0.39122515	0.30695371	0.60214052
	2069-2099	0.49418236	0.76516967	0.91730063	1.68877084		2069-2099	0.39959105	0.66874655	0.7886123	1.4013597
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.53196791	0.5340729	0.54539022	0.51797681	e2-RCP8.5	2005-2035	0.40970504	0.41772517	0.4244937	0.40607398
	2035-2065	0.23923703	0.34623444	0.2826048	0.58241437		2035-2065	0.21438323	0.28991943	0.24435889	0.45872434
	2069-2099	0.74805826	0.7521575	0.86555223	1.54633408		2069-2099	0.57071945	0.68694186	0.78111306	1.30906551
NOCO <sub>2</sub> -FIRR						NOCO <sub>2</sub> -NOIRR					
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP2.6	2005-2035	0.15321148	0.15554744	0.1558268	0.15356524	e2-RCP2.6	2005-2035	0.14937751	0.16223645	0.16488557	0.15616914
	2035-2065	0.13438922	0.10889756	0.11774056	0.12476294		2035-2065	0.1203435	0.19845369	0.16325399	0.33730942
	2069-2099	0.1257721	0.16250362	0.21305249	0.45012585		2069-2099	0.15618364	0.44742958	0.54616046	0.992513
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP4.5	2005-2035	0.3257637	0.31017699	0.32619283	0.31004121	e2-RCP4.5	2005-2035	0.24626788	0.24312822	0.25445548	0.24366648
	2035-2065	0.1741545	0.34741458	0.24912497	0.69597423		2035-2065	0.13474807	0.23604417	0.17310678	0.47457428
	2069-2099	0.40509488	0.66453593	0.88139789	1.8895651		2069-2099	0.29606633	0.51045378	0.65736854	1.34614352
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP6	2005-2035	0.33109767	0.32742764	0.32859089	0.32014723	e2-RCP6	2005-2035	0.26281814	0.26908649	0.26709575	0.26320263
	2035-2065	0.15614748	0.27595723	0.17159198	0.53484561		2035-2065	0.14501028	0.22939939	0.15737205	0.39294503
	2069-2099	0.55116132	0.48025673	0.59948428	1.3301222		2069-2099	0.38226202	0.36197715	0.43585217	0.89524461
	Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5		Horizonte	RCP2.6	RCP4.5	RCP6	RCP8.5
e2-RCP8.5	2005-2035	0.48978843	0.49102104	0.49870066	0.47685565	e2-RCP8.5	2005-2035	0.37578144	0.37896556	0.36832496	0.37578144
	2035-2065	0.2897791	0.1911307	0.23996822	0.26780542		2035-2065	0.16826416	0.20745142	0.15424759	0.16826416
	2069-2099	0.93066665	0.57308355	0.55924319	0.9020998		2069-2099	0.43427025	0.42499399	0.55685871	0.43427025