

Reporte de Modelos — Etchojoa

10-2011, 2011-2012, 2012-2013, 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023

Generado: 2025-09-30 17:25

Etchojoa — 2010-2011

Días del ciclo: 172

ETc total [mm]: 687.6

ETverde total [mm]: 1.5

ETazul total [mm]: 686.1

Tmax / Tmin [°C]: 37.9 / 0.2

Etchojoa — 2010-2011 · Resultados y métricas

[Etchojoa 2010-2011] Regresión Lineal ET0 — R^2 : 0.9831 MSE: 0.0308

[Etchojoa 2010-2011] Random Forest ET0 — R^2 : 0.9251 MSE: 0.1371

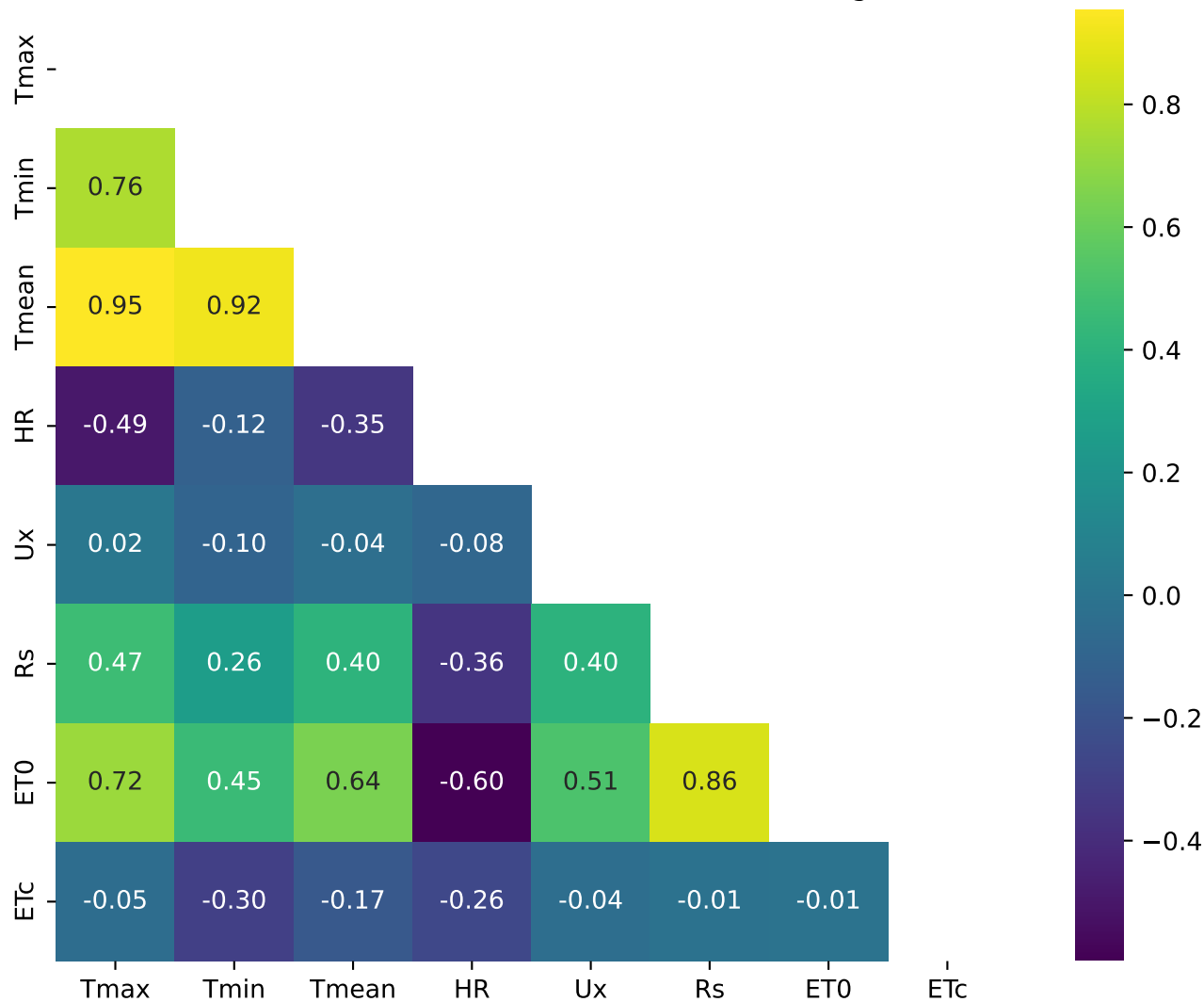
Importancias: {'Tmax': 0.1363019693822717, 'Tmin': 0.015545450489418647, 'HR': 0.07030695943337269, 'Ux': 0.040766892000138145, 'Rs': 0.7370787286947988}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	25.407209	12.249070	50.283721	1.783953	15.813256	3.603072	3.750508
1	32.391935	16.098710	33.927097	2.422258	25.477097	7.169798	1.824806
2	26.150303	10.460909	34.122727	2.203333	17.802727	4.748626	5.460920
3	31.934800	14.686400	28.558800	2.024800	22.962800	6.357929	7.311618
4	30.700000	15.618250	36.572250	1.736750	17.281500	4.721666	2.669443

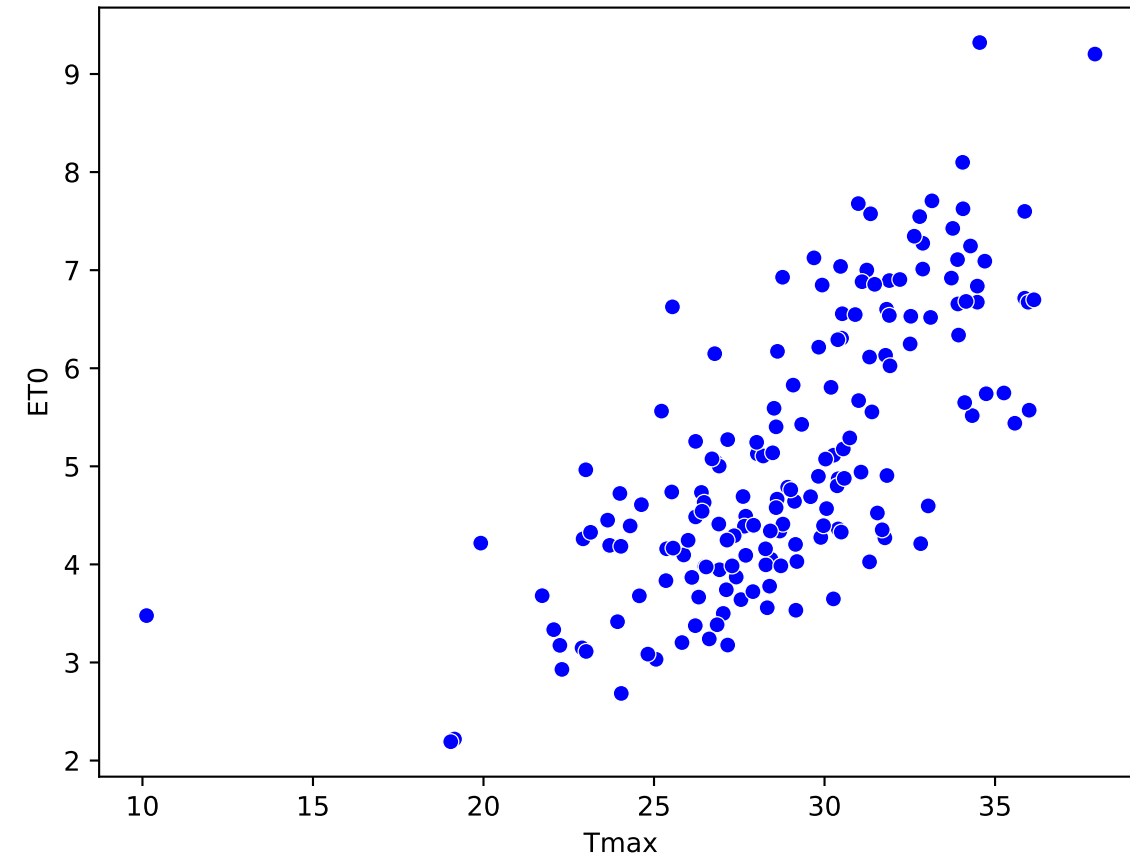
Etchojoa — 2010-2011

Matriz de Correlación entre Variables Meteorológicas

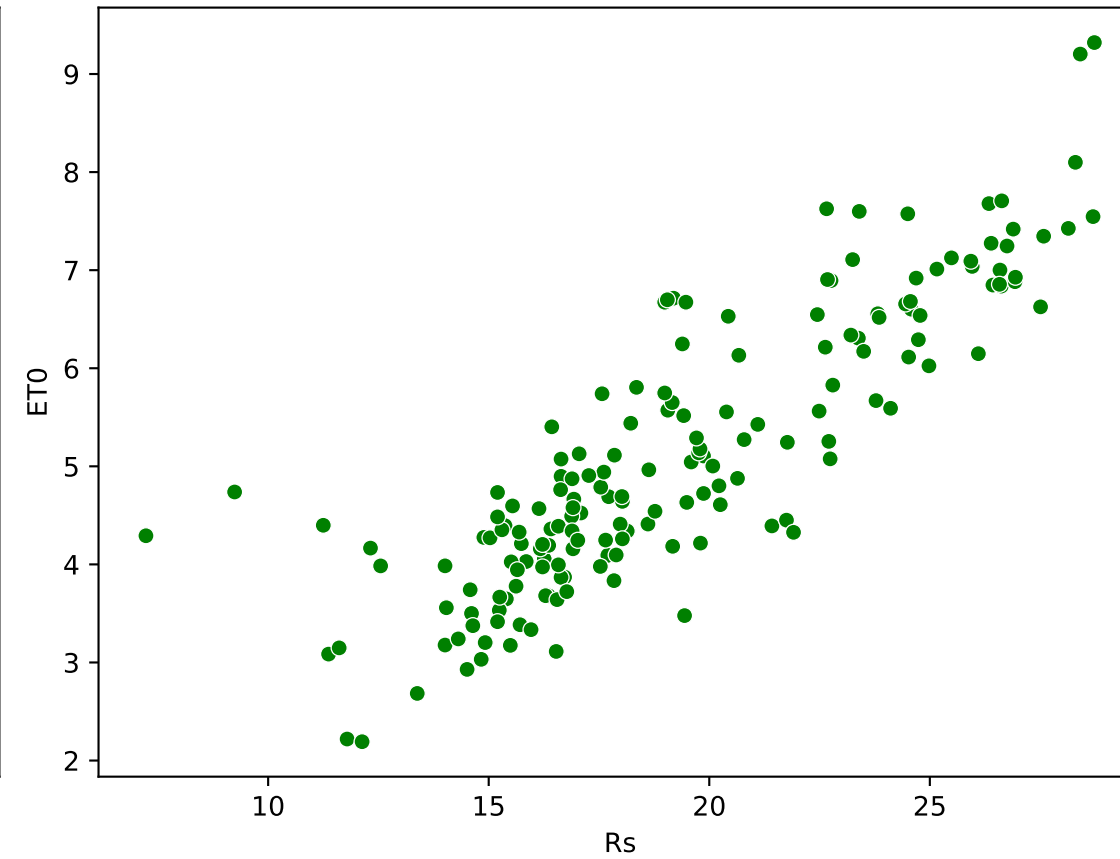


Dispersión — Etchojoa (2010-2011)

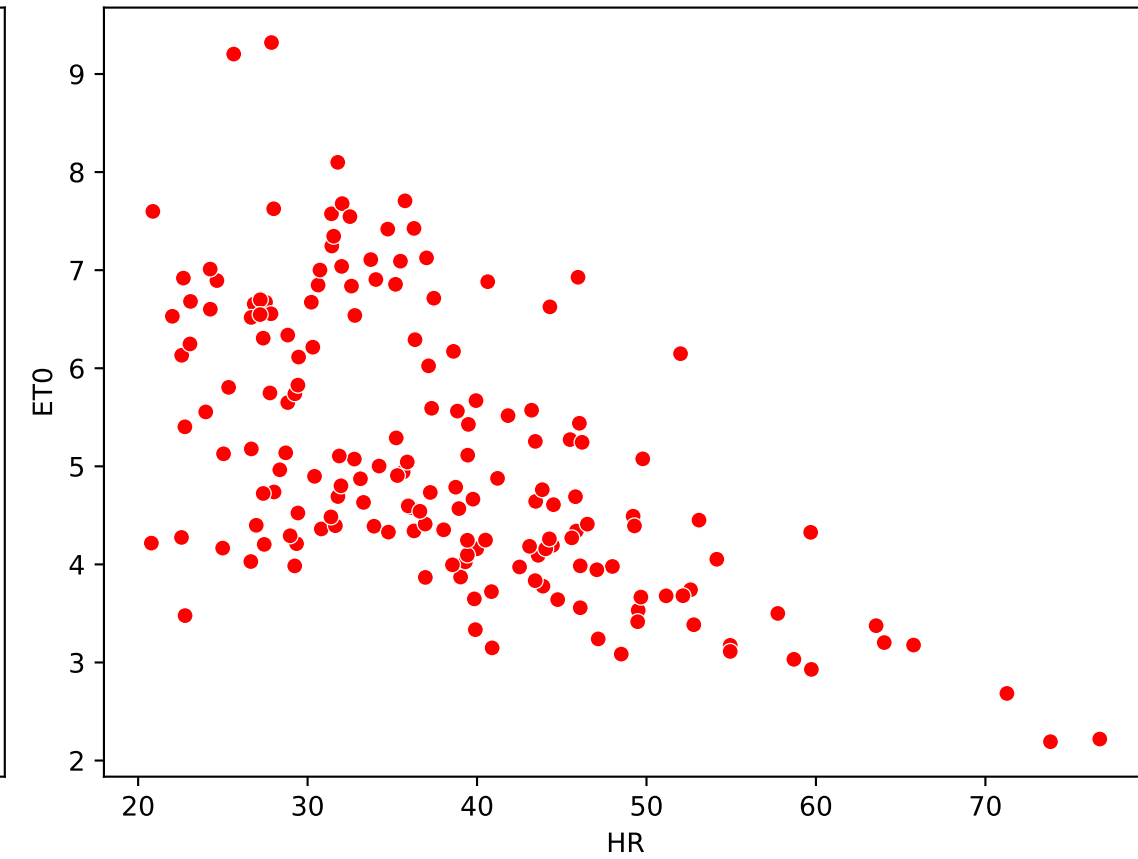
Tmax vs ET0



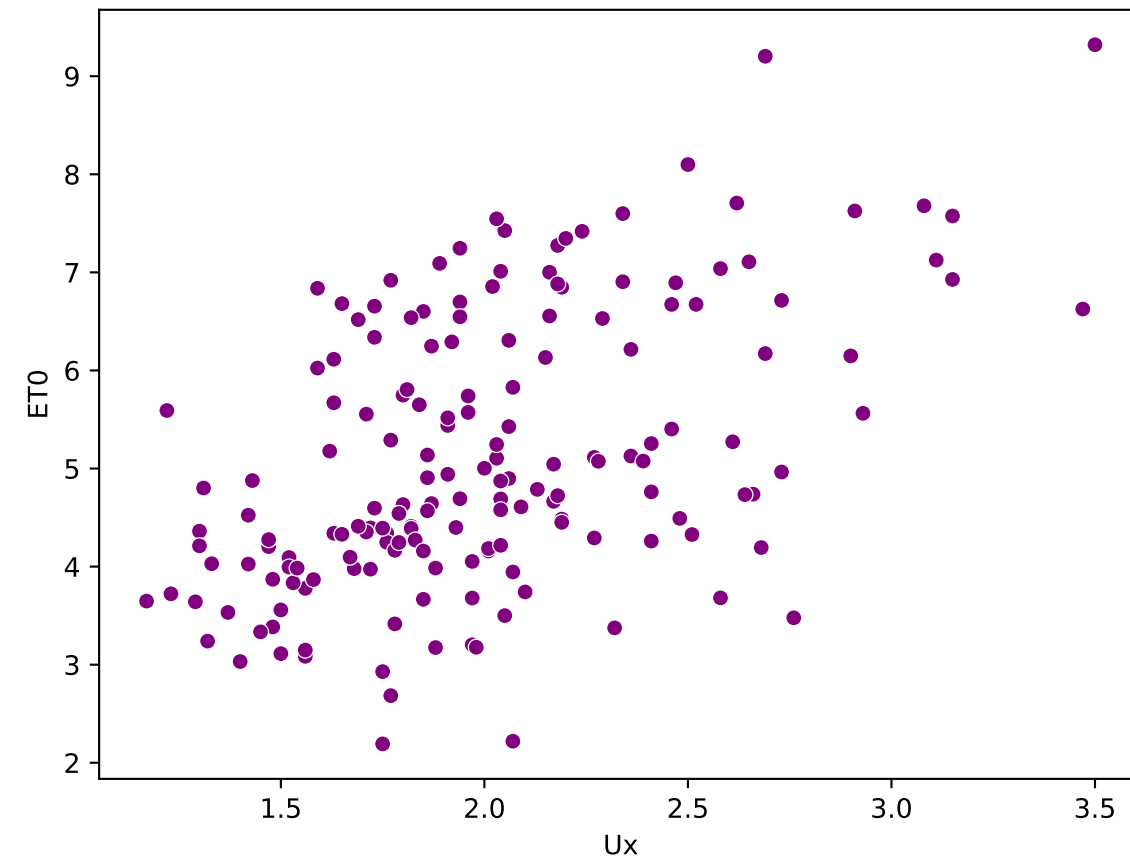
Rs vs ET0



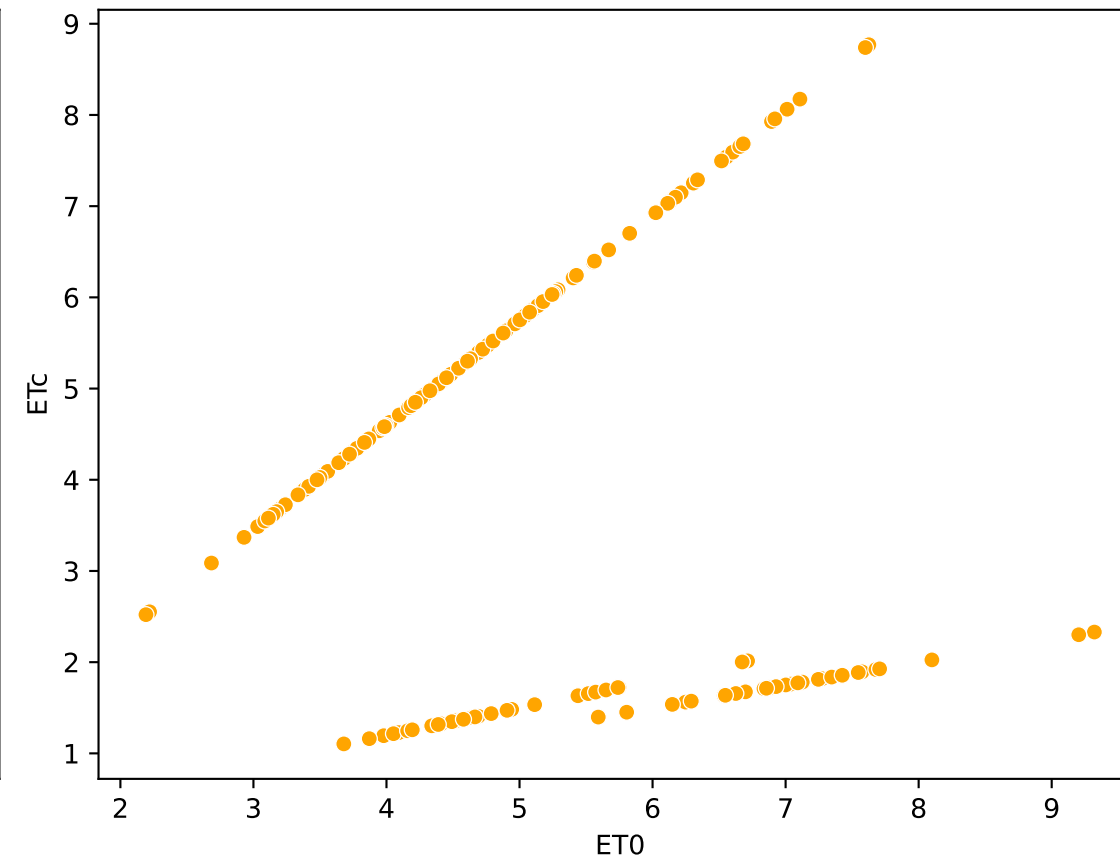
HR vs ET0



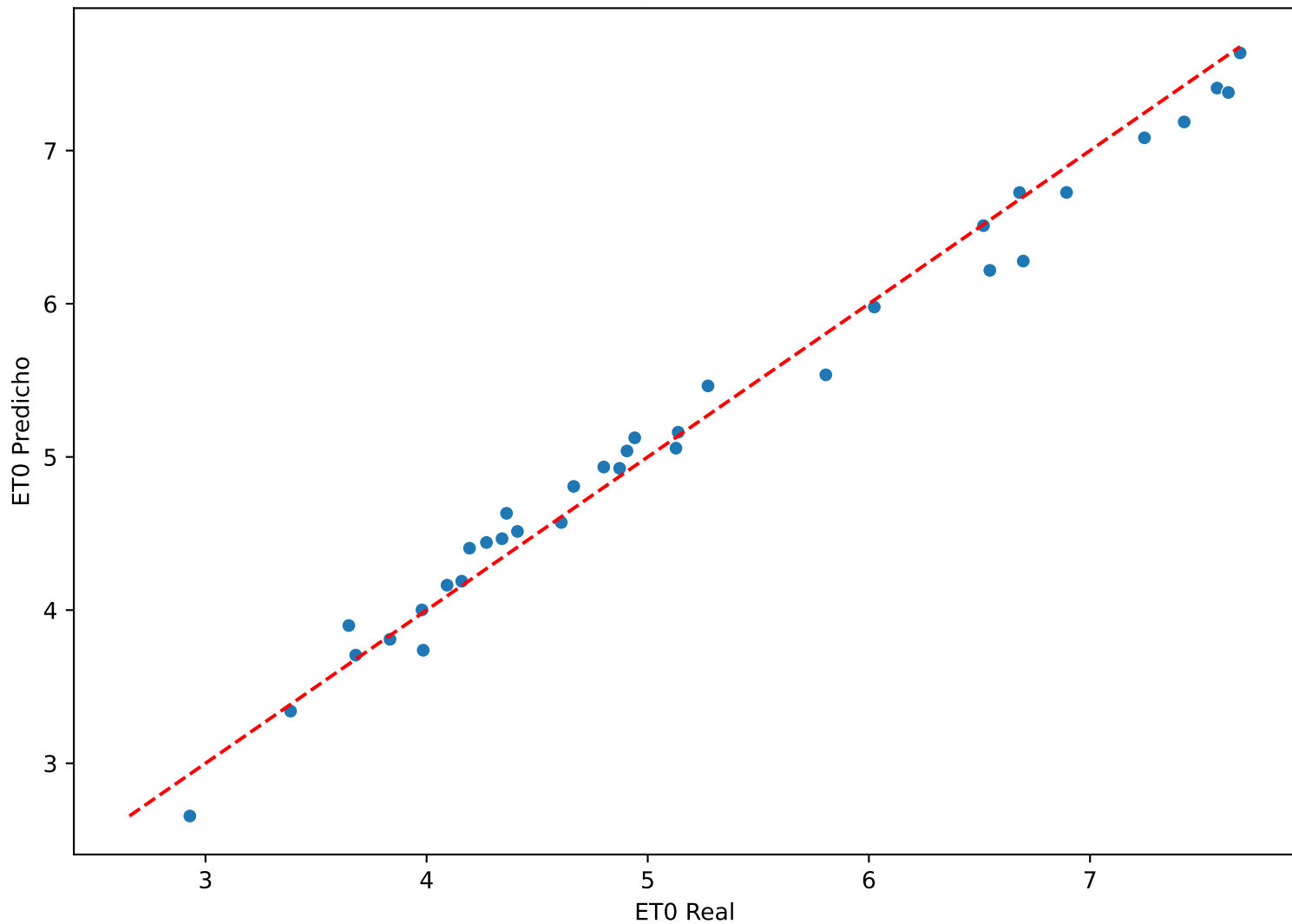
Ux vs ET0



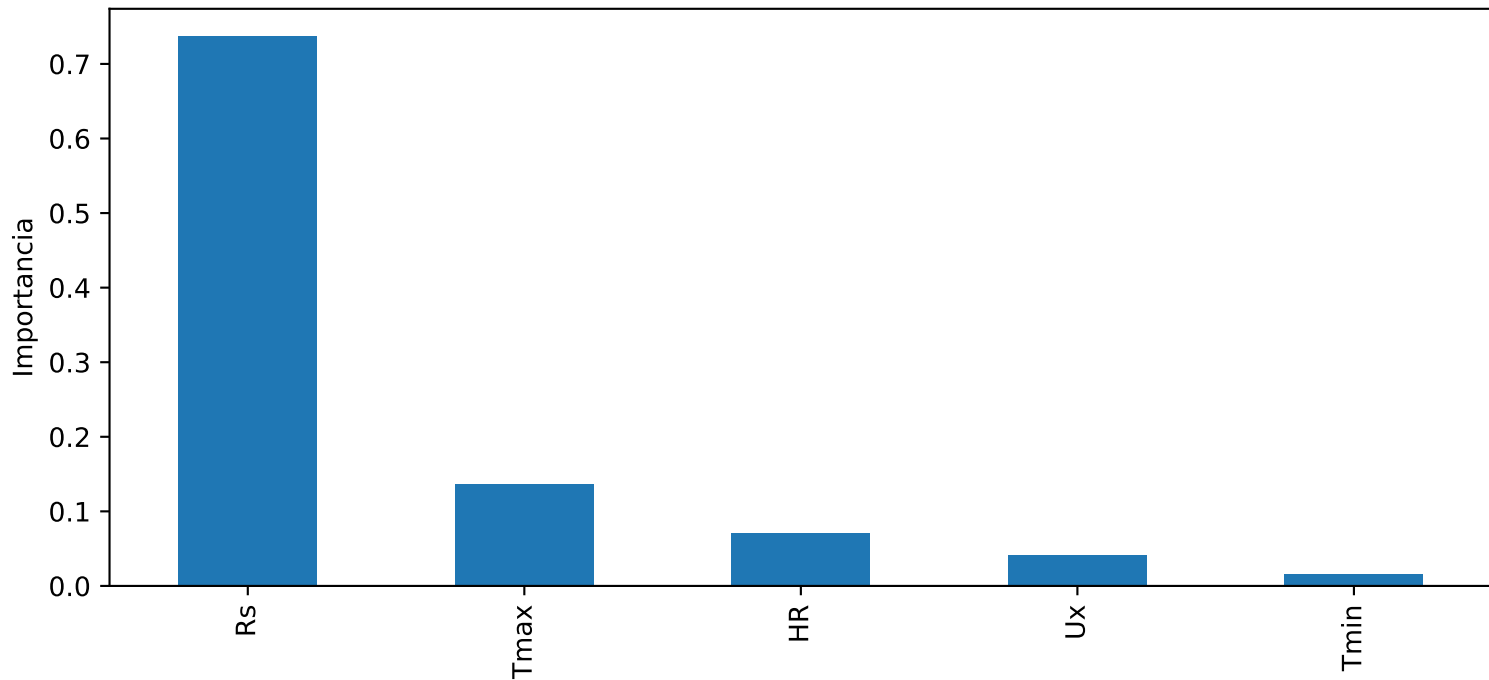
ET0 vs ETc



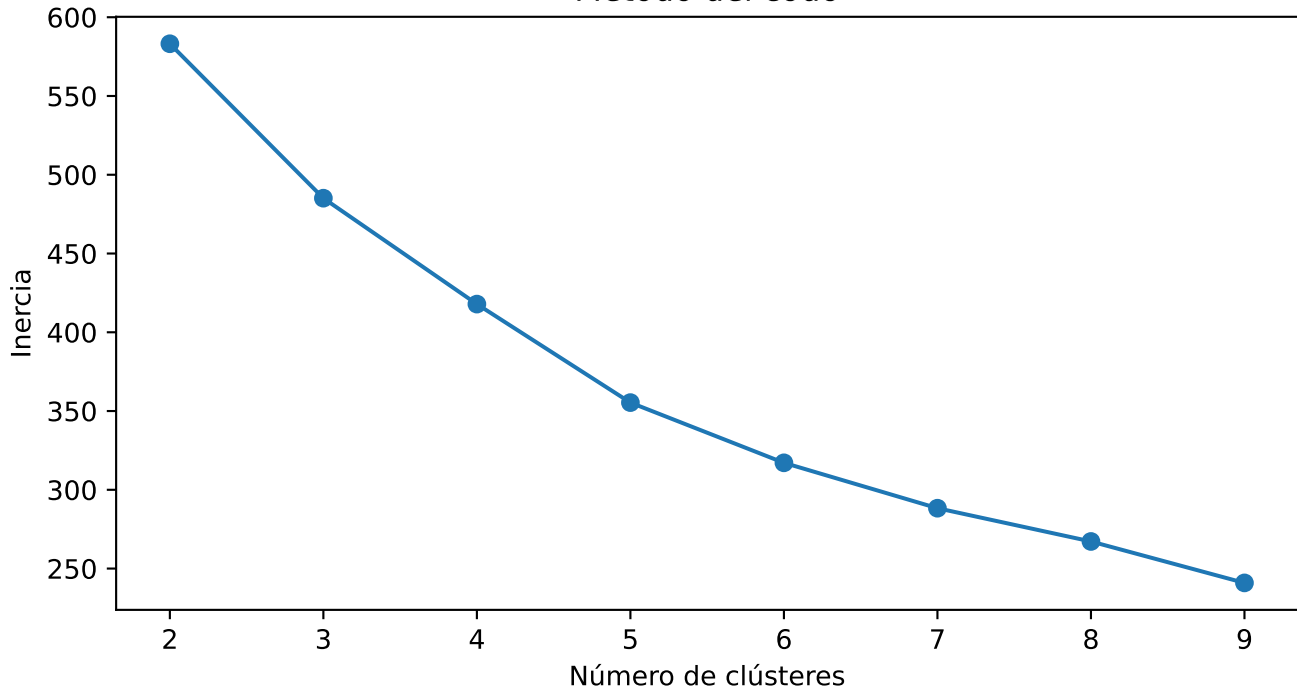
Comparación entre ET0 Real y Predicho — Etchojoa (2010-2011)



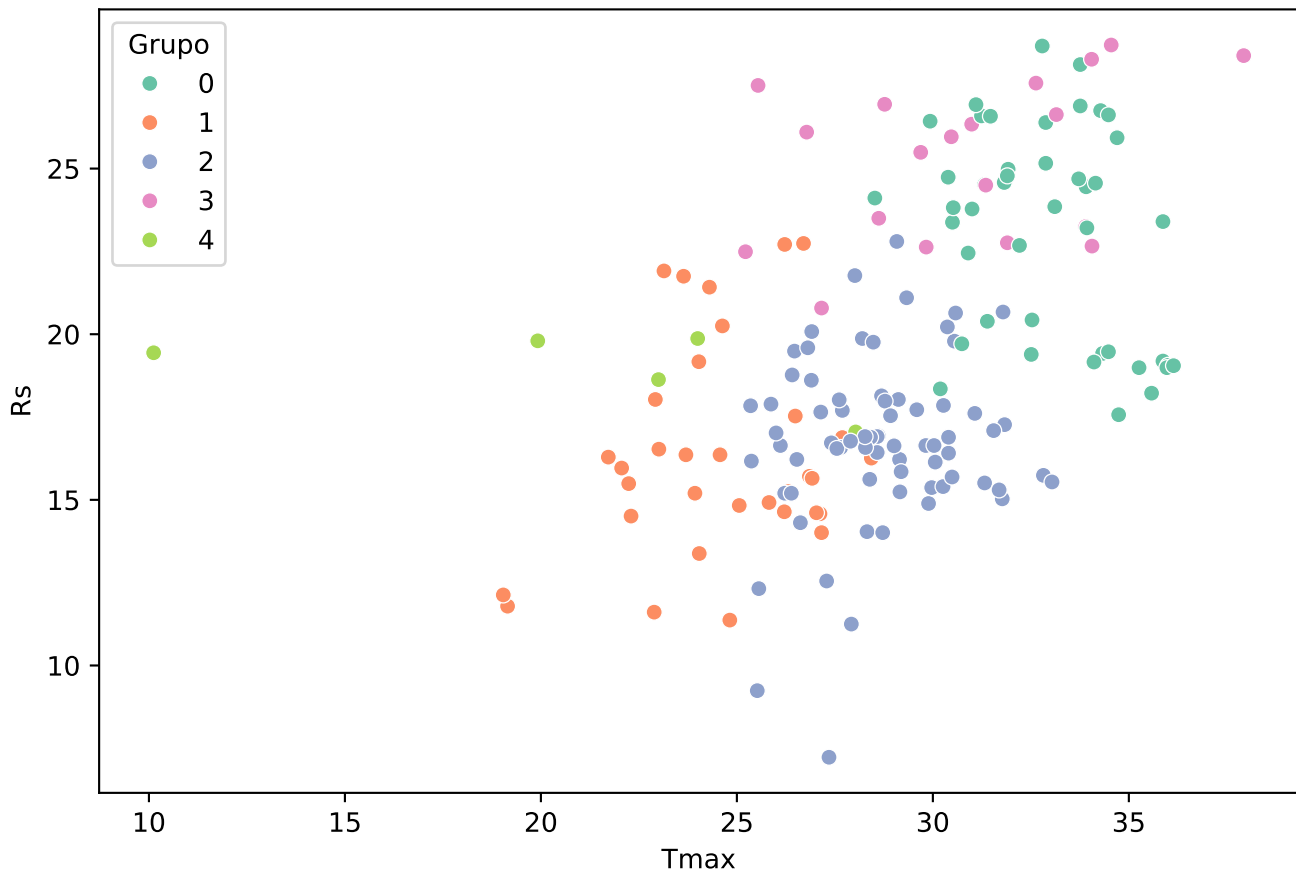
Importancia de variables (RF) — Etchojoa (2010-2011)



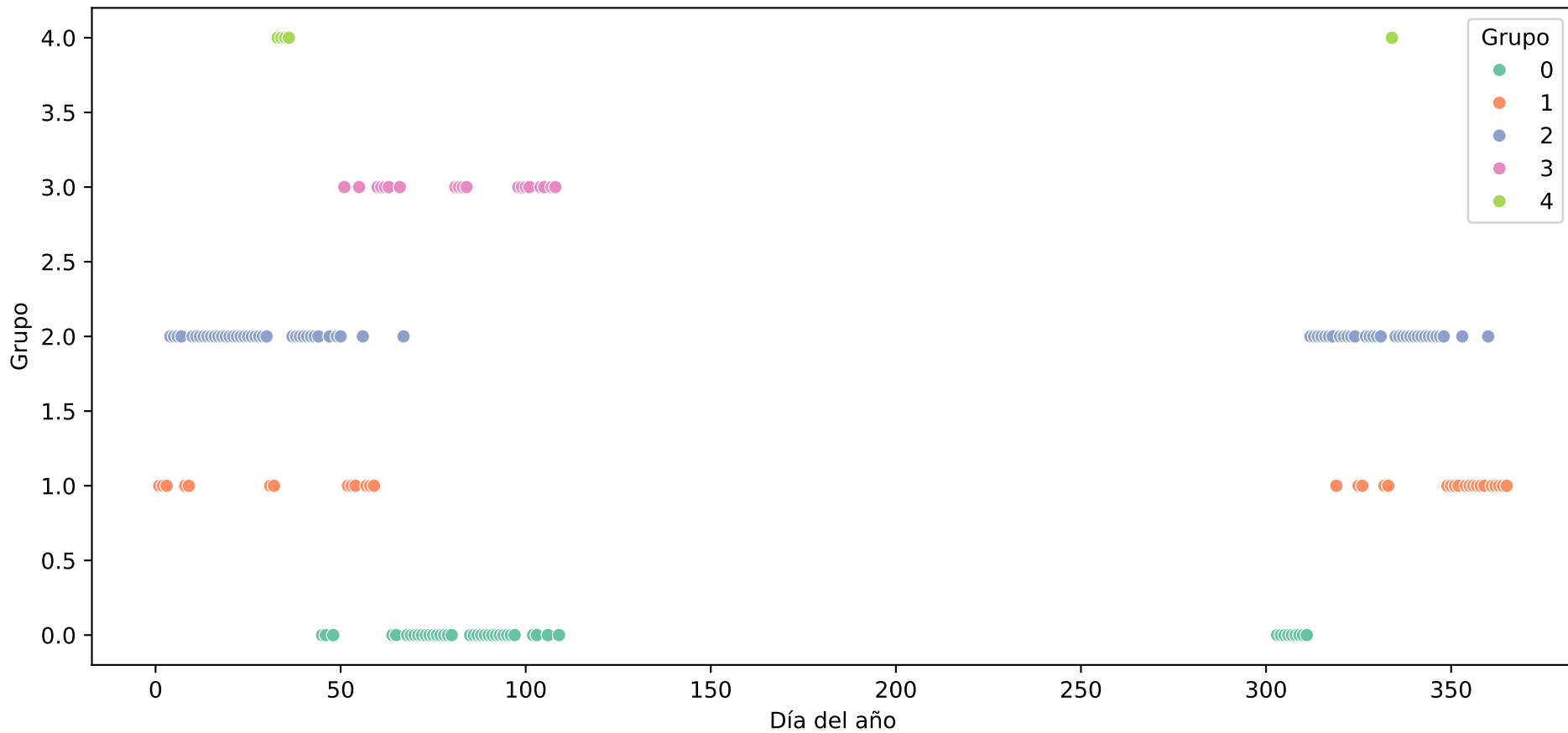
Método del codo



Clasificación de días climáticos — Etchojoa (2010-2011)

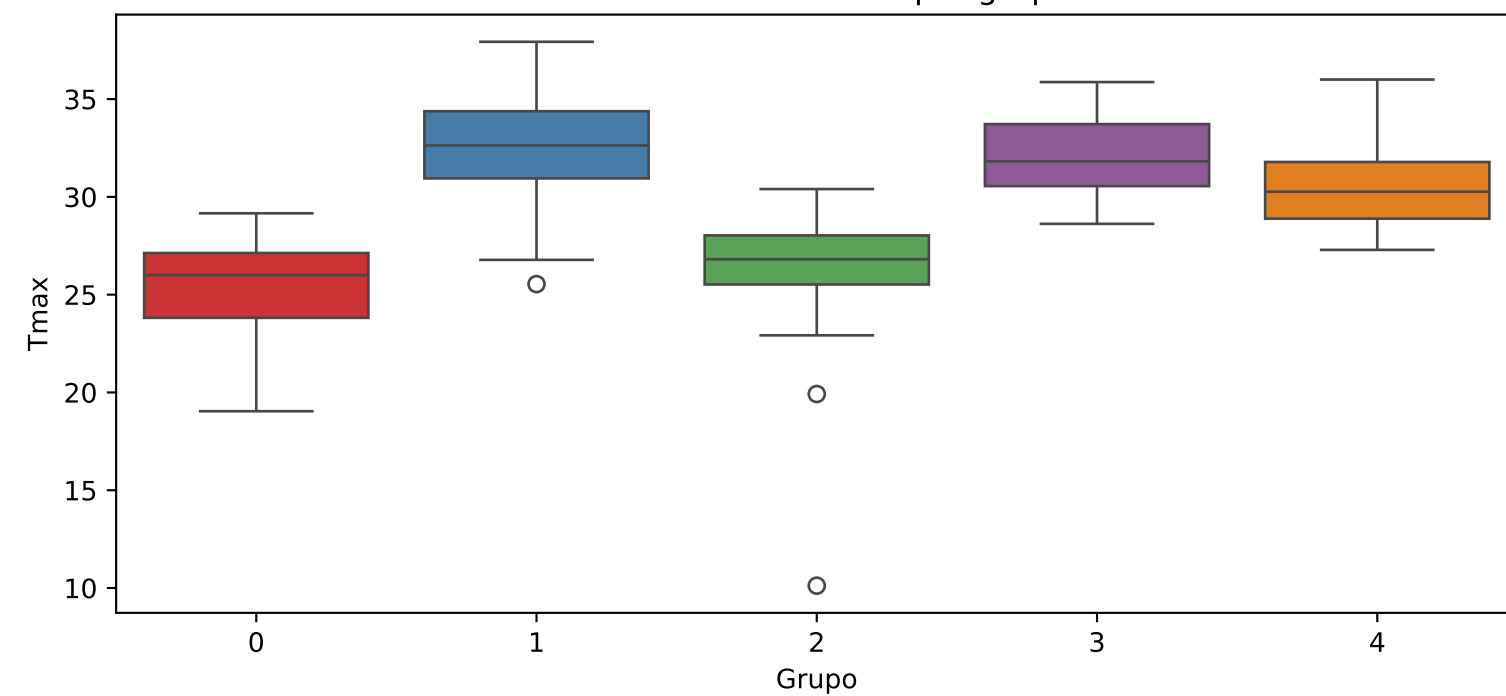


Distribución de días por grupo — Etchojoa (2010-2011)

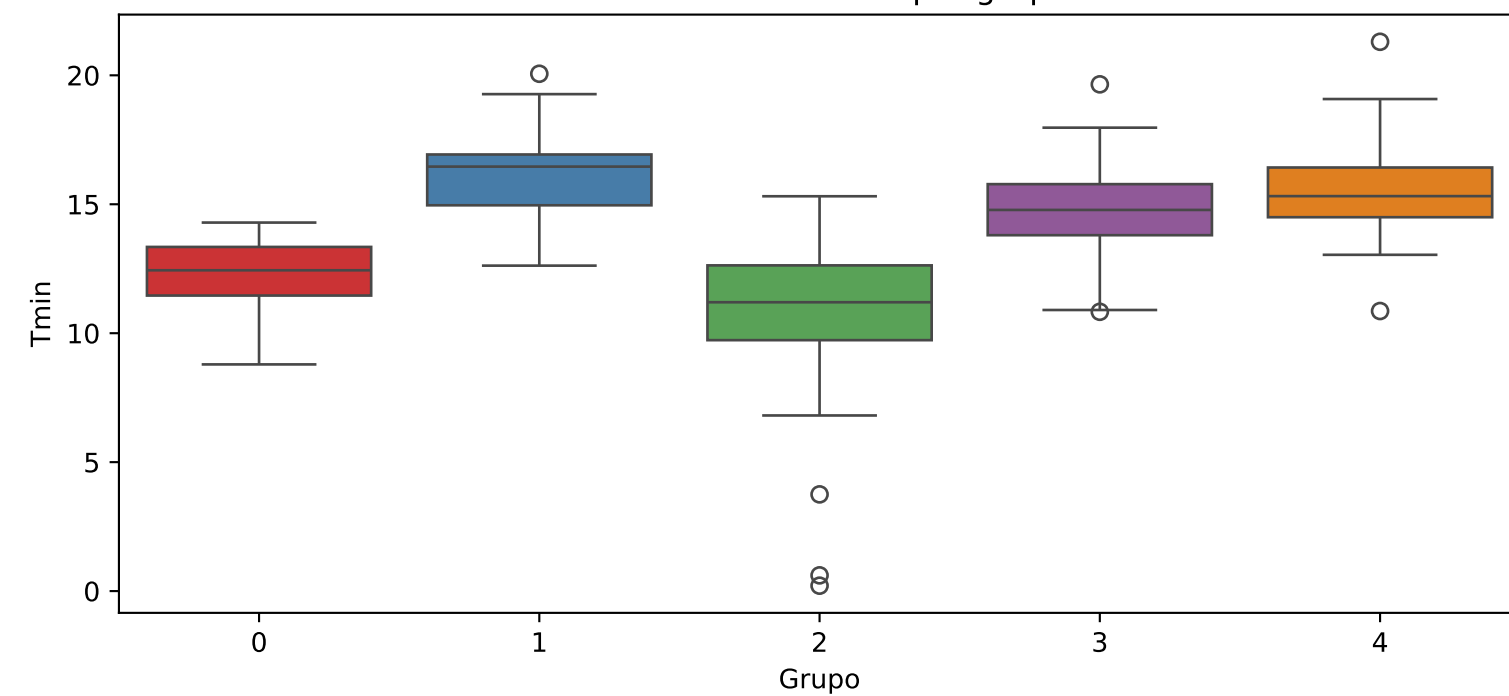


Boxplots por grupo — Etchojoa (2010-2011)

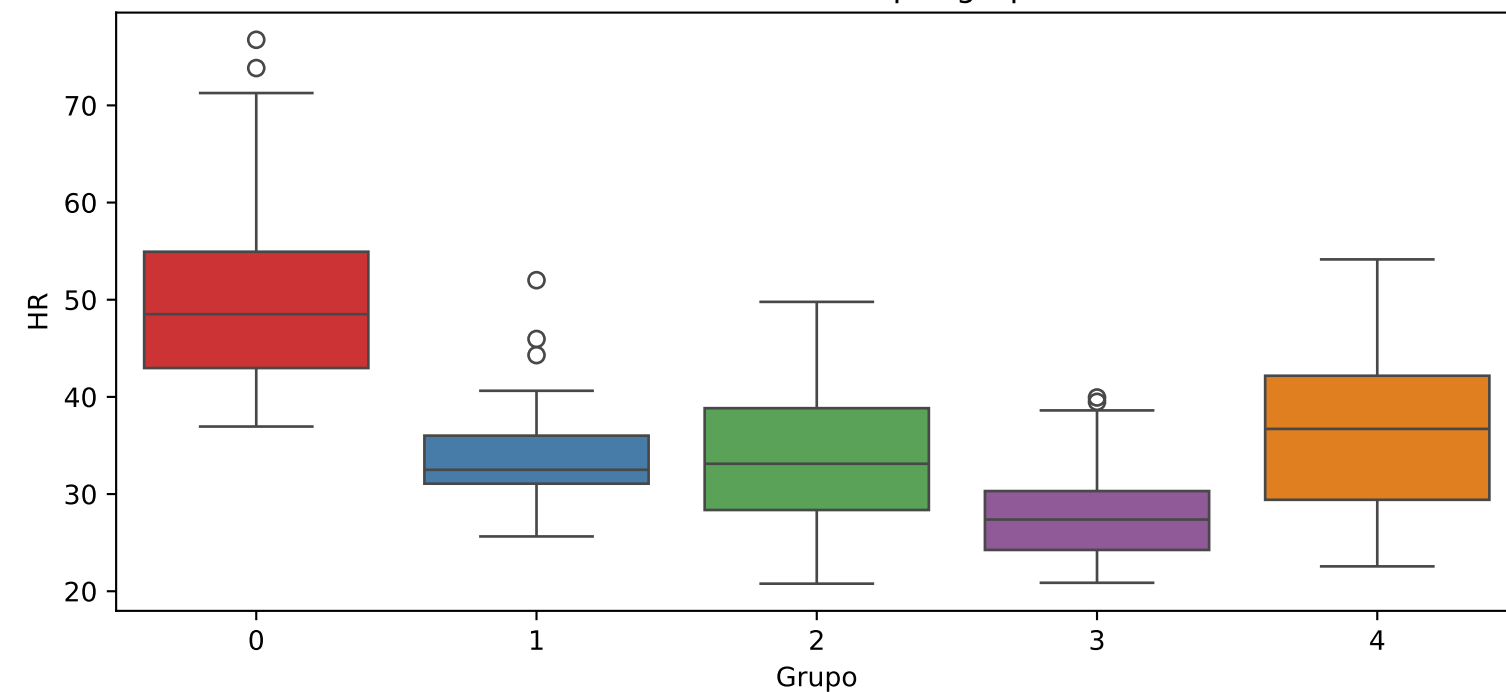
Distribución de Tmax por grupo



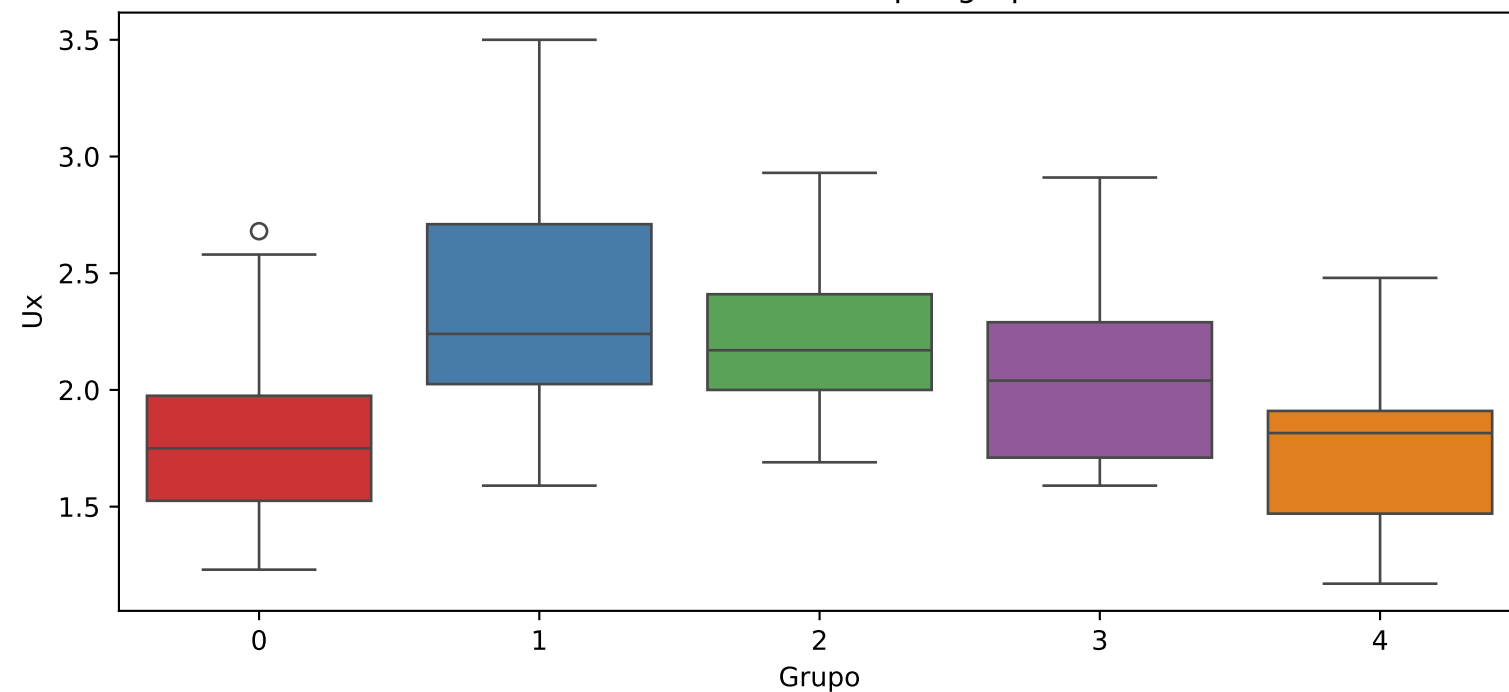
Distribución de Tmin por grupo



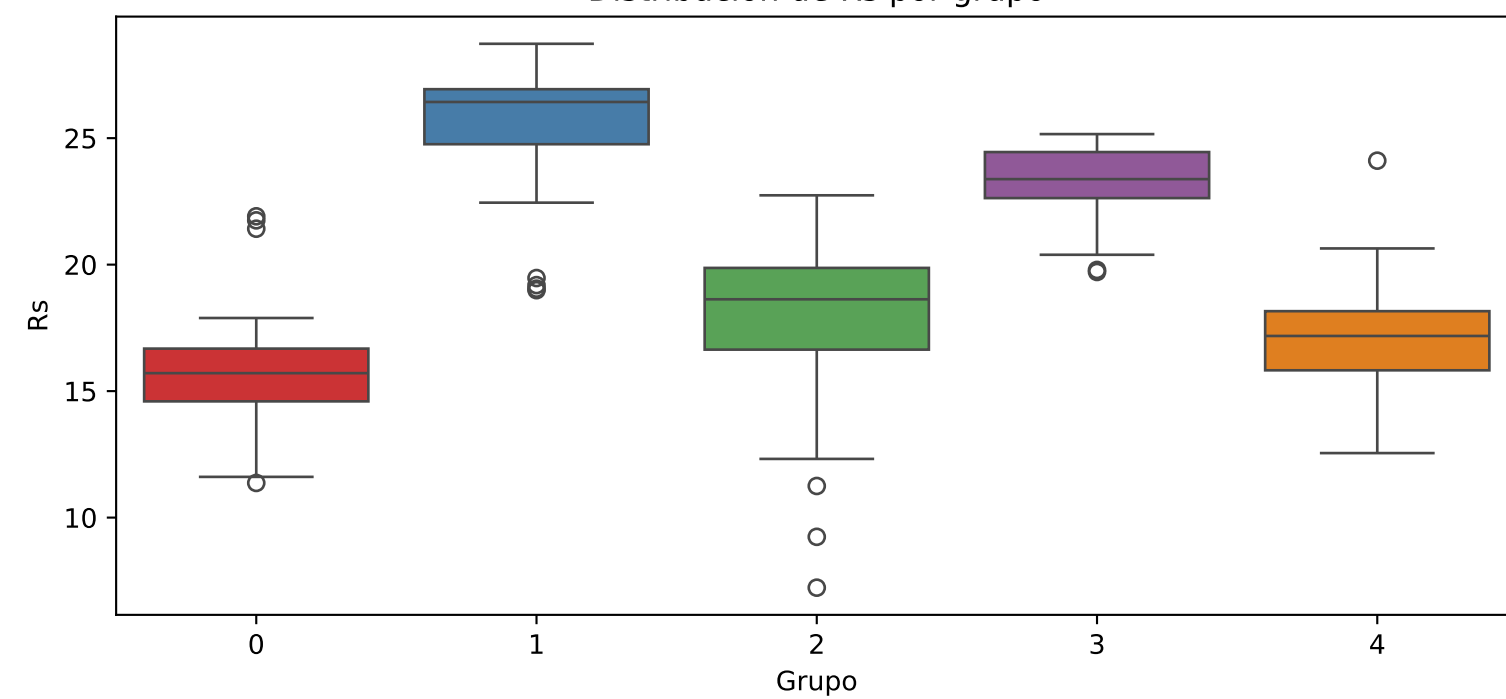
Distribución de HR por grupo



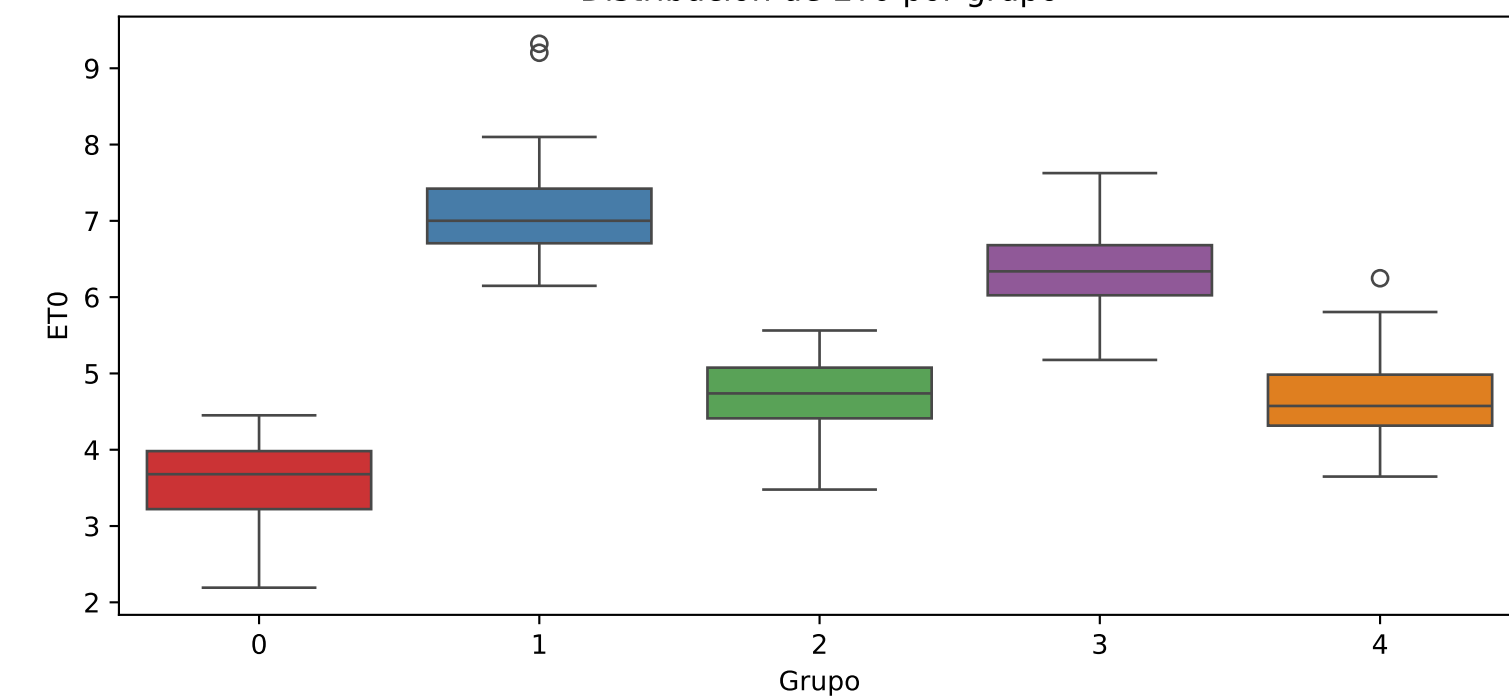
Distribución de Ux por grupo



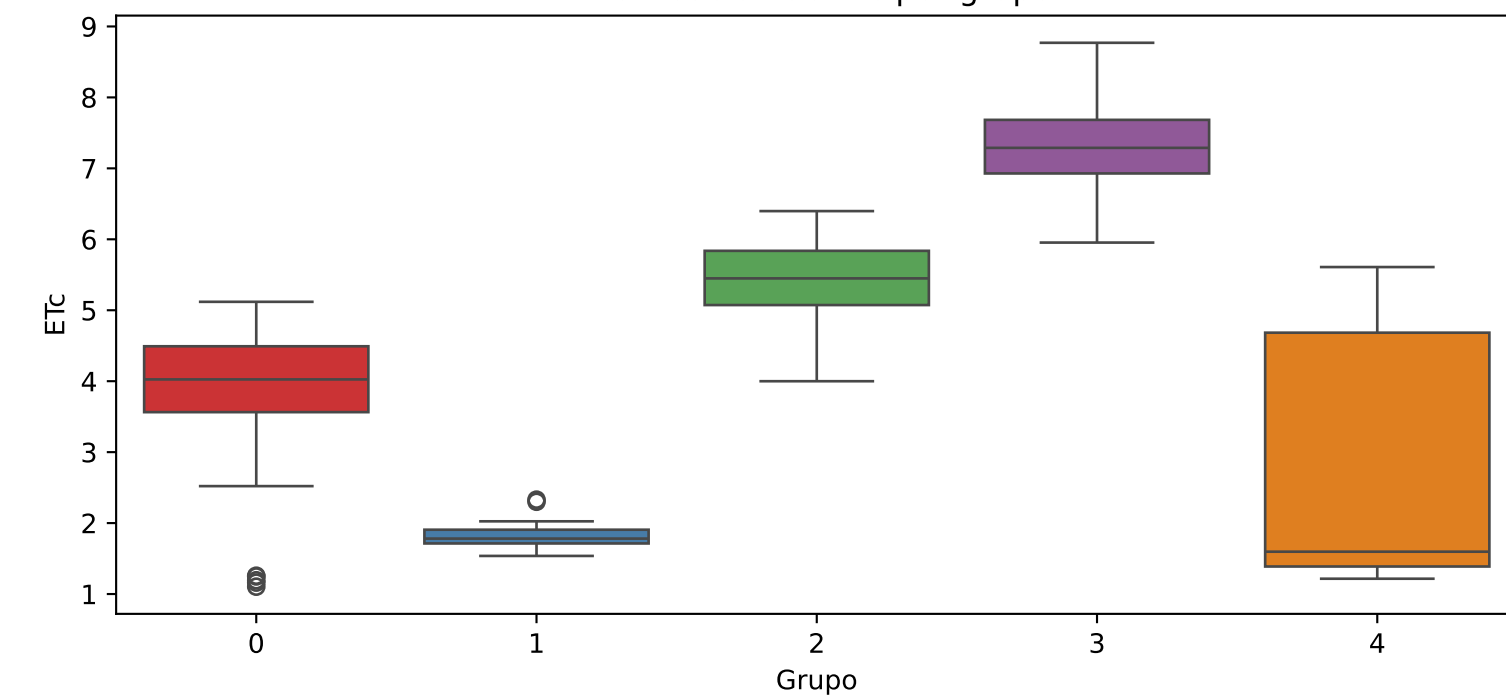
Distribución de Rs por grupo



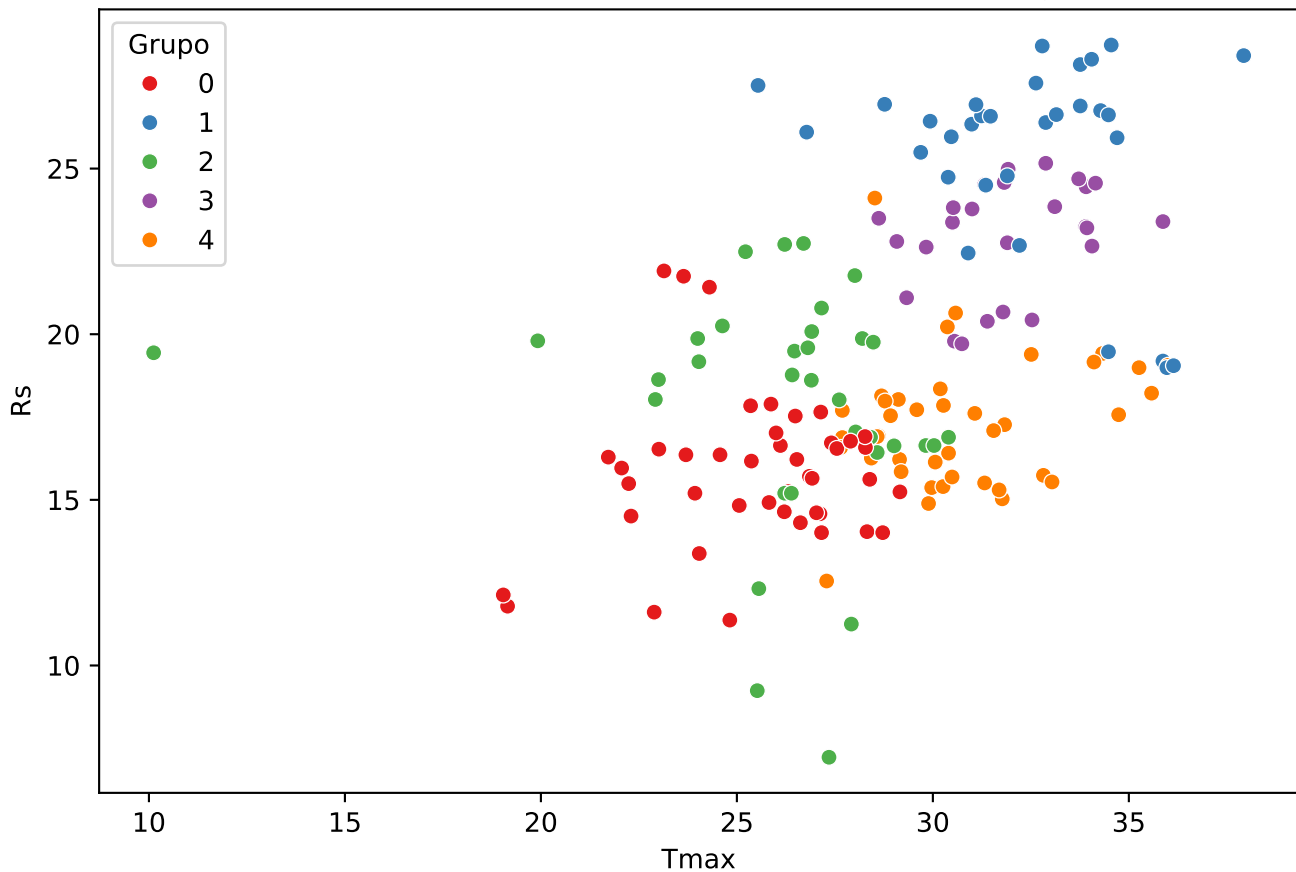
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2010-2011)



Etchojoa — 2011-2012

Días del ciclo: 172

ETc total [mm]: 638.5

ETverde total [mm]: 12.8

ETazul total [mm]: 625.7

Tmax / Tmin [°C]: 36.1 / 3.5

Etchojoa — 2011-2012 · Resultados y métricas

[Etchojoa 2011-2012] Regresión Lineal ET0 — R^2 : 0.9853 MSE: 0.0290

[Etchojoa 2011-2012] Random Forest ET0 — R^2 : 0.9575 MSE: 0.0837

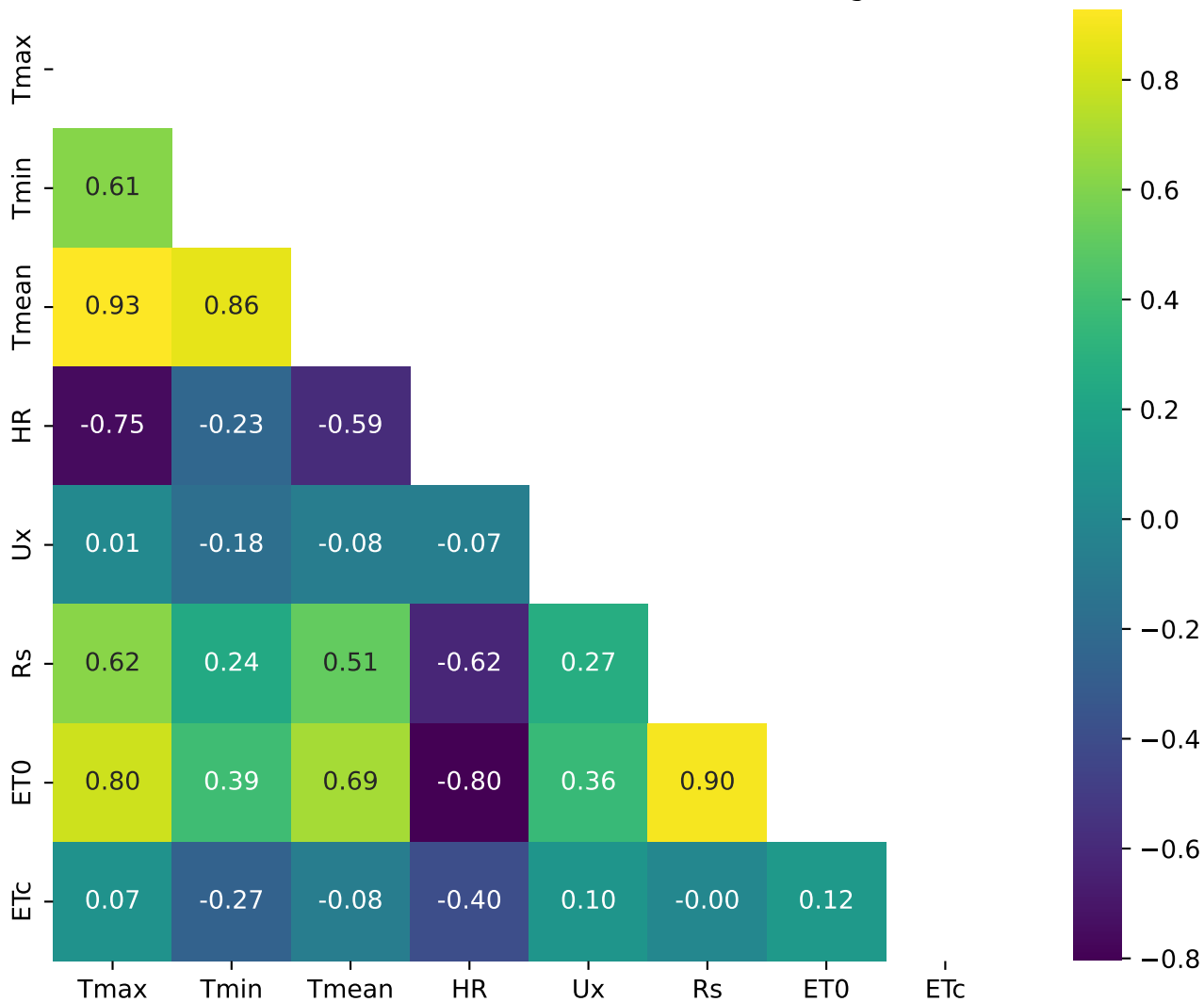
Importancias: {'Tmax': 0.22266266755537373, 'Tmin': 0.006864035302130538, 'HR': 0.07395907298856506, 'Ux': 0.02097368915344424, 'Rs': 0.6755405350004864}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	31.900000	15.996842	32.277368	2.111842	25.104211	6.718436	1.746305
1	23.684286	9.941071	53.019286	2.395000	17.282500	3.895074	3.920033
2	22.476190	13.231429	67.731429	1.643333	11.607619	2.513102	2.188512
3	27.891333	13.681556	46.218667	1.679556	15.789333	3.955959	3.475891
4	29.946750	13.552250	30.266000	2.068750	20.299000	5.651353	6.499057

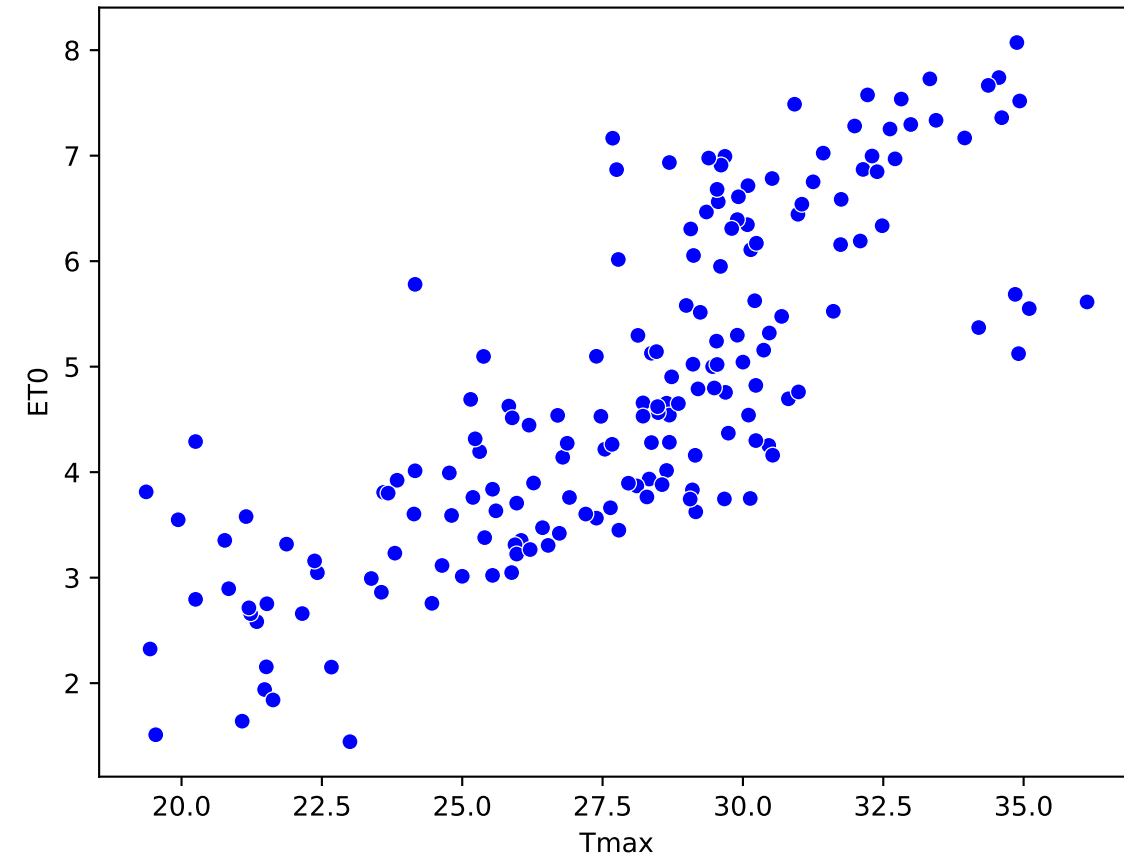
Etchojoa — 2011-2012

Matriz de Correlación entre Variables Meteorológicas

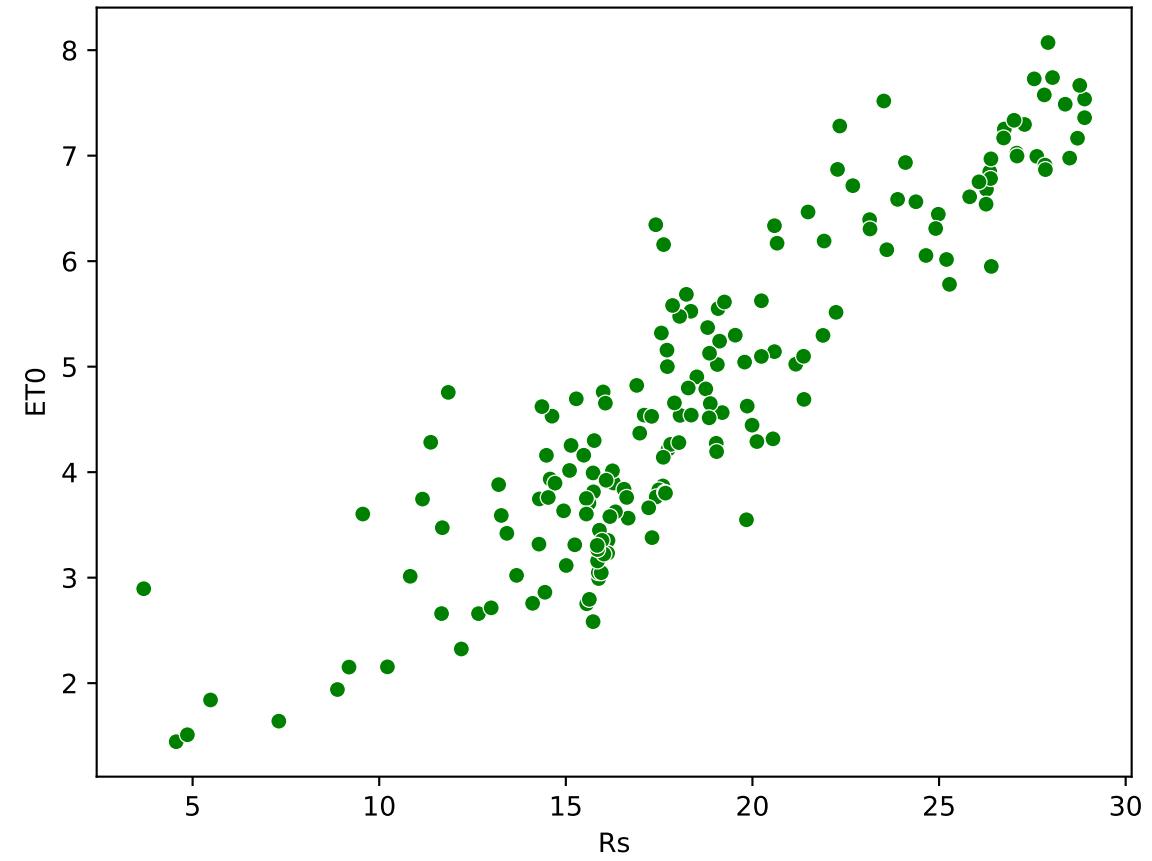


Dispersión — Etchojoa (2011-2012)

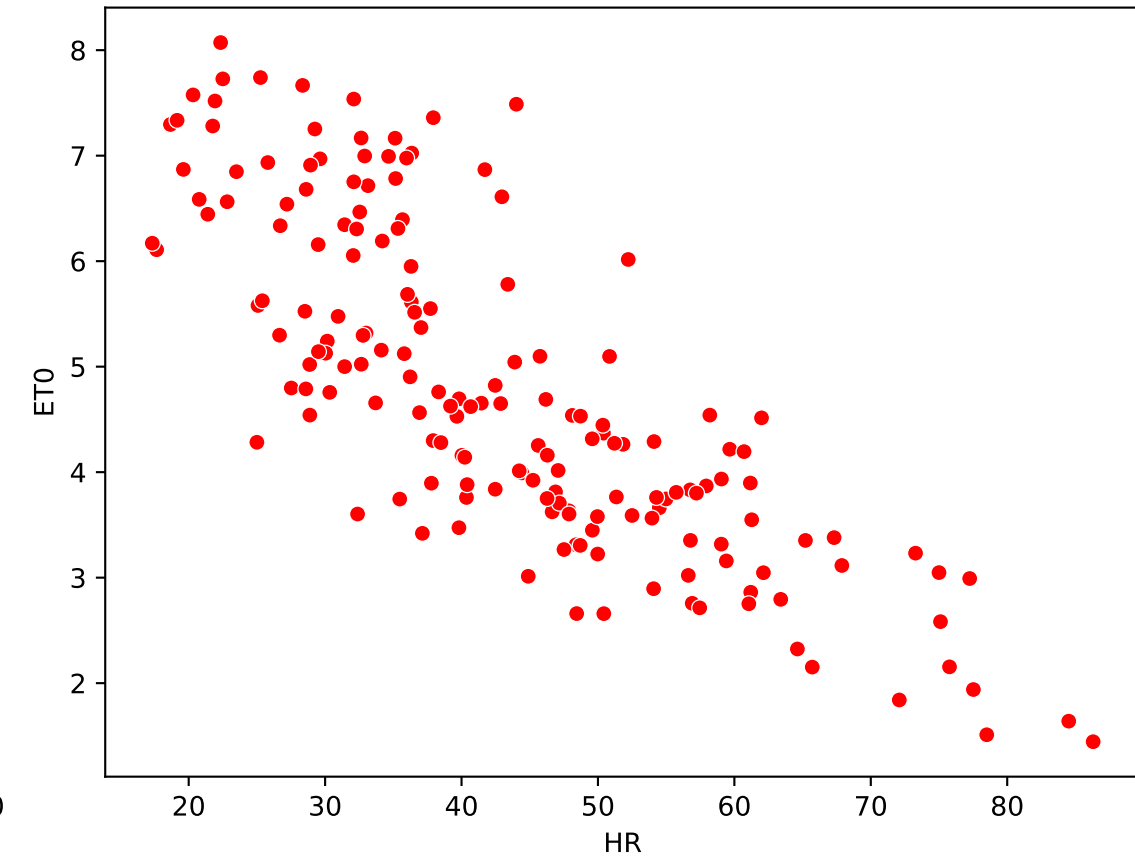
Tmax vs ET0



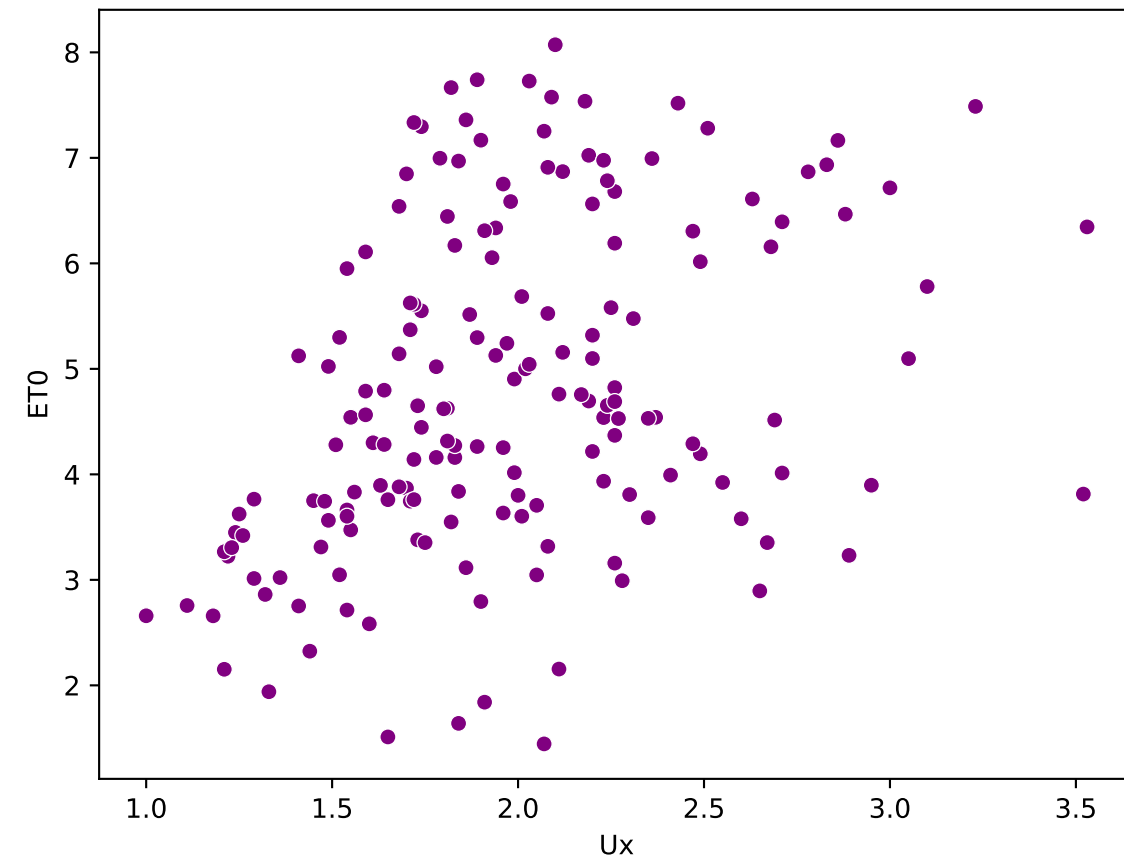
Rs vs ET0



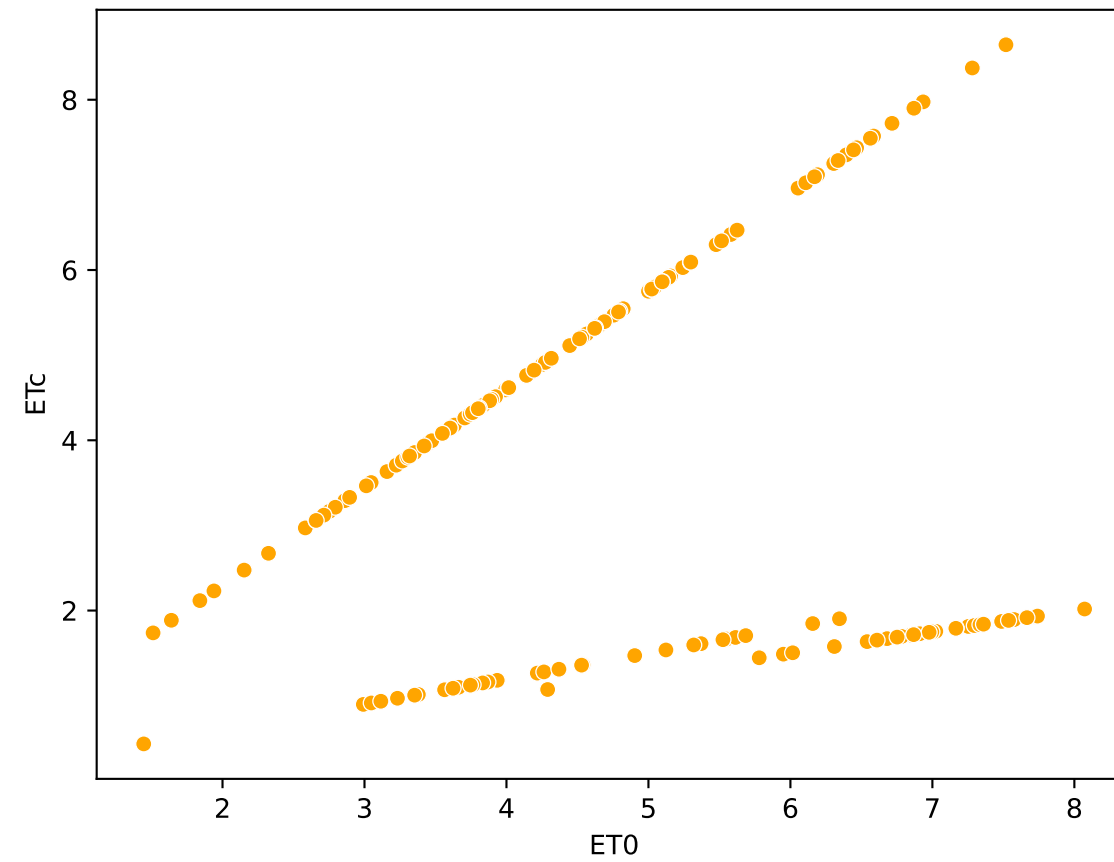
HR vs ET0



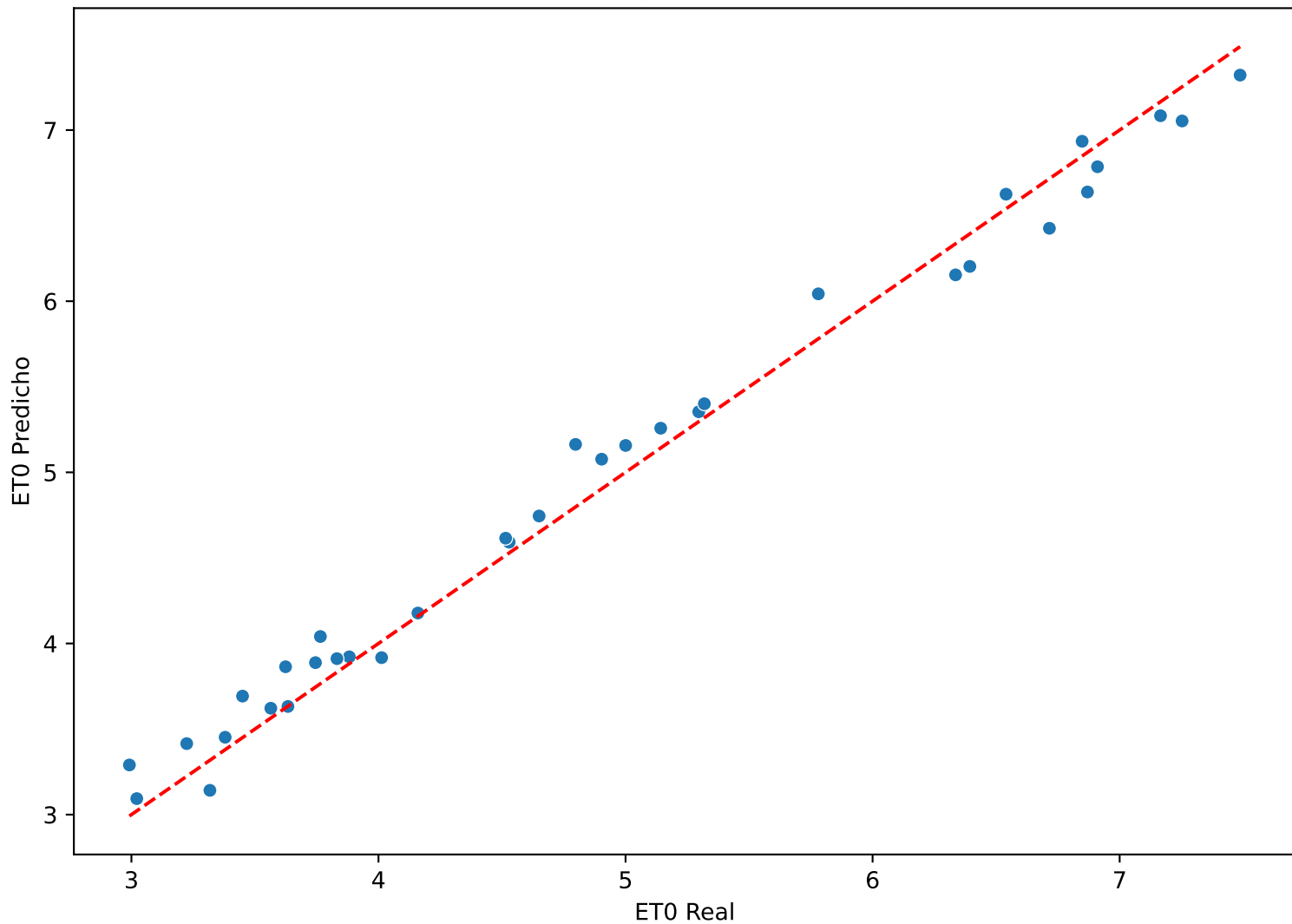
Ux vs ET0



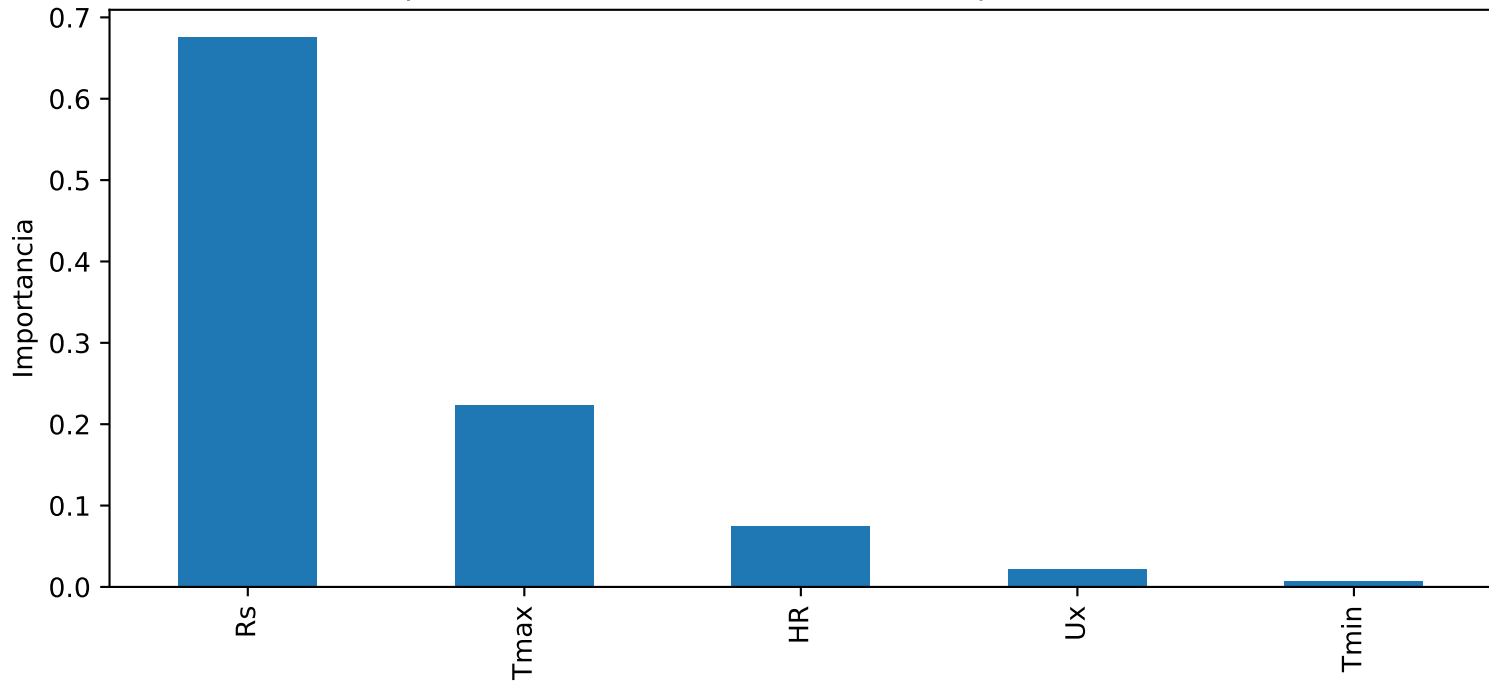
ET0 vs ETc



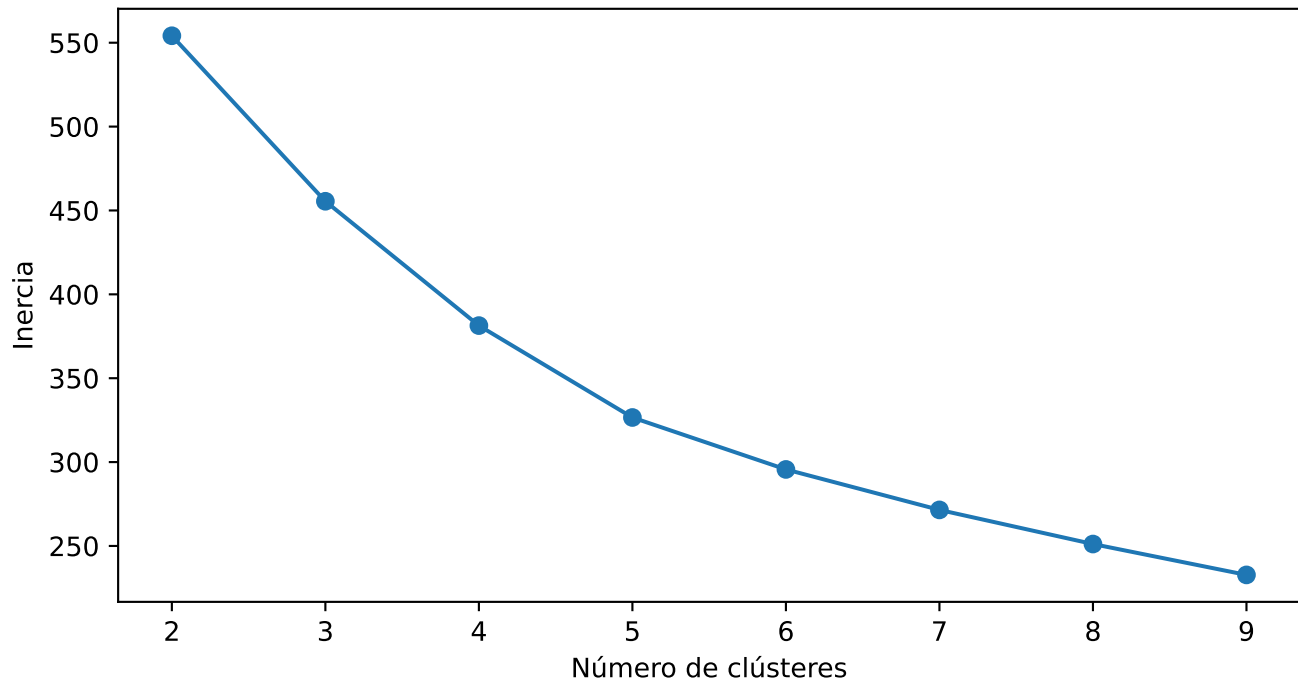
Comparación entre ET0 Real y Predicho — Etchojoa (2011-2012)



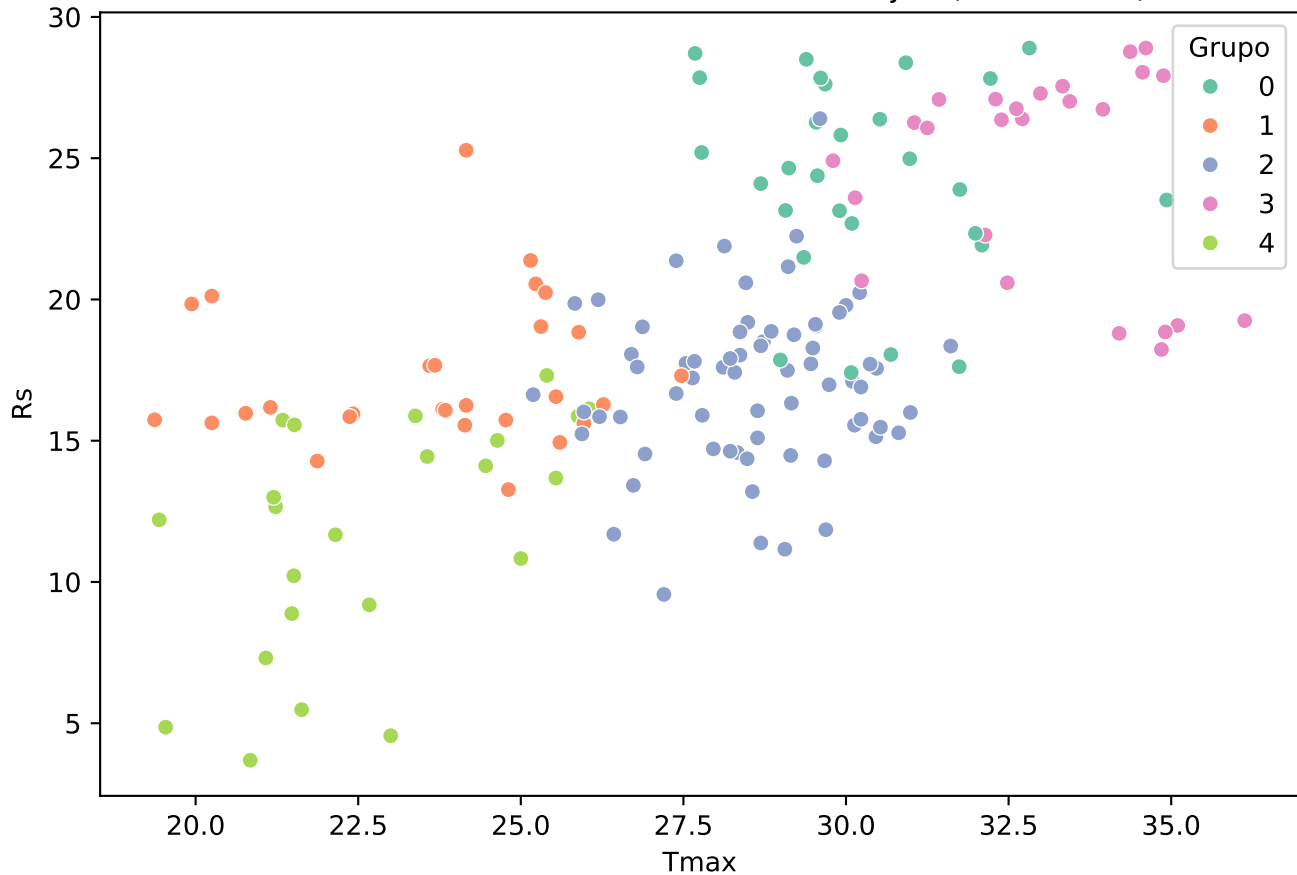
Importancia de variables (RF) — Etchojoa (2011-2012)



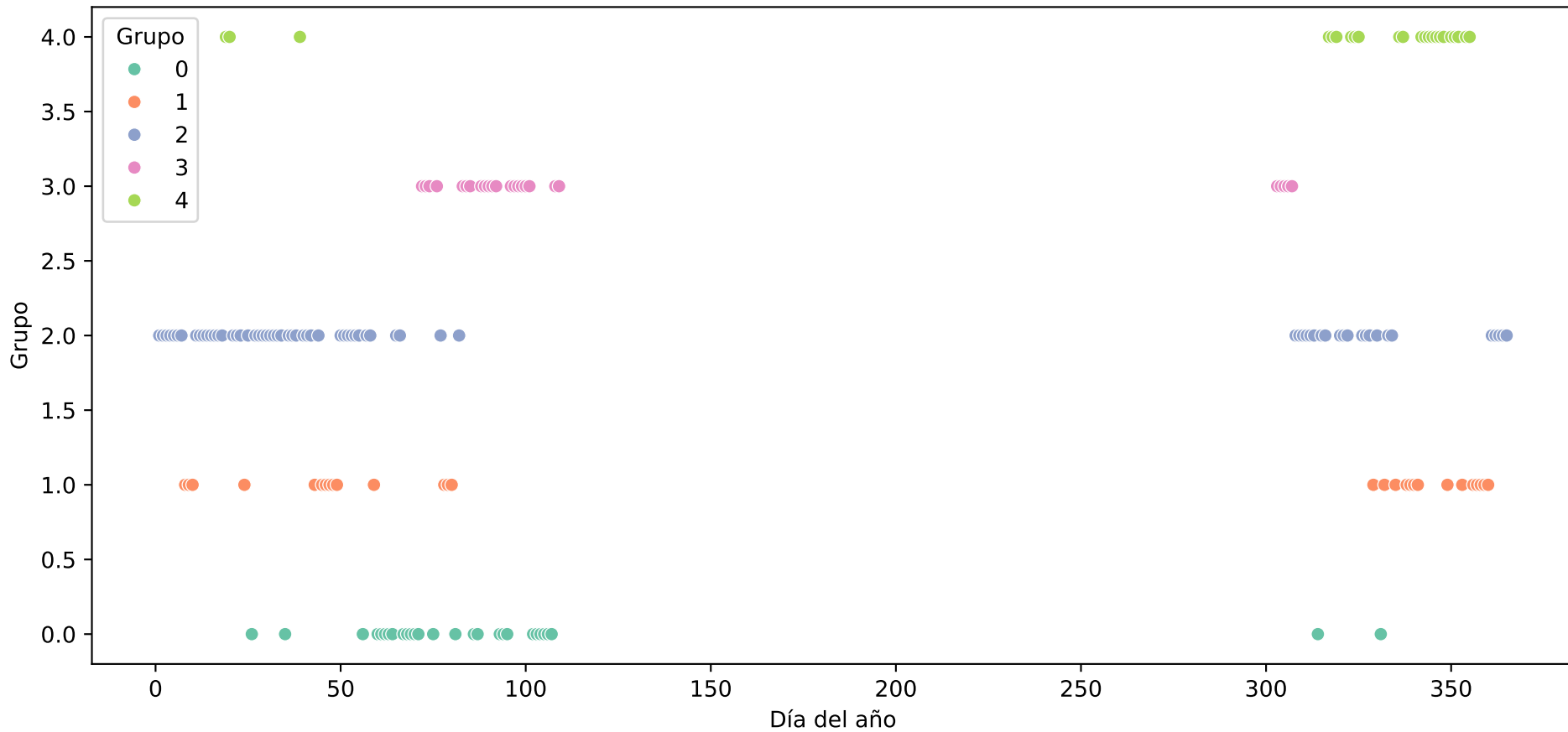
Método del codo



Clasificación de días climáticos — Etchojoa (2011-2012)

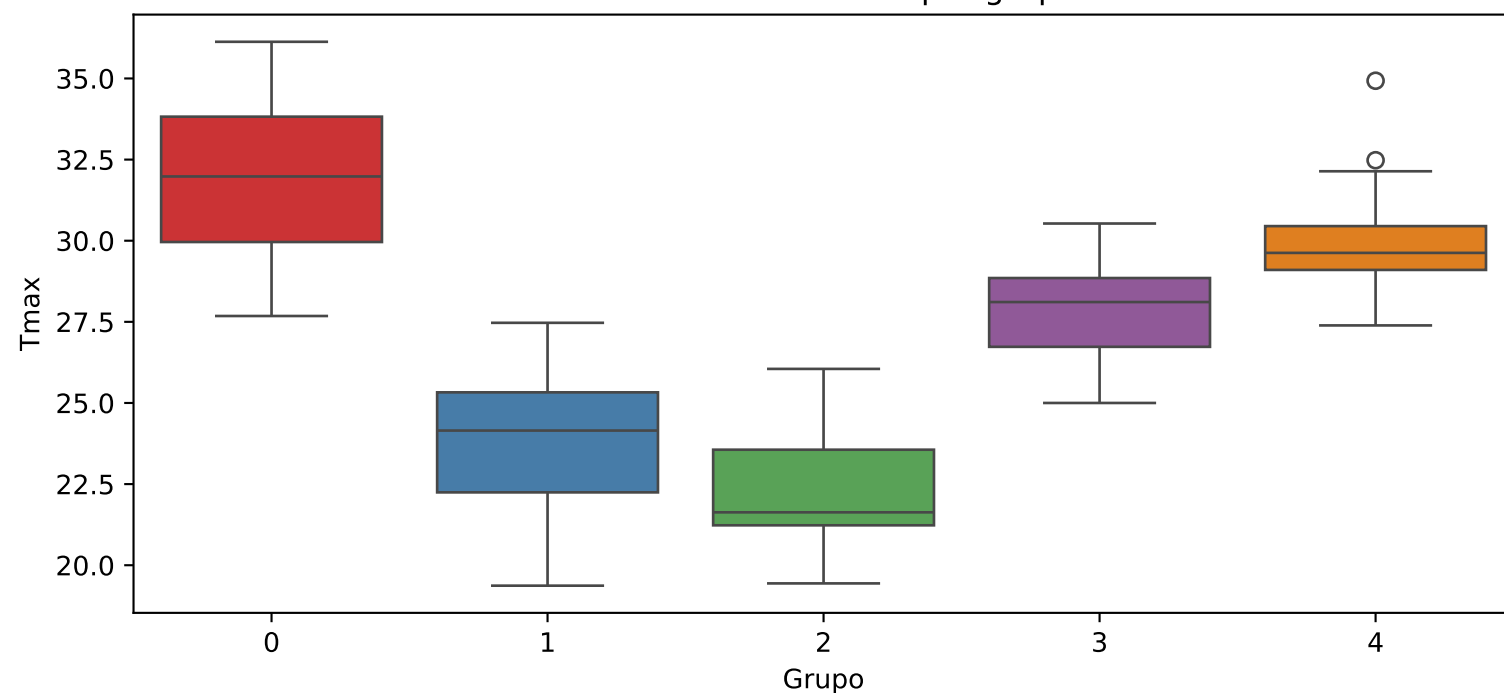


Distribución de días por grupo — Etchojoa (2011-2012)

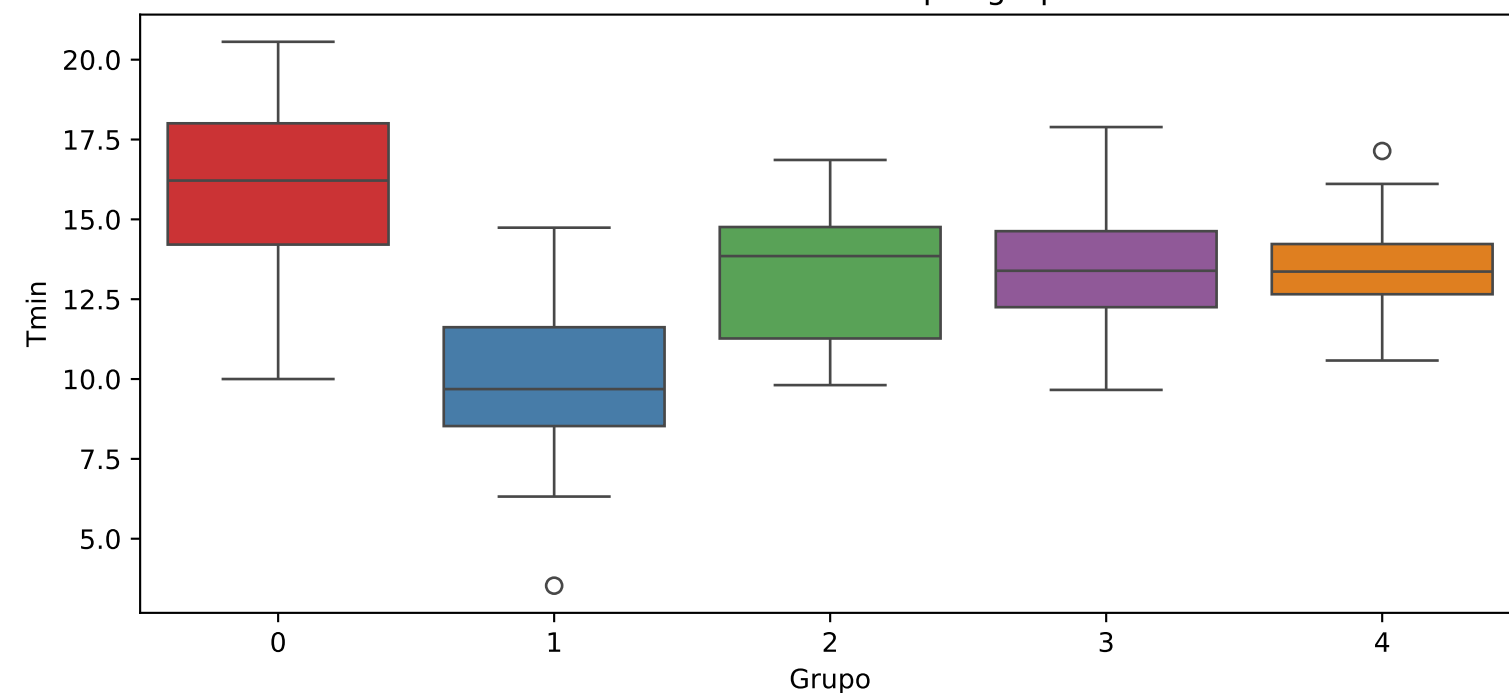


Boxplots por grupo — Etchojoa (2011-2012)

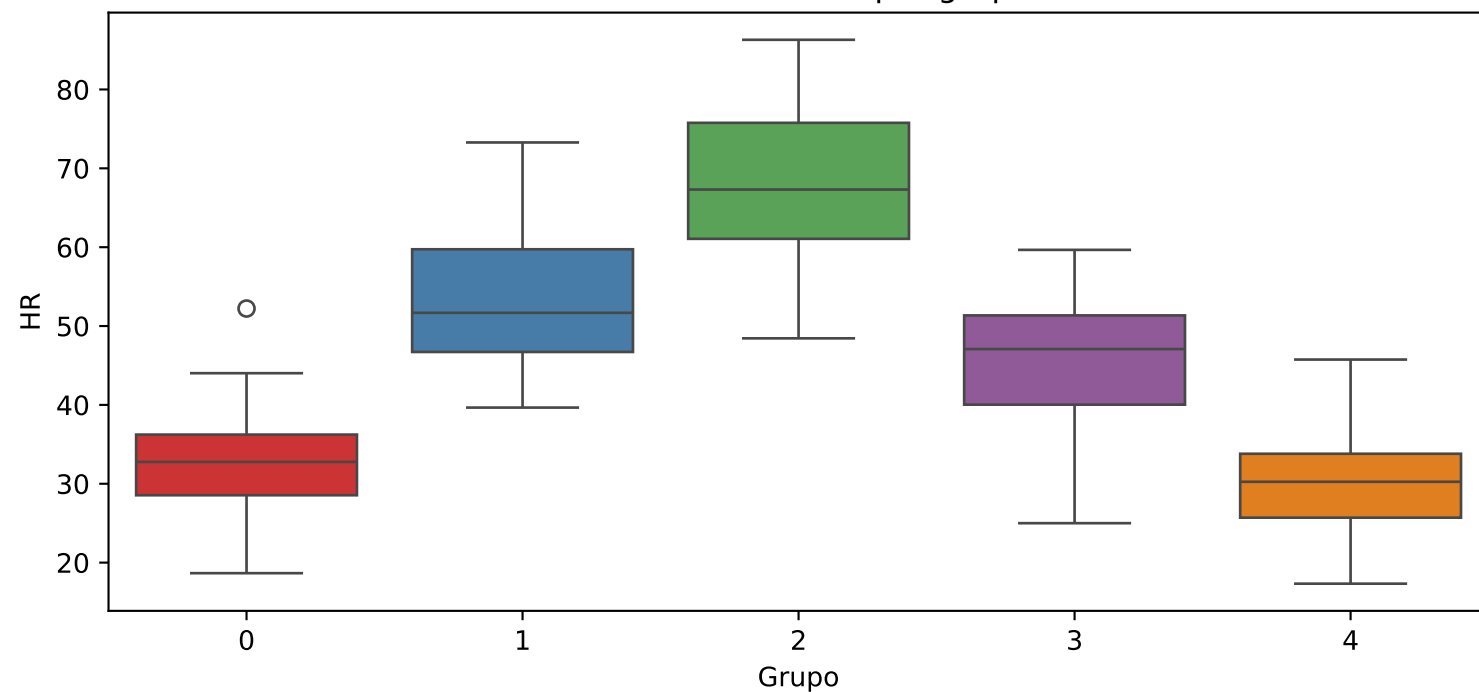
Distribución de Tmax por grupo



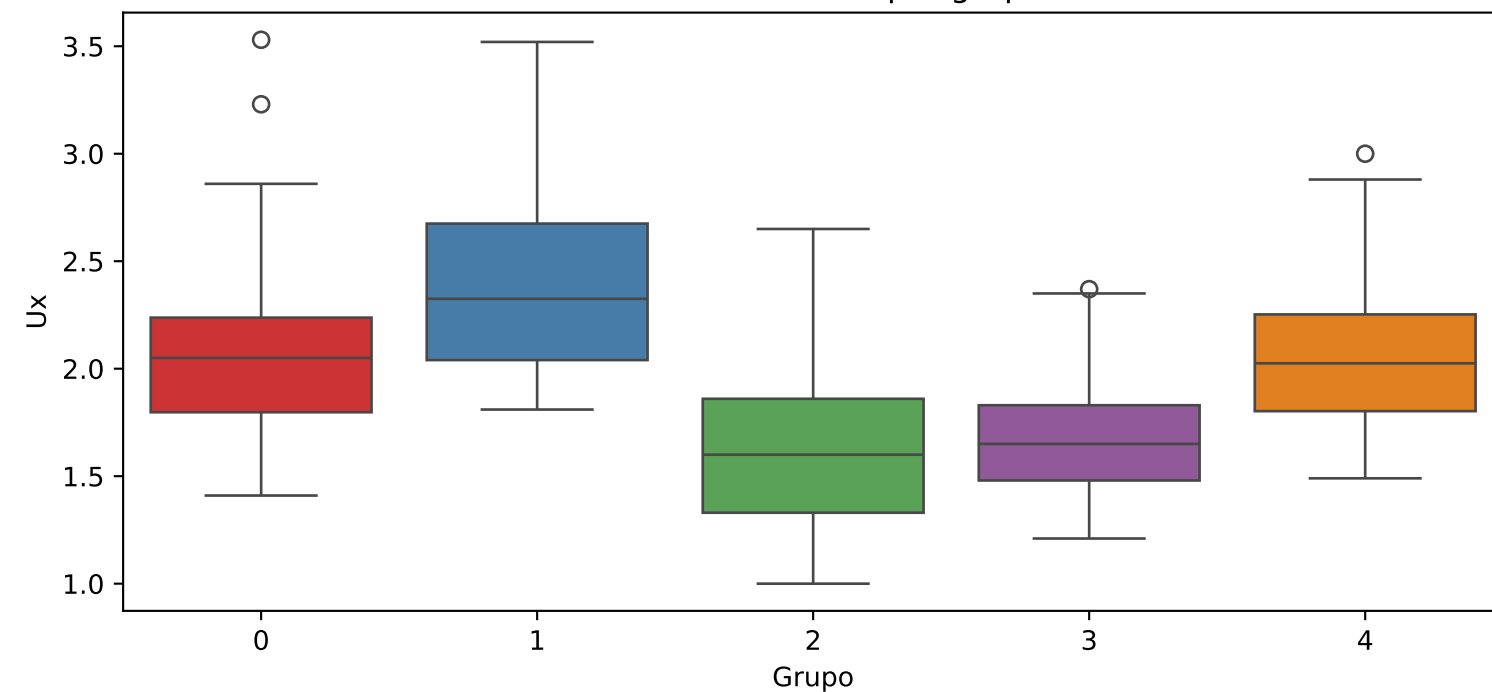
Distribución de Tmin por grupo



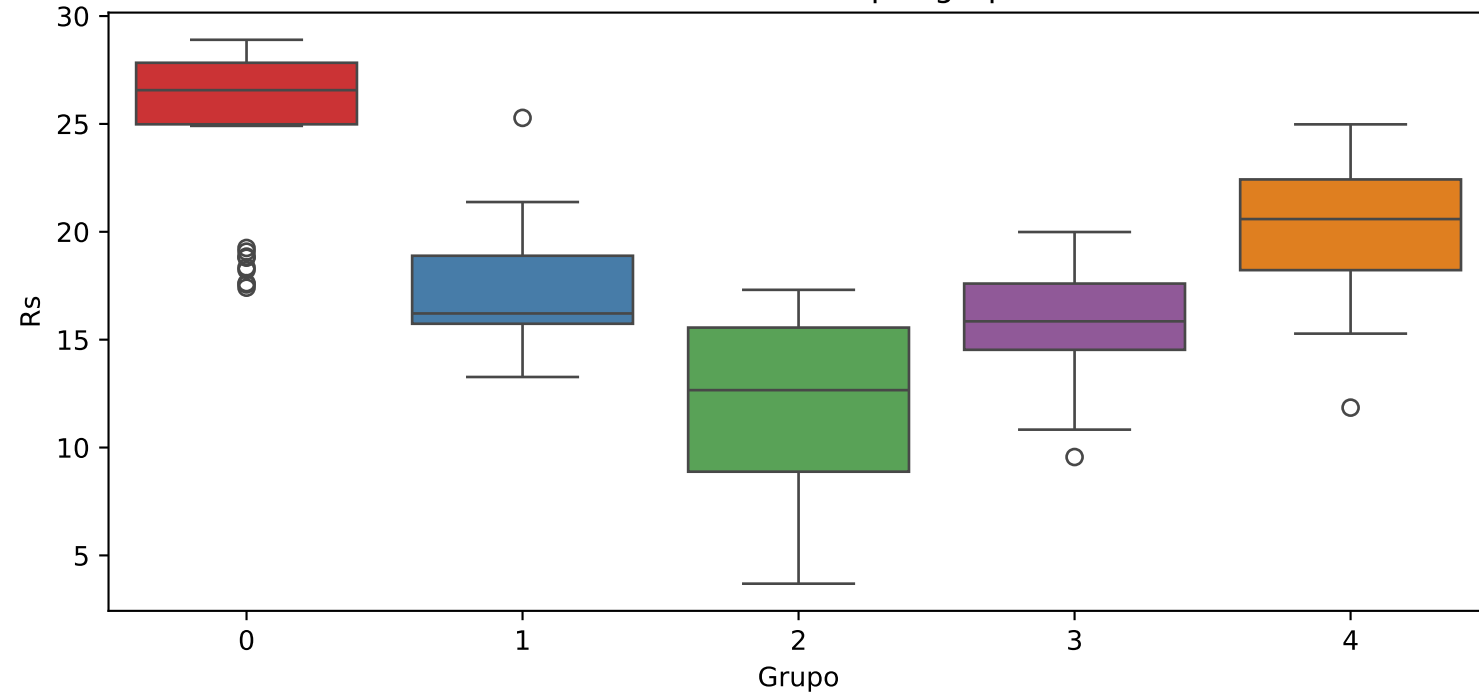
Distribución de HR por grupo



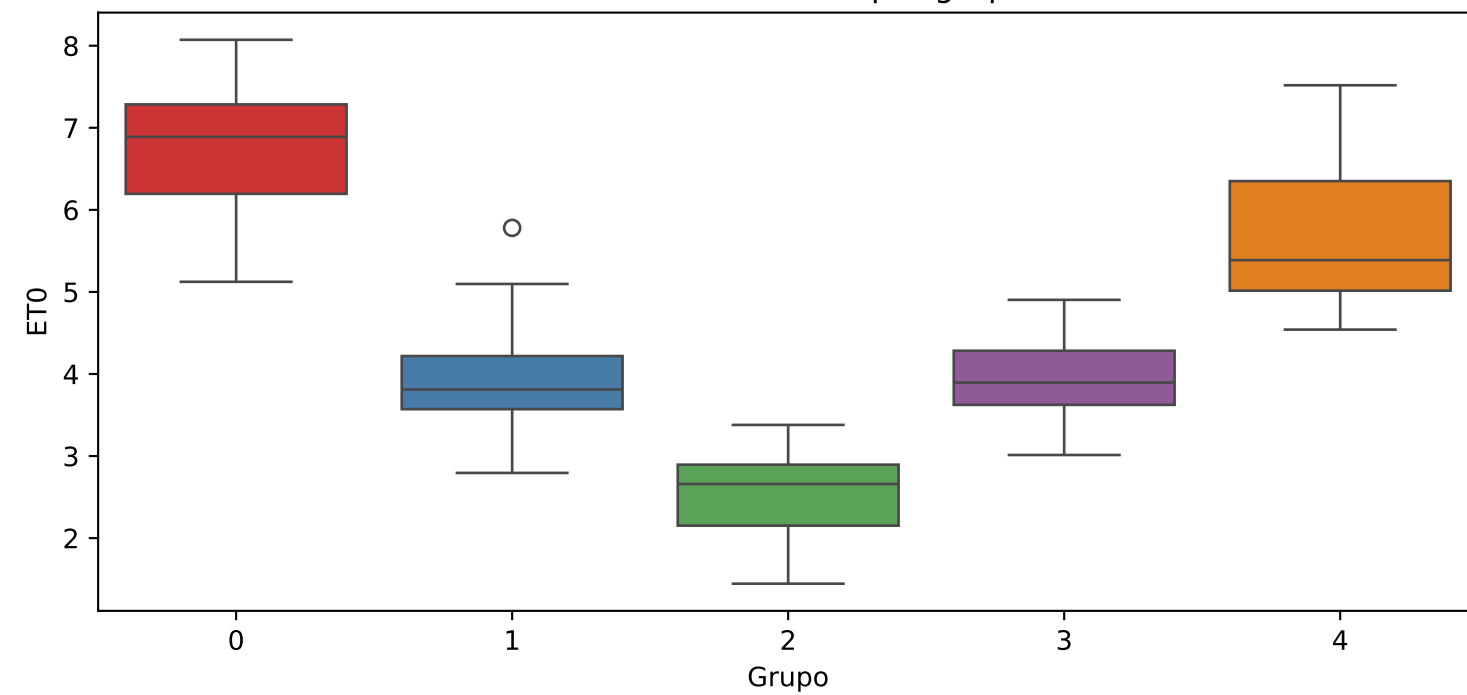
Distribución de Ux por grupo



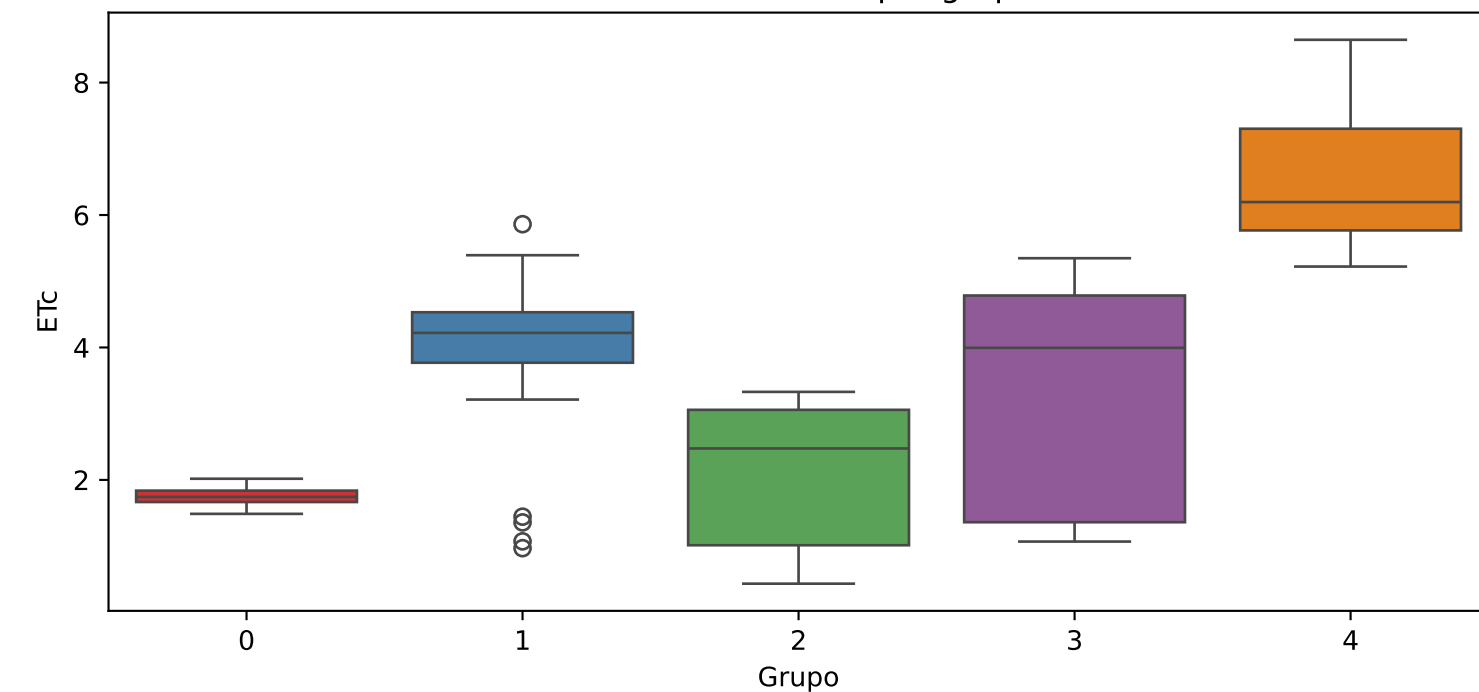
Distribución de Rs por grupo



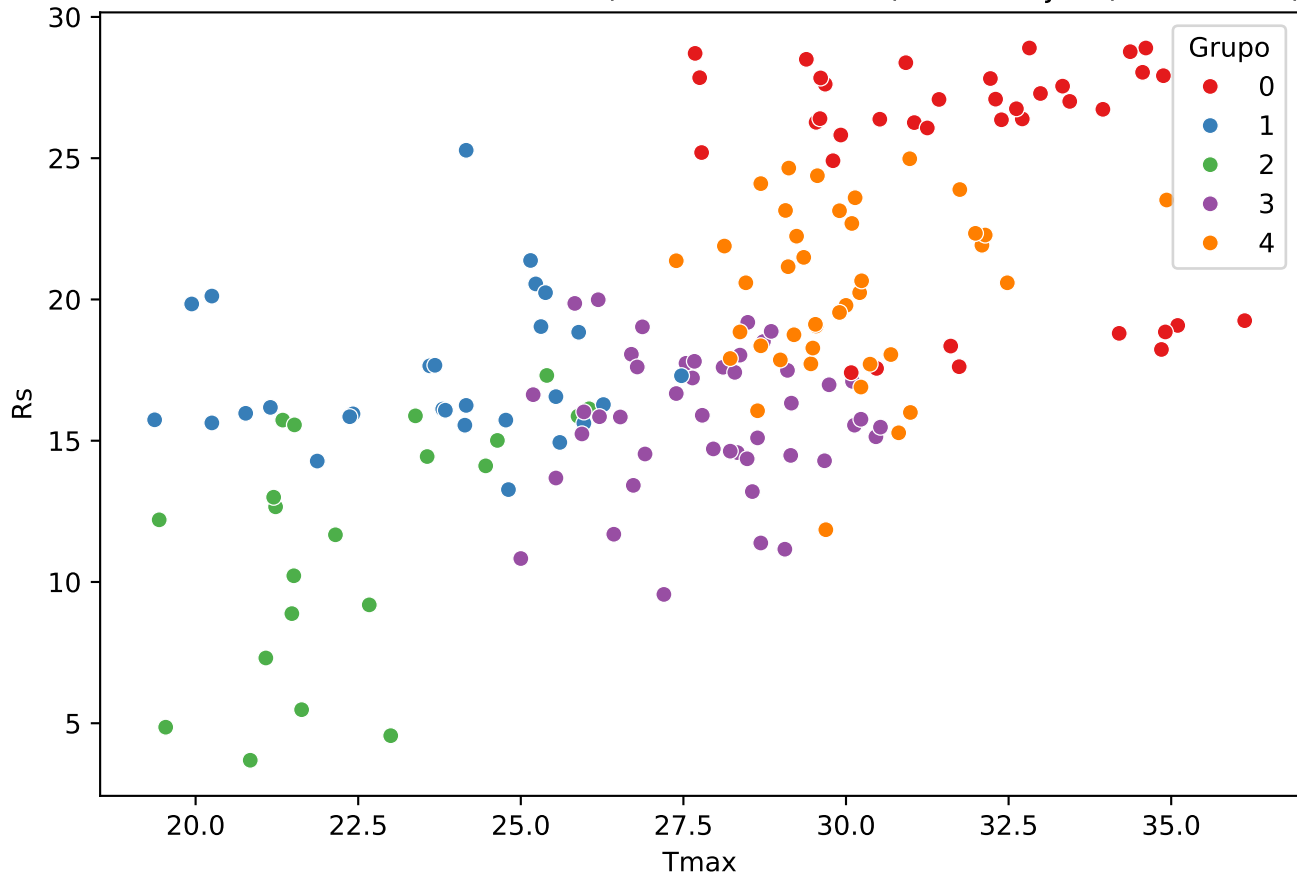
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2011-2012)



Etchojoa — 2012-2013

Días del ciclo: 172

ETc total [mm]: 670.2

ETverde total [mm]: 14.6

ETazul total [mm]: 655.6

Tmax / Tmin [°C]: 36.7 / 3.9

Etchojoa — 2012-2013 · Resultados y métricas

[Etchojoa 2012-2013] Regresión Lineal ET0 — R^2 : 0.9750 MSE: 0.0620

[Etchojoa 2012-2013] Random Forest ET0 — R^2 : 0.9063 MSE: 0.2320

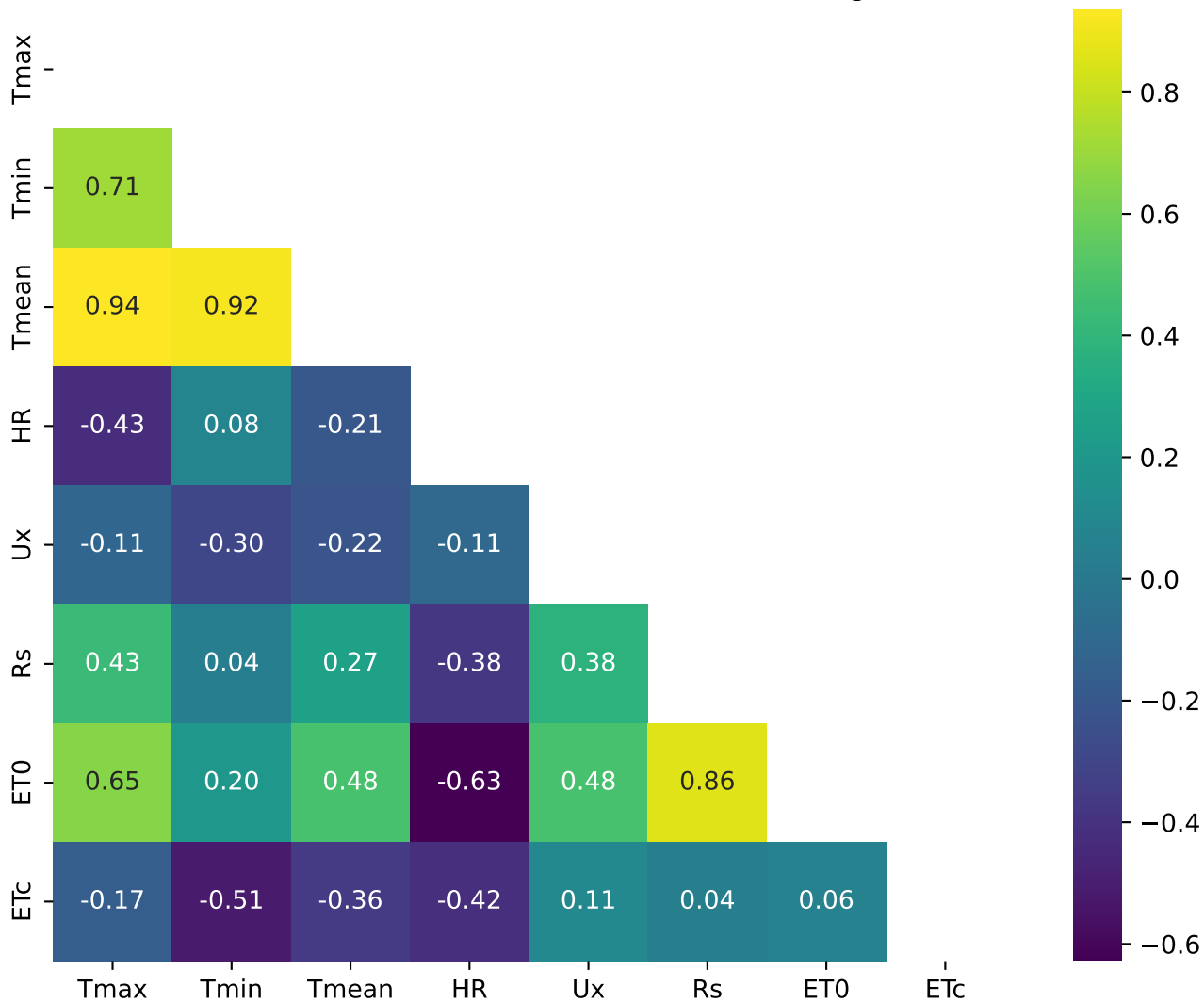
Importancias: {'Tmax': 0.09828650448509033, 'Tmin': 0.010675062981512277, 'HR': 0.10283741783047148, 'Ux': 0.04491600010920589, 'Rs': 0.74328501459372}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	28.516304	14.895435	41.604348	1.727609	14.771304	4.100600	4.715690
1	32.059333	18.919000	46.562667	1.770667	15.330000	4.446690	1.334007
2	30.596333	12.626000	27.344333	2.226000	21.678000	6.192369	7.121225
3	32.182187	16.541875	36.299375	2.481250	26.094375	7.219395	1.813273
4	22.526765	10.327647	50.777353	2.291765	15.267941	3.621724	4.164982

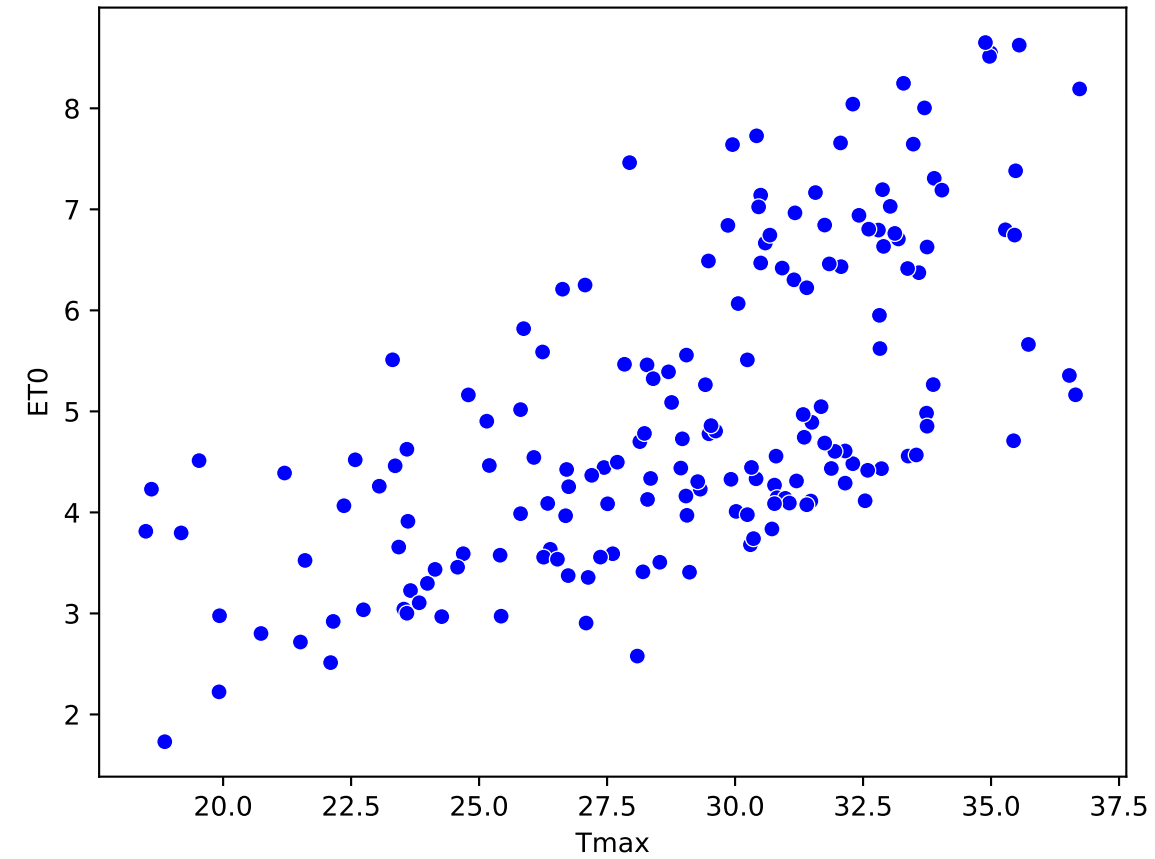
Etchojoa — 2012-2013

Matriz de Correlación entre Variables Meteorológicas

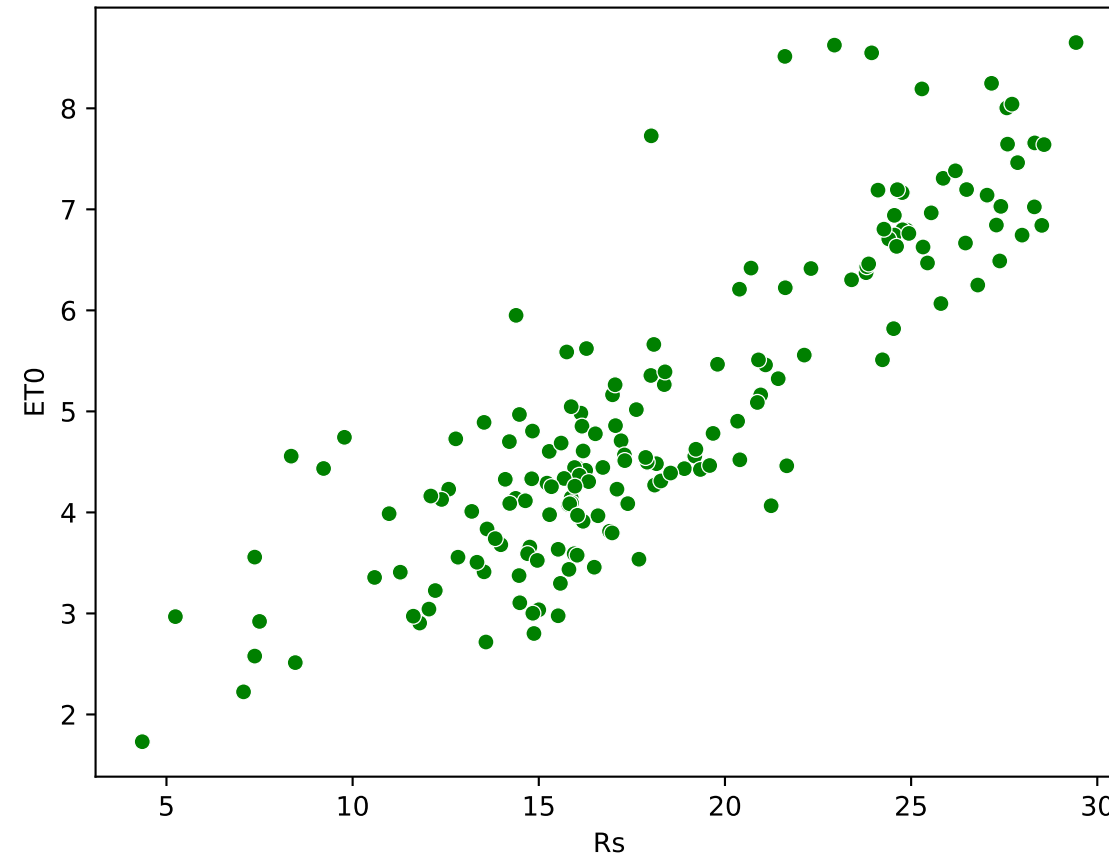


Dispersión — Etchojoa (2012-2013)

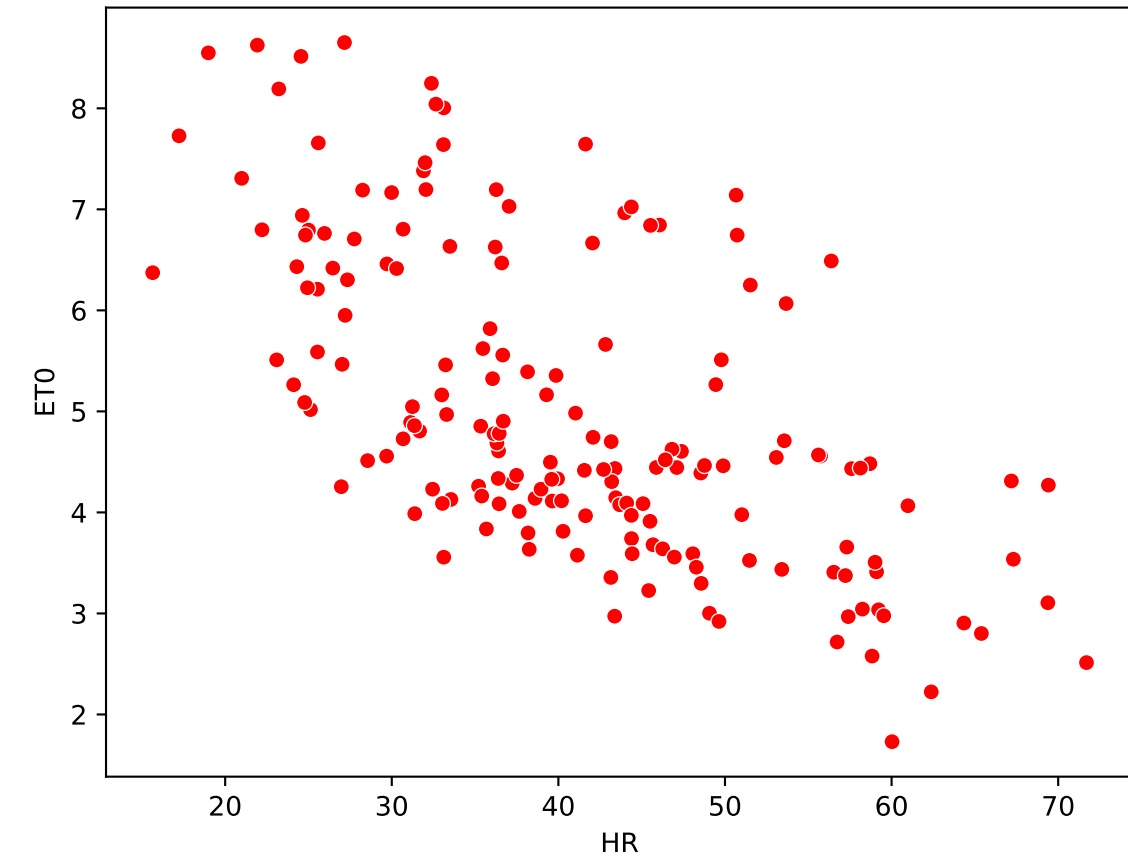
Tmax vs ET0



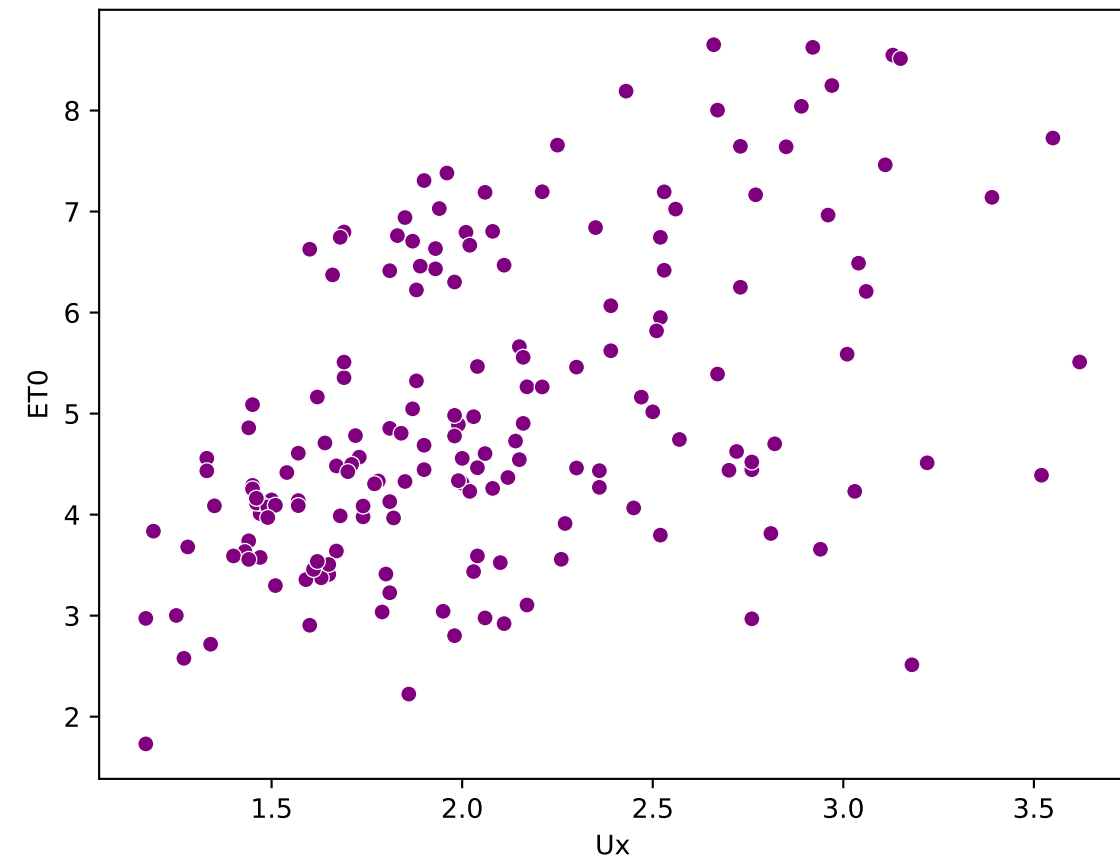
Rs vs ET0



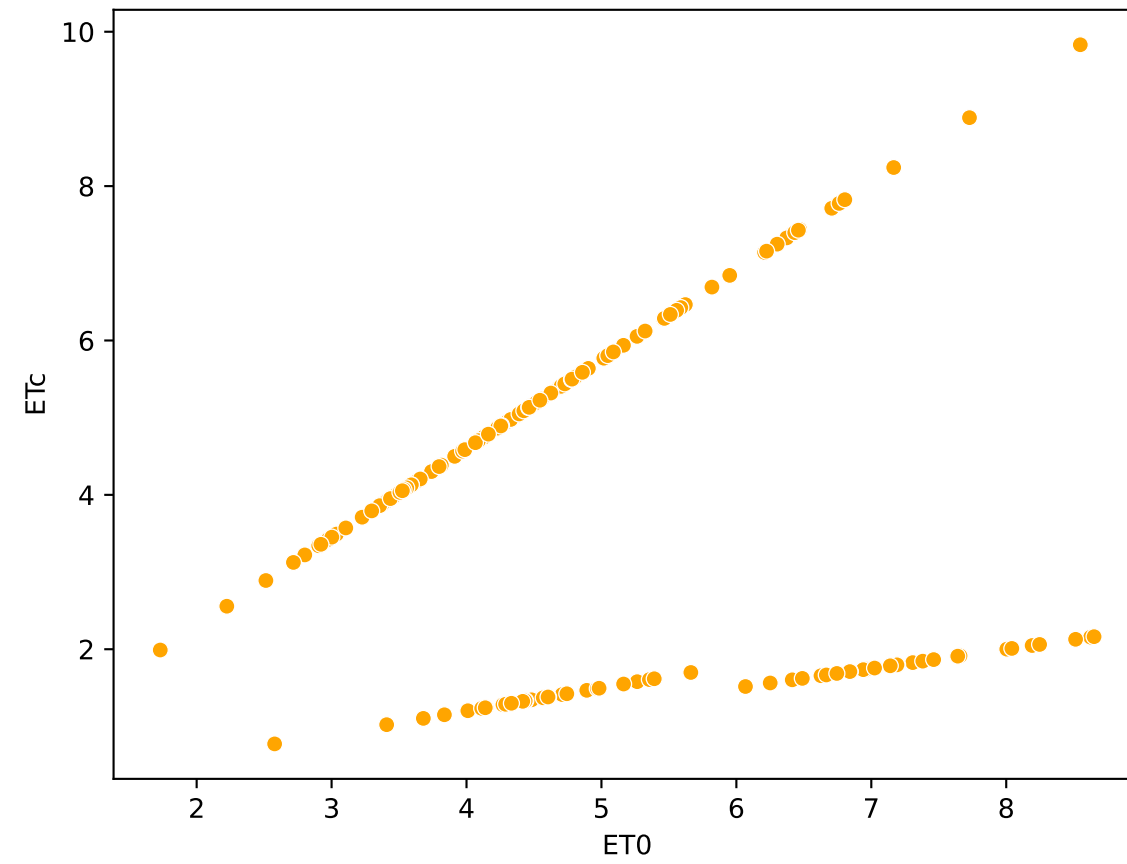
HR vs ET0



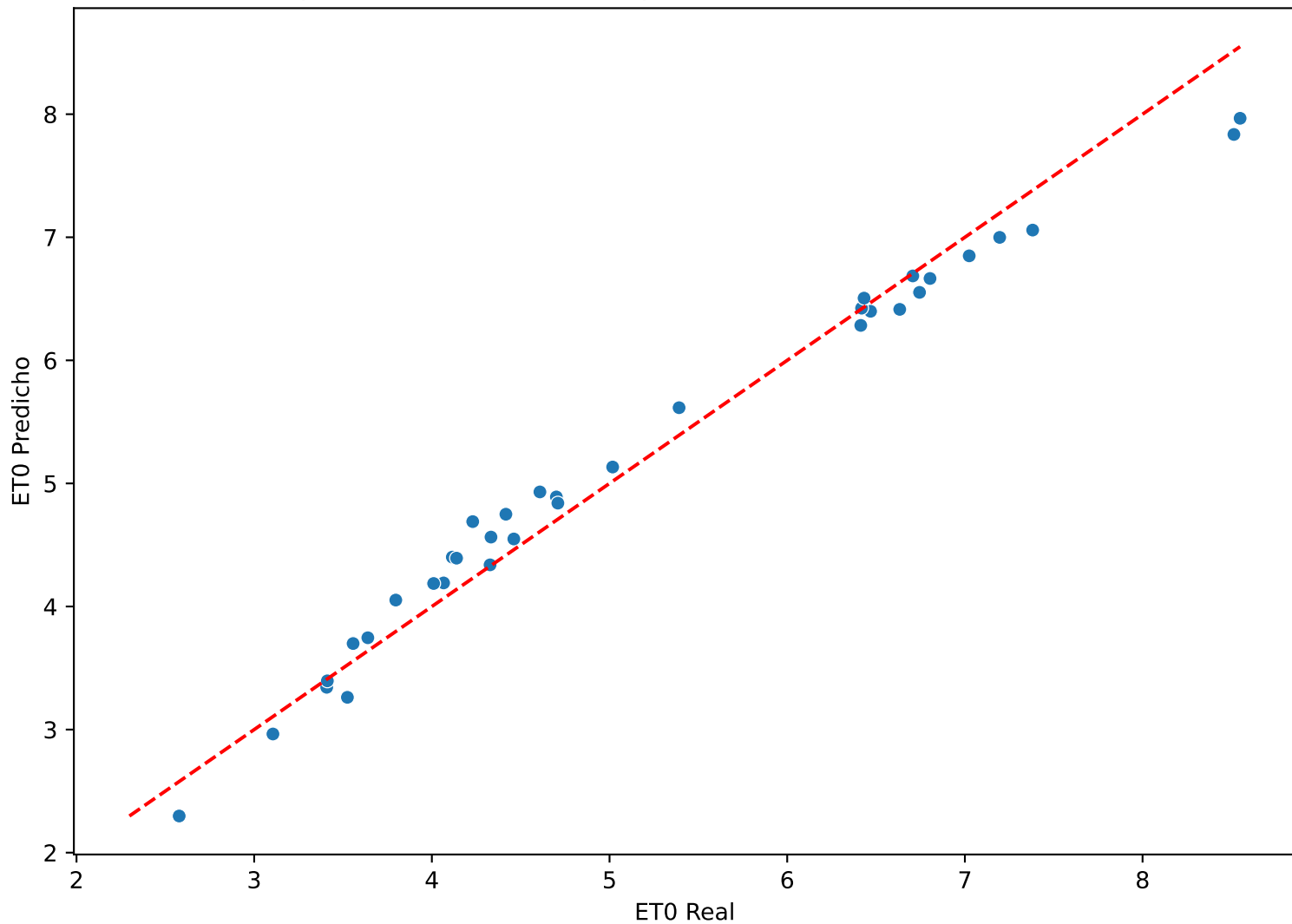
Ux vs ET0



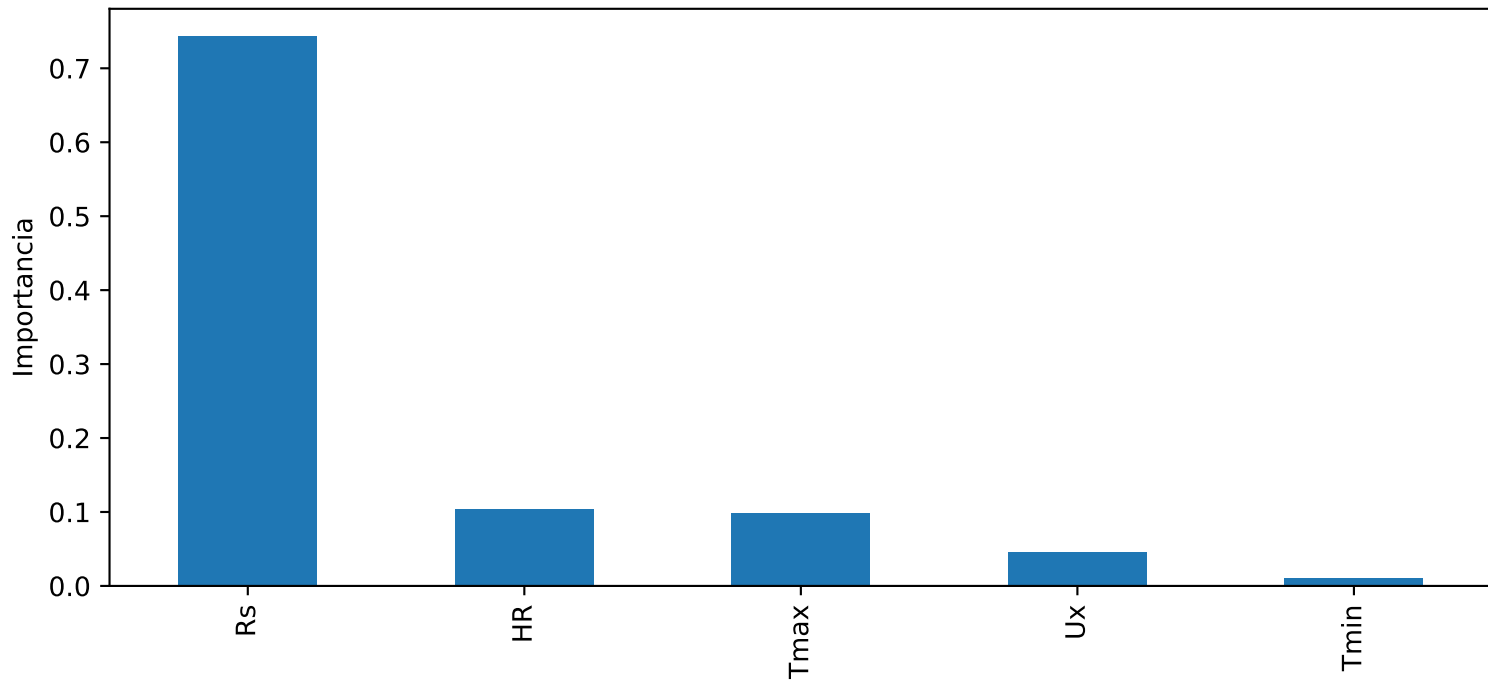
ET0 vs ETc



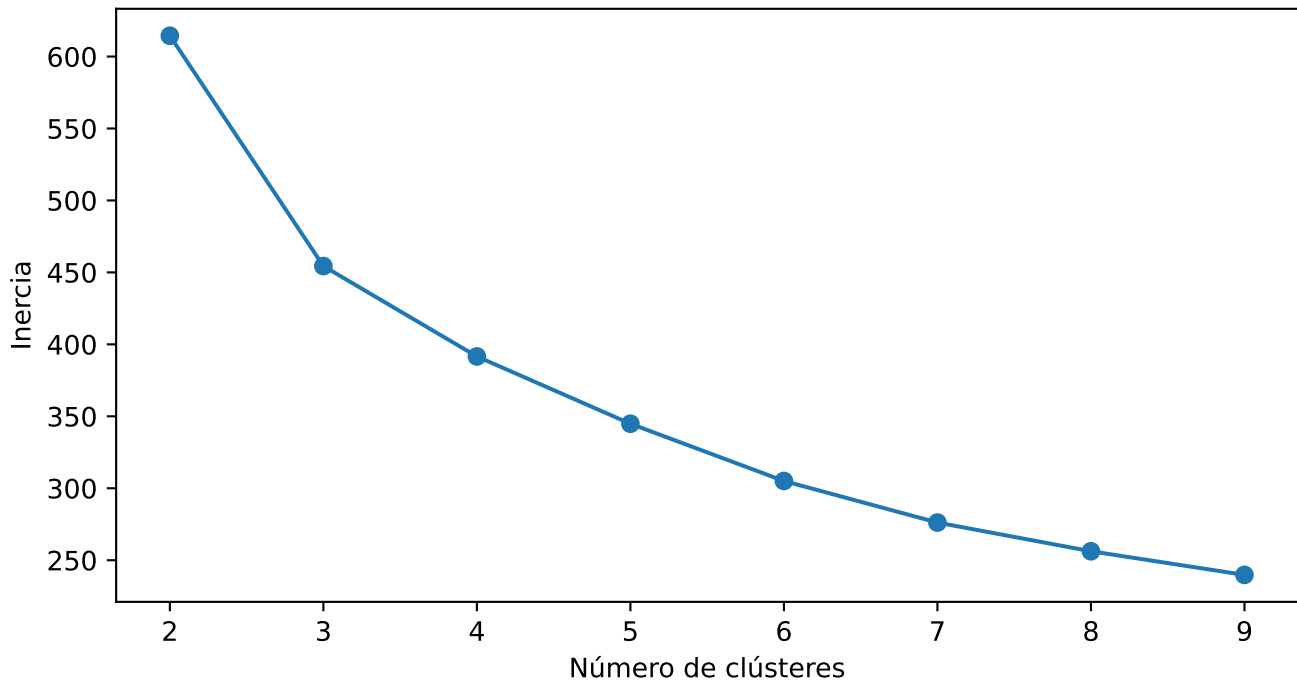
Comparación entre ET0 Real y Predicho — Etchojoa (2012-2013)



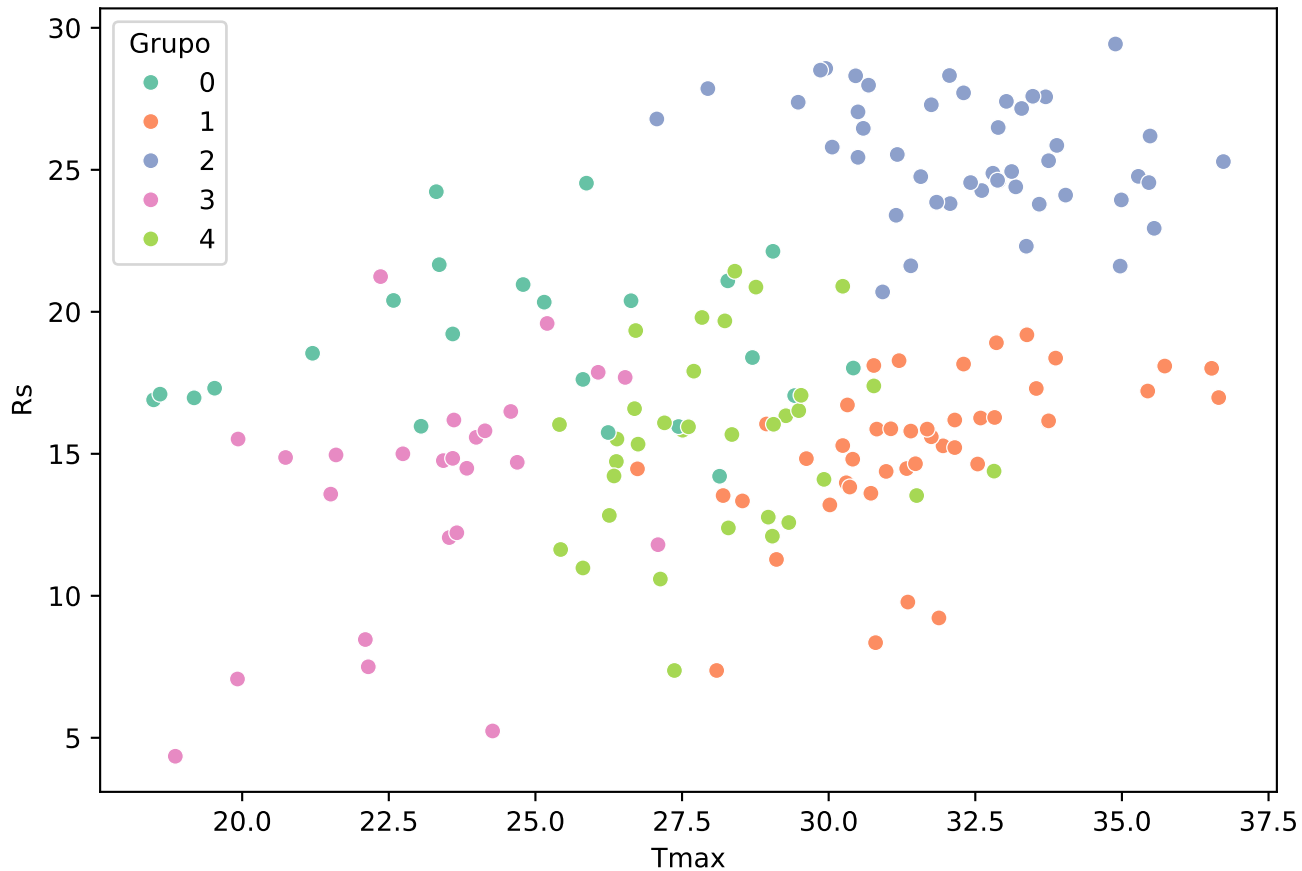
Importancia de variables (RF) — Etchojoa (2012-2013)



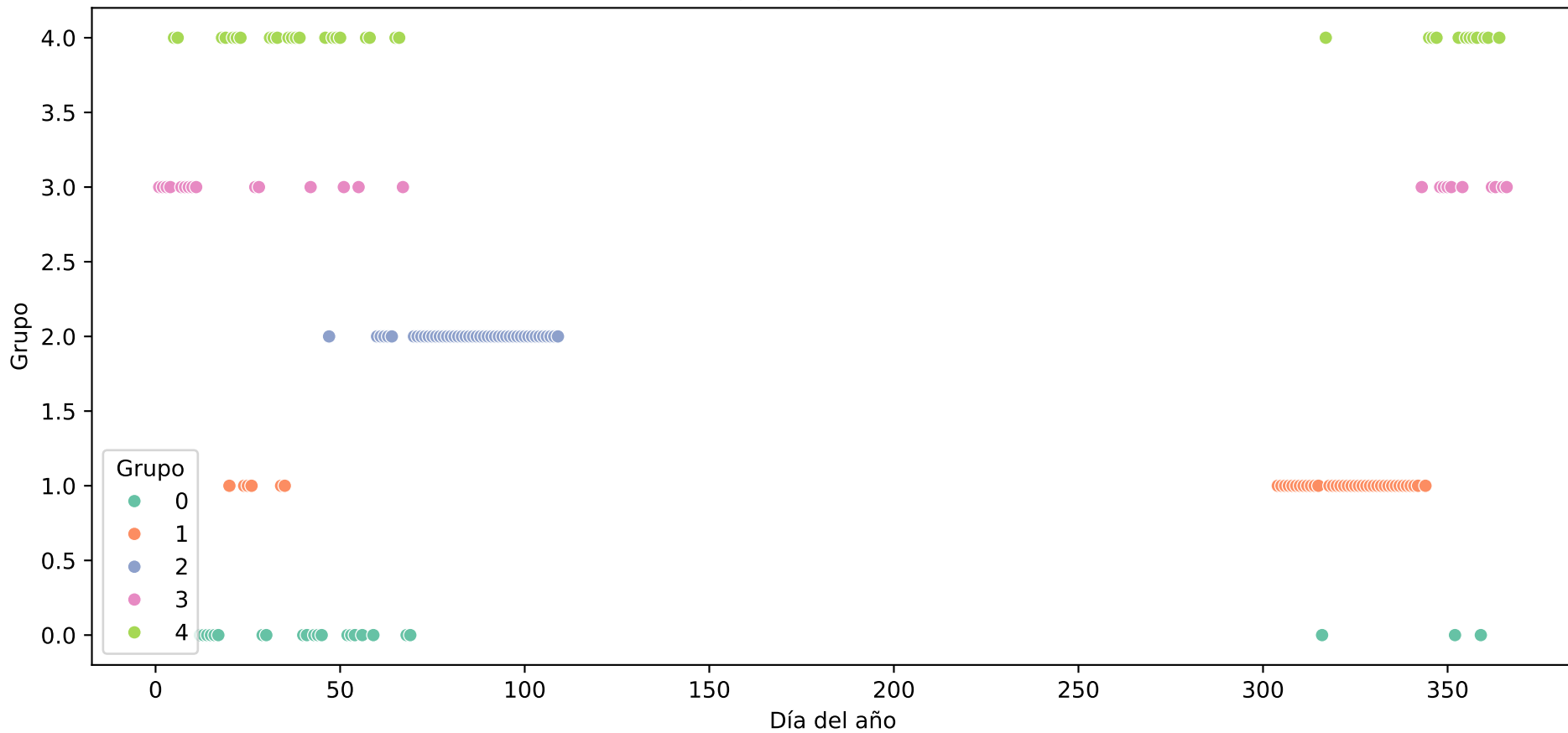
Método del codo



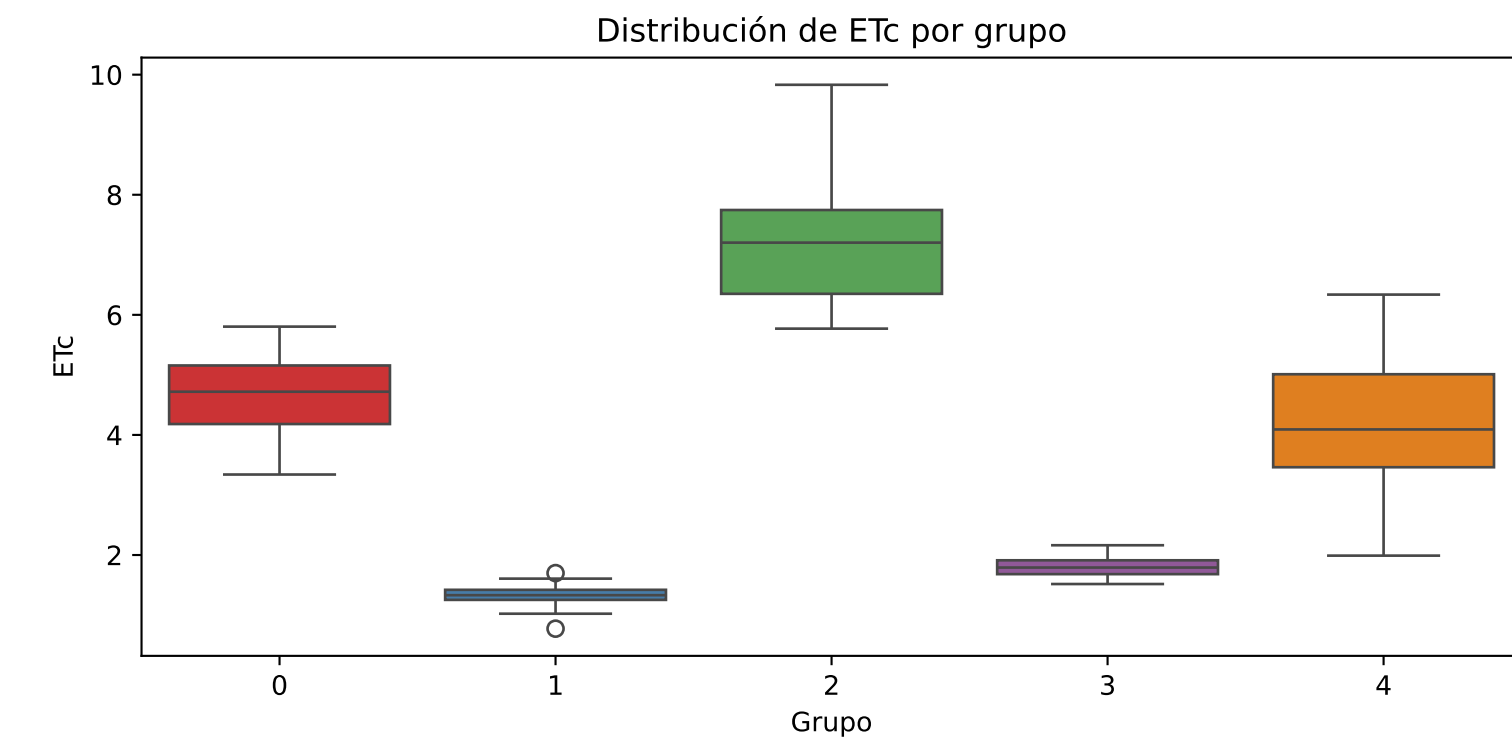
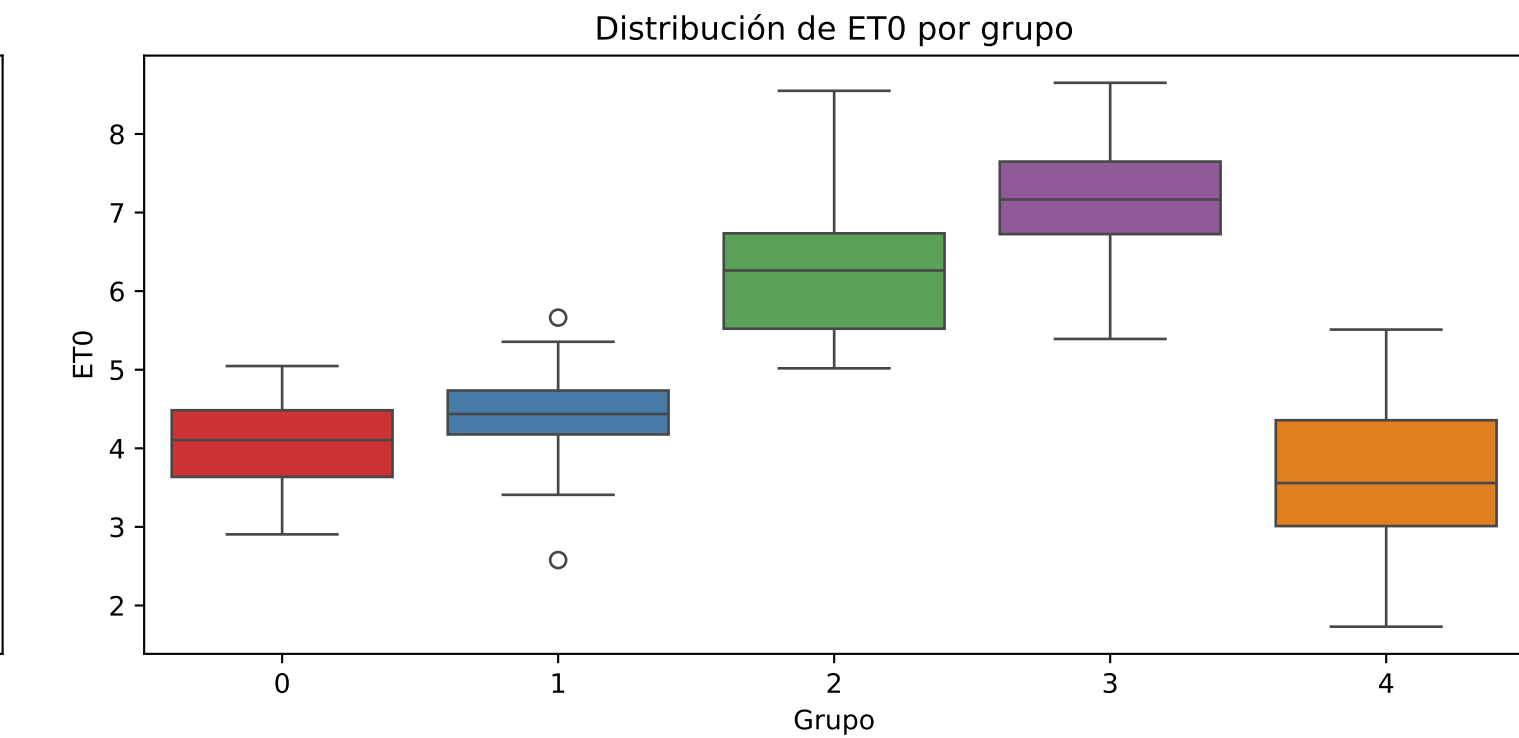
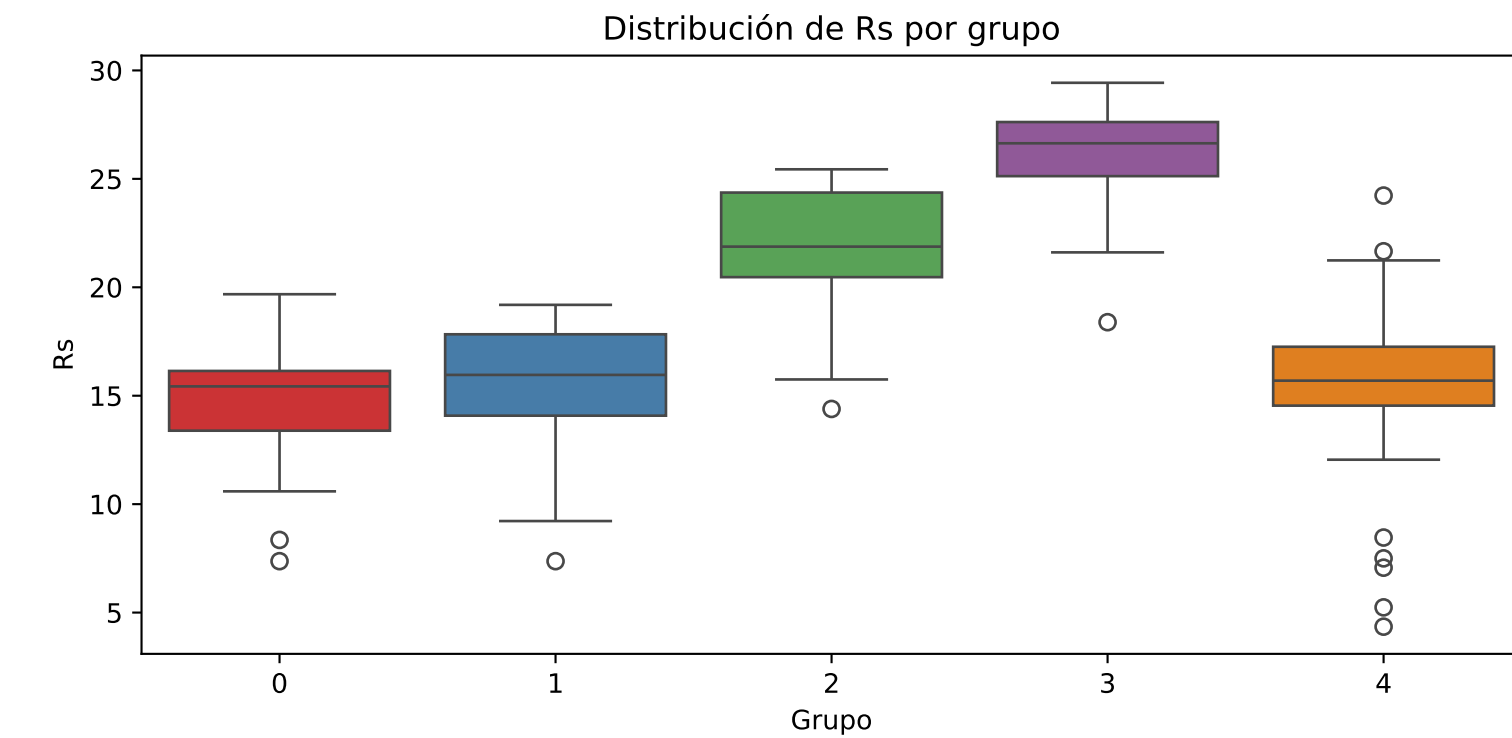
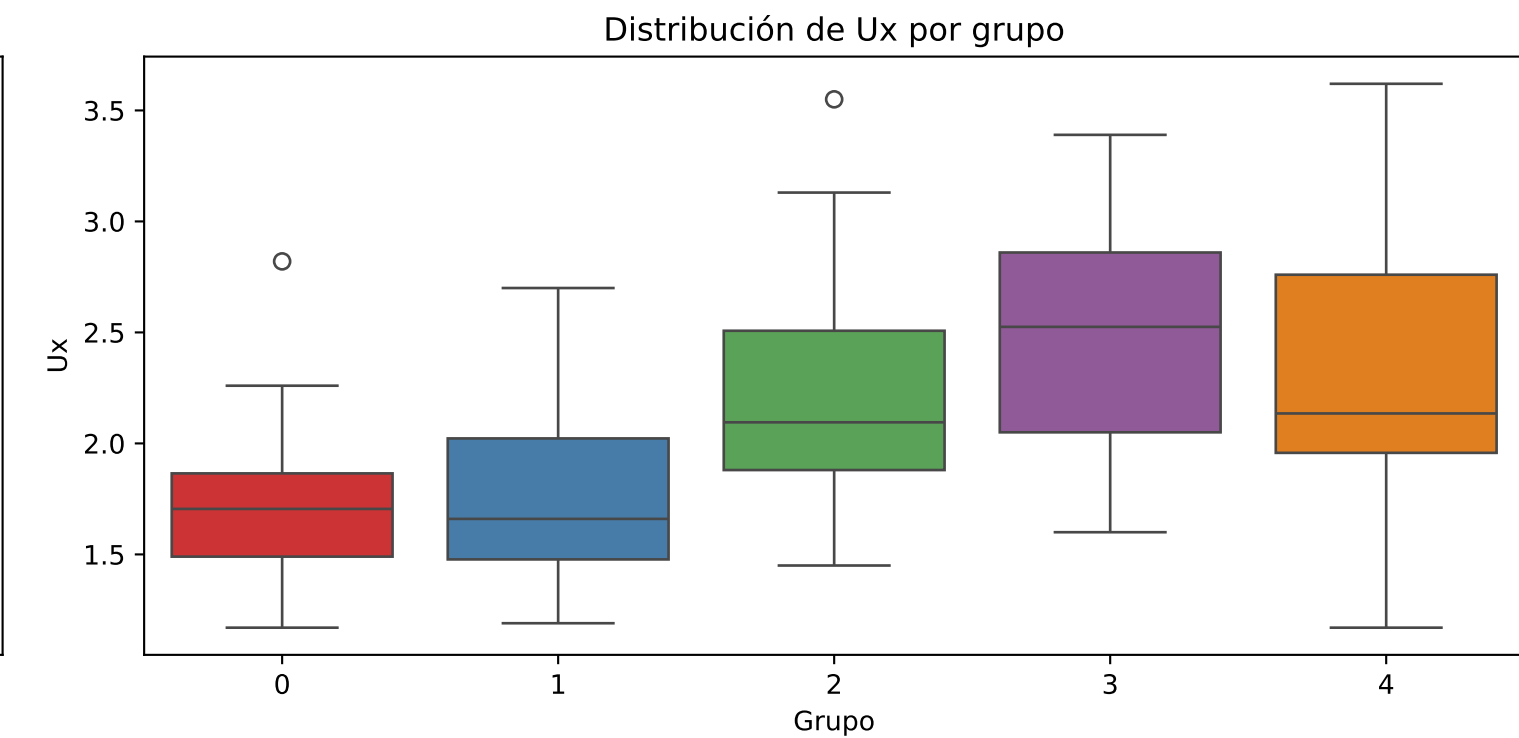
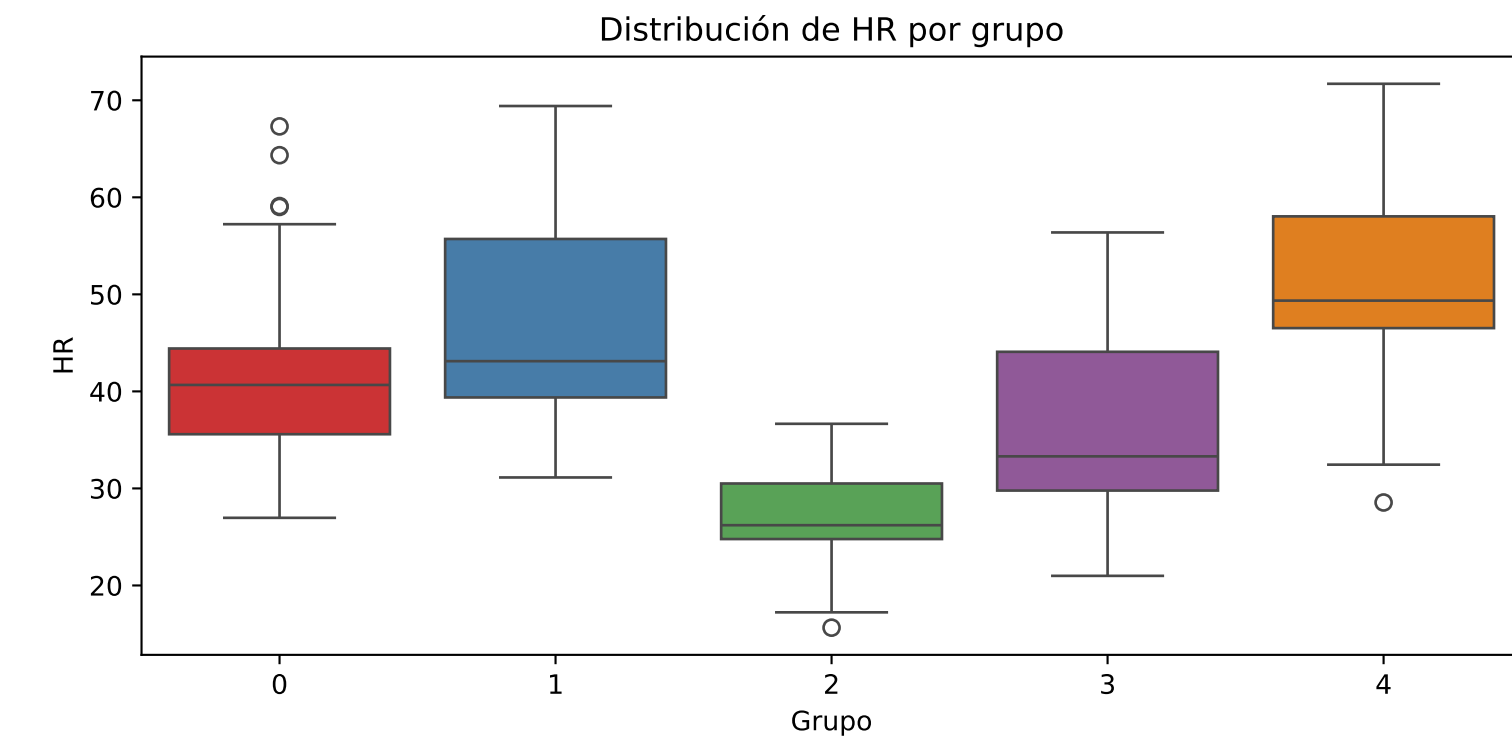
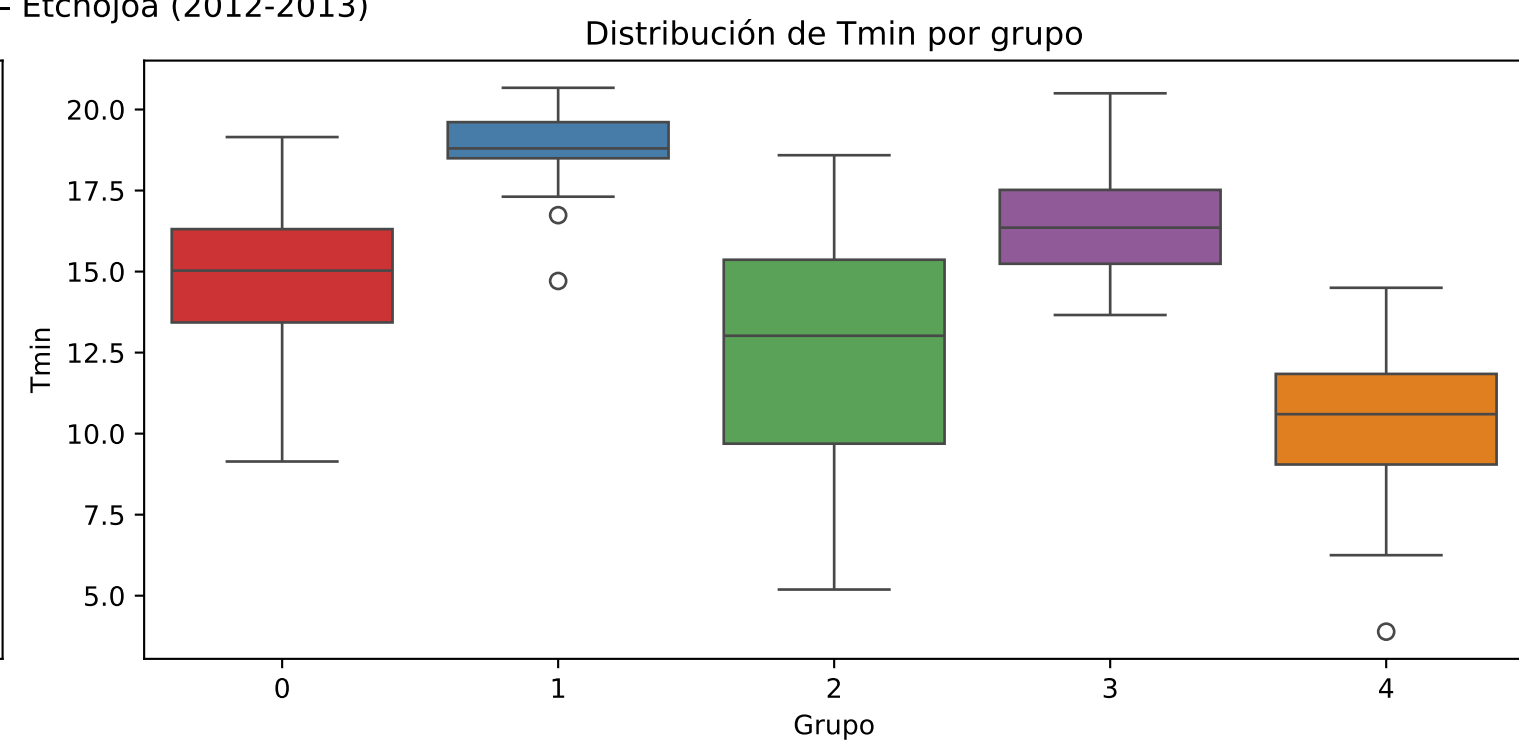
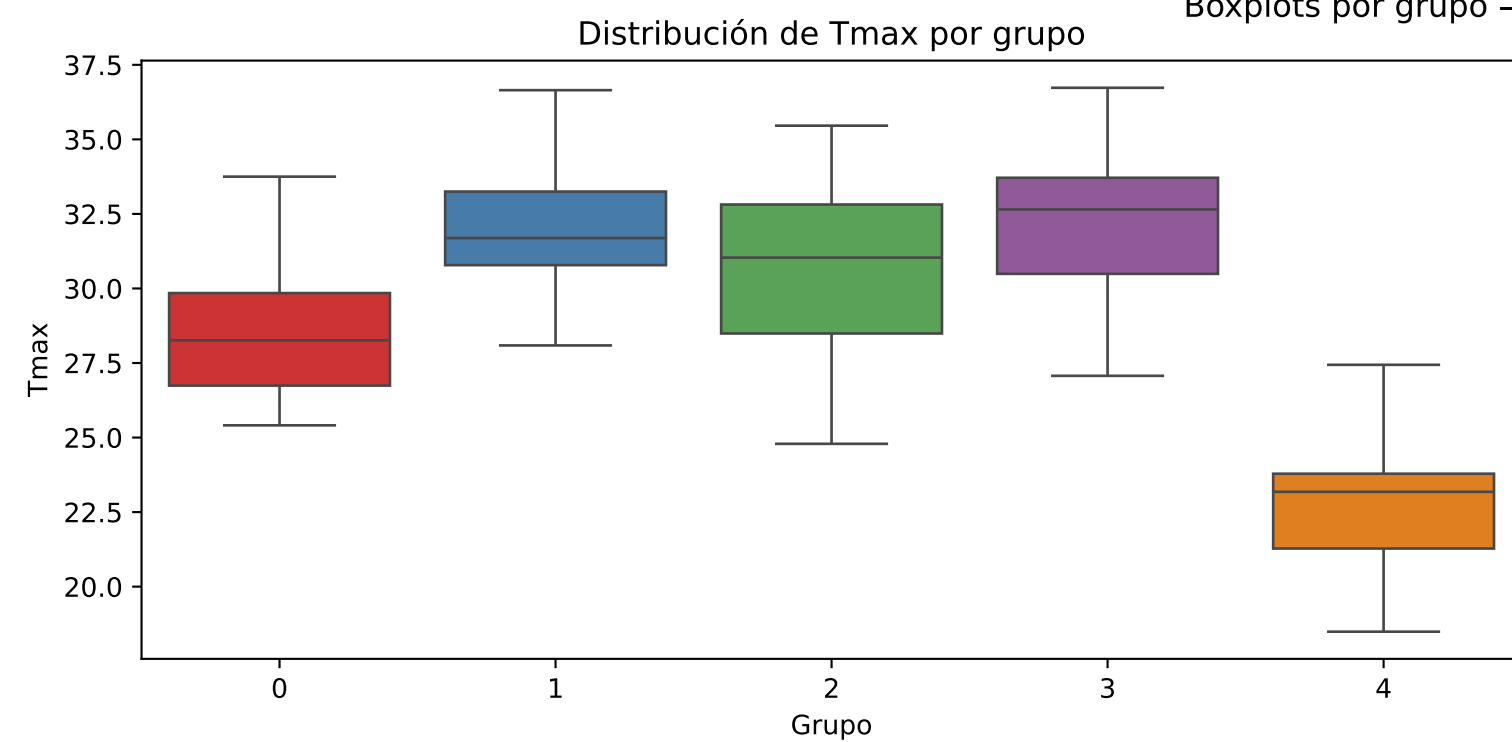
Clasificación de días climáticos — Etchojoa (2012-2013)



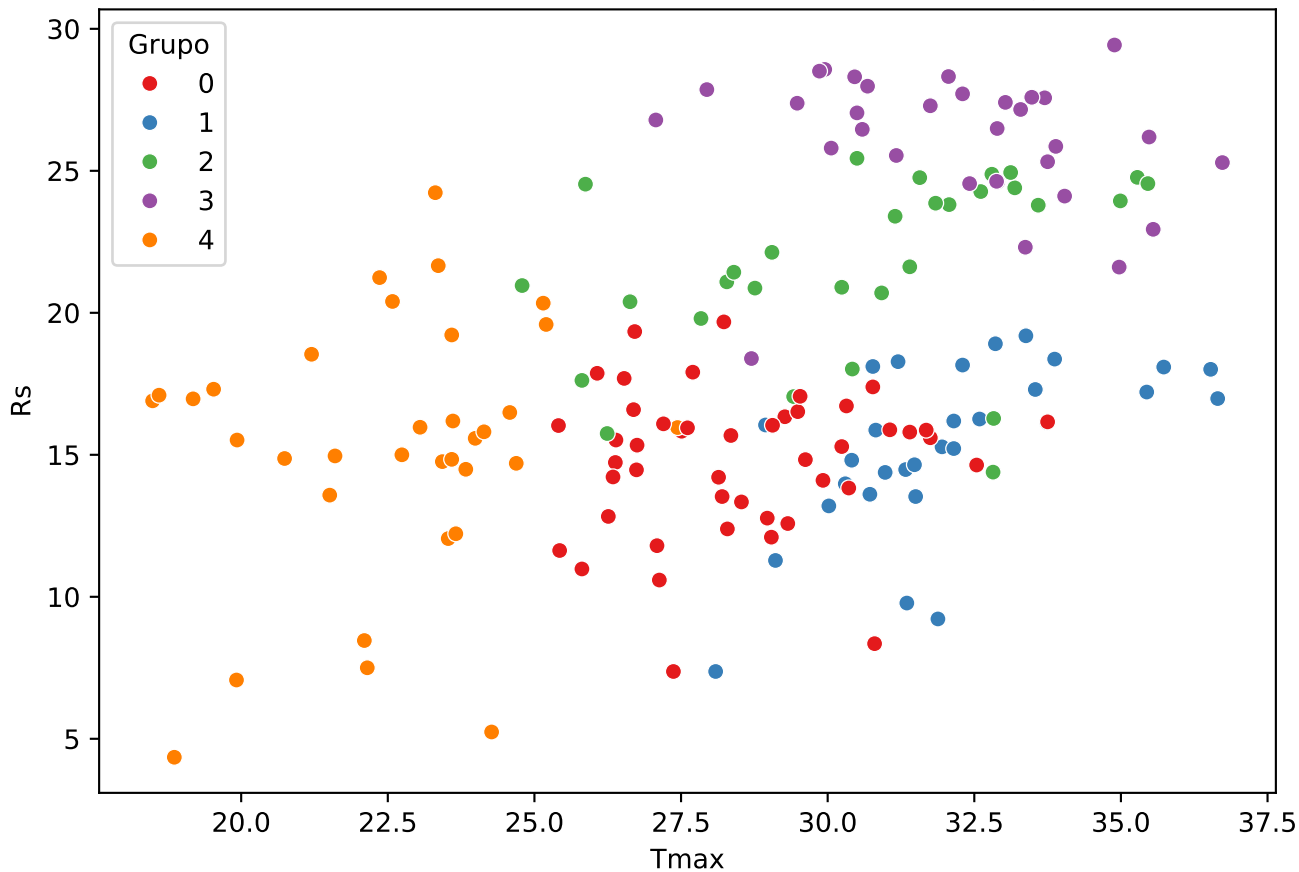
Distribución de días por grupo — Etchojoa (2012-2013)



Boxplots por grupo — Etchojoa (2012-2013)



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2012-2013)



Etchojoa — 2013-2014

Días del ciclo: 172

ETc total [mm]: 666.7

ETverde total [mm]: 17.4

ETazul total [mm]: 649.2

Tmax / Tmin [°C]: 40.7 / 8.8

Etchojoa — 2013-2014 · Resultados y métricas

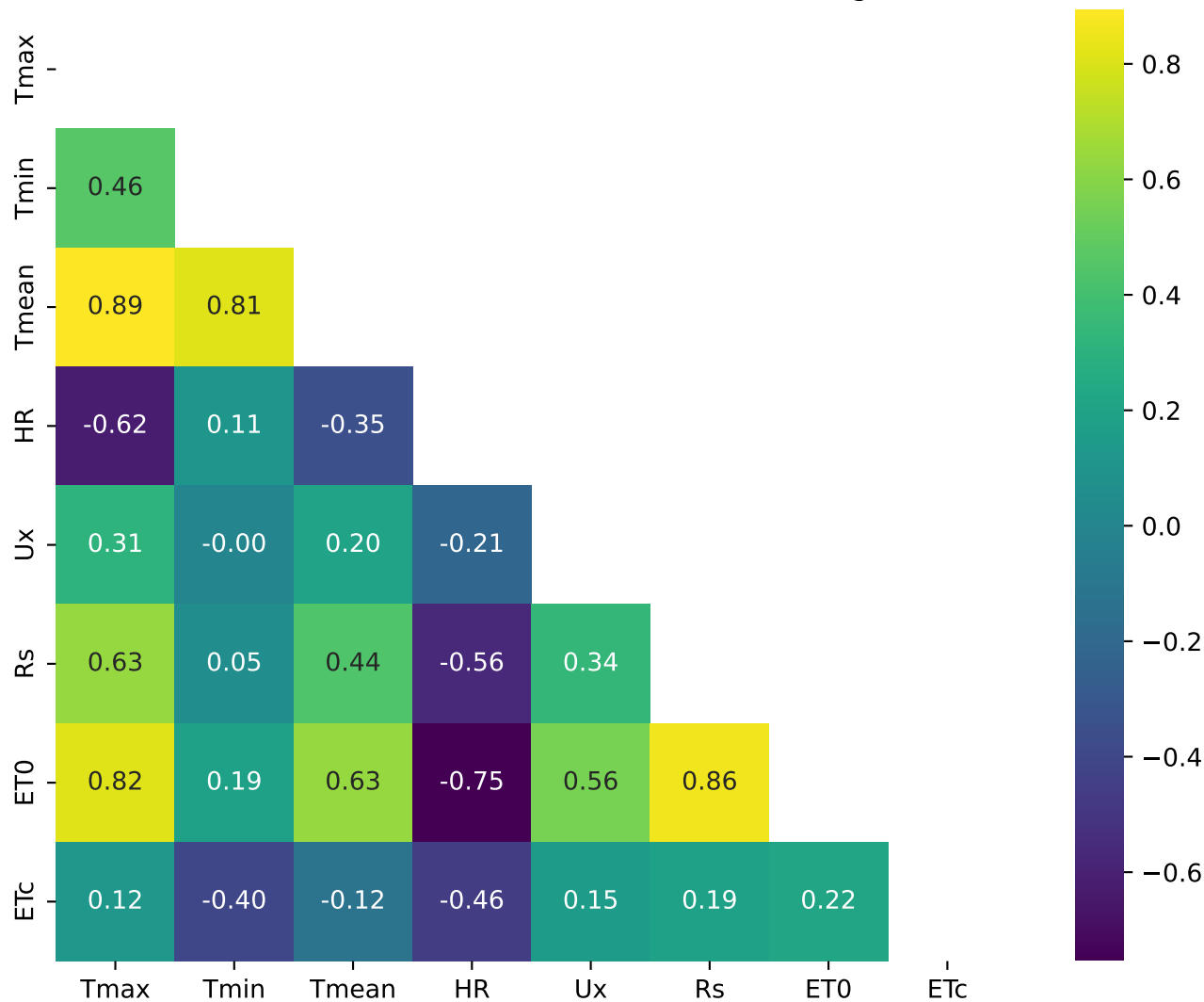
[Etchojoa 2013-2014] Regresión Lineal ET0 — R²: 0.9723 MSE: 0.0533
[Etchojoa 2013-2014] Random Forest ET0 — R²: 0.9272 MSE: 0.1402
Importancias: {'Tmax': 0.1474180284512726, 'Tmin': 0.009055473468004784, 'HR': 0.10612142736644739, 'Ux': 0.06456040435478656, 'Rs': 0.6728446663594887}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	24.031000	13.727000	58.553500	1.680500	12.083500	2.905135	2.895161
1	28.156800	13.553800	42.237800	1.887200	16.184600	4.284893	4.674603
2	31.601000	15.691750	35.409750	2.168750	20.421250	5.852854	6.730782
3	29.047059	18.381176	61.981176	1.846471	14.200000	3.676699	1.613445
4	33.426071	17.568929	32.728929	2.315714	24.193571	7.237524	1.819583

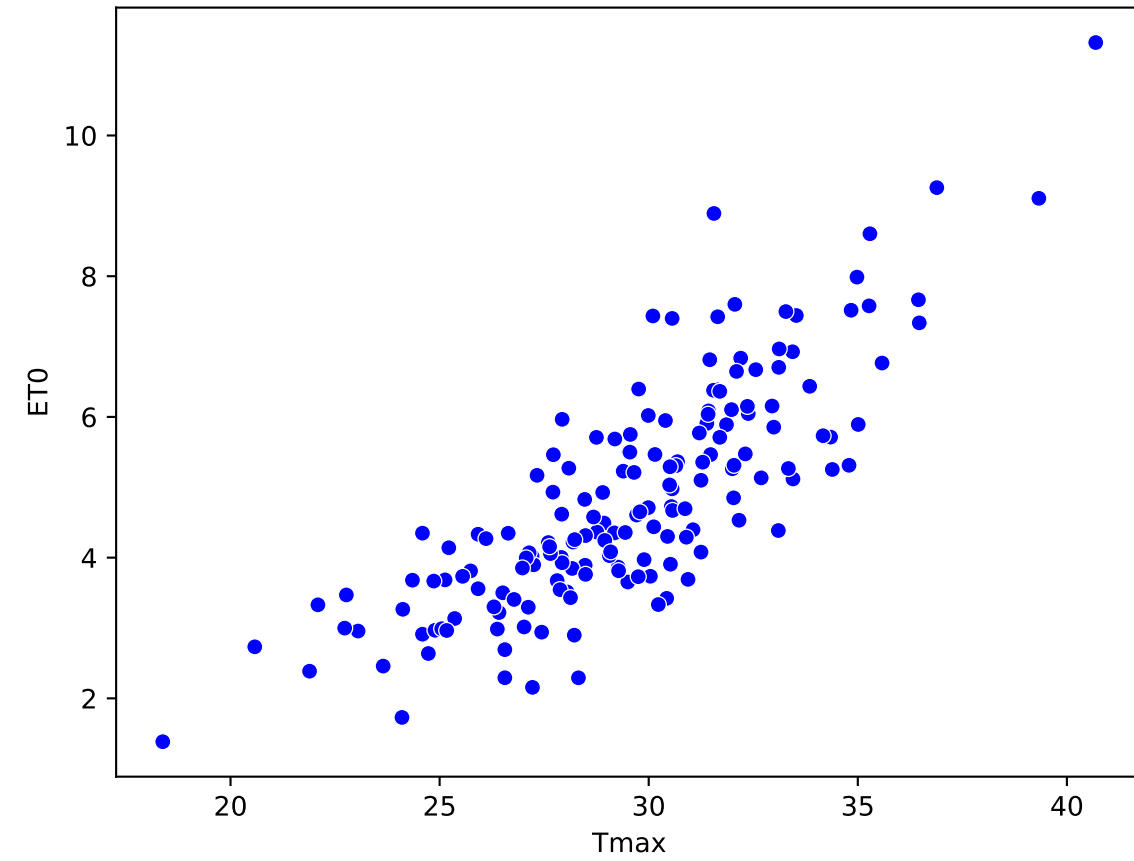
Etchojoa — 2013-2014

Matriz de Correlación entre Variables Meteorológicas

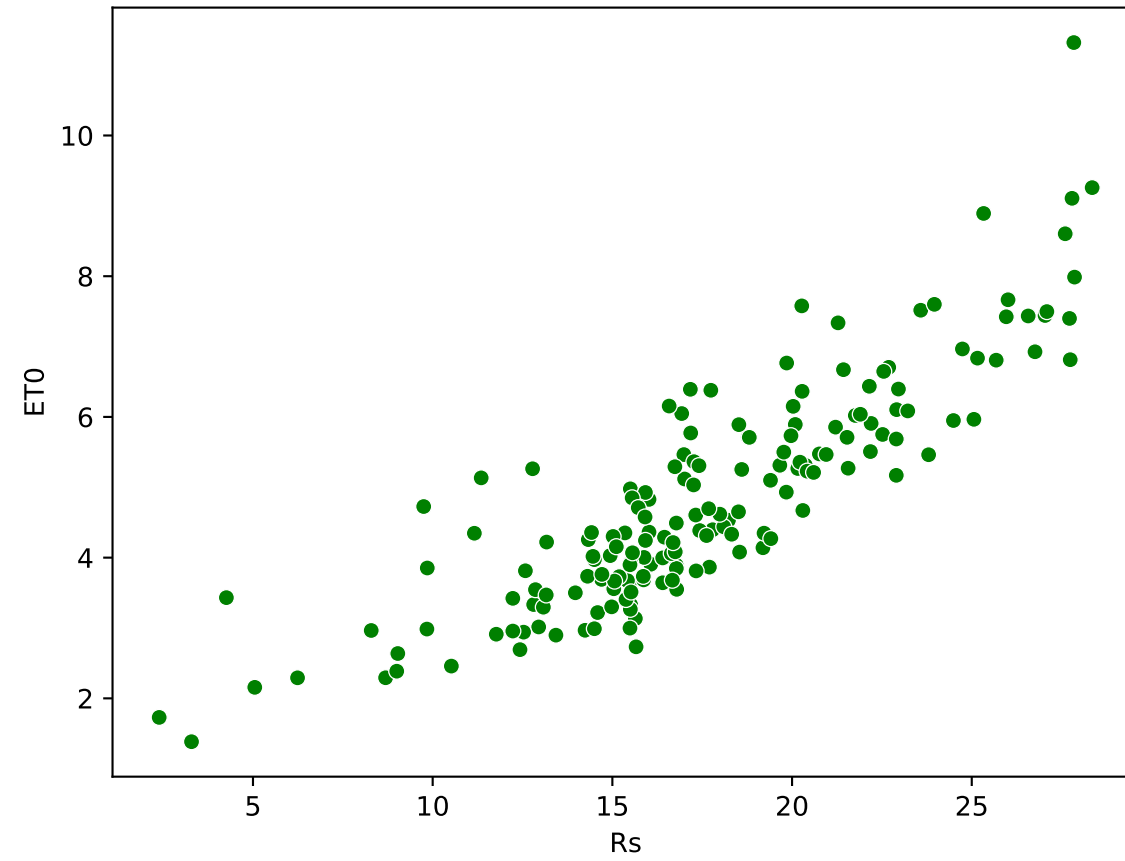


Dispersión — Etchojoa (2013-2014)

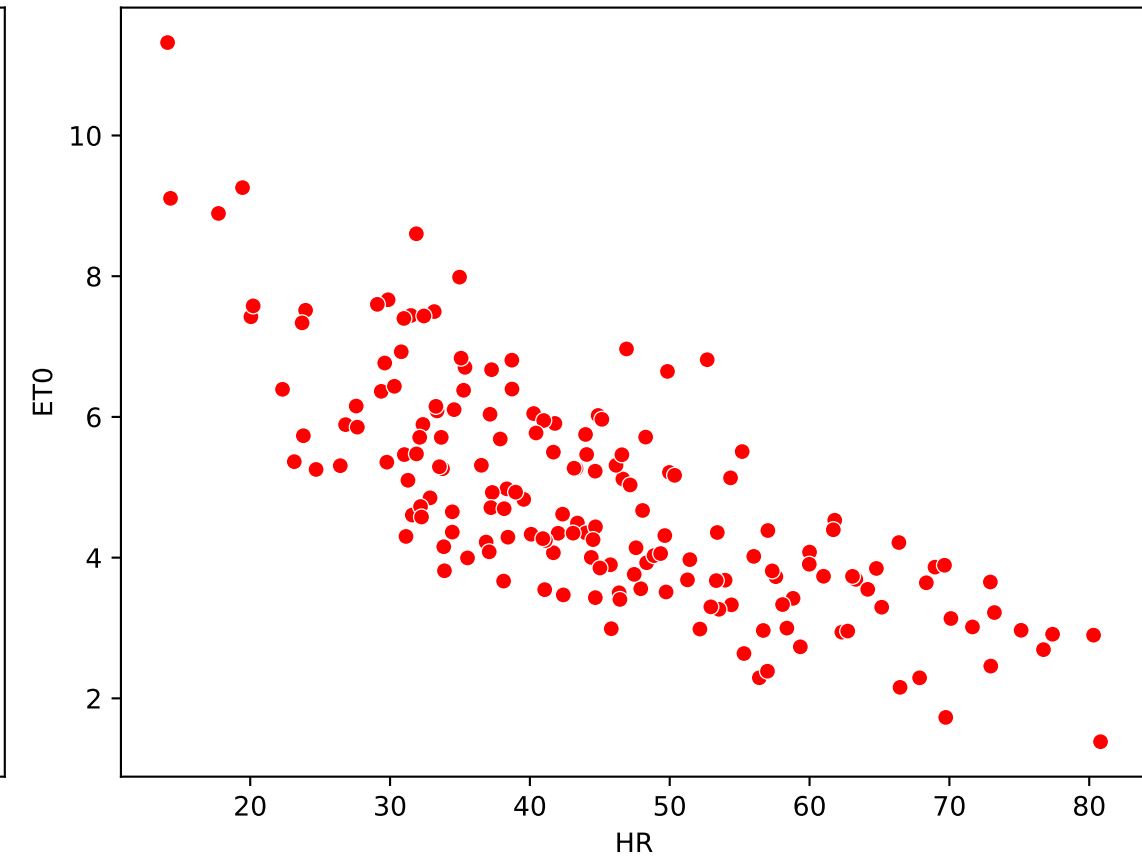
Tmax vs ET0



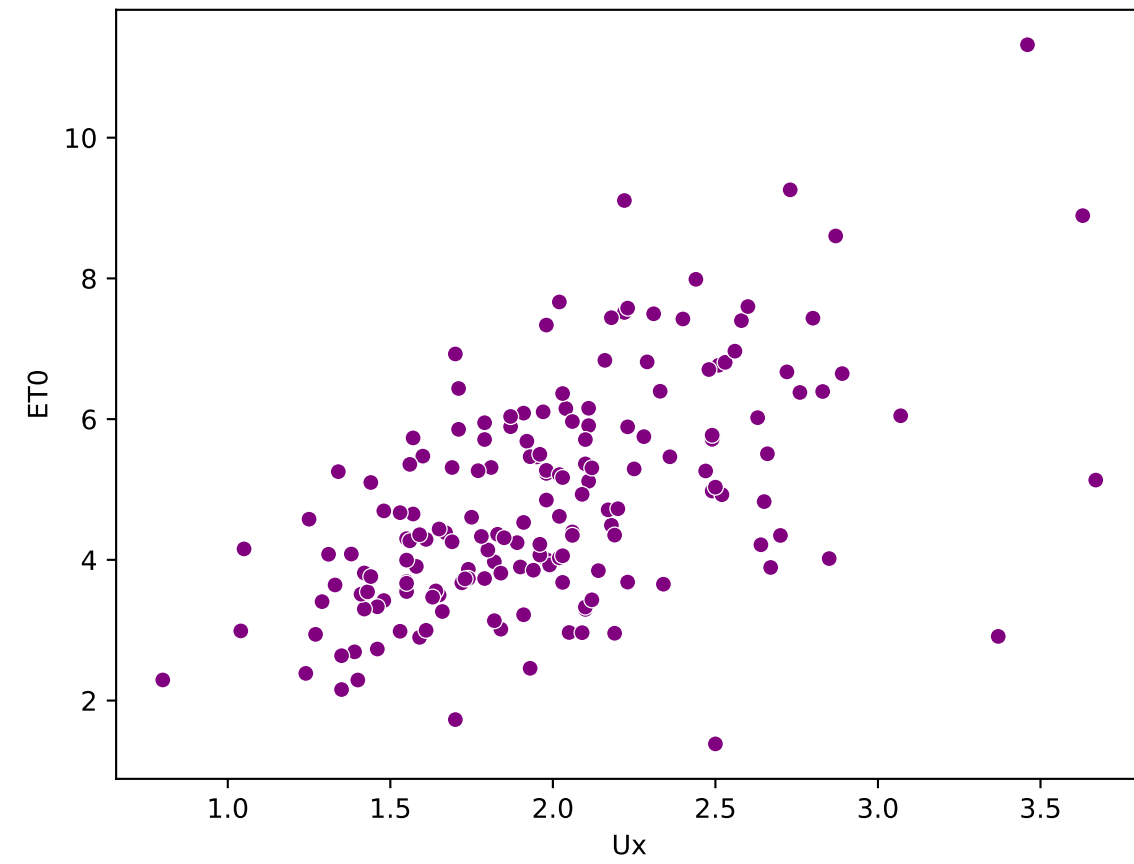
Rs vs ET0



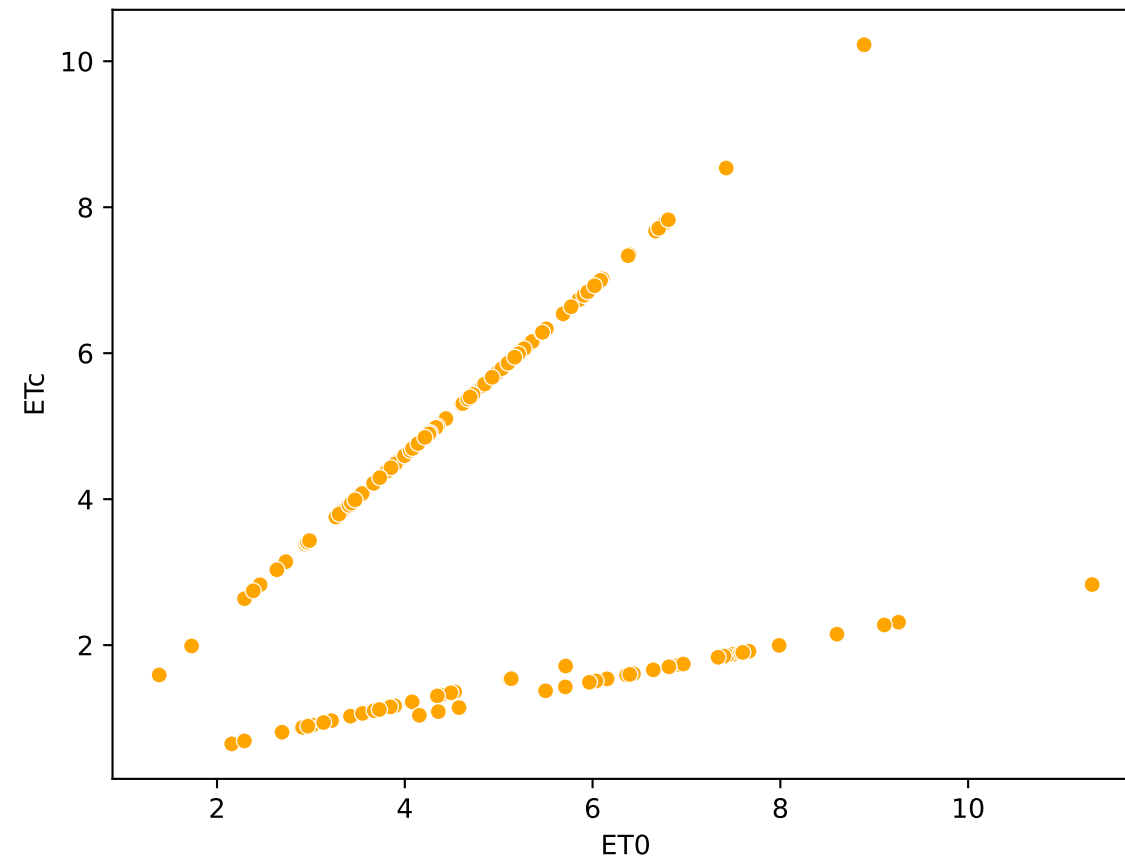
HR vs ET0



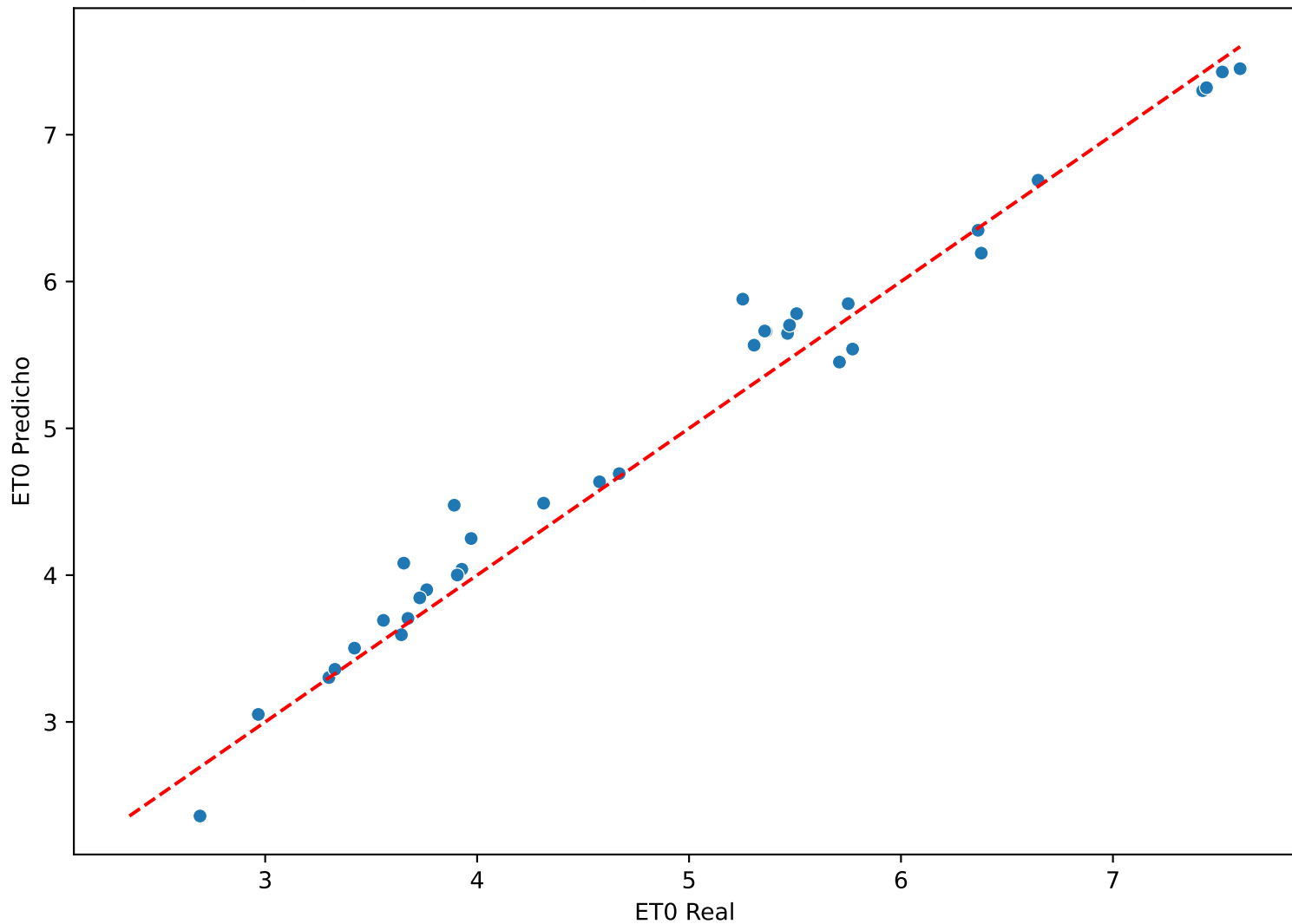
Ux vs ET0



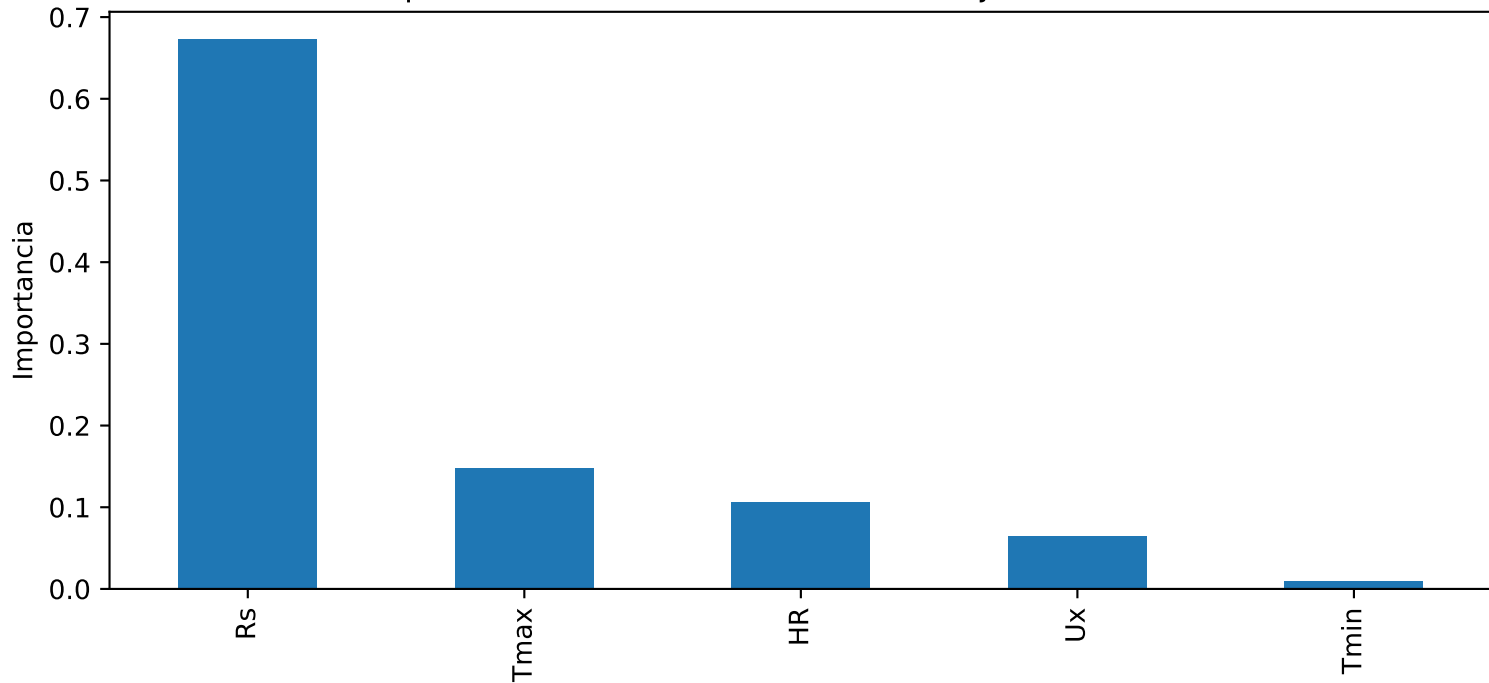
ET0 vs ETc



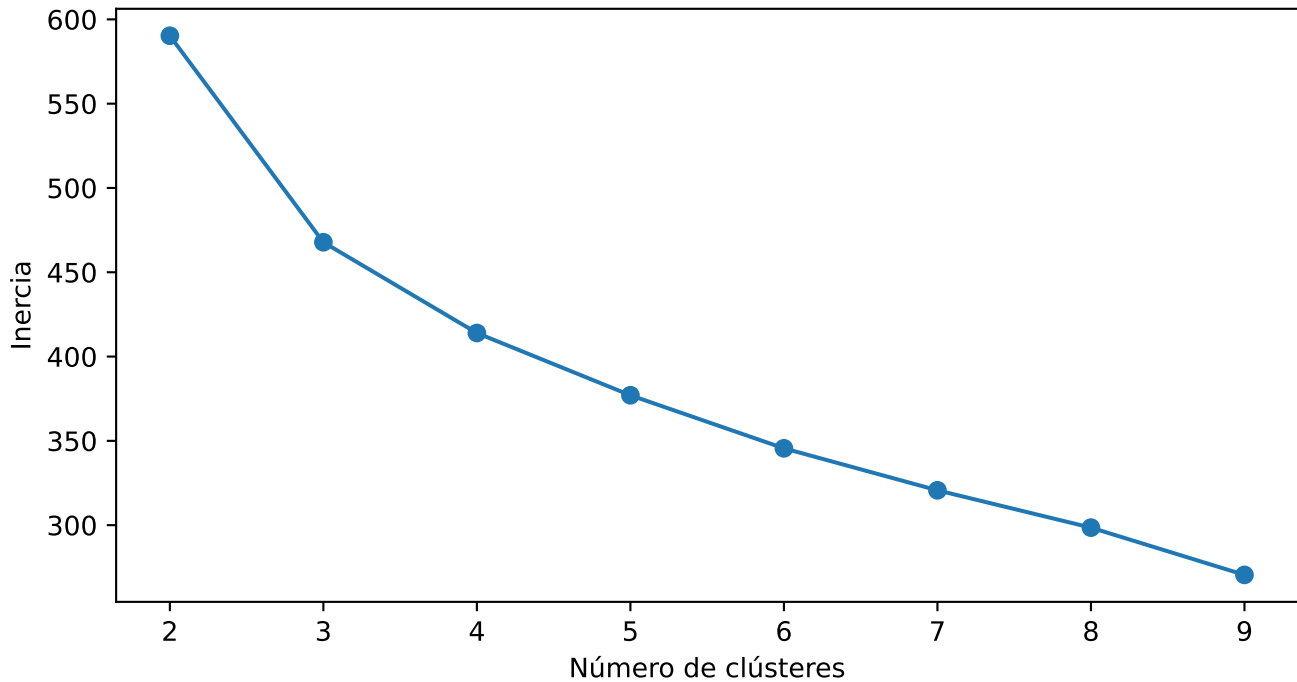
Comparación entre ET0 Real y Predicho — Etchojoa (2013-2014)



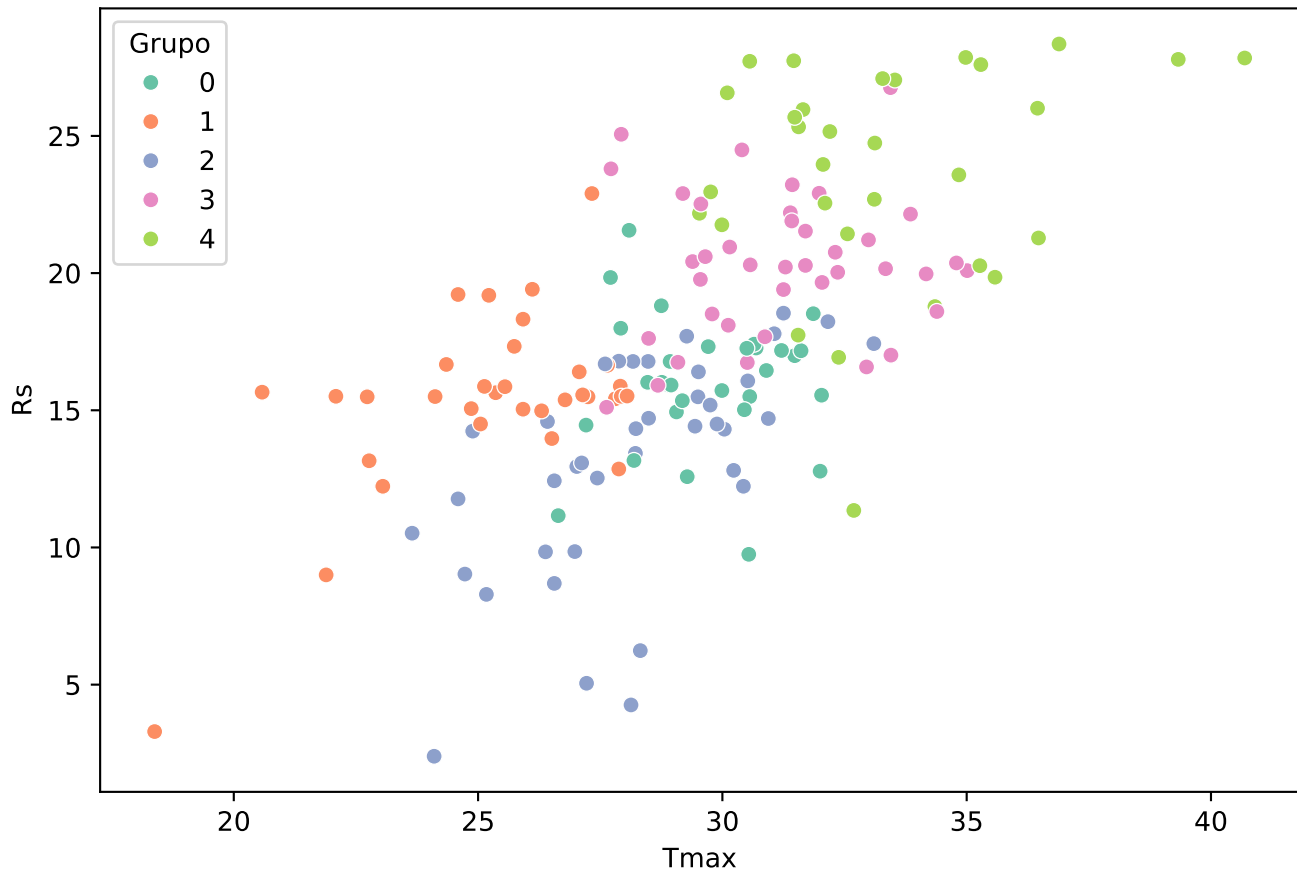
Importancia de variables (RF) — Etchojoa (2013-2014)



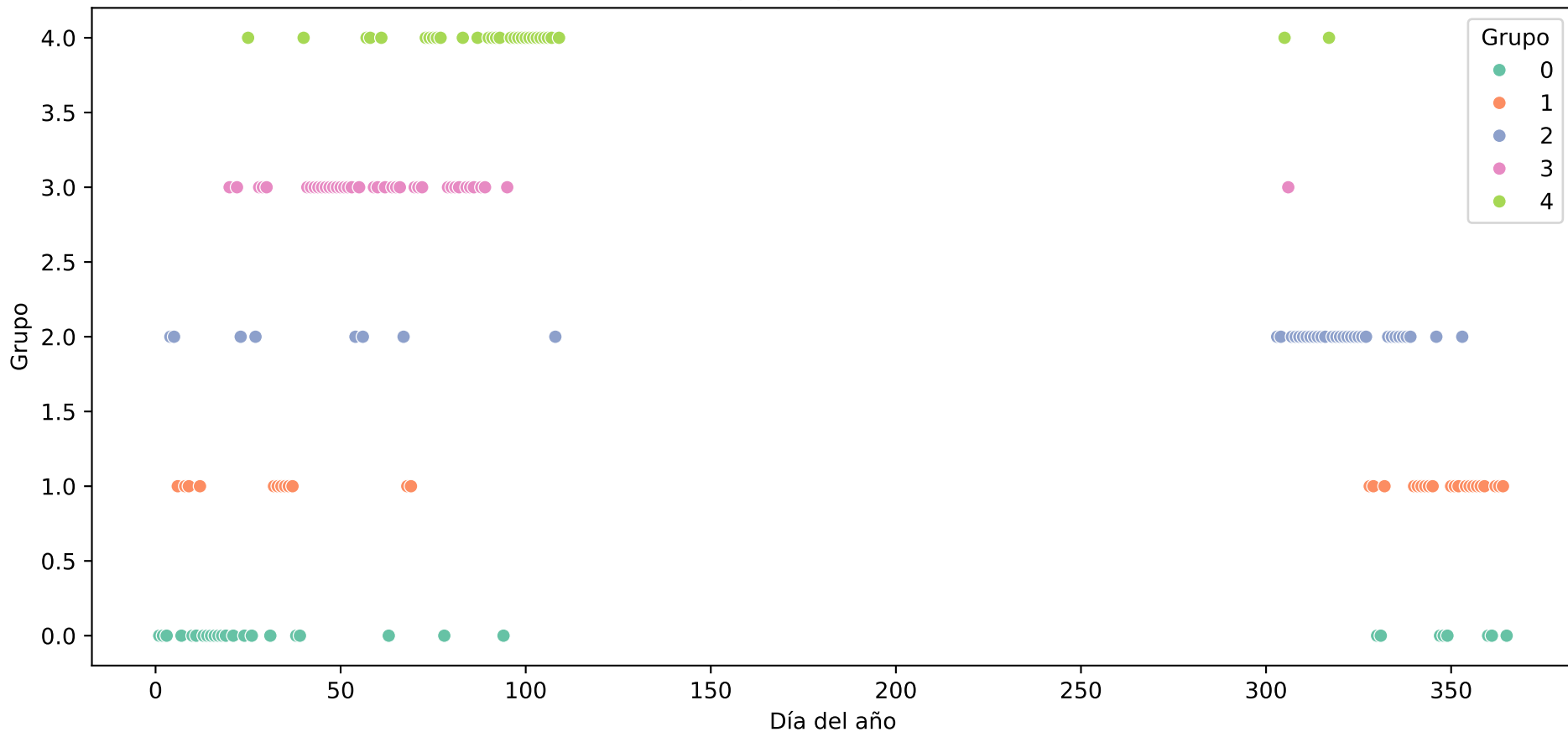
Método del codo



Clasificación de días climáticos — Etchojoa (2013-2014)

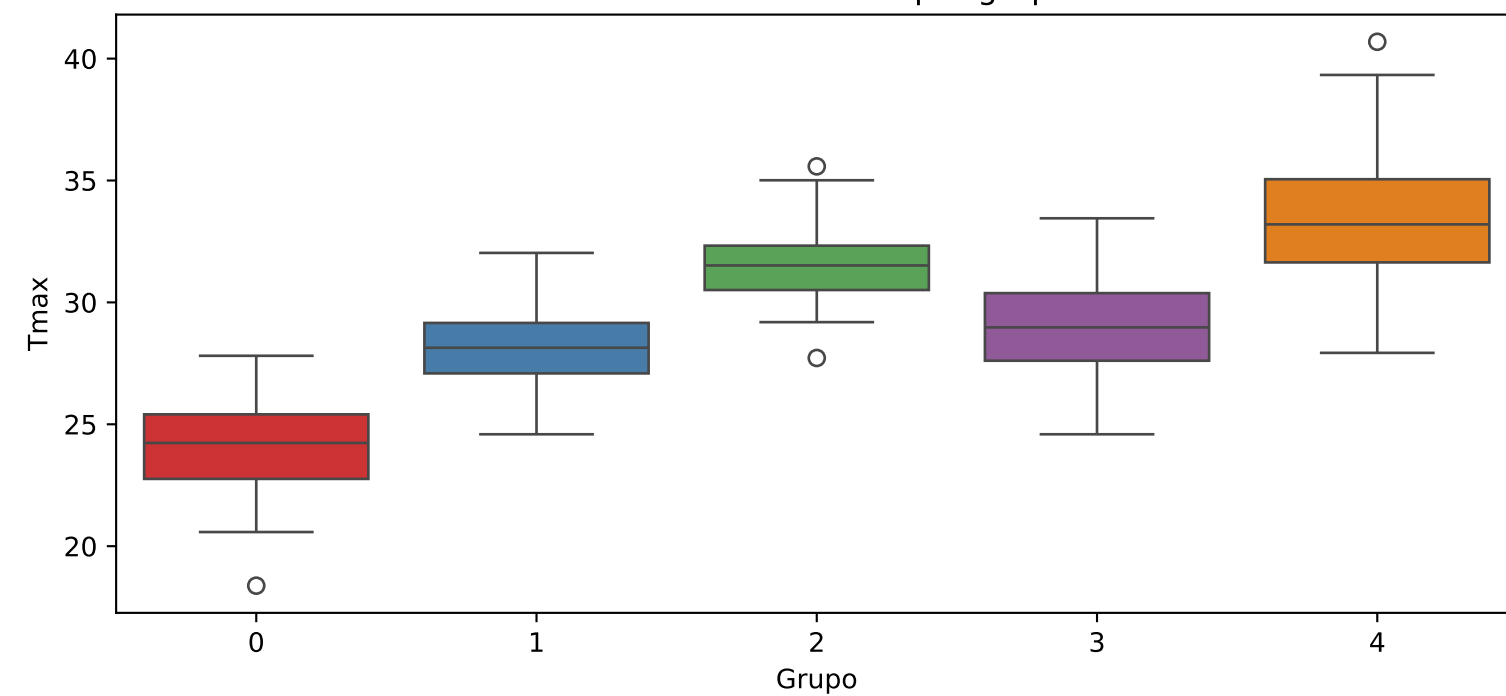


Distribución de días por grupo — Etchojoa (2013-2014)

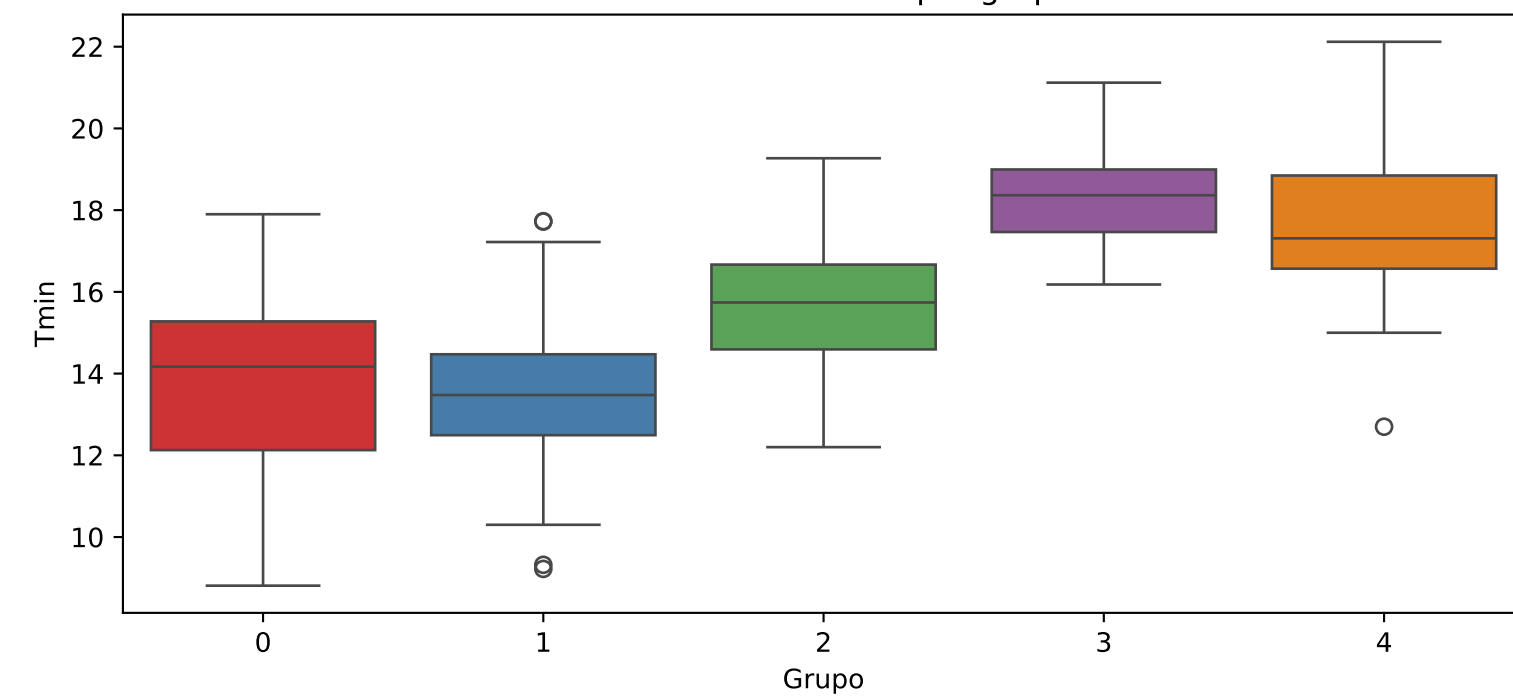


Boxplots por grupo — Etchojoa (2013-2014)

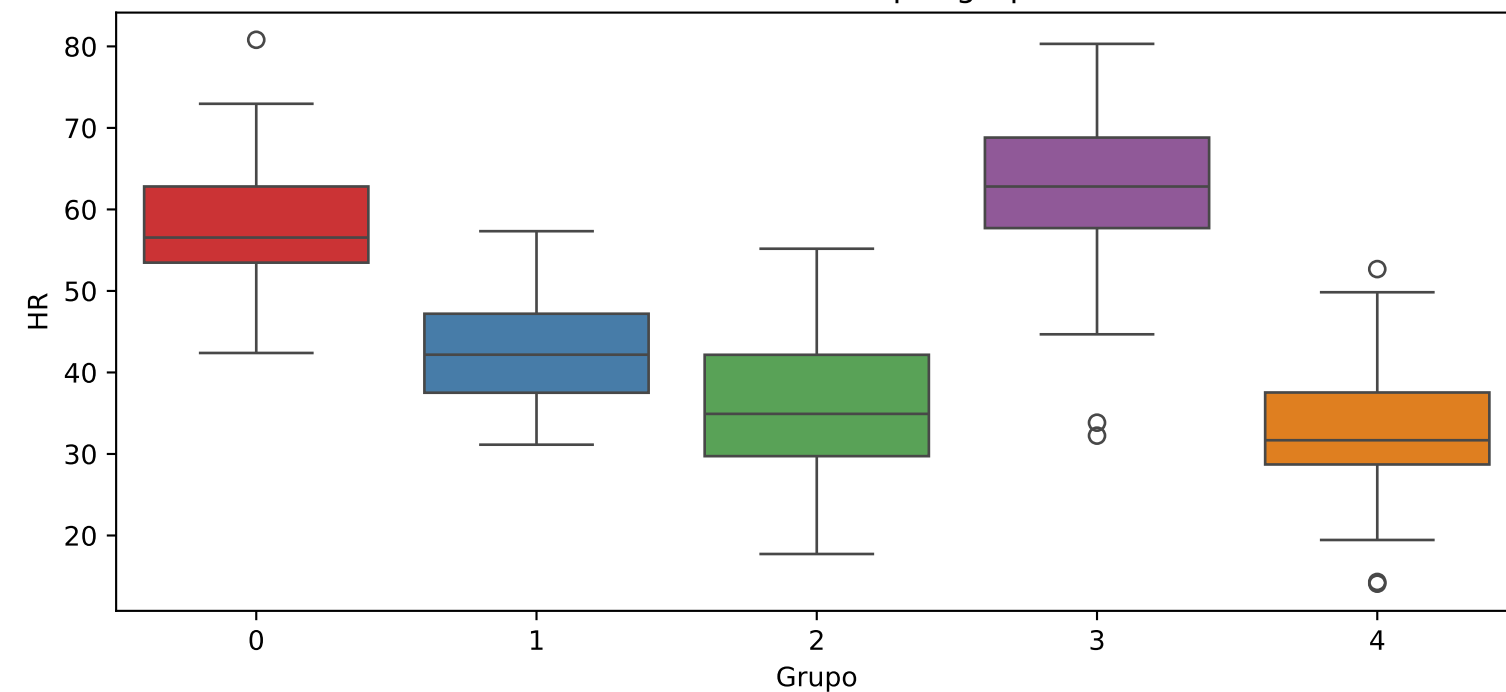
Distribución de Tmax por grupo



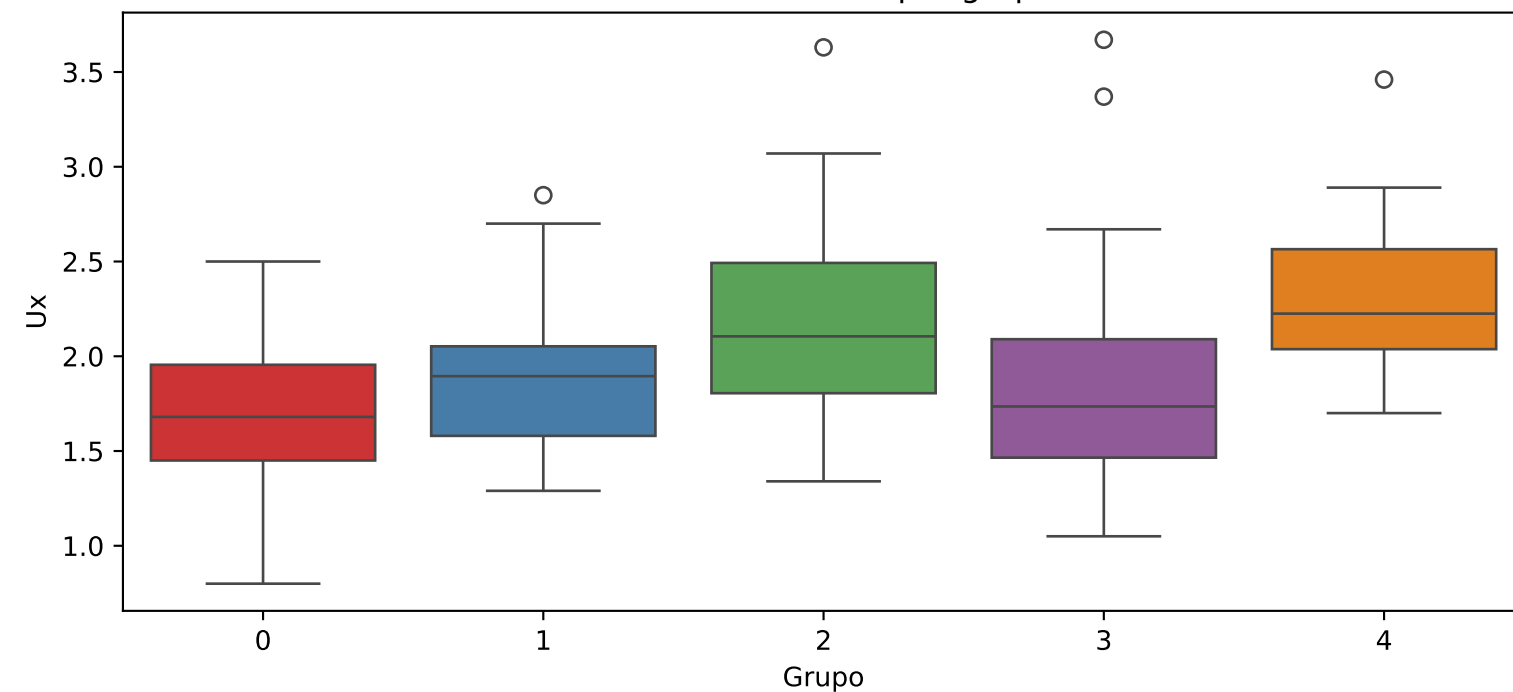
Distribución de Tmin por grupo



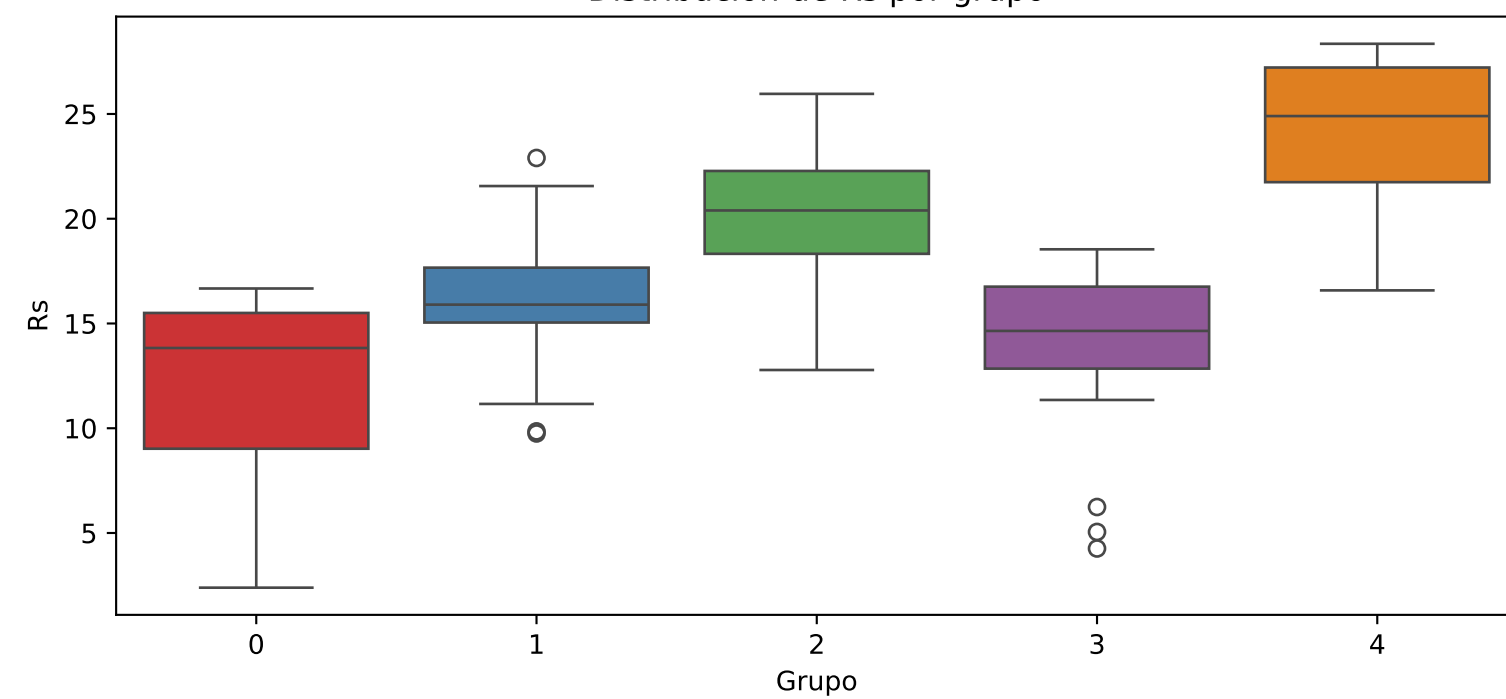
Distribución de HR por grupo



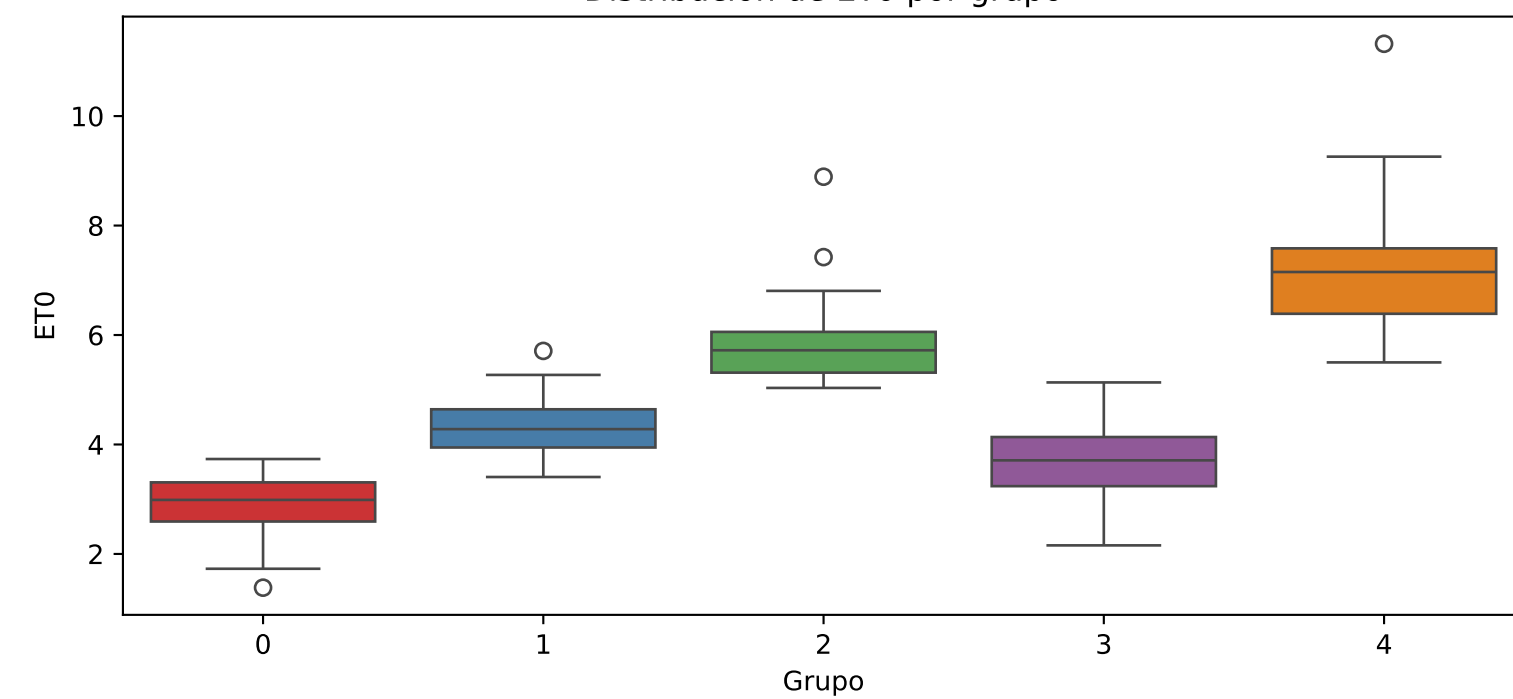
Distribución de Ux por grupo



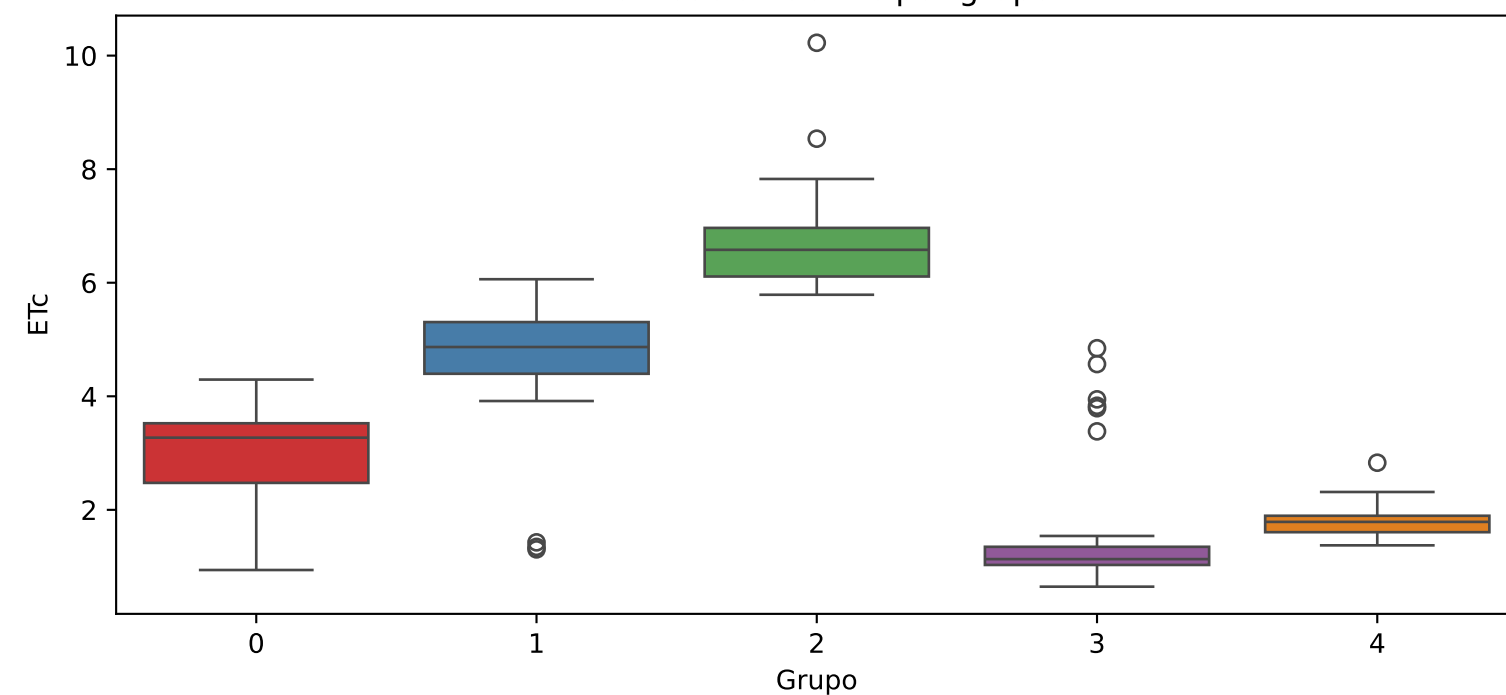
Distribución de Rs por grupo



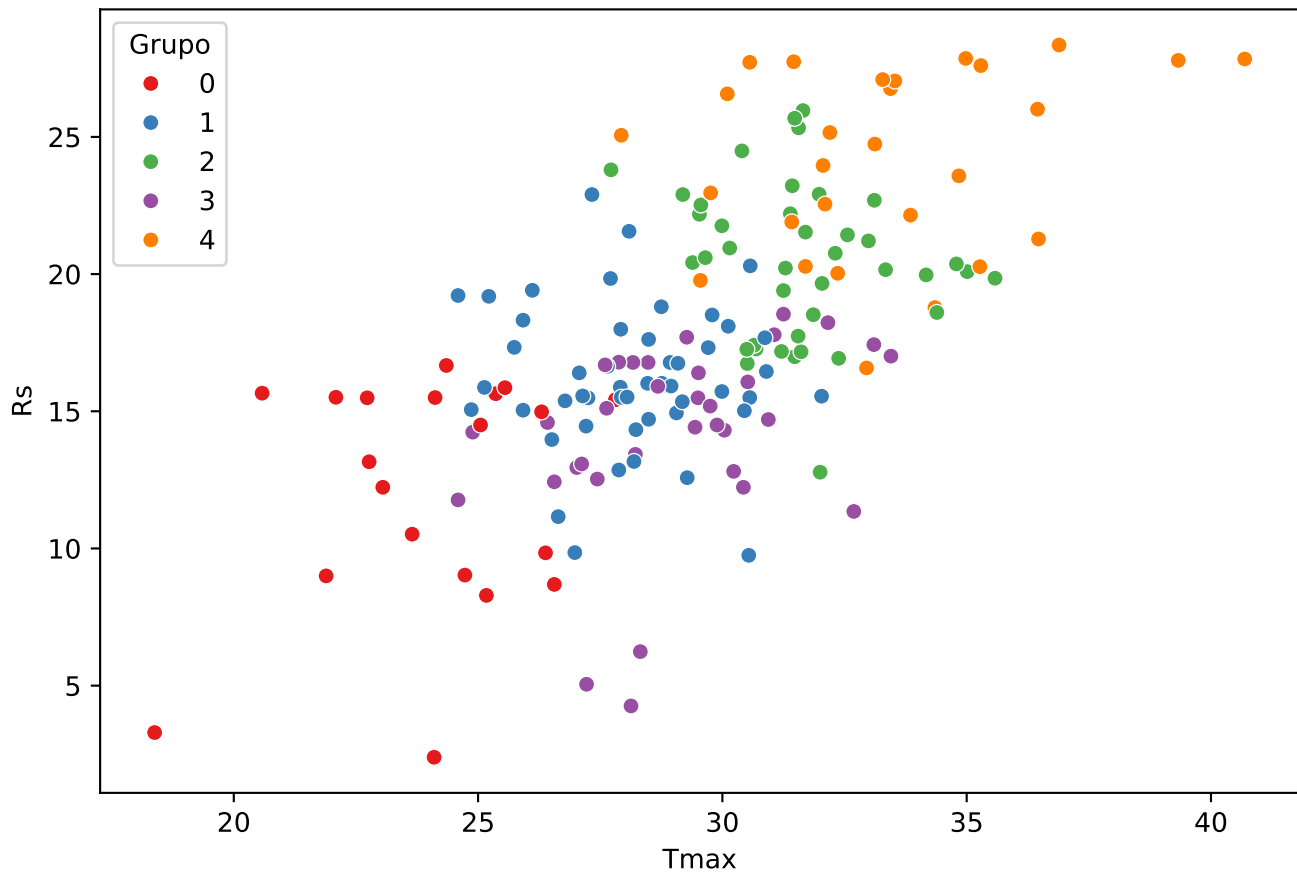
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2013-2014)



Etchojoa — 2014-2015

Días del ciclo: 172

ETc total [mm]: 599.8

ETverde total [mm]: 35.8

ETazul total [mm]: 564.0

Tmax / Tmin [°C]: 37.6 / 7.6

Etchojoa — 2014-2015 · Resultados y métricas

[Etchojoa 2014-2015] Regresión Lineal ET0 — R^2 : 0.9650 MSE: 0.0429

[Etchojoa 2014-2015] Random Forest ET0 — R^2 : 0.9223 MSE: 0.0951

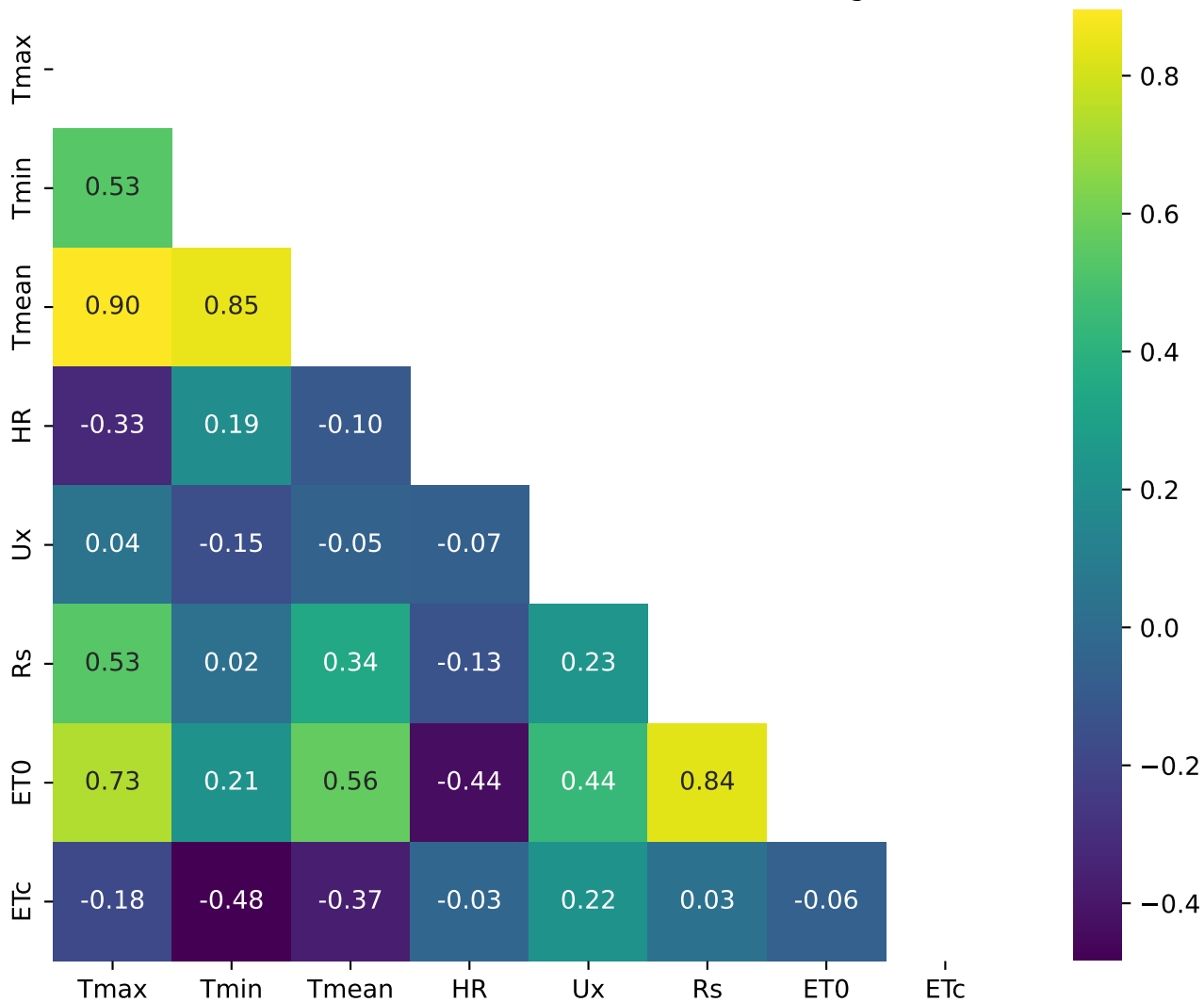
Importancias: {'Tmax': 0.16815219600086667, 'Tmin': 0.02430264040956815, 'HR': 0.07713232154337274, 'Ux': 0.05579688596352674, 'Rs': 0.6746159560826657}

Estadísticas descriptivas por grupo (medias):

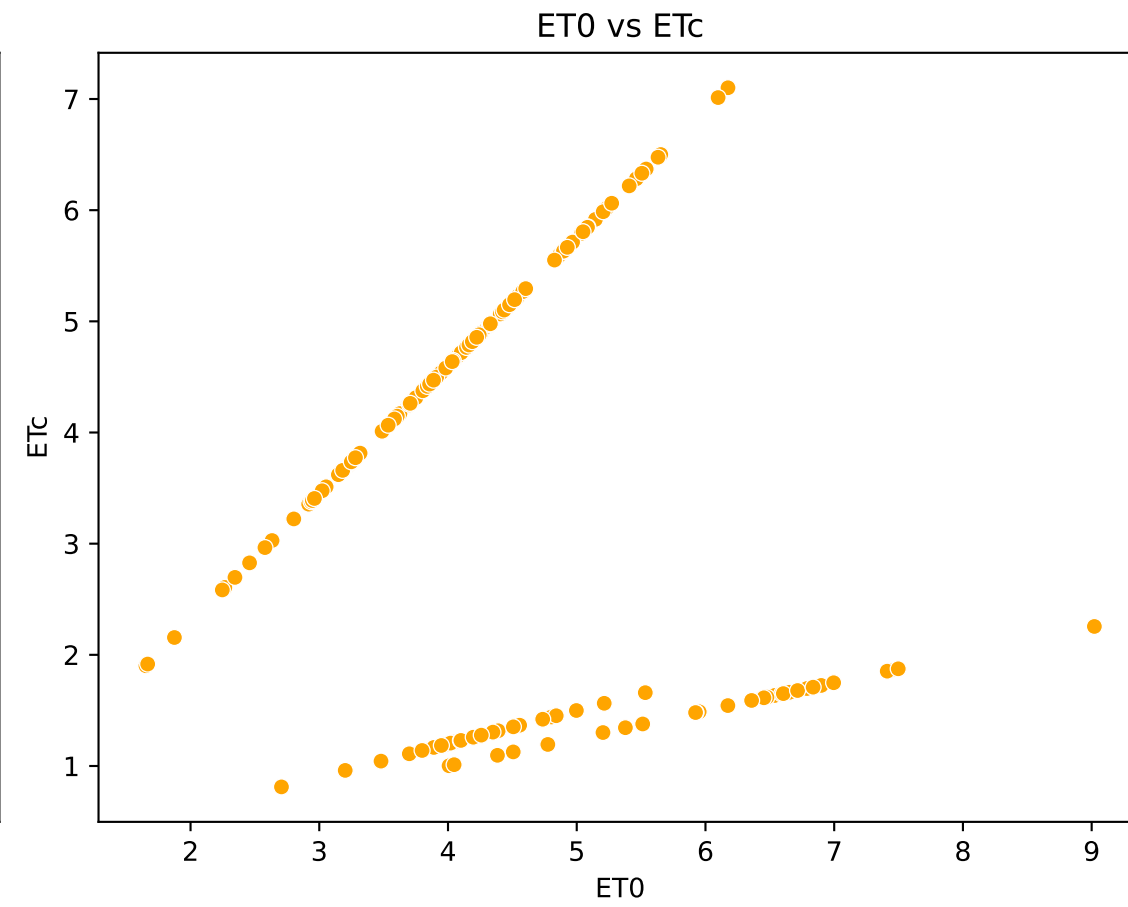
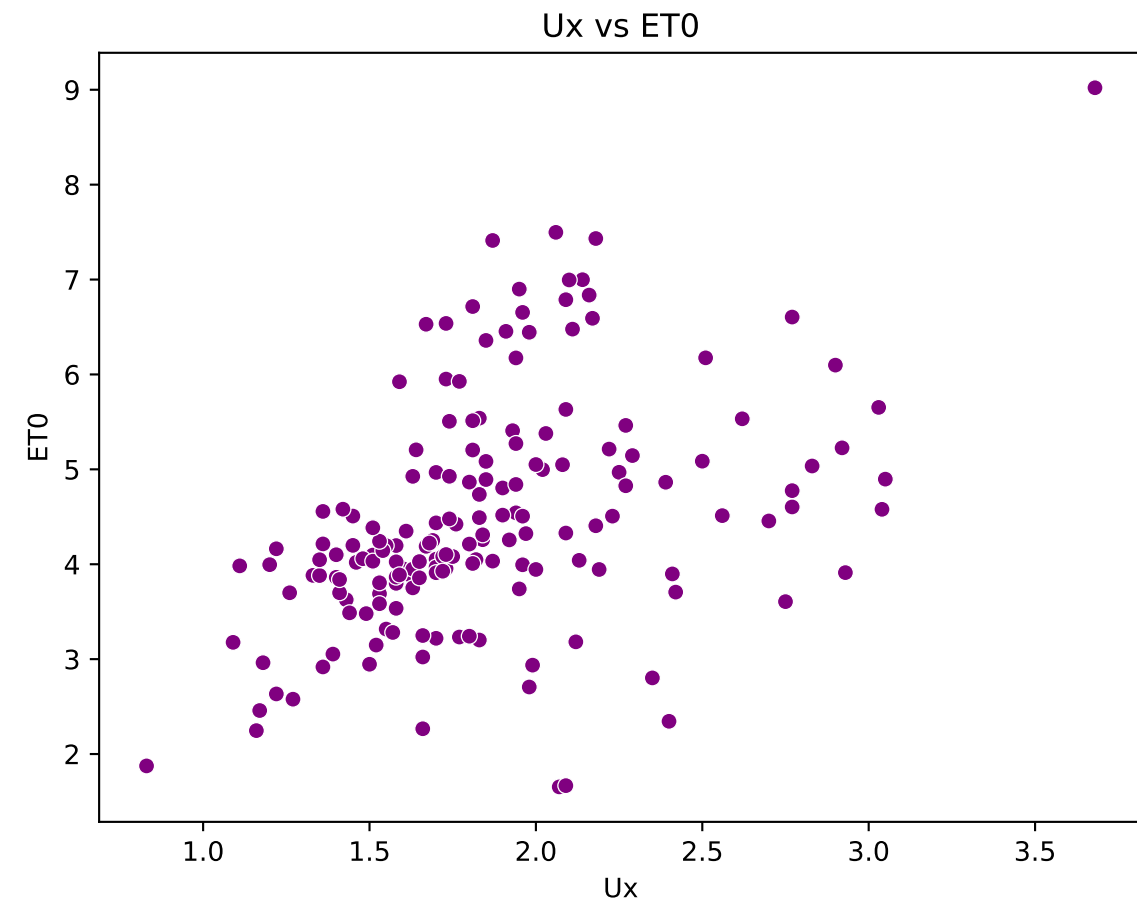
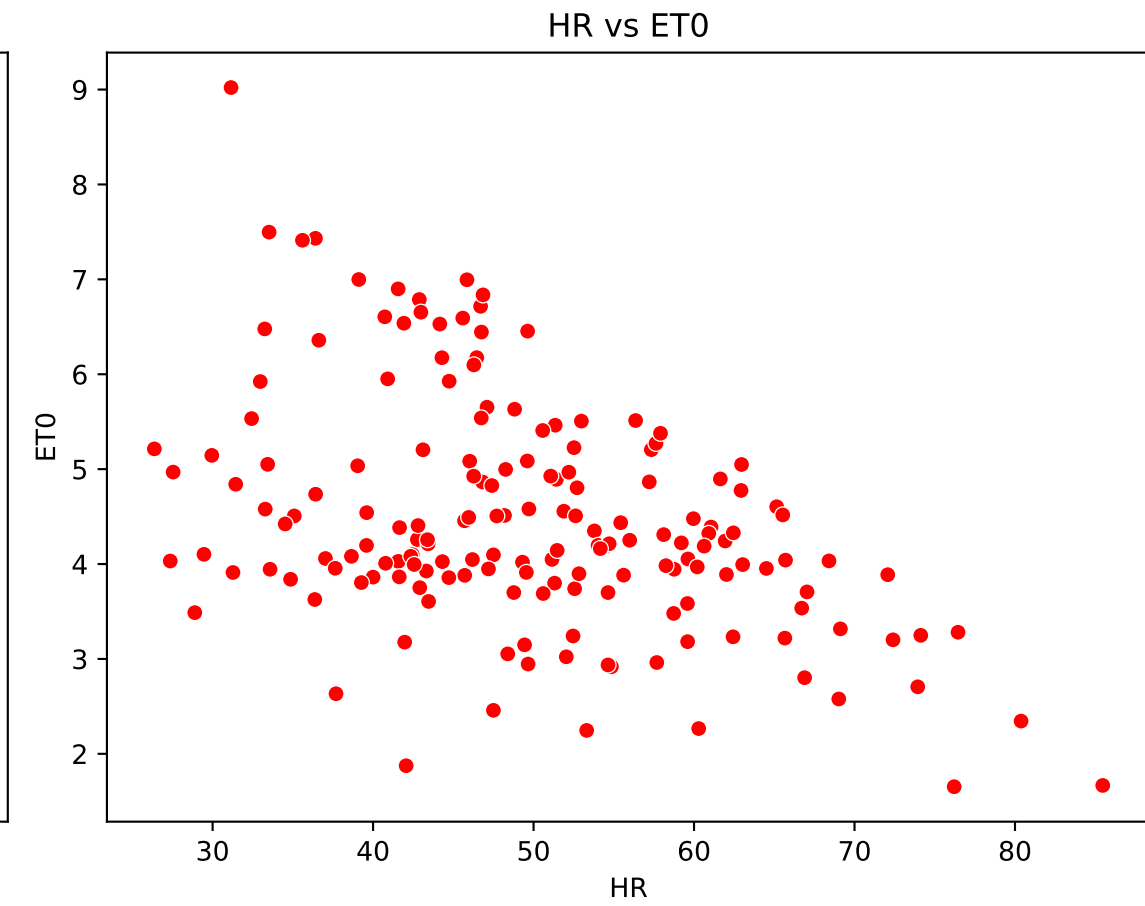
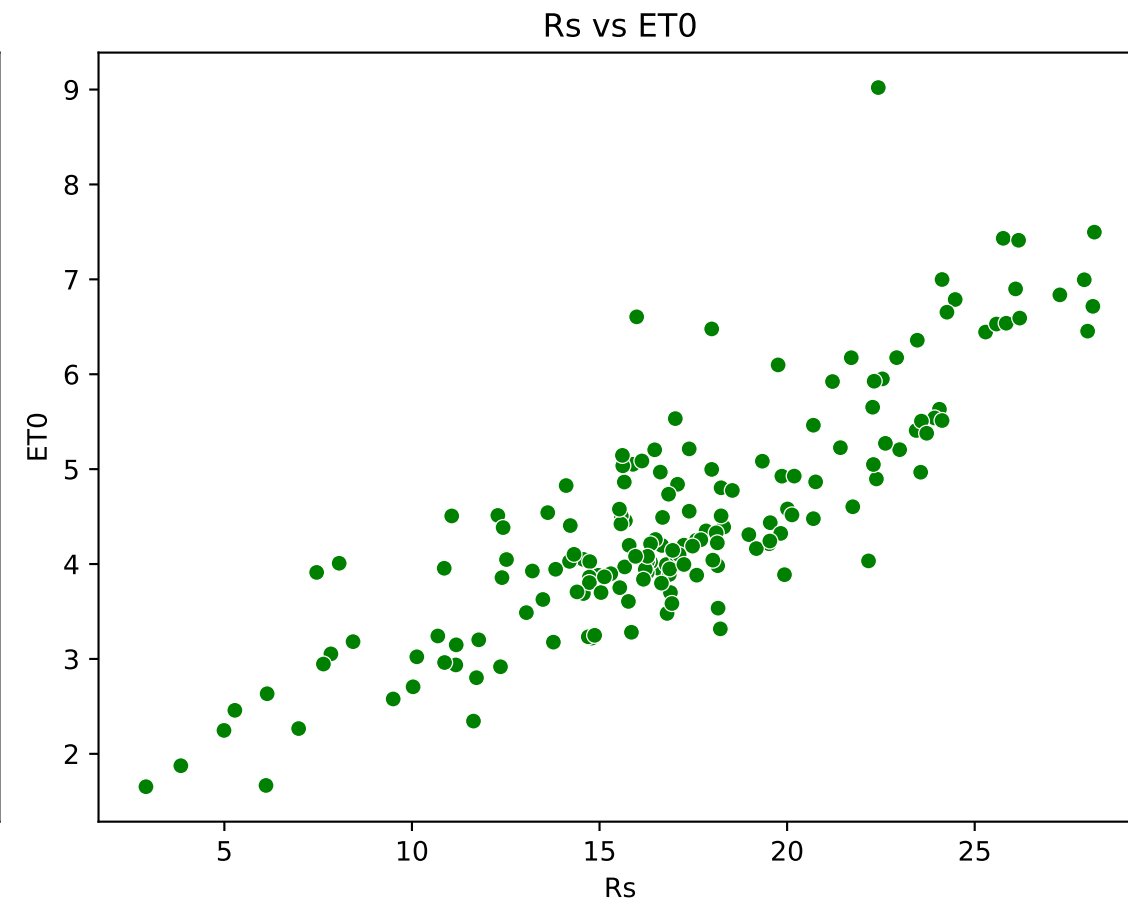
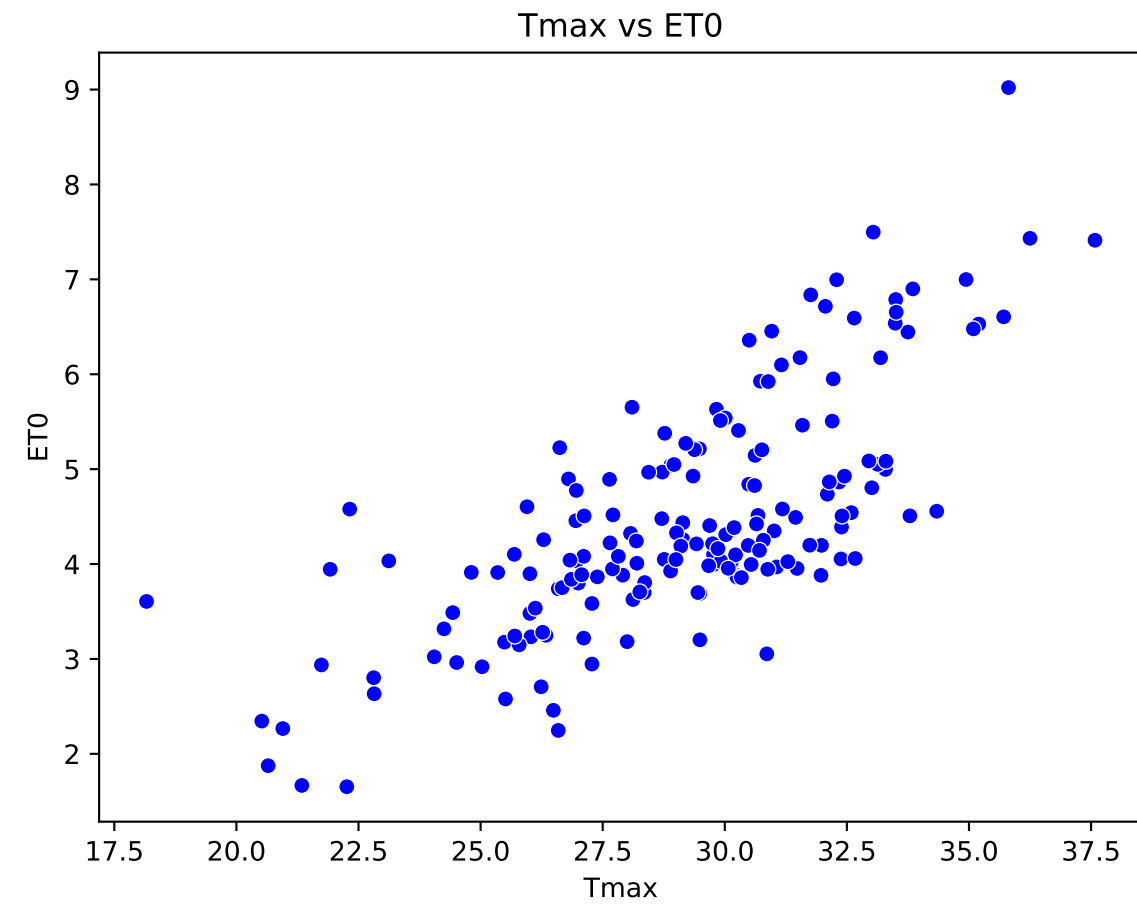
	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	27.791563	12.642812	36.506250	1.963125	15.598437	4.307201	4.188889
1	30.604359	18.392564	50.955385	1.568205	15.402051	4.081795	2.114412
2	29.369787	15.224043	54.975319	2.033191	19.458511	4.720962	5.337660
3	33.106000	18.280800	42.337600	2.042400	24.354000	6.644517	1.661129
4	24.758276	15.432759	60.257586	1.662069	10.798621	2.881959	3.132939

Etchojoa — 2014-2015

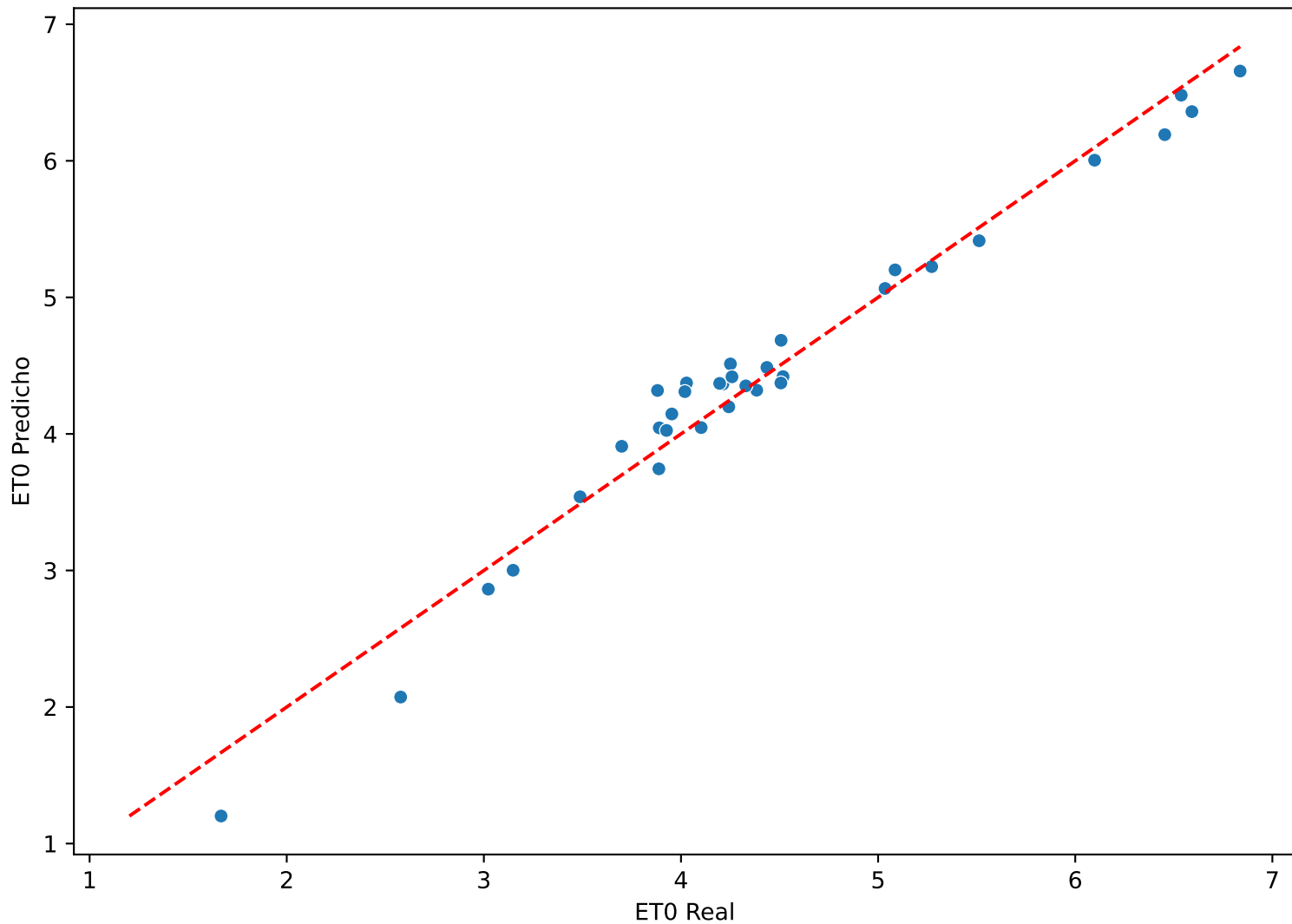
Matriz de Correlación entre Variables Meteorológicas



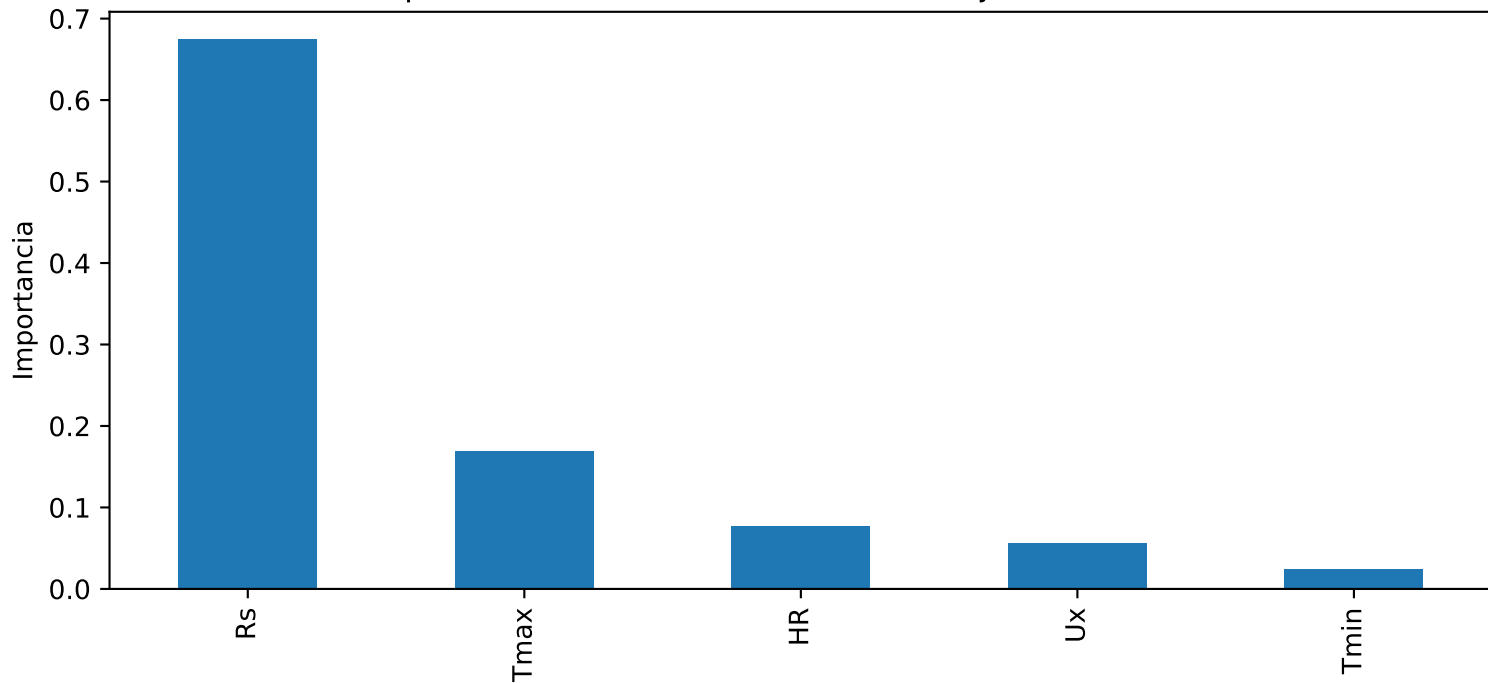
Dispersión — Etchojoa (2014-2015)



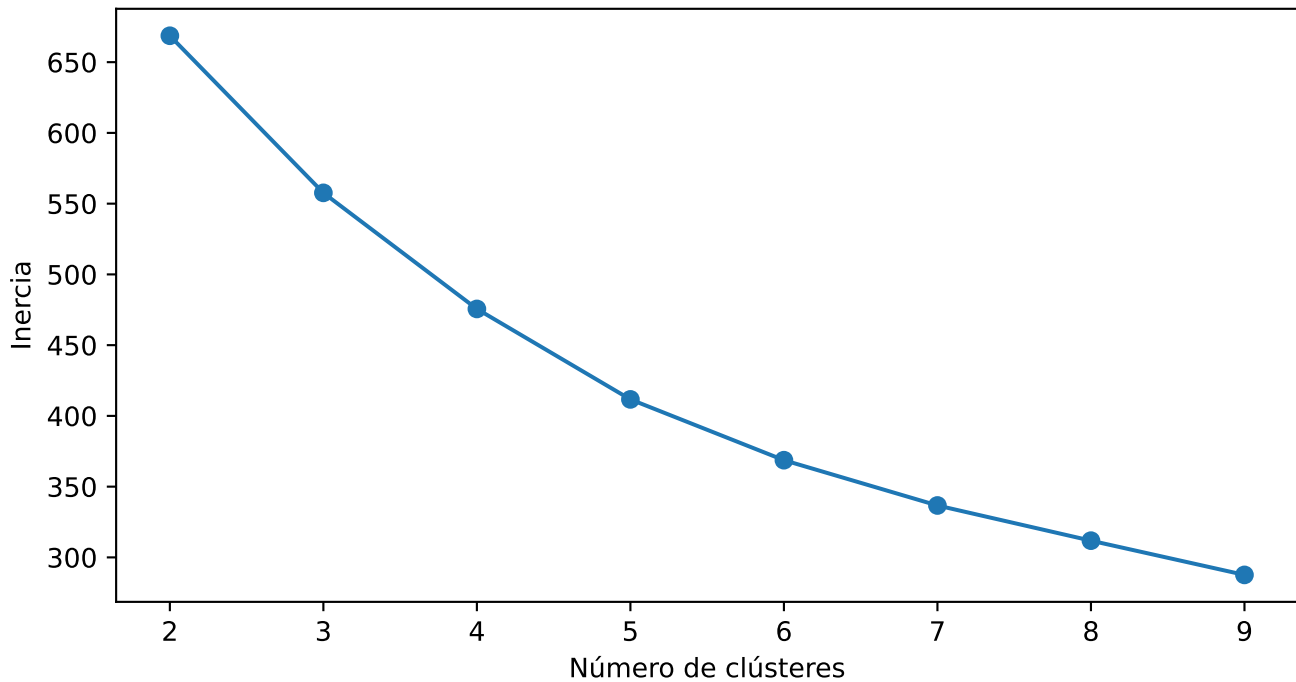
Comparación entre ET0 Real y Predicho — Etchojoa (2014-2015)



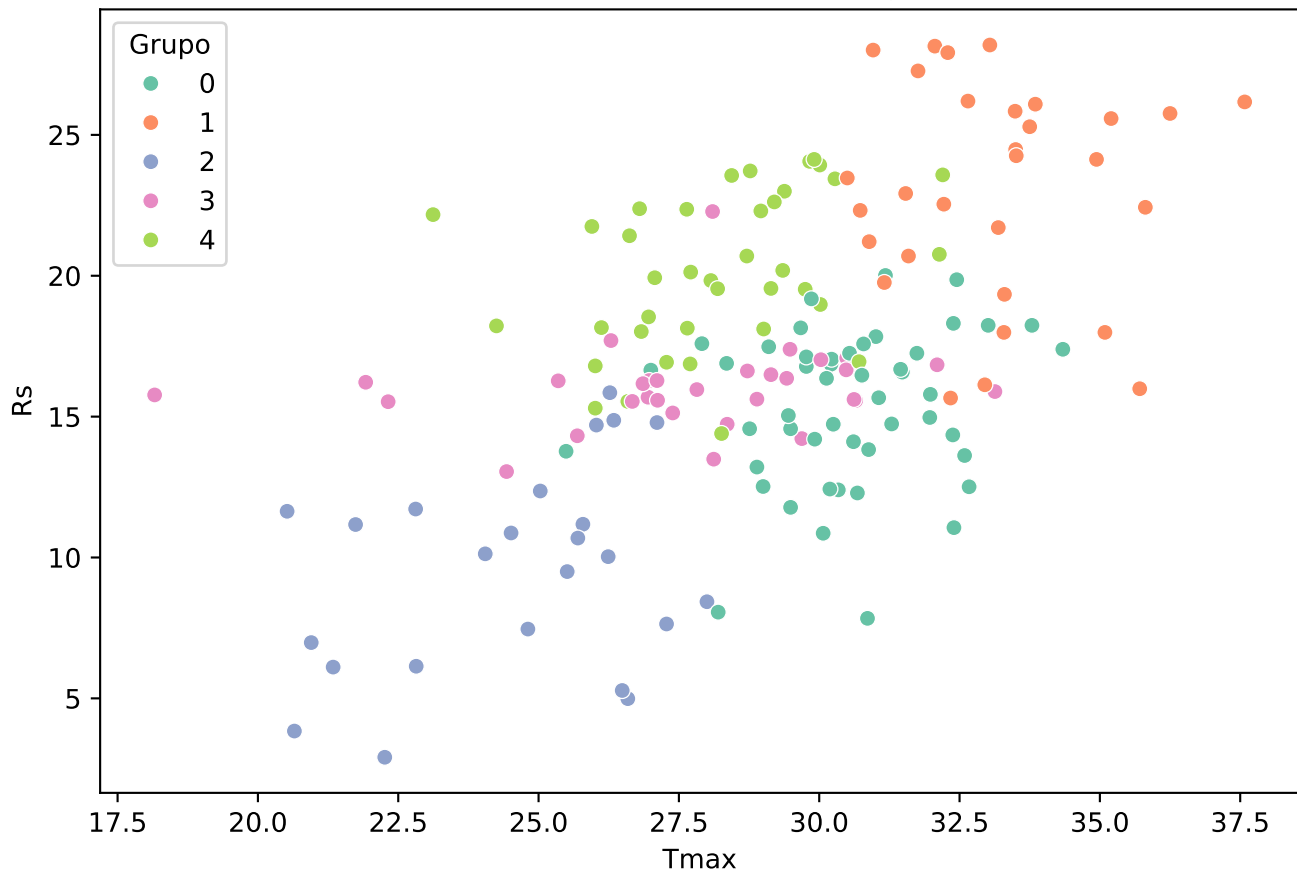
Importancia de variables (RF) — Etchojoa (2014-2015)



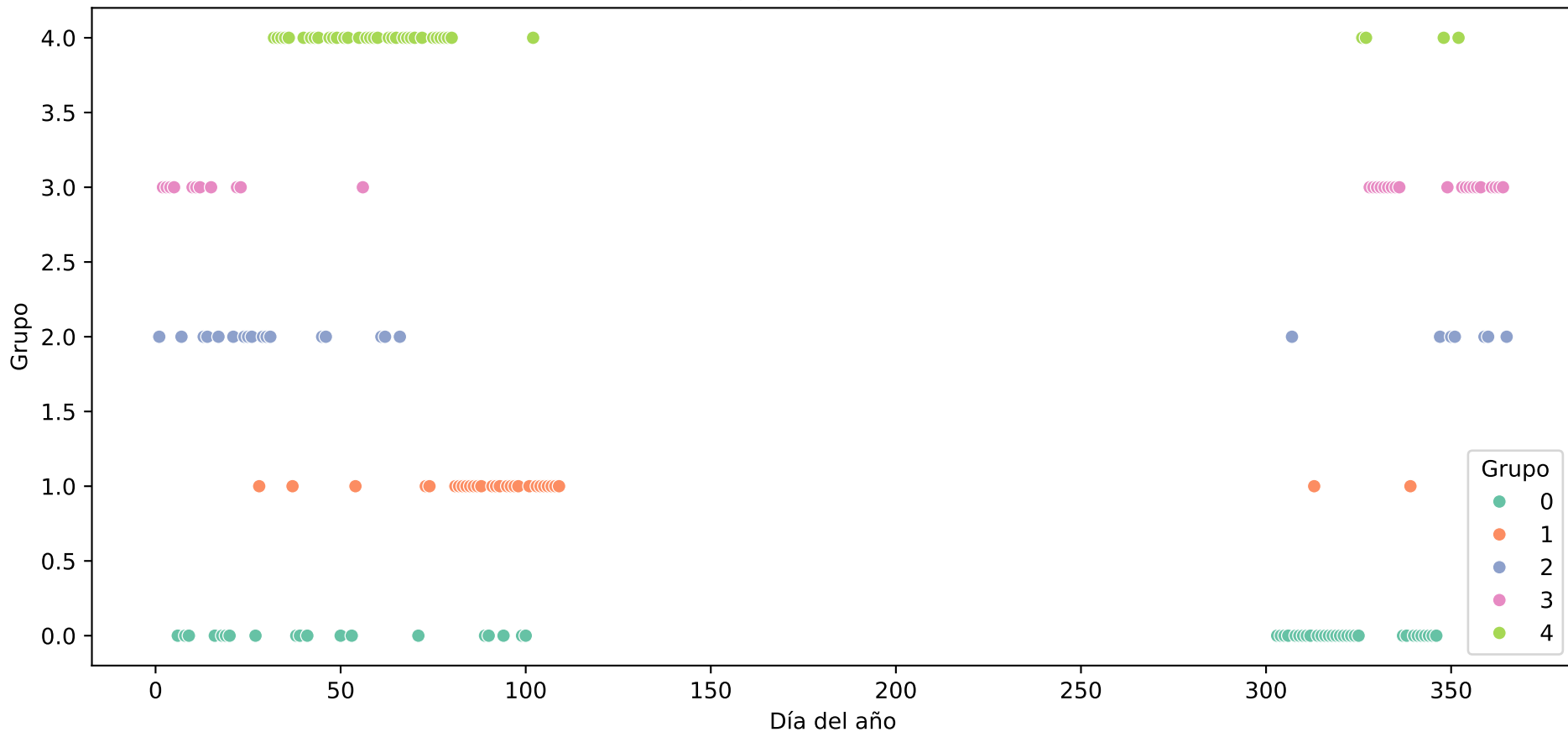
Método del codo



Clasificación de días climáticos — Etchojoa (2014-2015)

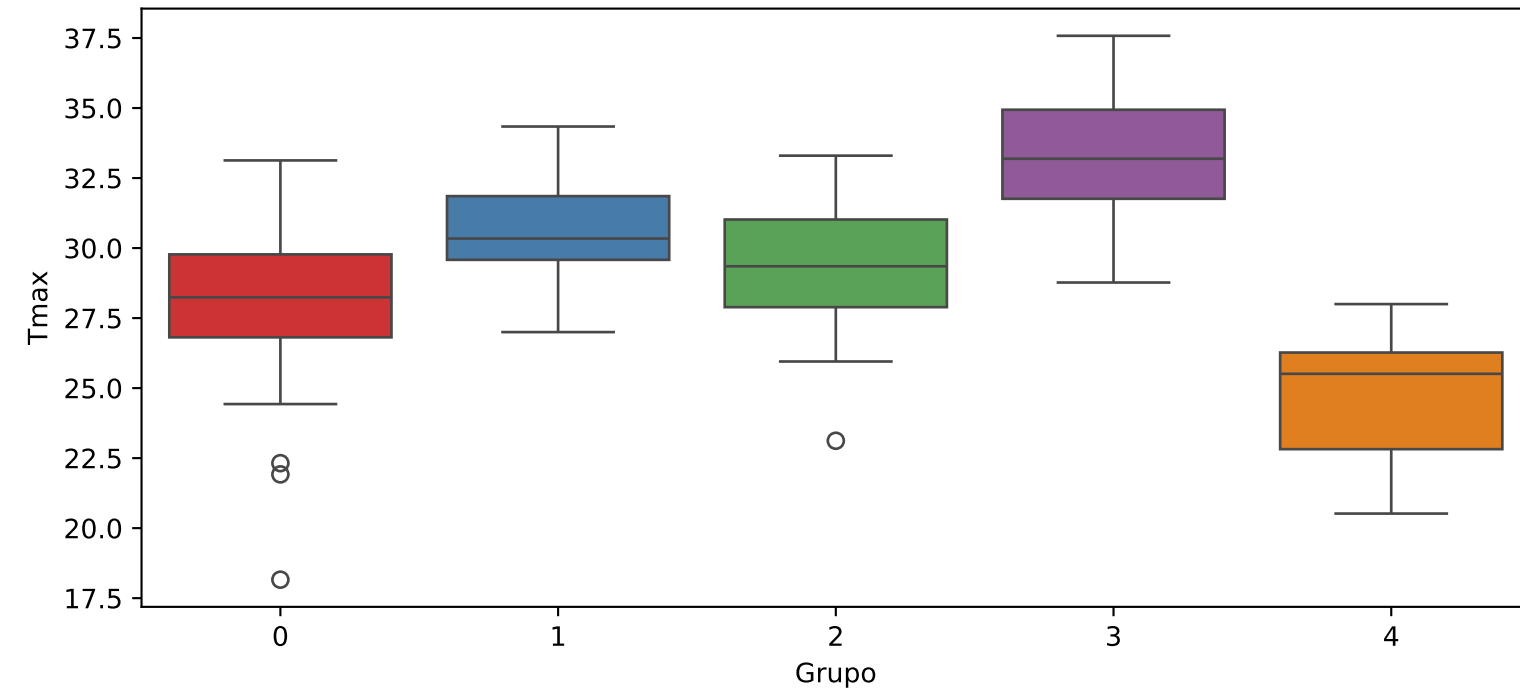


Distribución de días por grupo — Etchojoa (2014-2015)

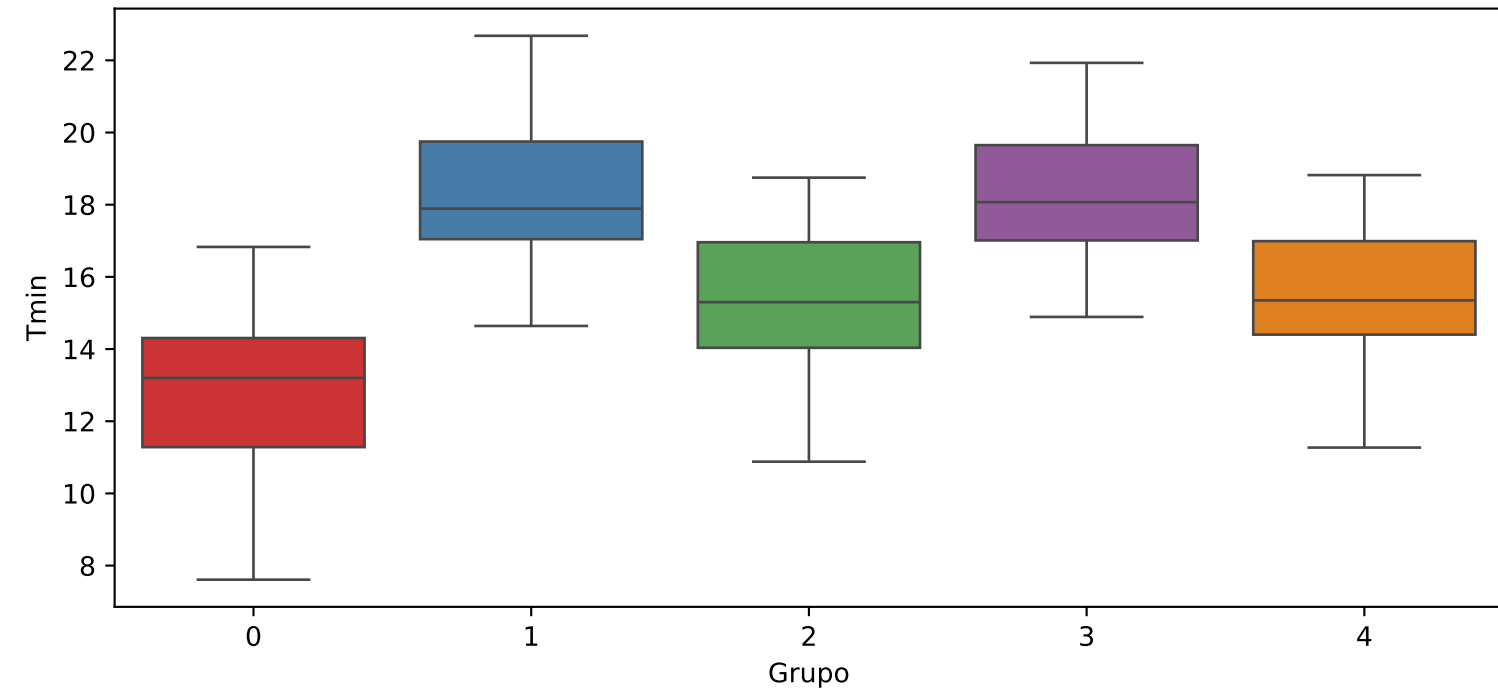


Boxplots por grupo — Etchojoa (2014-2015)

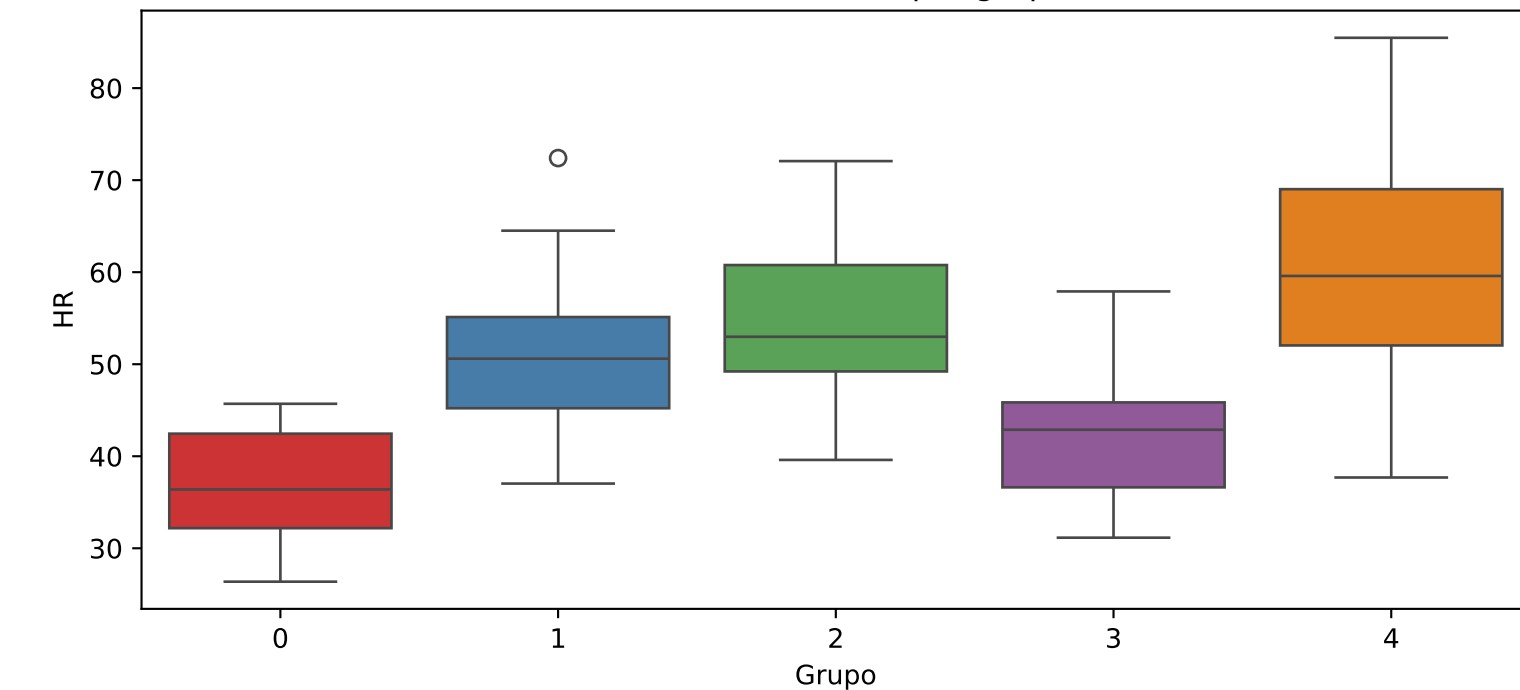
Distribución de Tmax por grupo



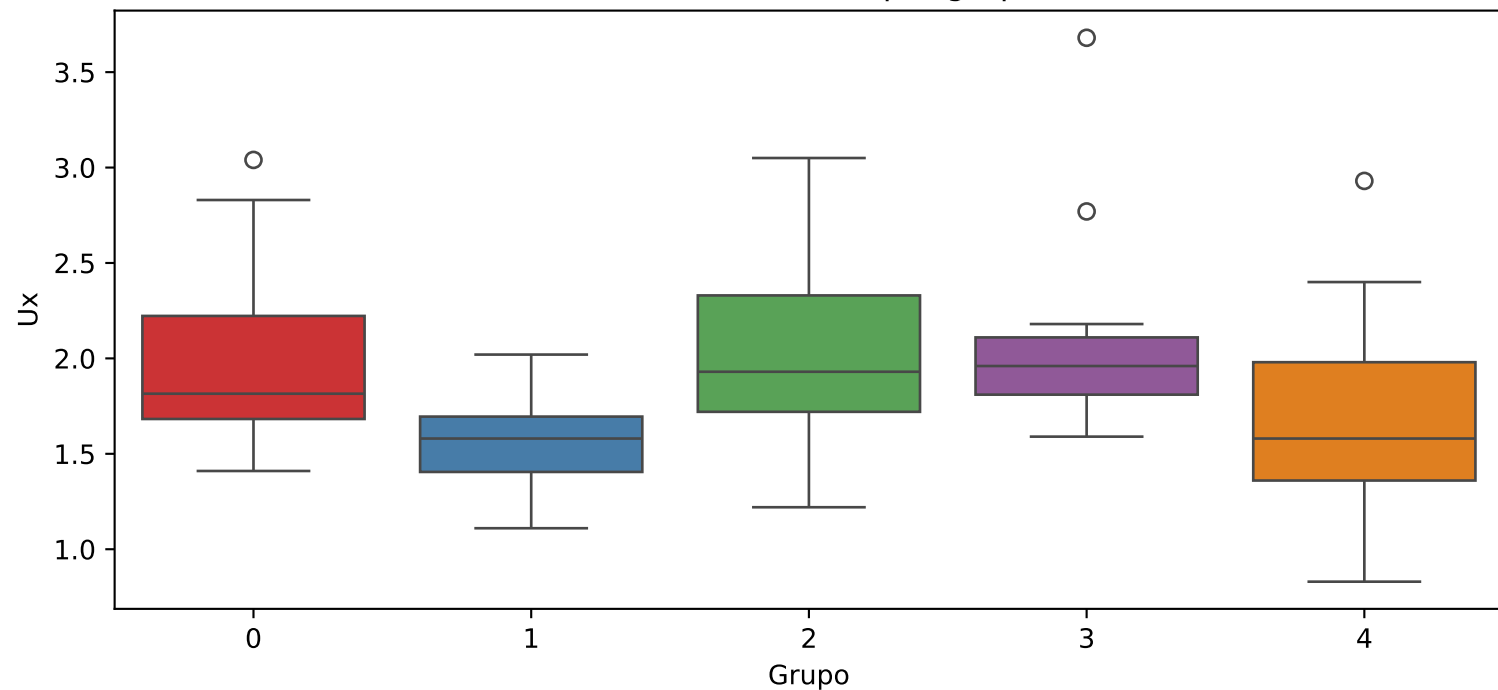
Distribución de Tmin por grupo



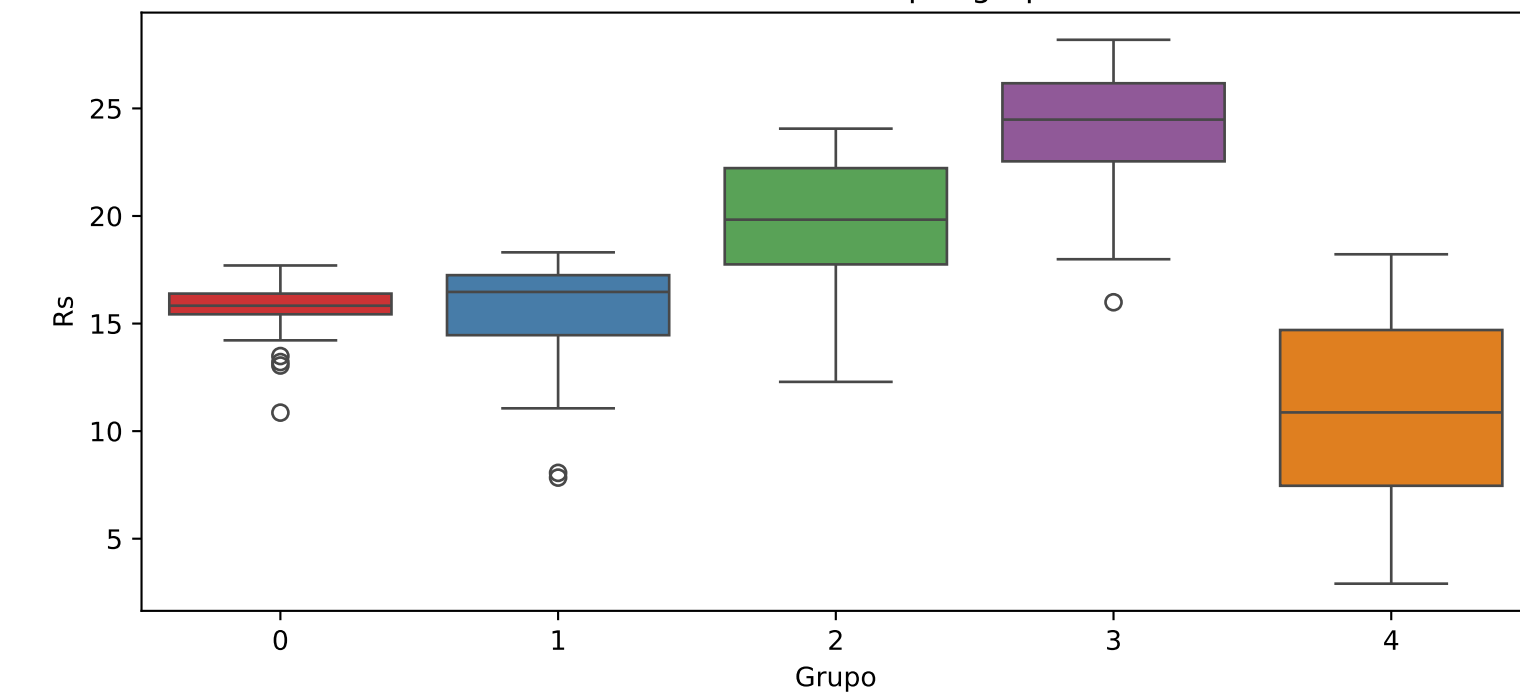
Distribución de HR por grupo



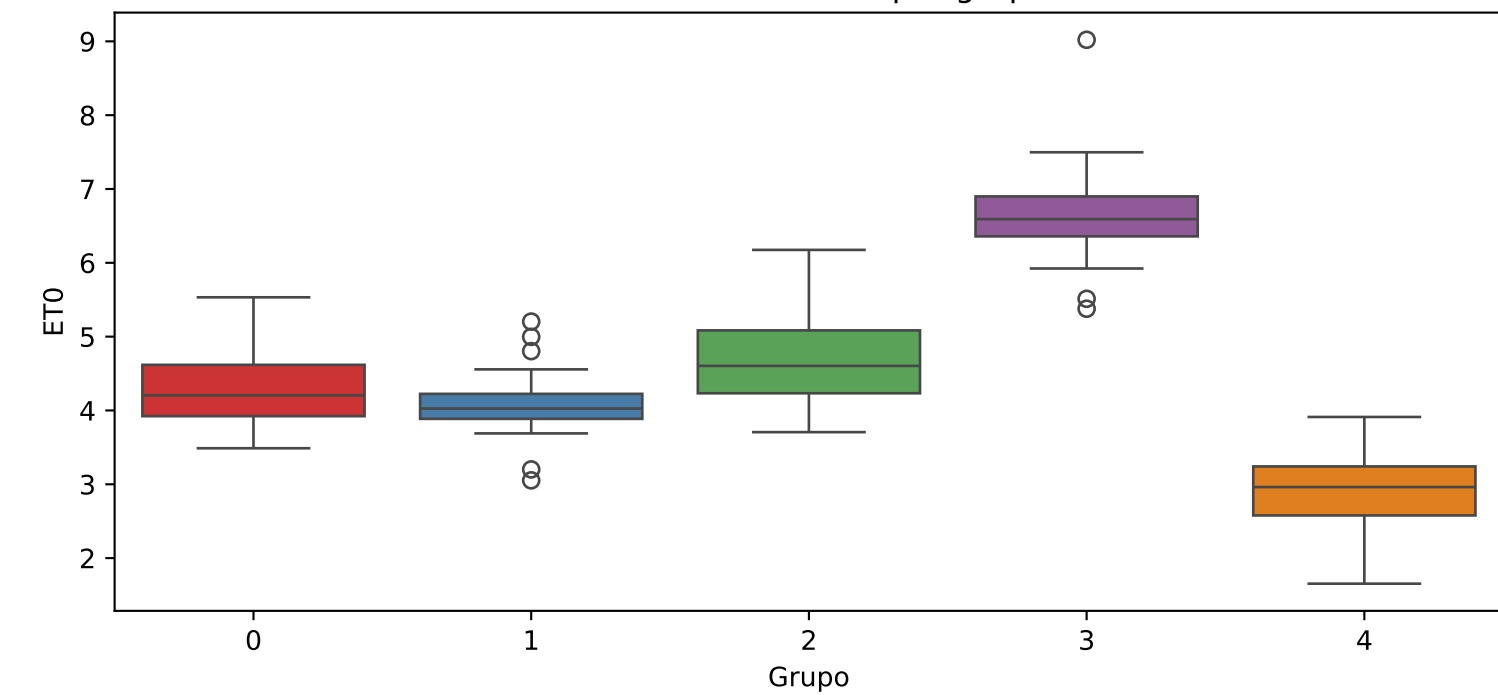
Distribución de Ux por grupo



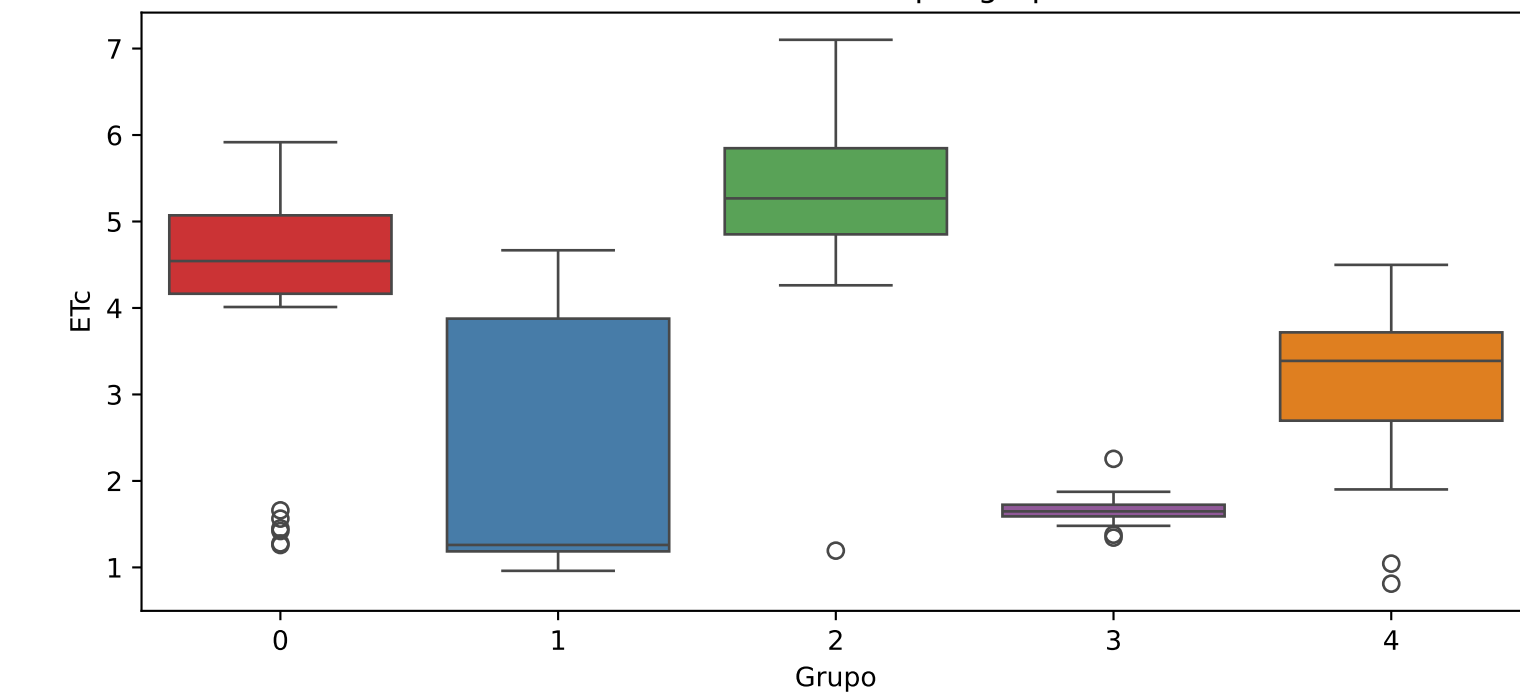
Distribución de Rs por grupo



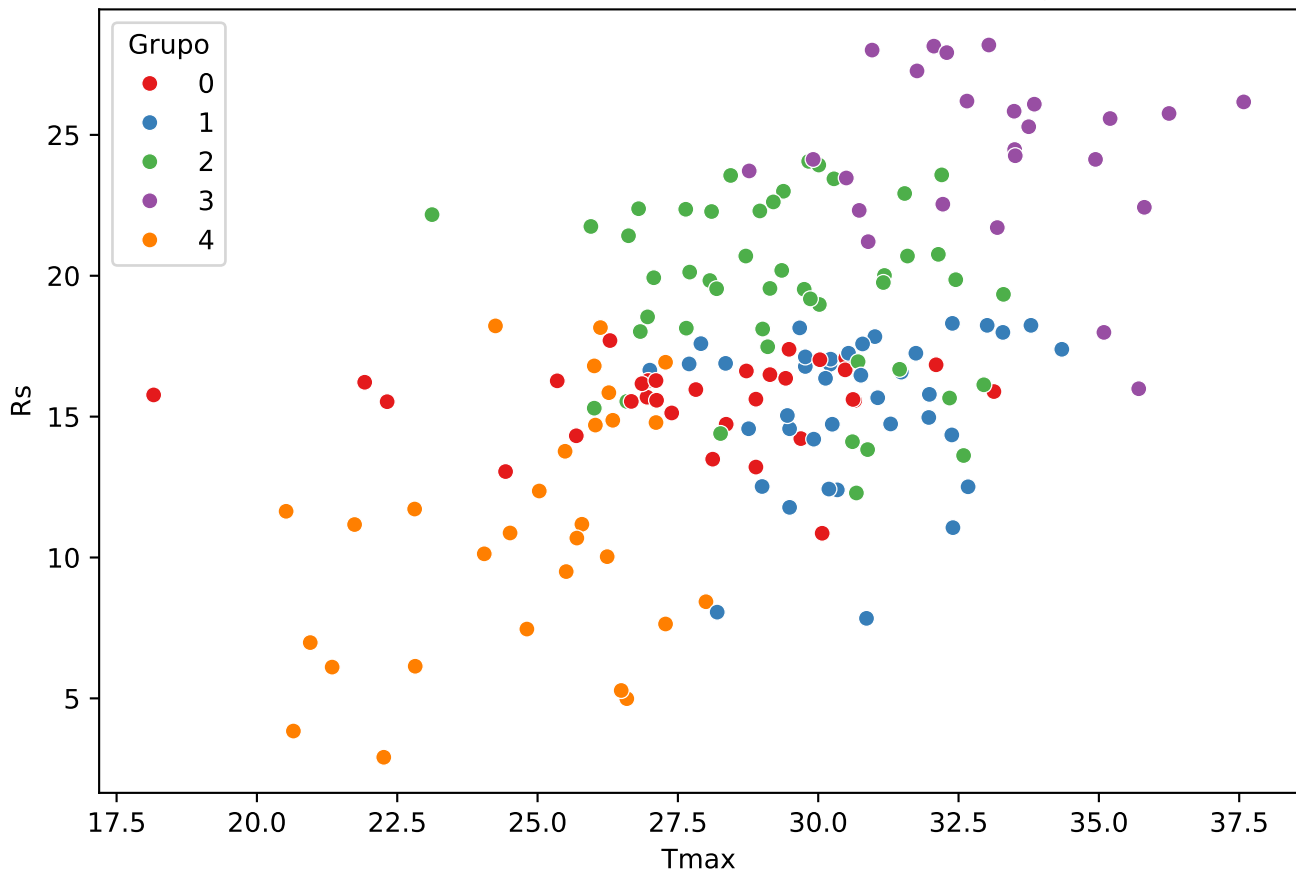
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2014-2015)



Etchojoa — 2015-2016

Días del ciclo: 173

ETc total [mm]: 671.4

ETverde total [mm]: 14.7

ETazul total [mm]: 656.7

Tmax / Tmin [°C]: 36.2 / 4.7

Etchojoa — 2015-2016 · Resultados y métricas

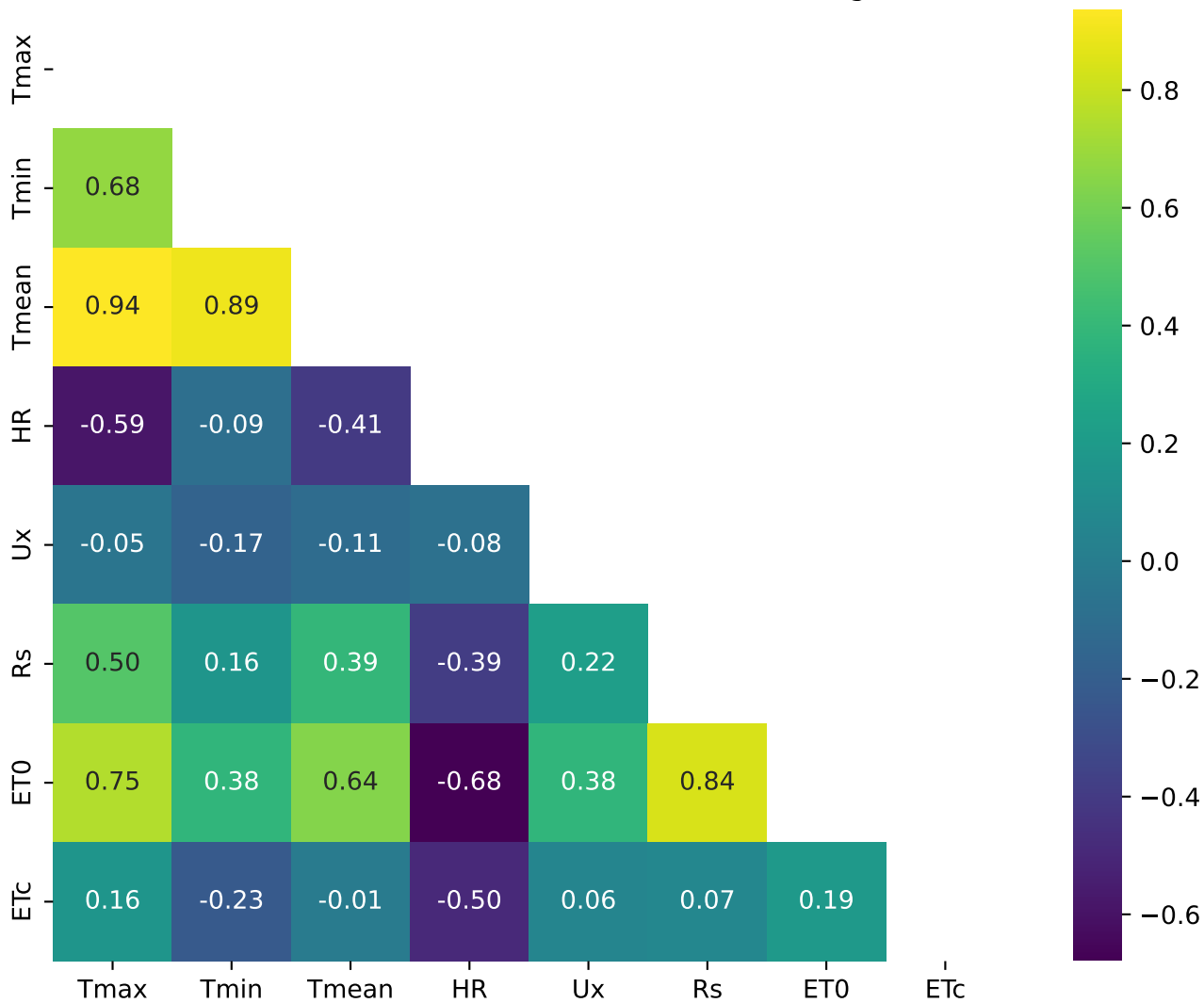
[Etchojoa 2015-2016] Regresión Lineal ET0 — R²: 0.9679 MSE: 0.0695
[Etchojoa 2015-2016] Random Forest ET0 — R²: 0.9362 MSE: 0.1378
Importancias: {'Tmax': 0.14609861494281037, 'Tmin': 0.007688082618271425, 'HR': 0.10402356091466344, 'Ux': 0.024012910374793497, 'Rs': 0.7181768311494613}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	30.649722	17.512222	49.811944	1.775833	15.378333	4.219977	1.893535
1	32.386207	17.054828	39.718966	2.227241	25.973793	6.944068	1.736017
2	32.413000	15.367400	33.235400	1.961200	20.078200	5.748396	6.610656
3	24.787692	10.767692	46.675385	2.609615	16.316154	4.253604	4.249404
4	24.517813	12.479375	56.386562	1.592812	13.664375	3.069762	3.495981

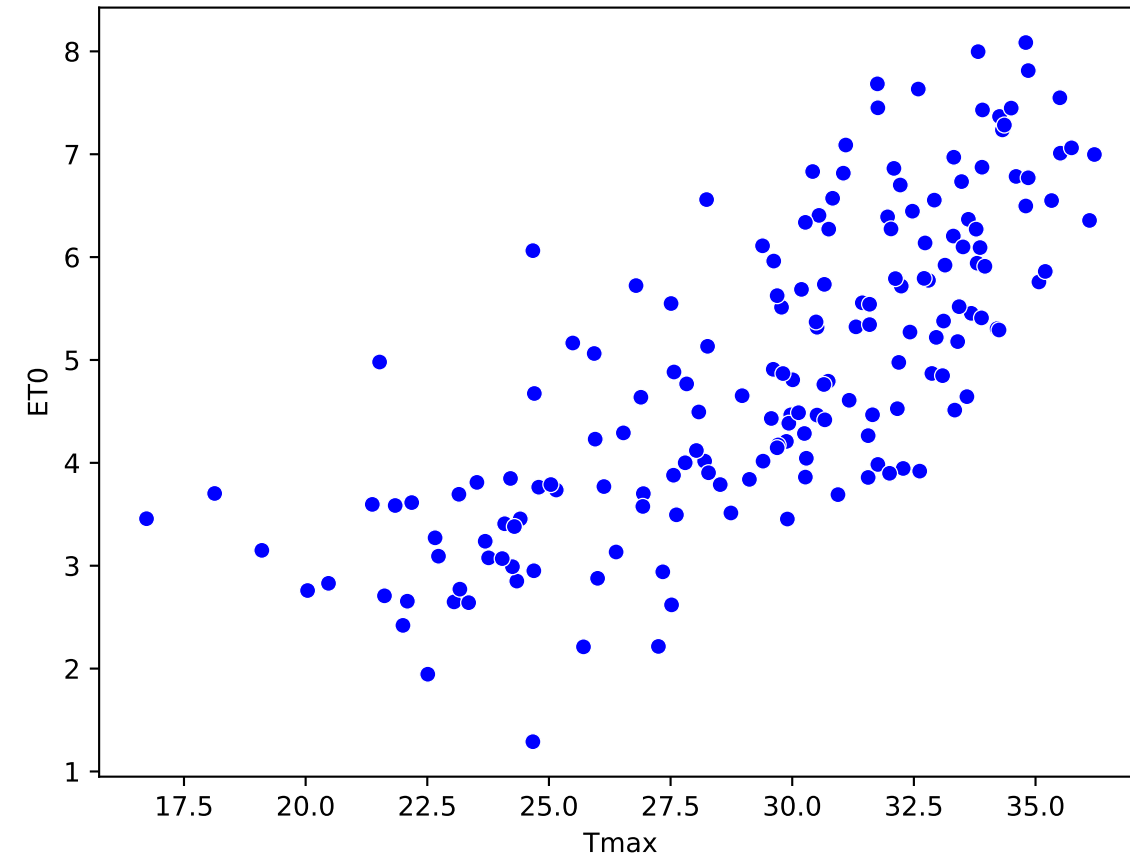
Etchojoa — 2015-2016

Matriz de Correlación entre Variables Meteorológicas

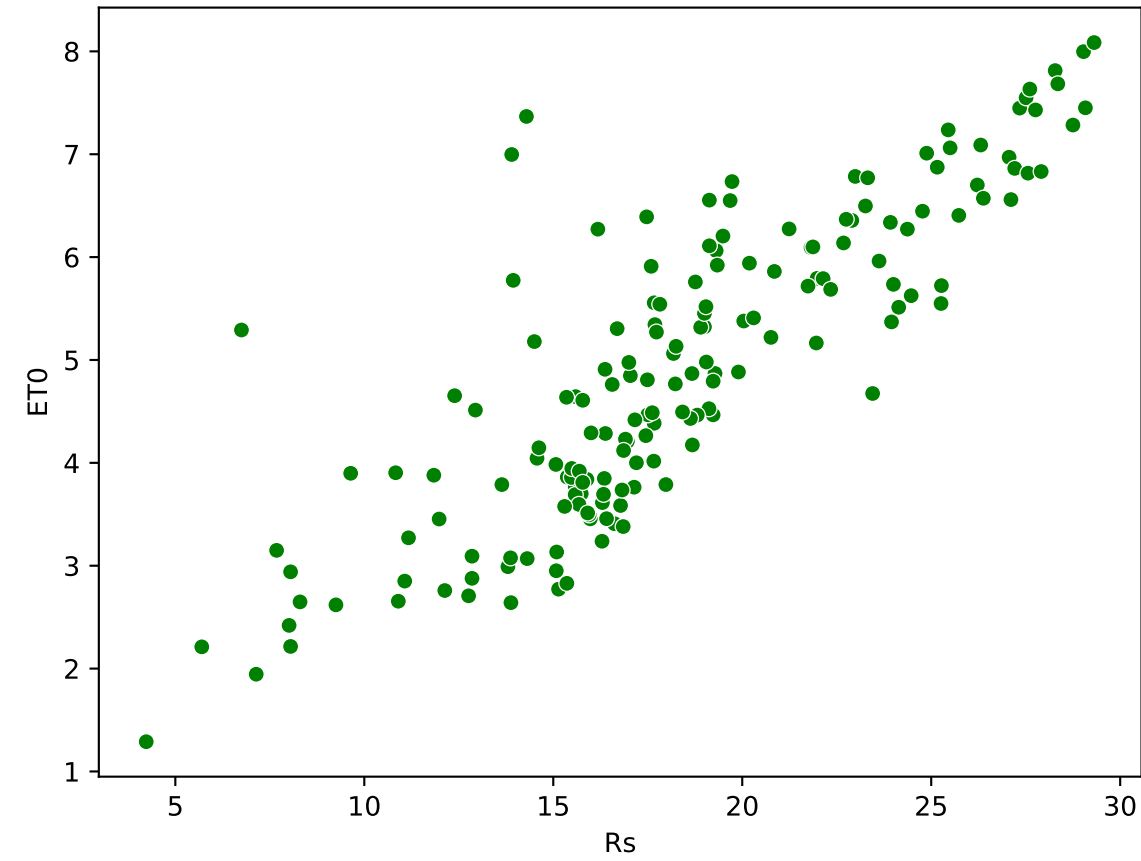


Dispersión — Etchojoa (2015-2016)

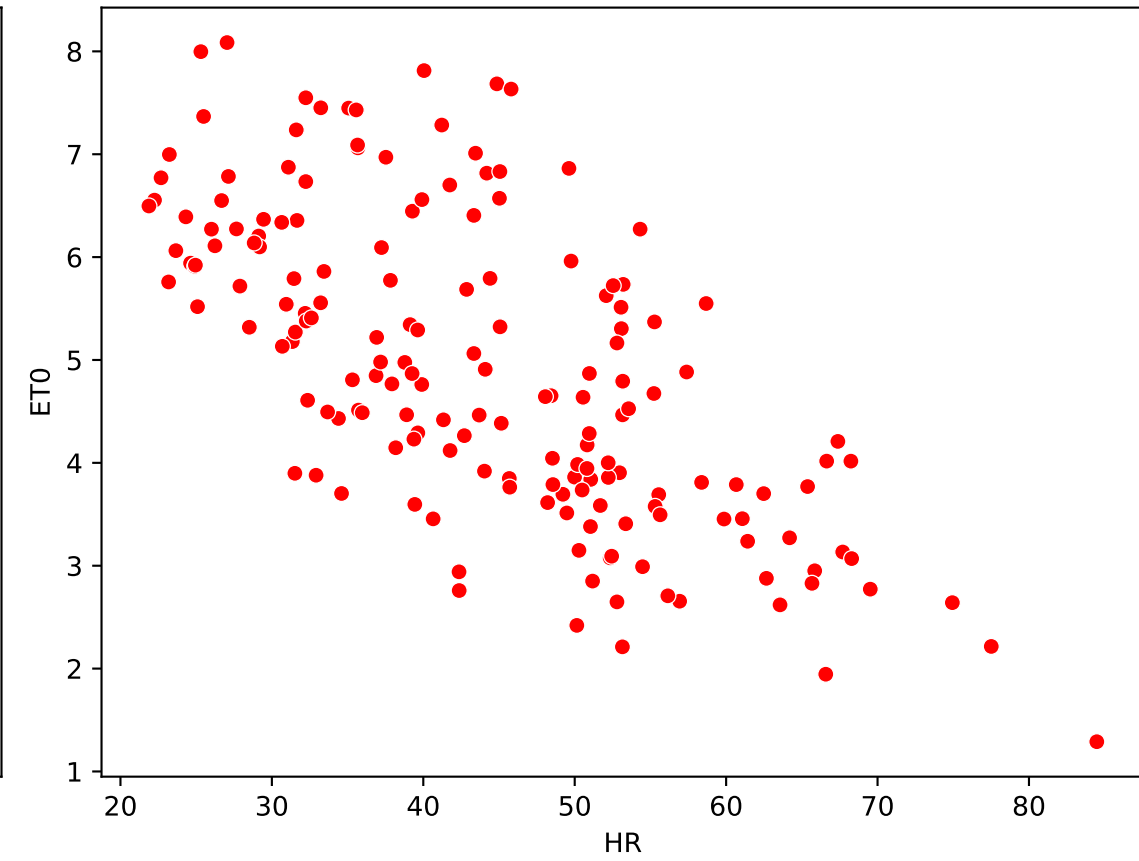
Tmax vs ET0



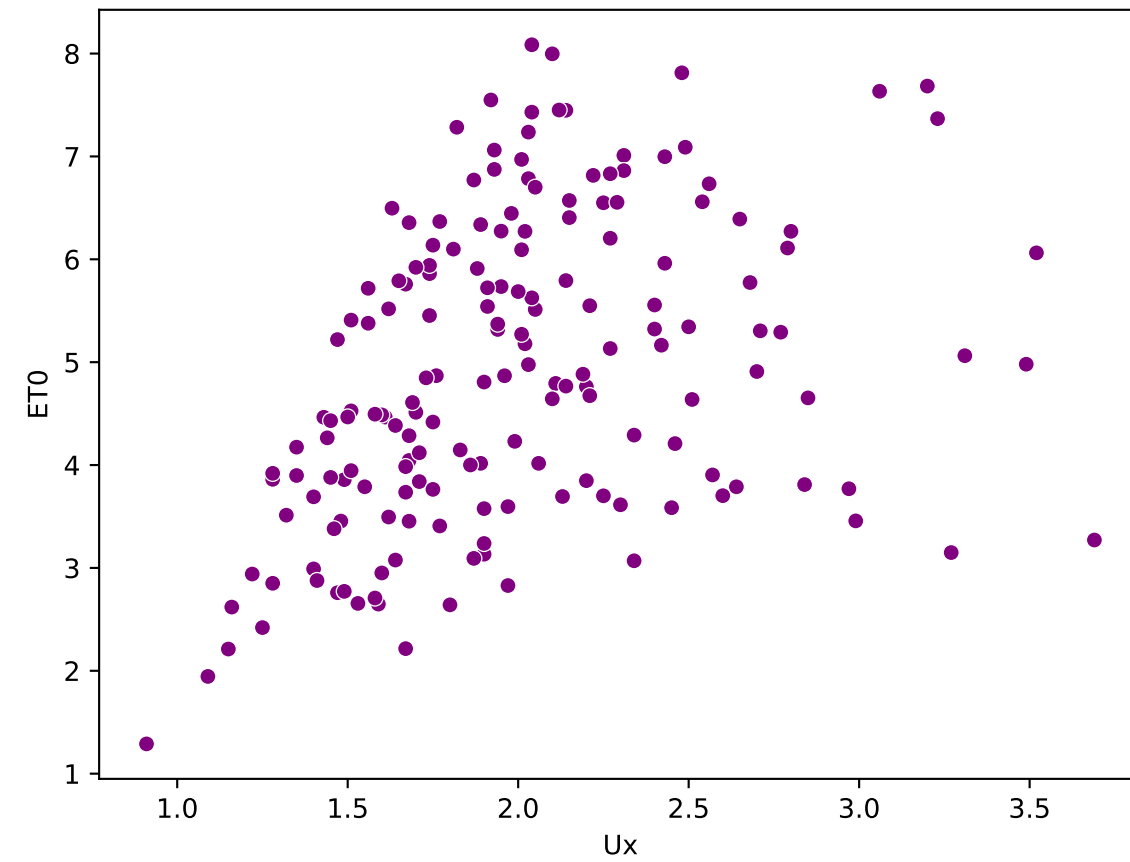
Rs vs ET0



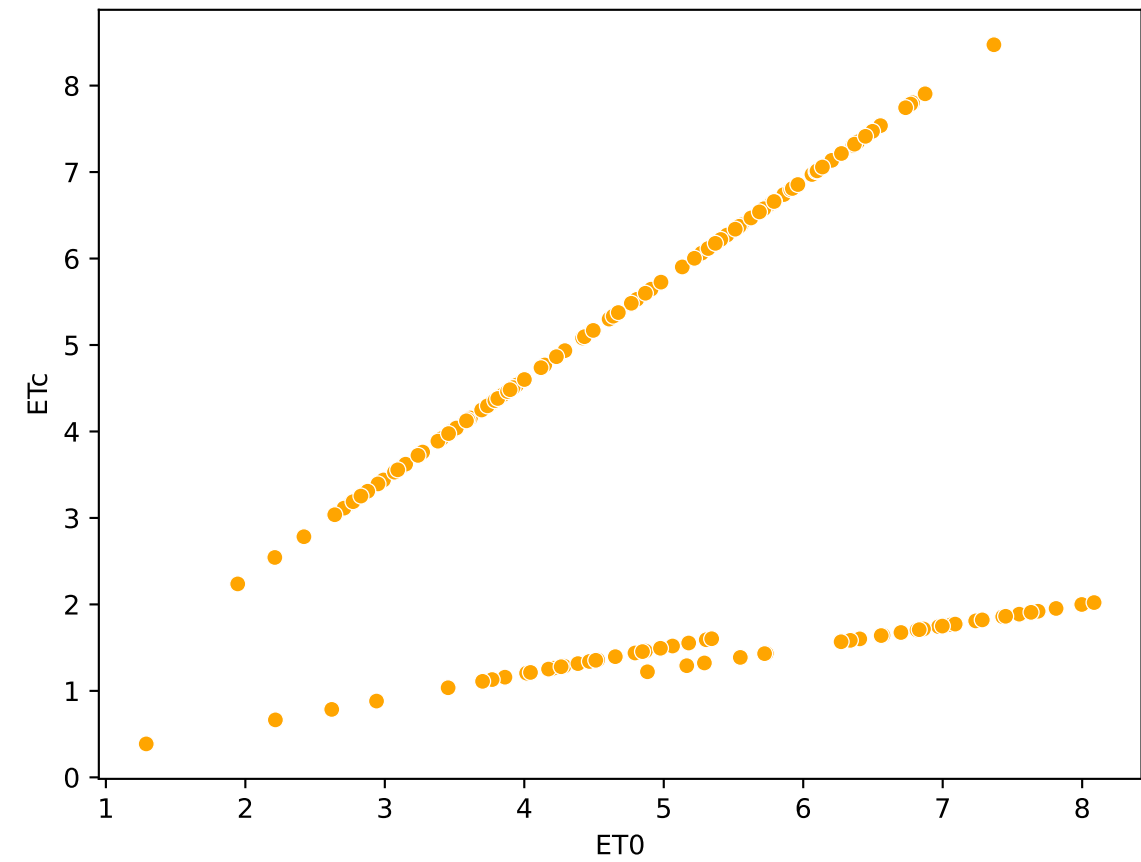
HR vs ET0



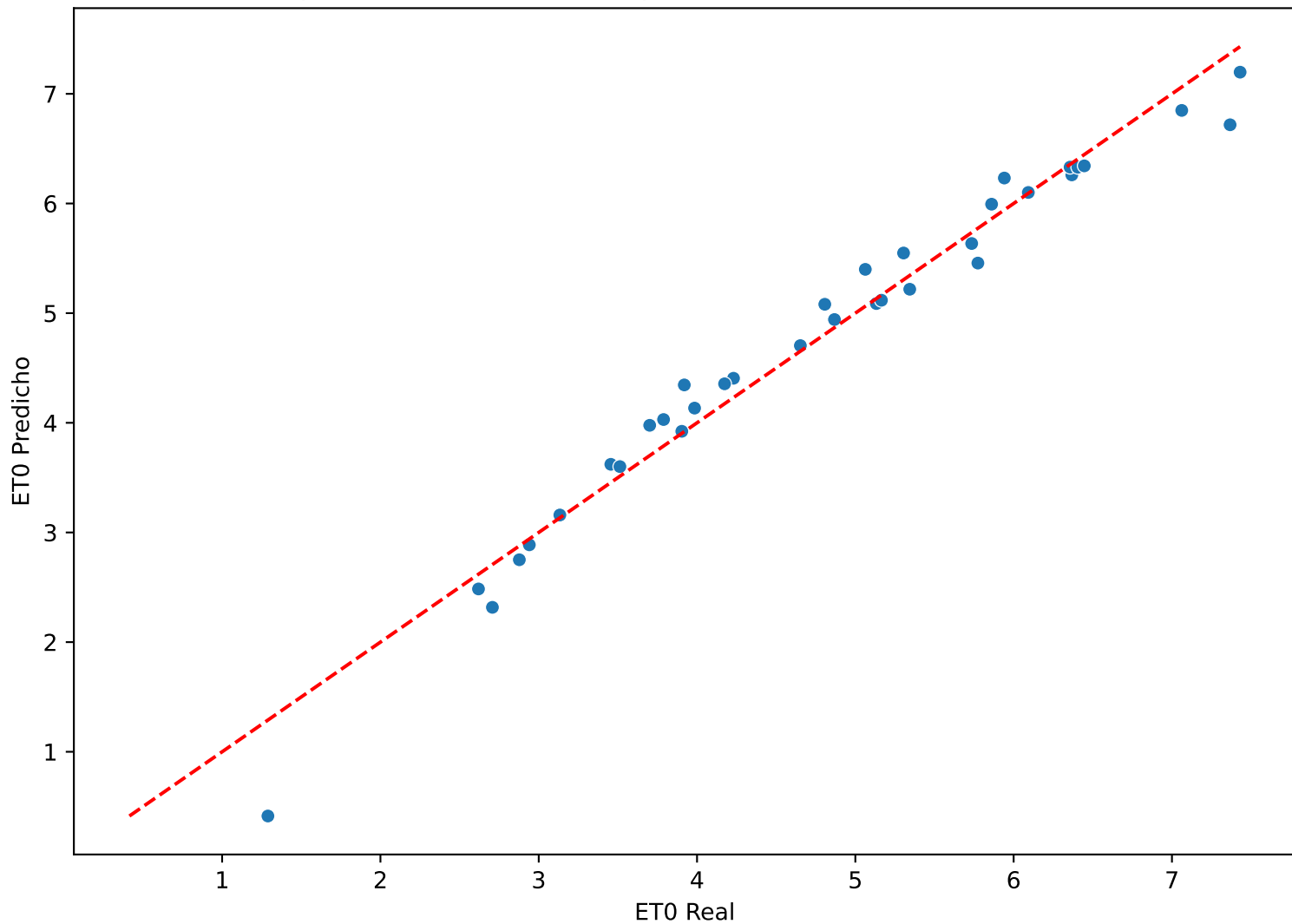
Ux vs ET0



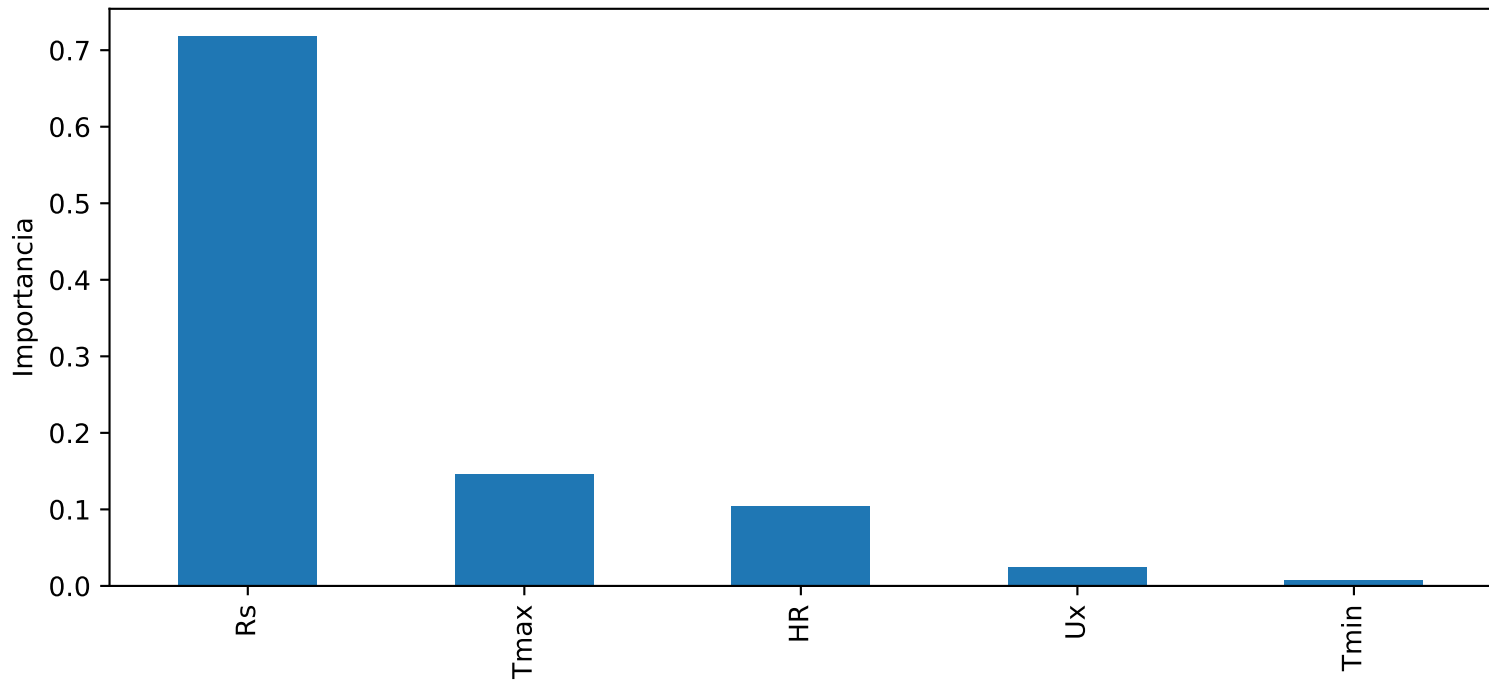
ET0 vs ETc



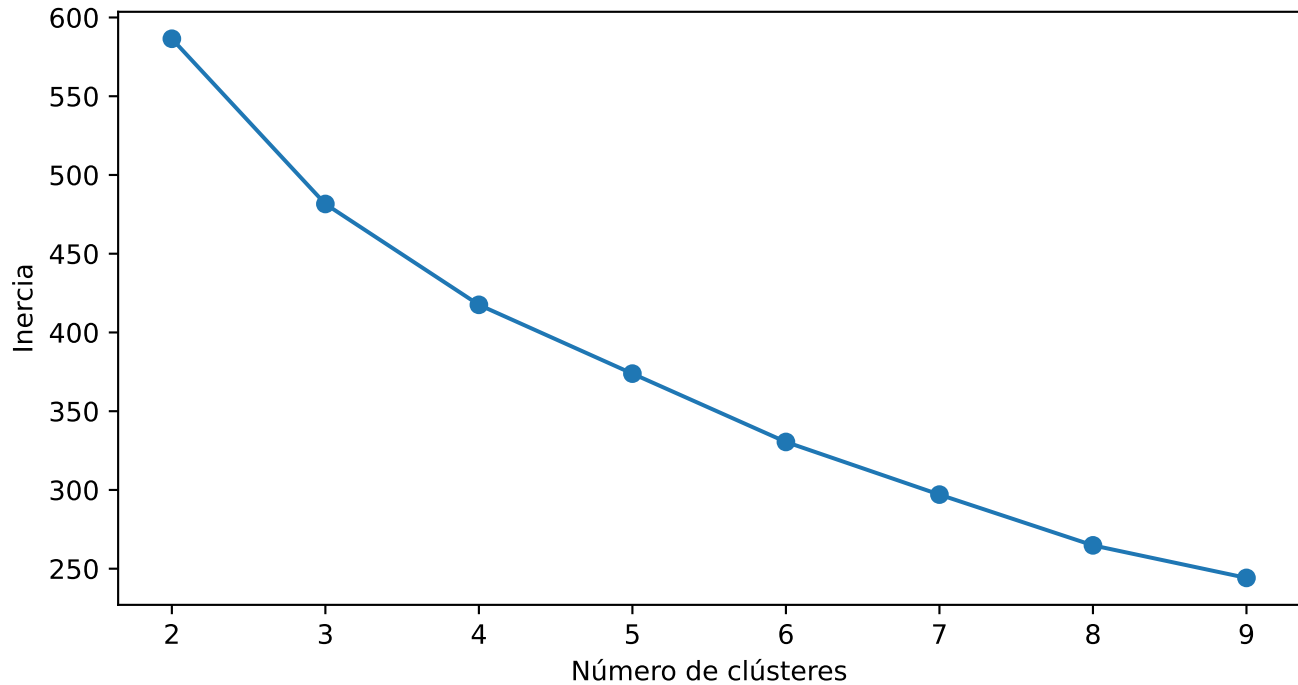
Comparación entre ET0 Real y Predicho — Etchojoa (2015-2016)



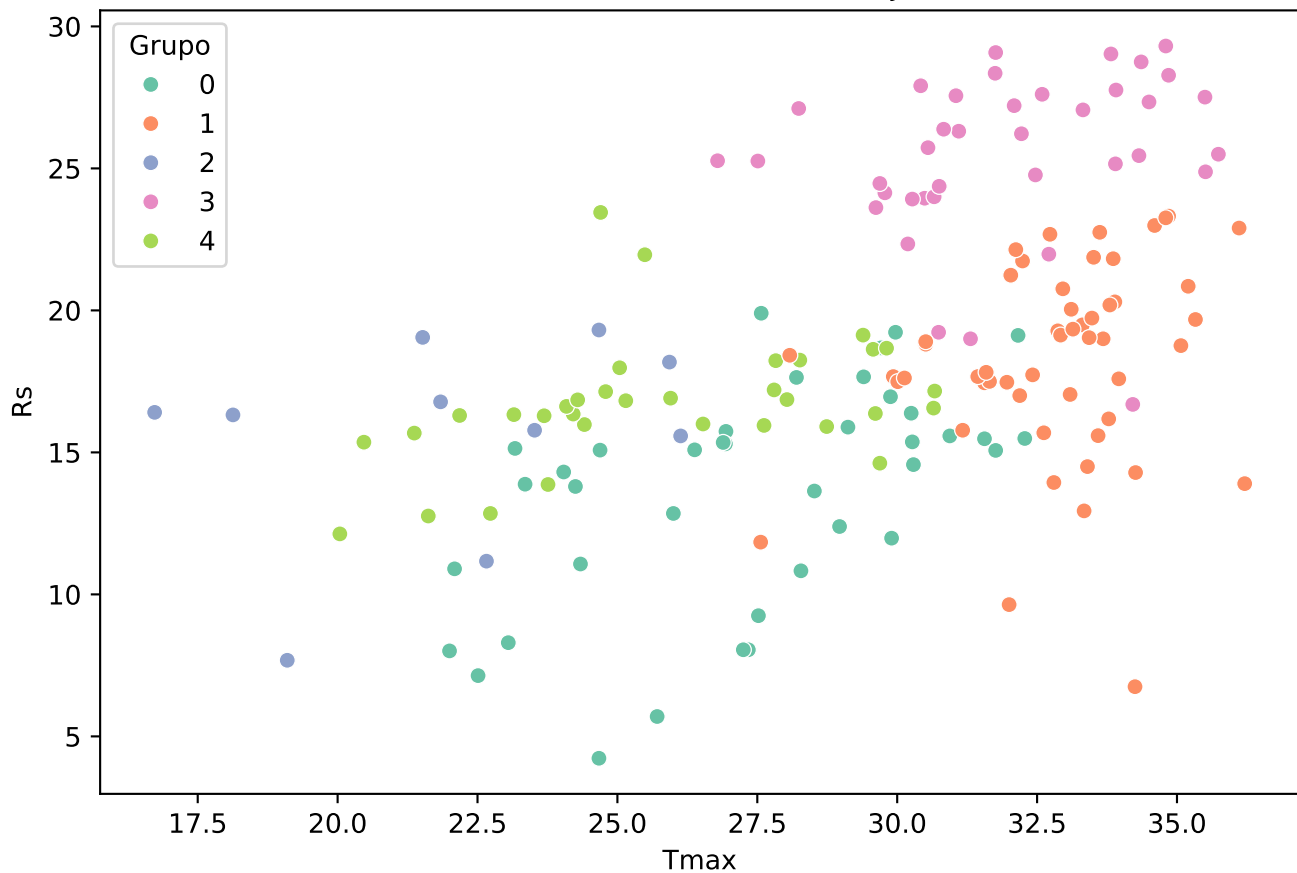
Importancia de variables (RF) — Etchojoa (2015-2016)



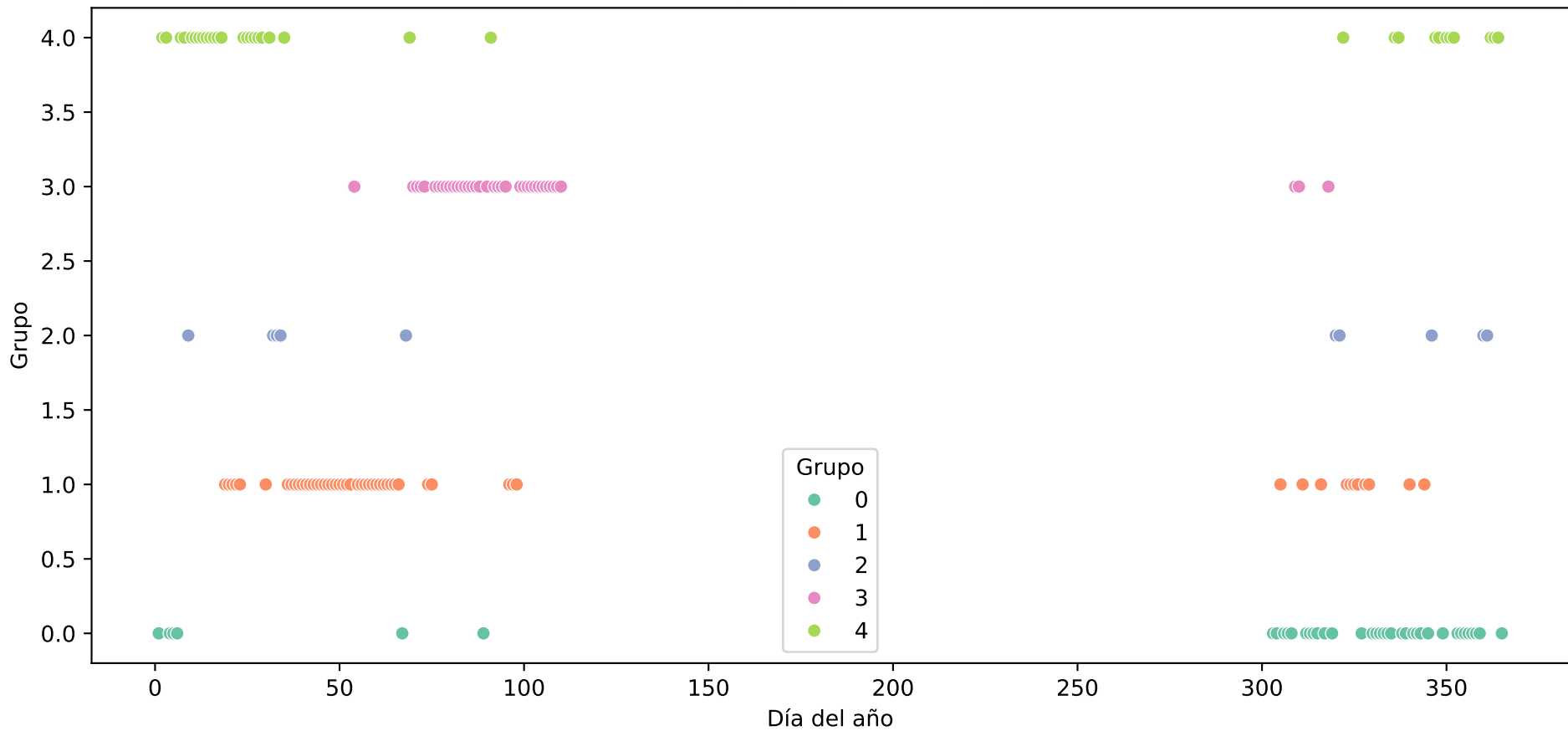
Método del codo



Clasificación de días climáticos — Etchojoa (2015-2016)

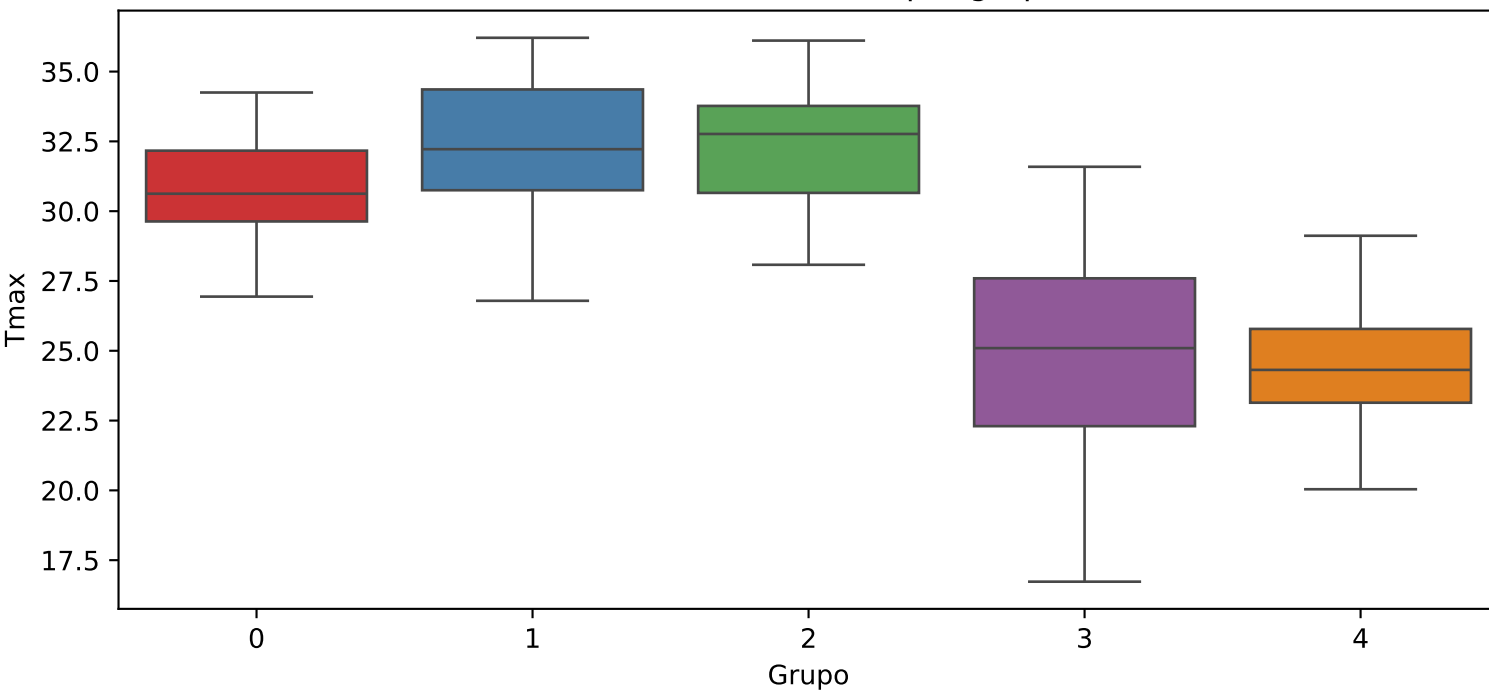


Distribución de días por grupo — Etchojoa (2015-2016)

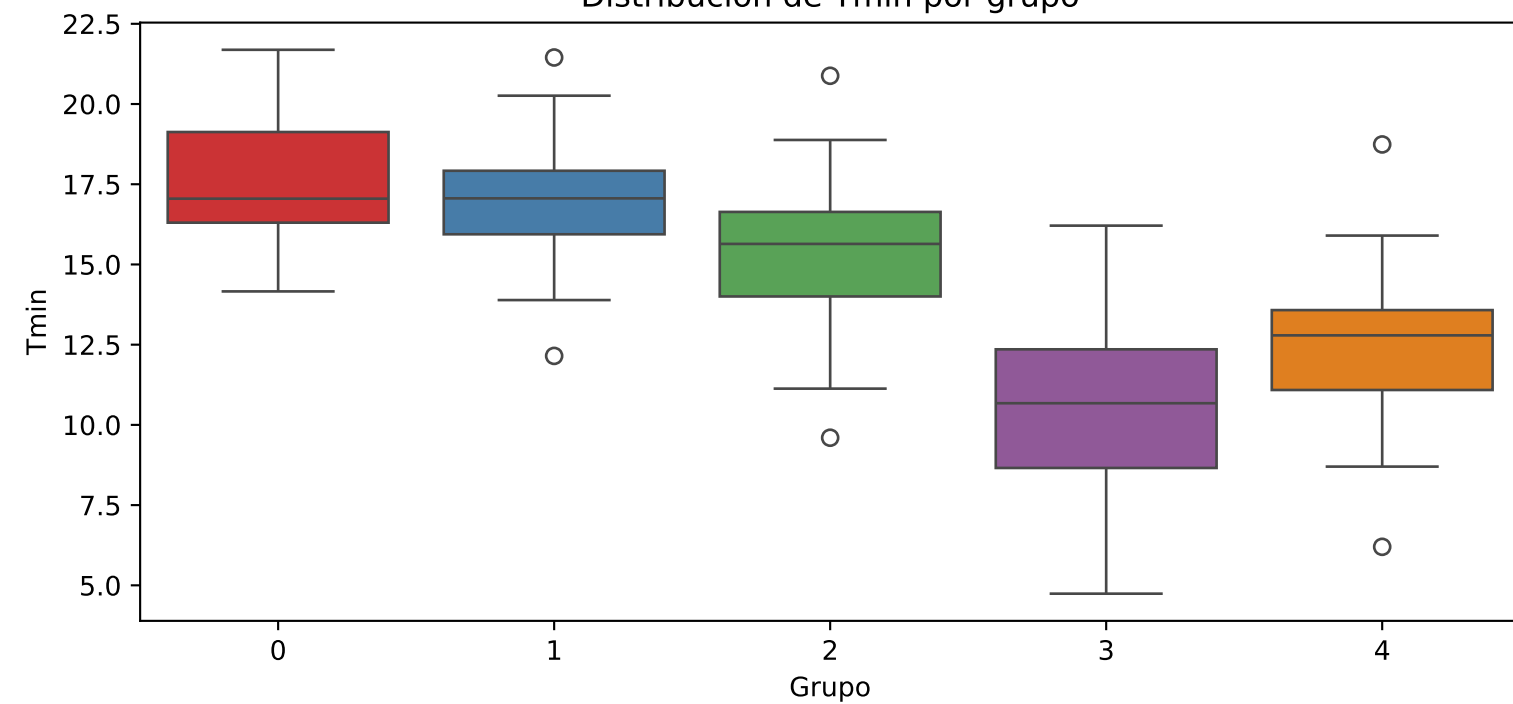


Boxplots por grupo — Etchojoa (2015-2016)

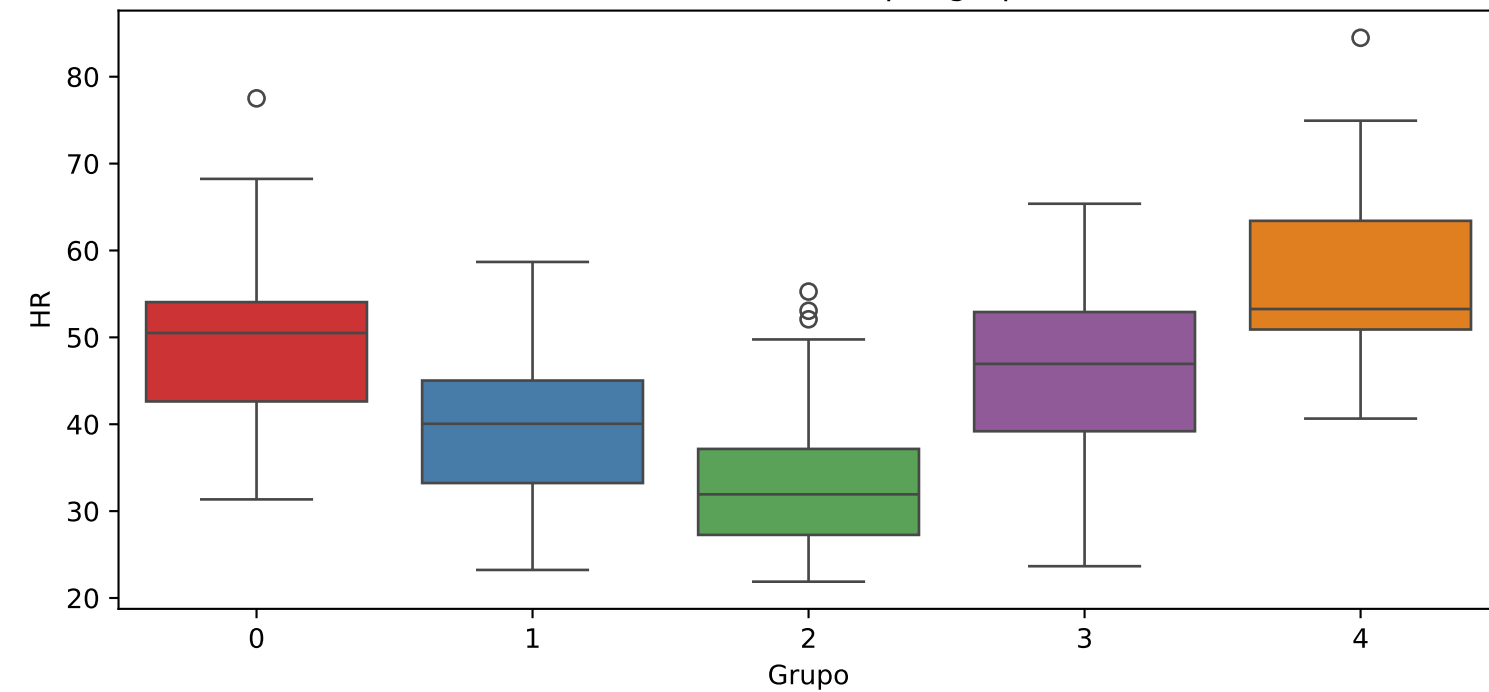
Distribución de Tmax por grupo



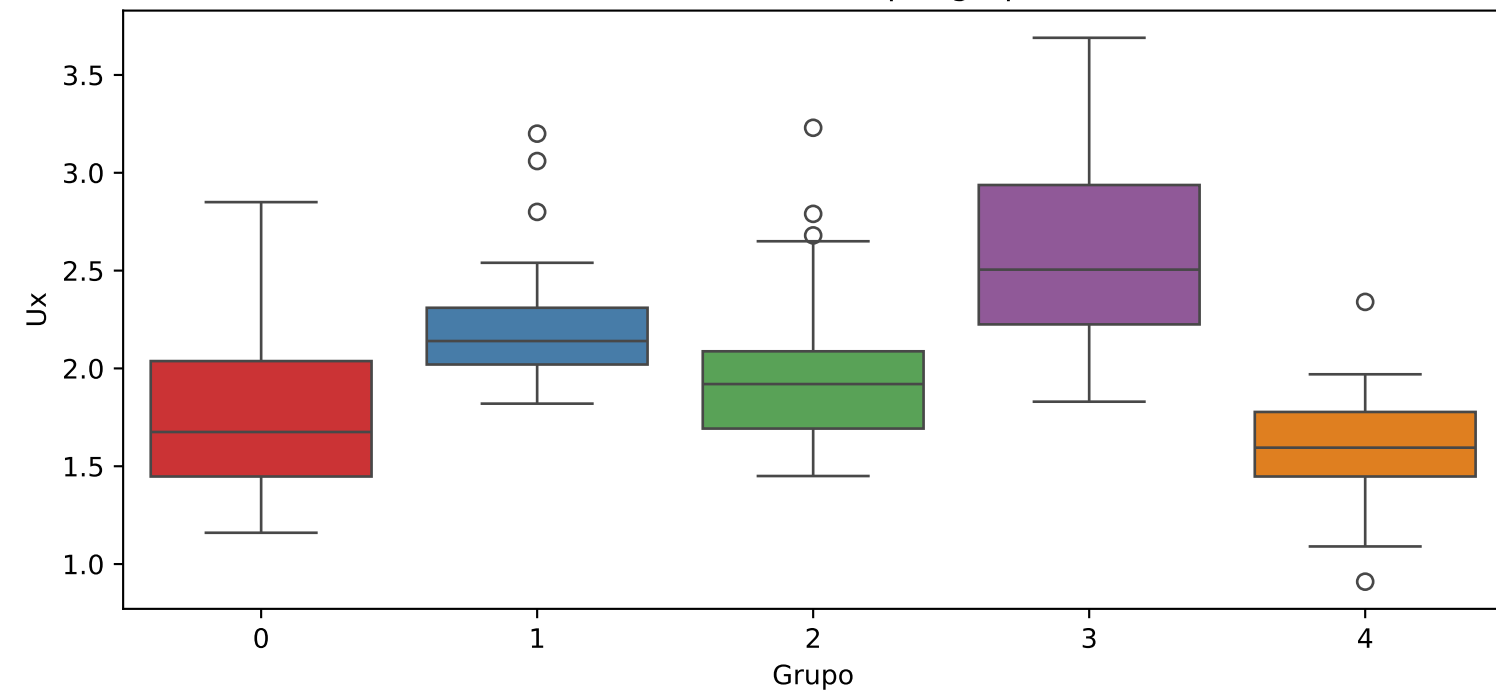
Distribución de Tmin por grupo



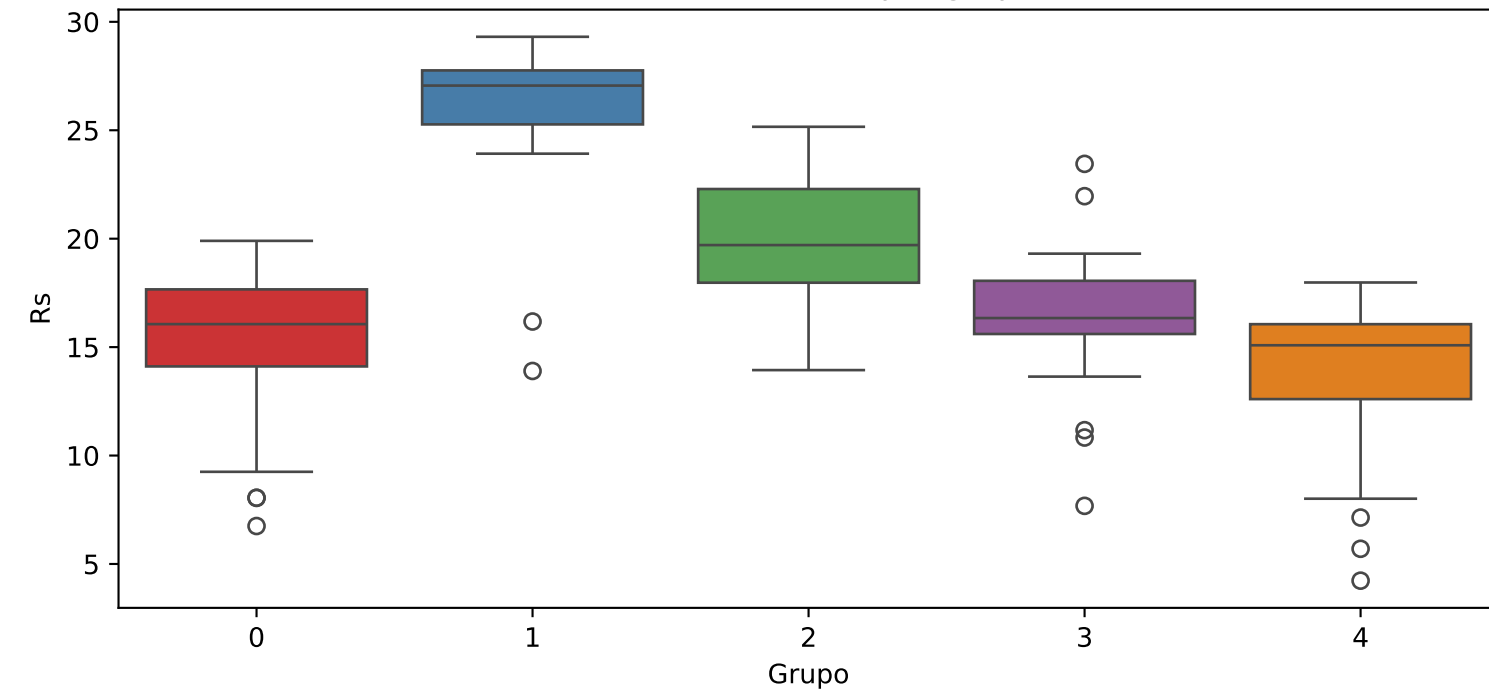
Distribución de HR por grupo



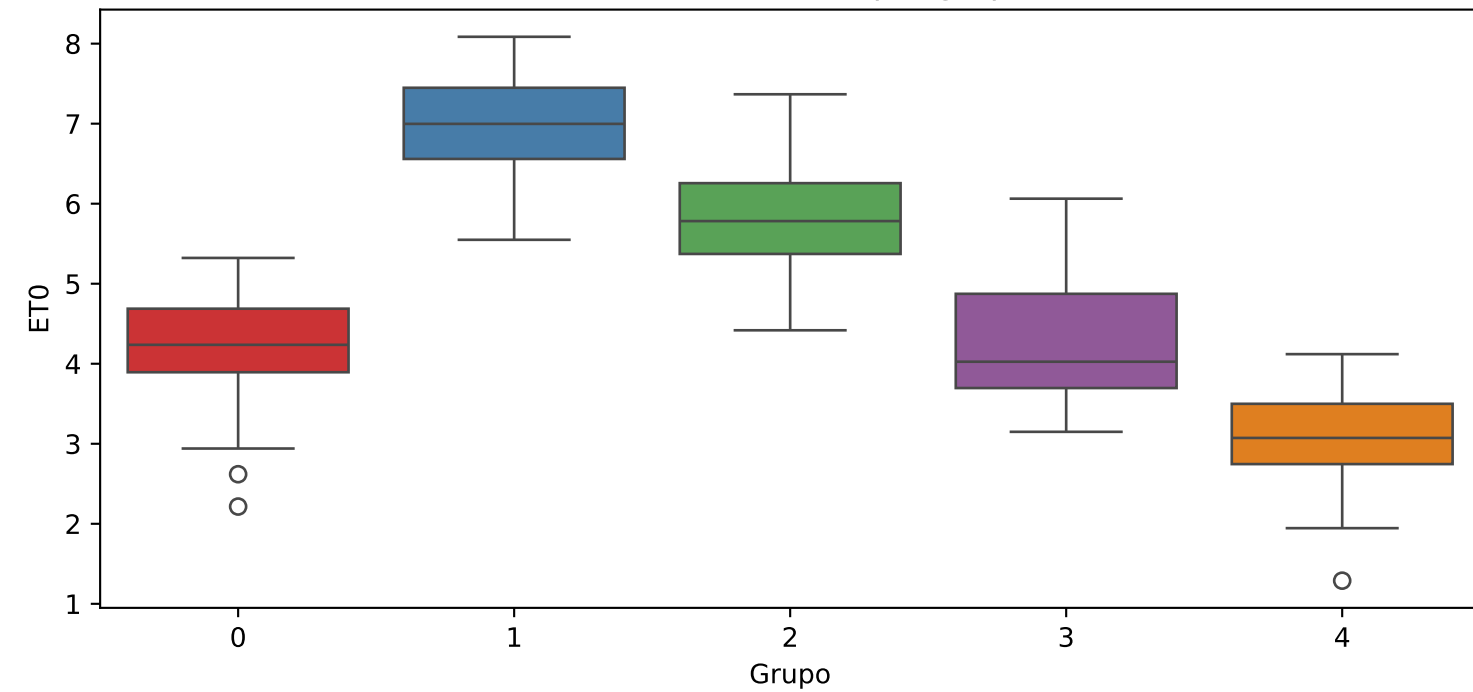
Distribución de Ux por grupo



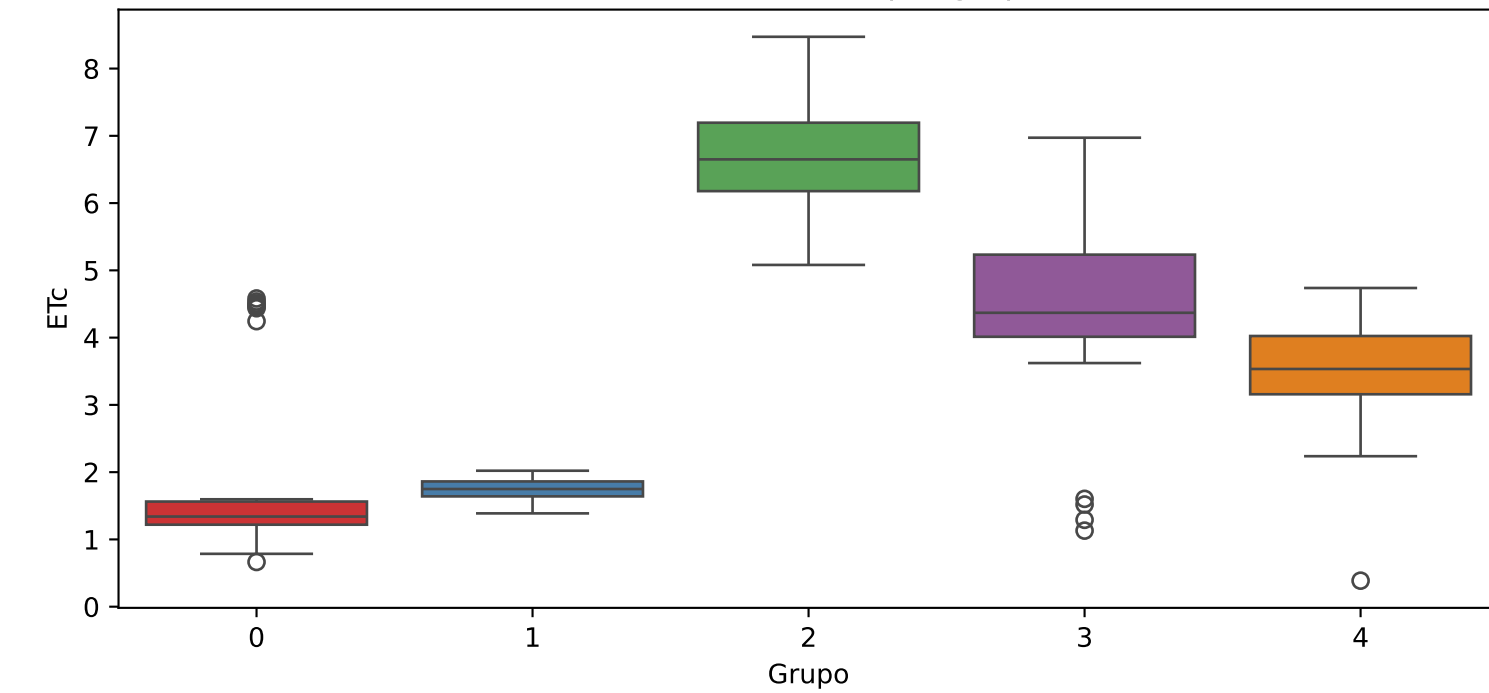
Distribución de Rs por grupo



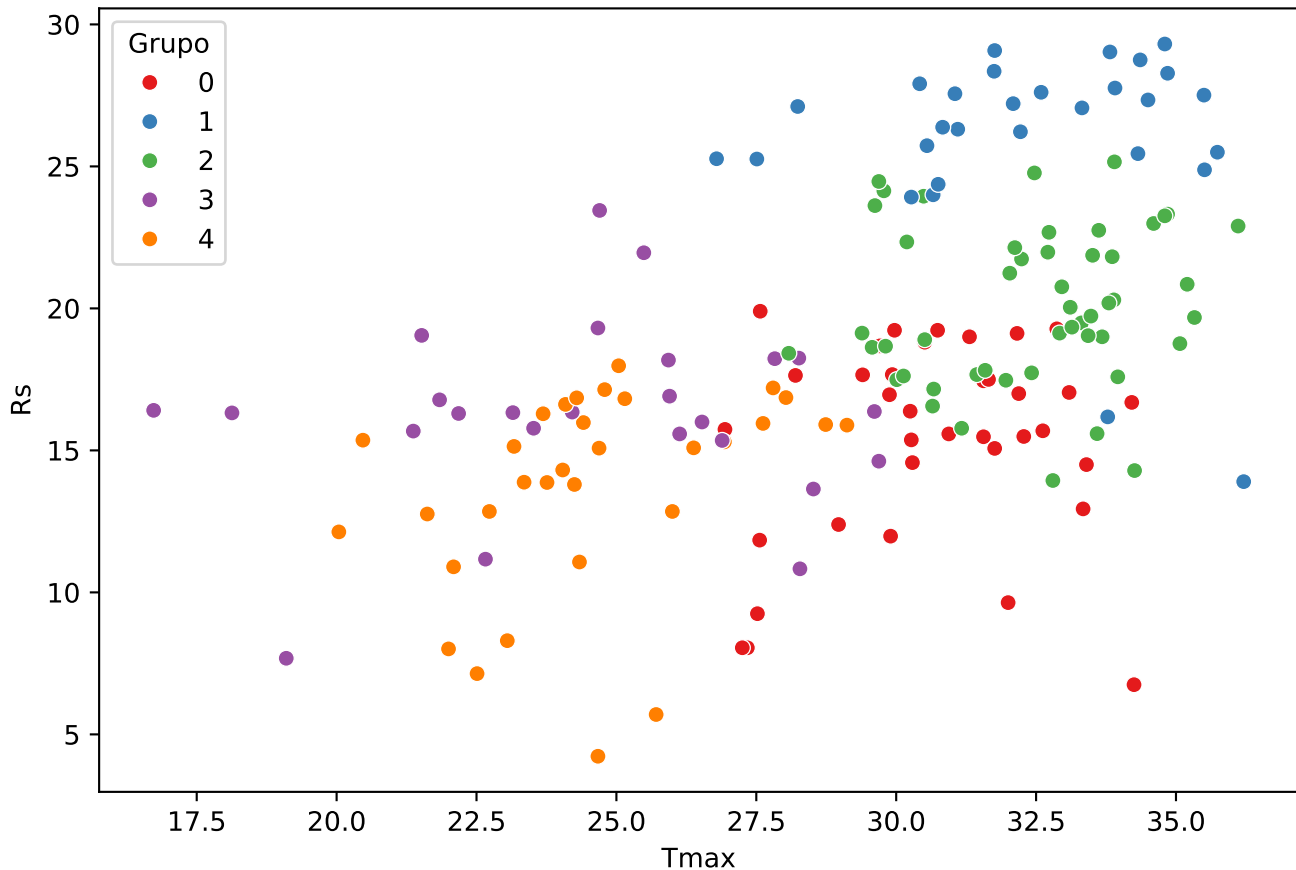
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2015-2016)



Etchojoa — 2016-2017

Días del ciclo: 172

ETc total [mm]: 646.7

ETverde total [mm]: 16.9

ETazul total [mm]: 629.7

Tmax / Tmin [°C]: 39.3 / 9.1

Etchojoa — 2016-2017 · Resultados y métricas

[Etchojoa 2016-2017] Regresión Lineal ET0 — R^2 : 0.9825 MSE: 0.0469

[Etchojoa 2016-2017] Random Forest ET0 — R^2 : 0.9616 MSE: 0.1027

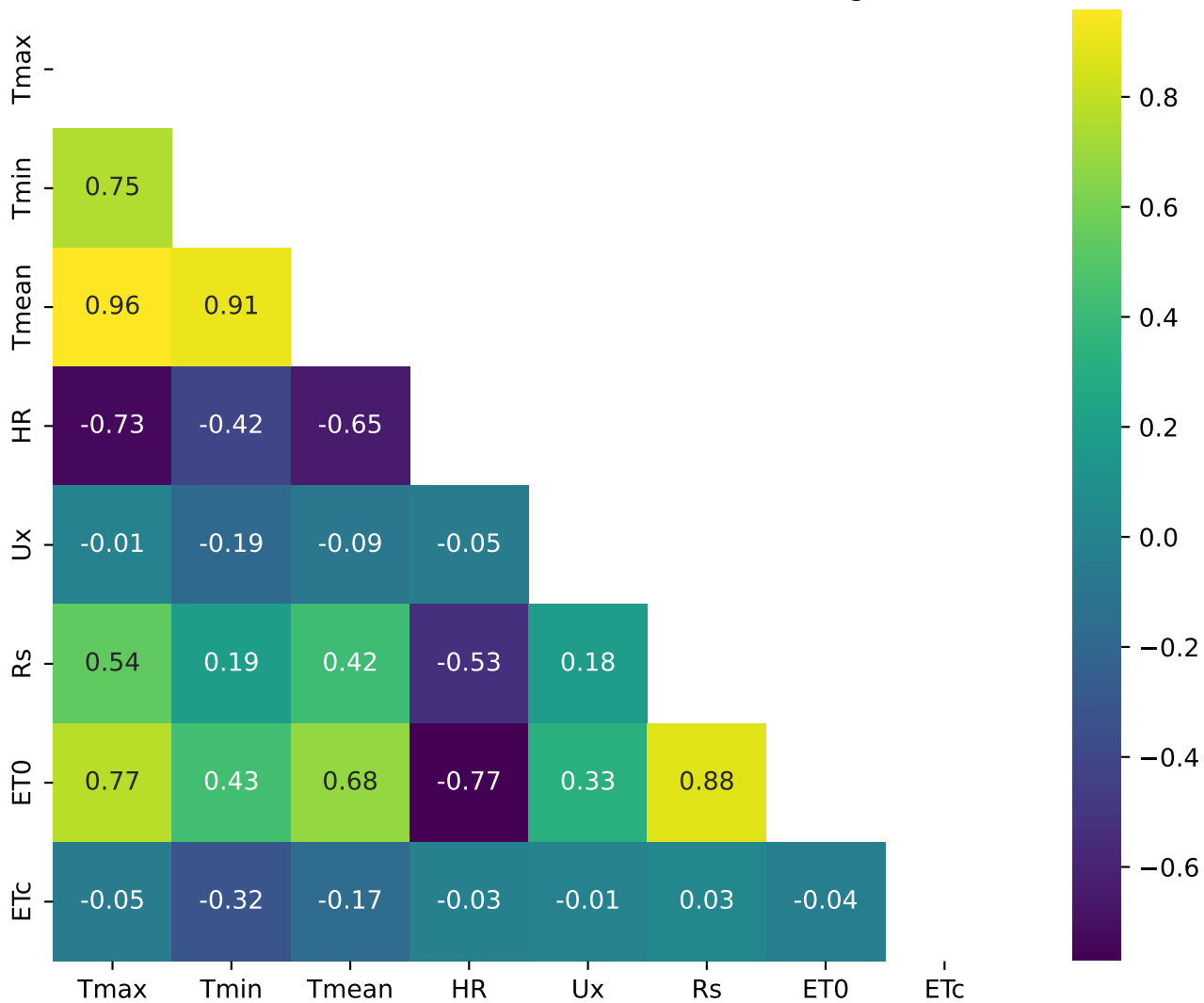
Importancias: {'Tmax': 0.12583480082094756, 'Tmin': 0.013307227266011945, 'HR': 0.06835583545232372, 'Ux': 0.03136296745638332, 'Rs': 0.7611391690043334}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	33.997500	17.746250	32.194063	2.240312	26.102187	7.420788	1.874922
1	29.601224	14.763673	43.226531	1.792653	16.721429	4.417300	5.079895
2	24.184286	12.908333	60.044762	1.936905	14.864762	3.310730	3.485349
3	32.857241	19.459655	45.351379	1.726552	15.322414	4.536819	1.630545
4	33.635500	16.814500	38.465000	2.055000	22.449500	6.264479	7.204150

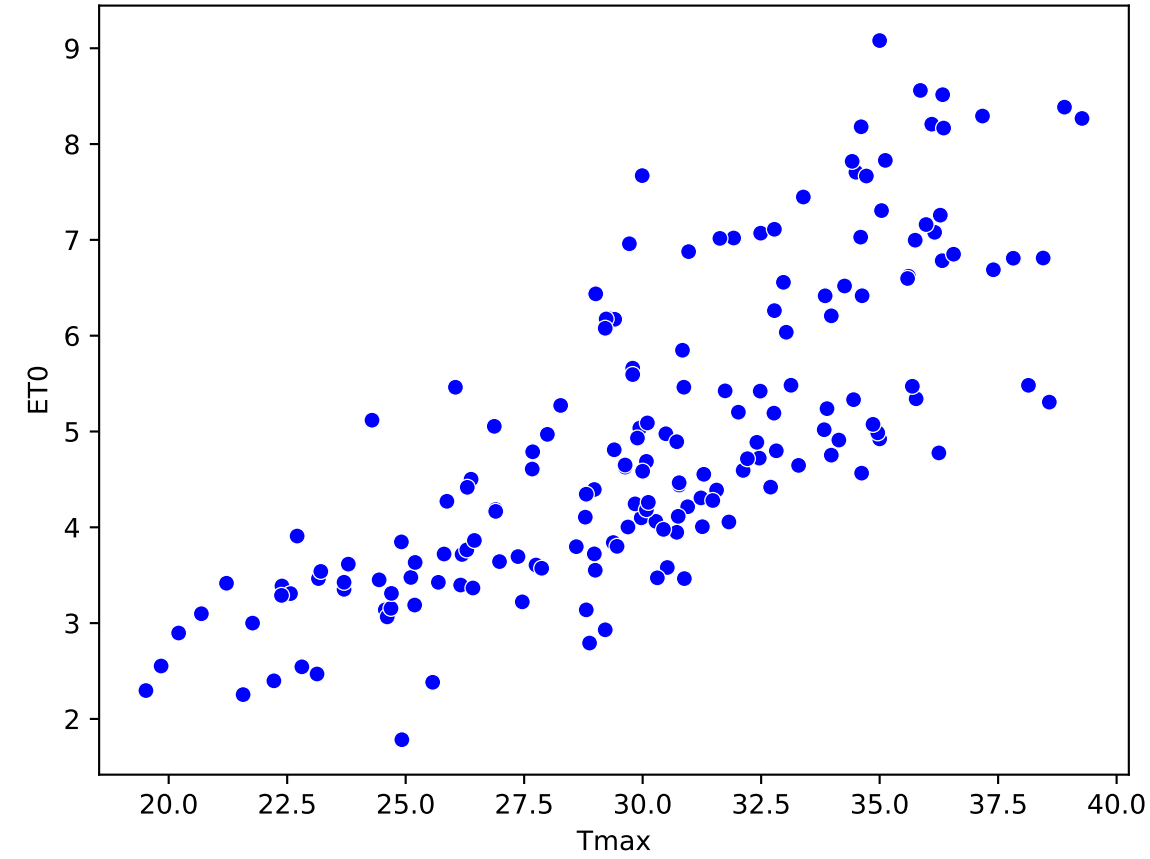
Etchojoa — 2016-2017

Matriz de Correlación entre Variables Meteorológicas

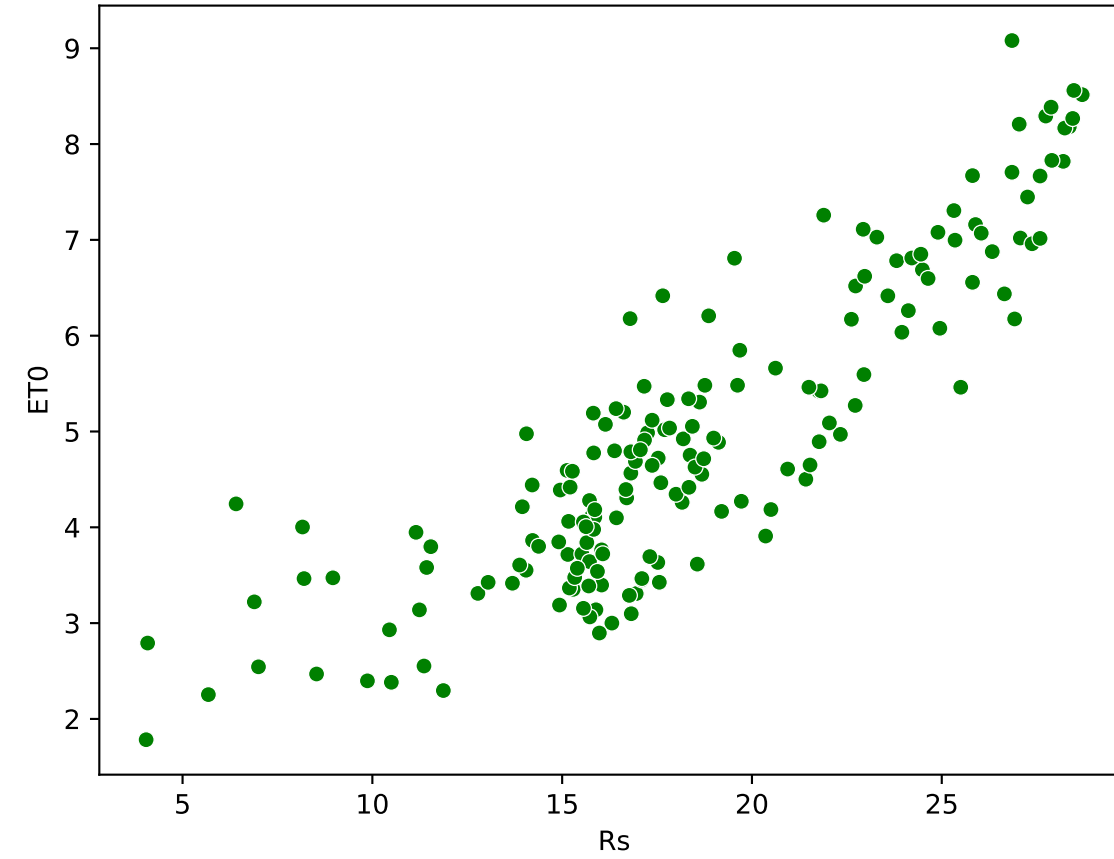


Dispersión — Etchojoa (2016-2017)

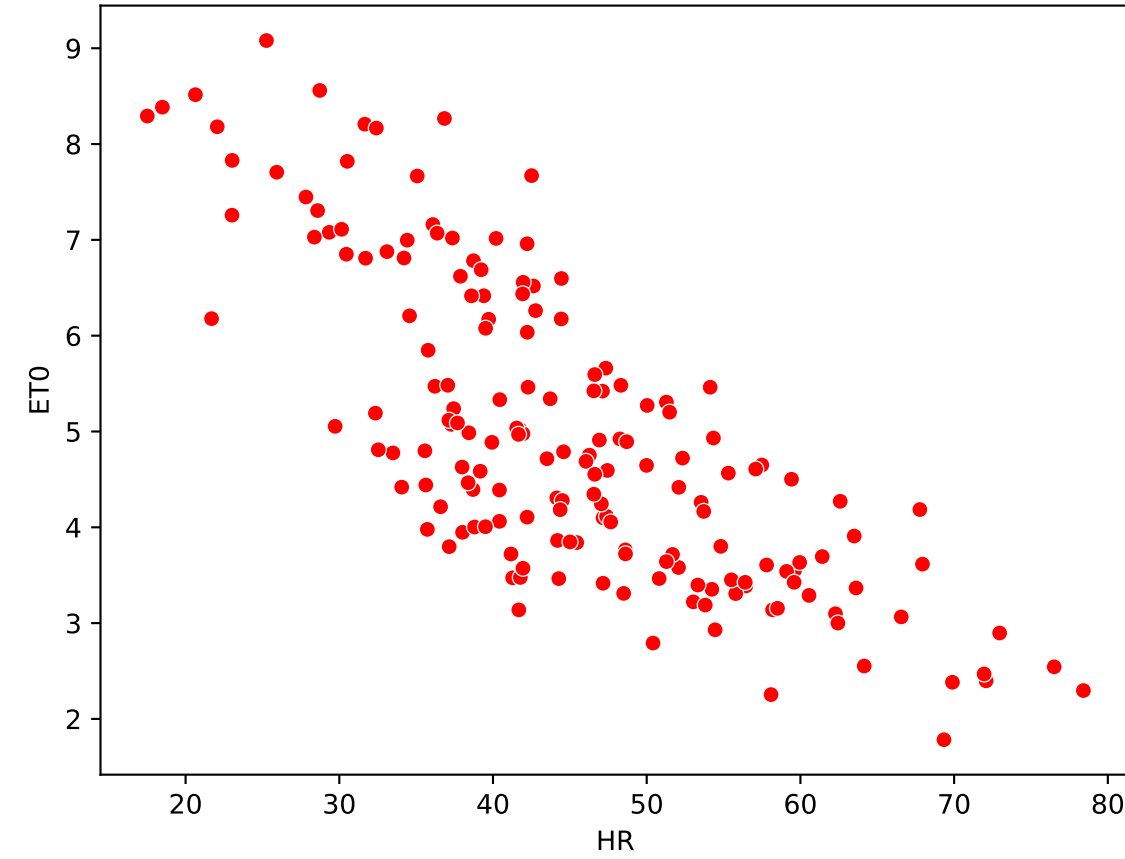
Tmax vs ET0



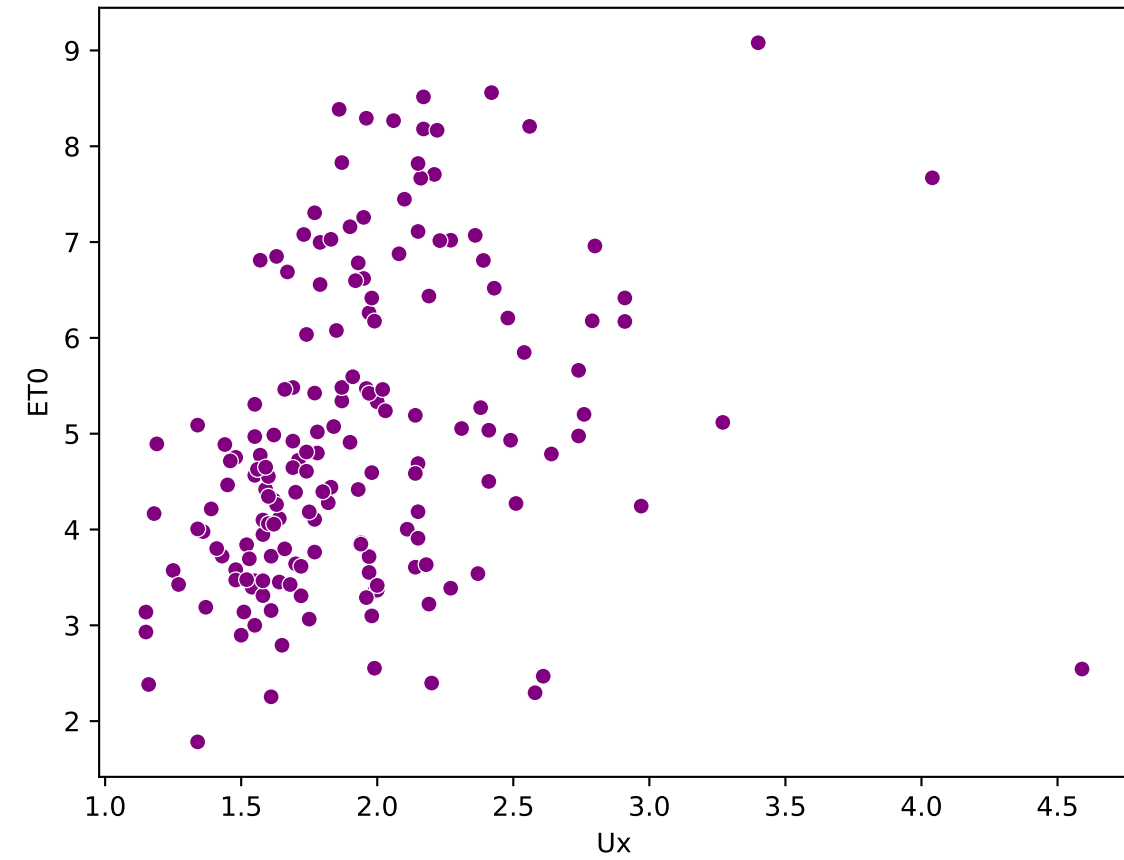
Rs vs ET0



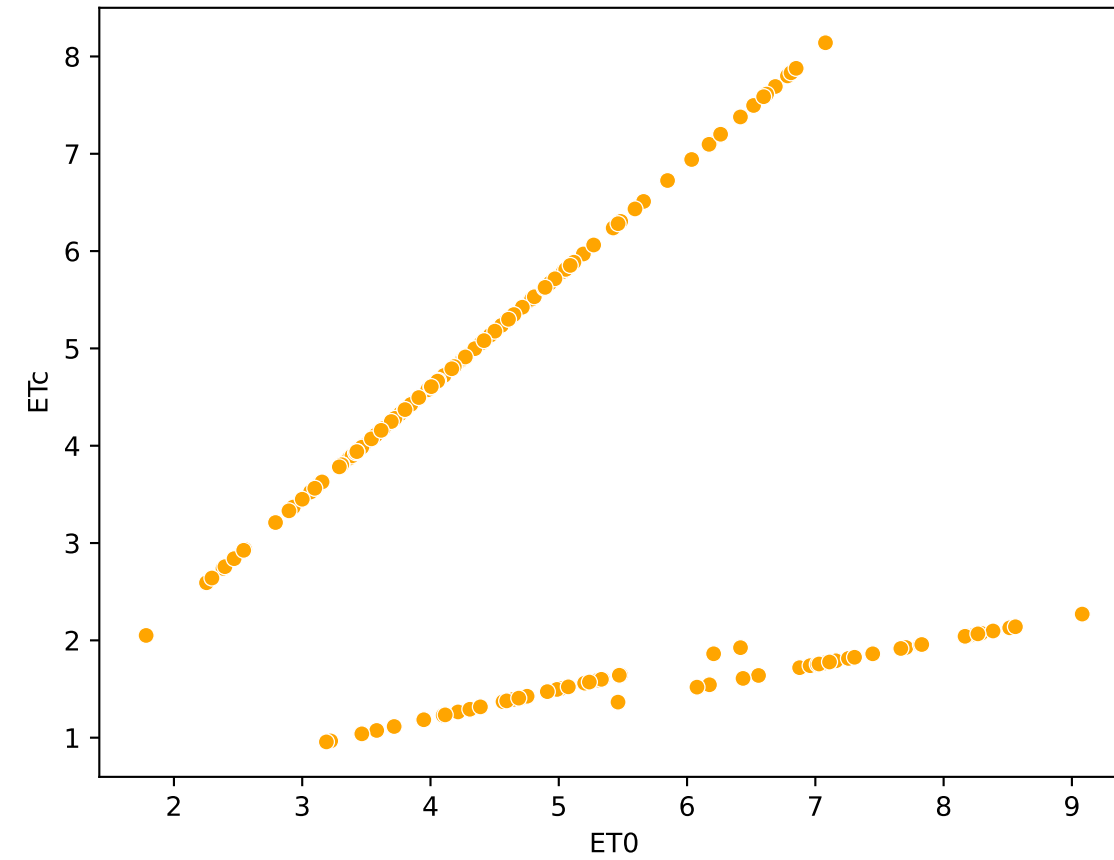
HR vs ET0



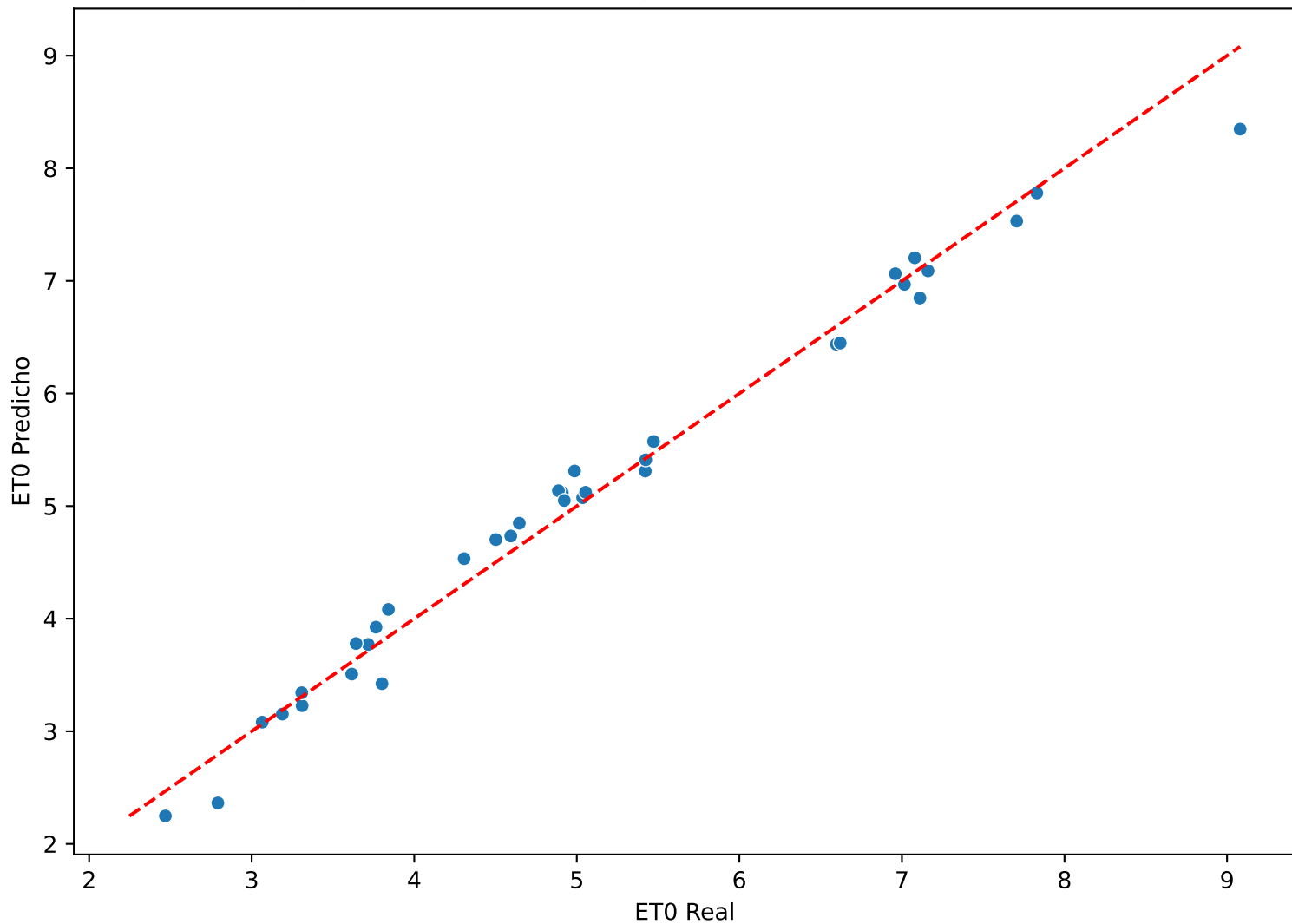
Ux vs ET0



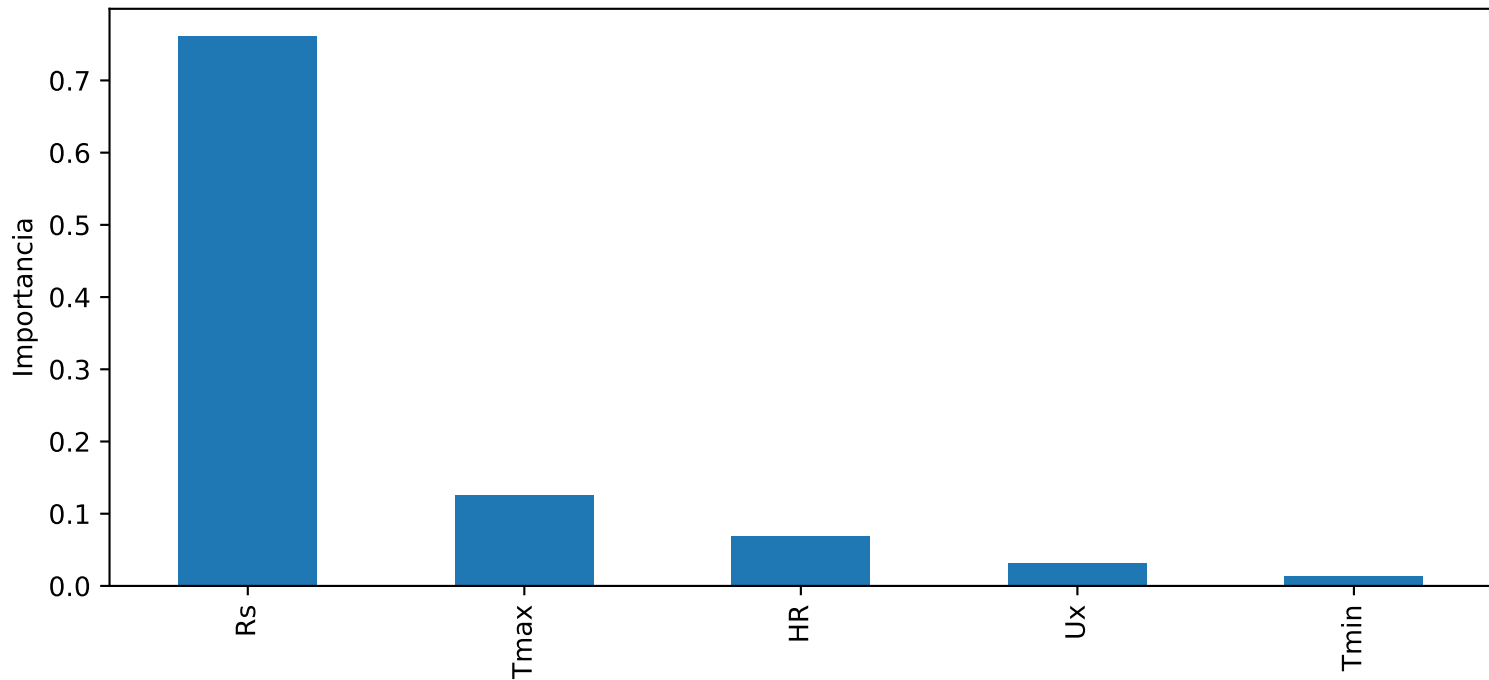
ET0 vs ETc



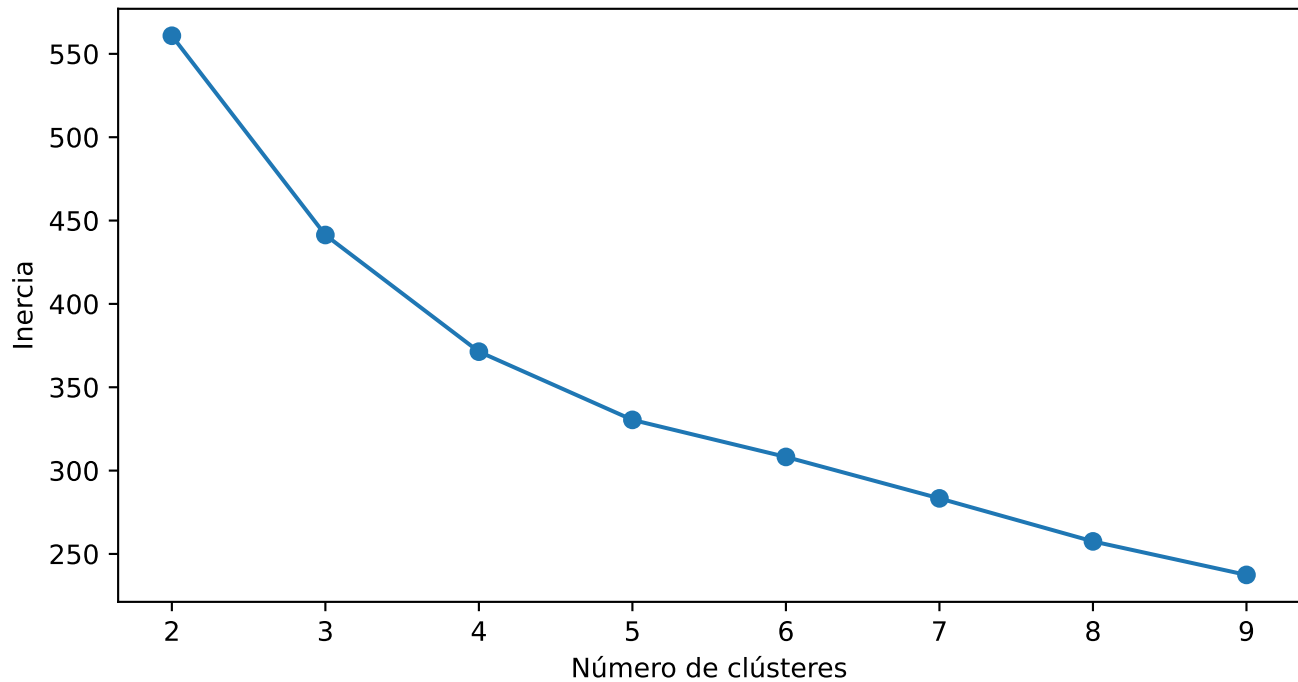
Comparación entre ET0 Real y Predicho — Etchojoa (2016-2017)



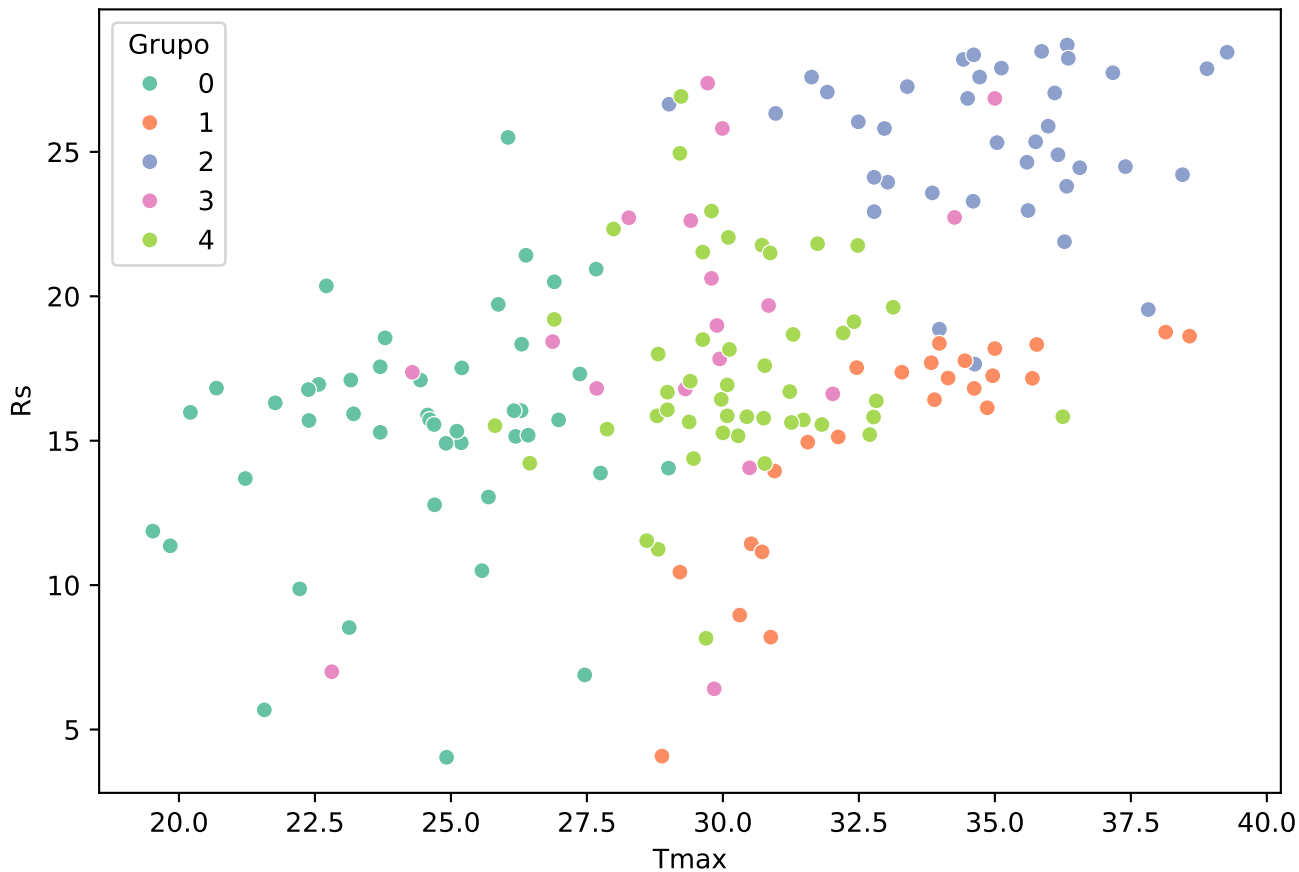
Importancia de variables (RF) — Etchojoa (2016-2017)



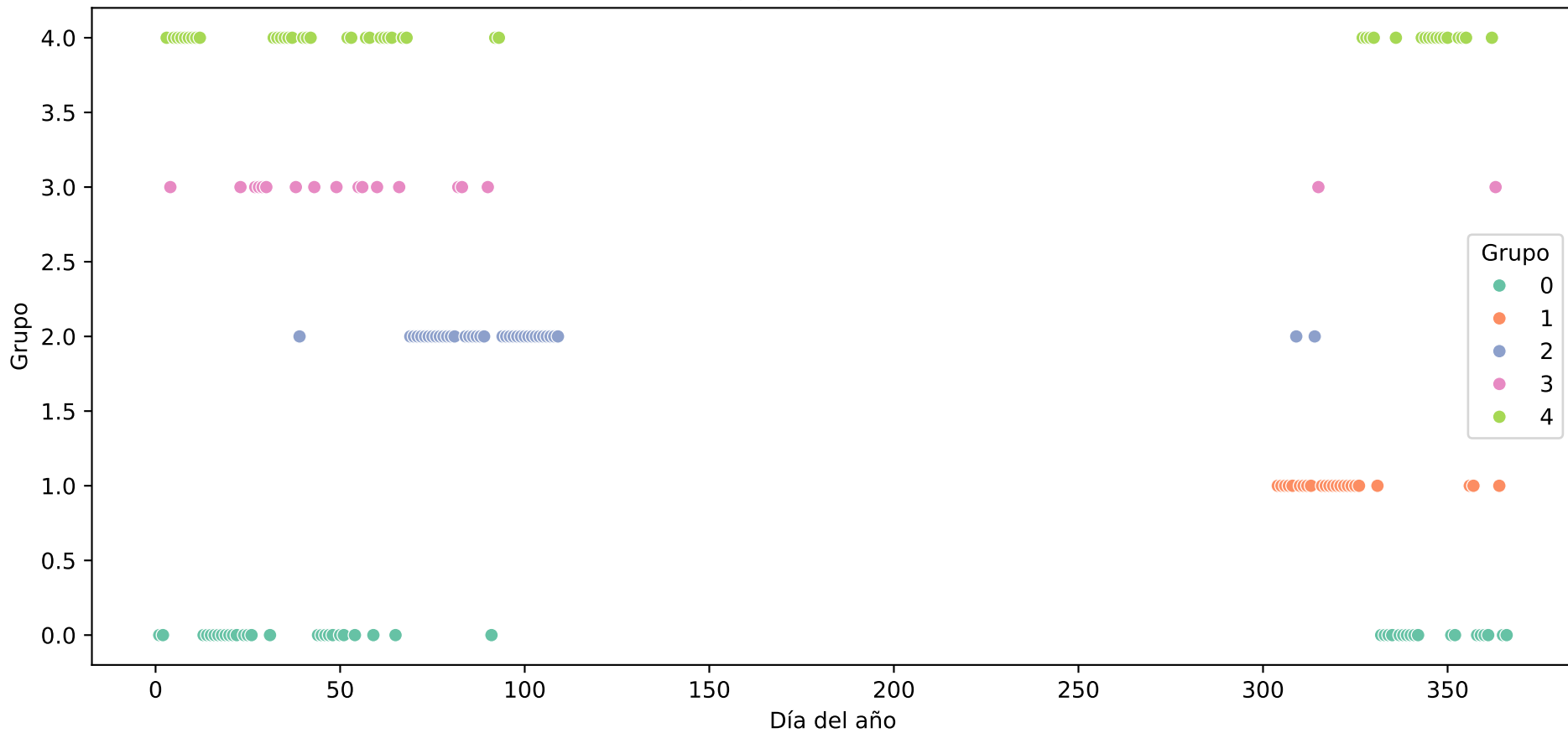
Método del codo



Clasificación de días climáticos — Etchojoa (2016-2017)

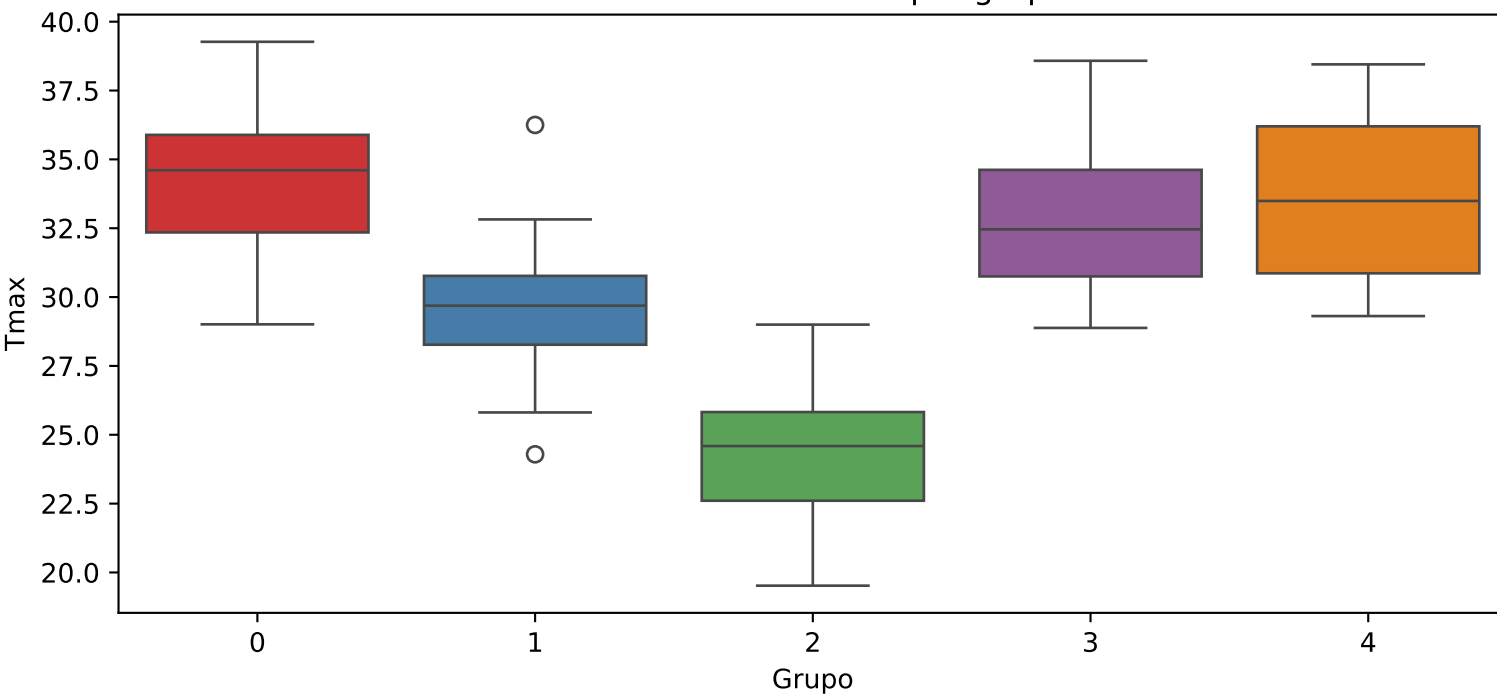


Distribución de días por grupo — Etchojoa (2016-2017)

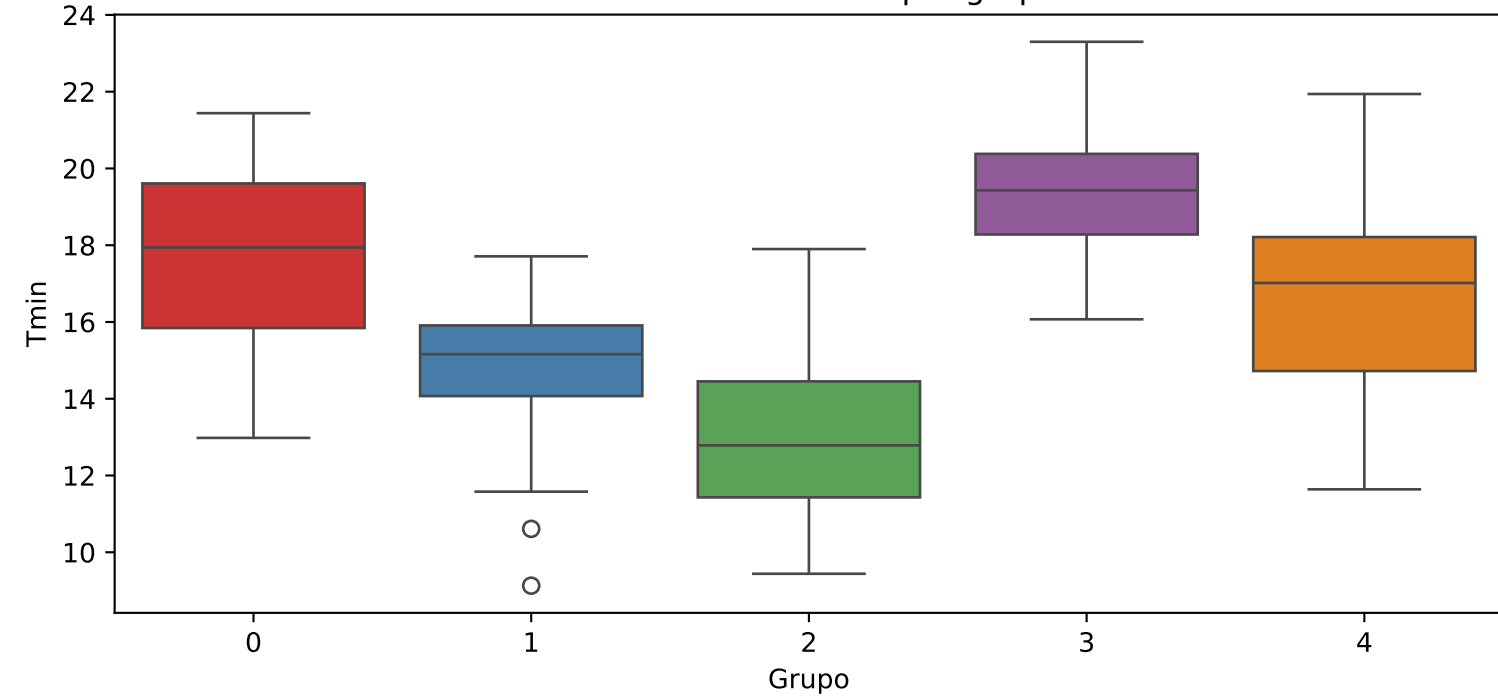


Boxplots por grupo — Etchojoa (2016-2017)

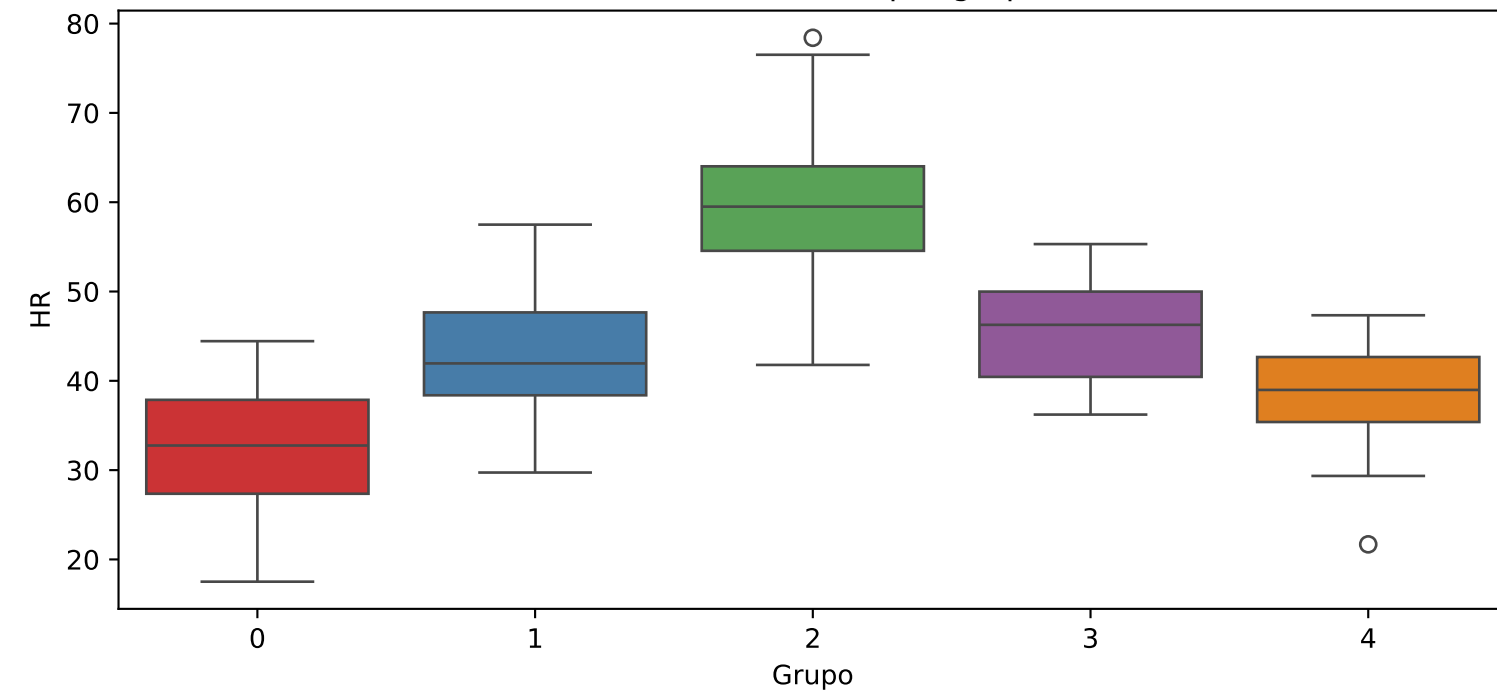
Distribución de Tmax por grupo



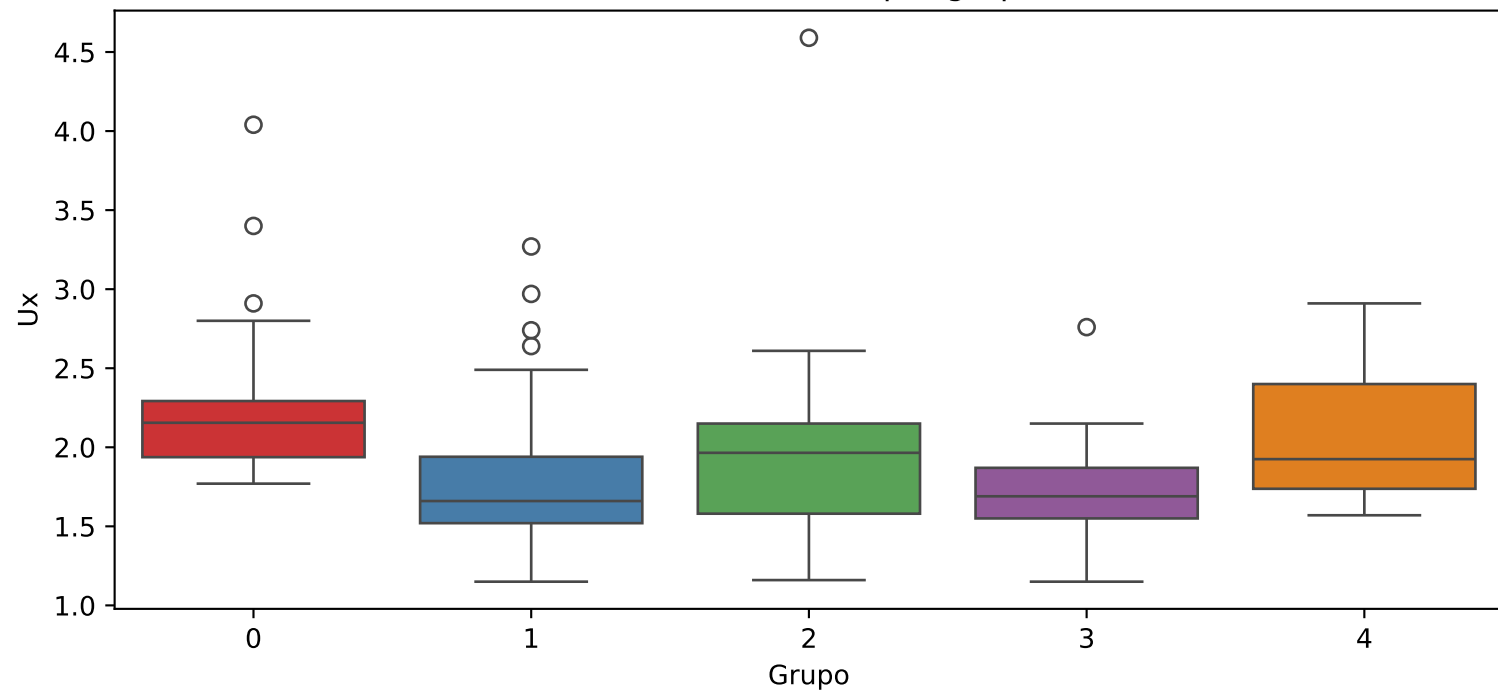
Distribución de Tmin por grupo



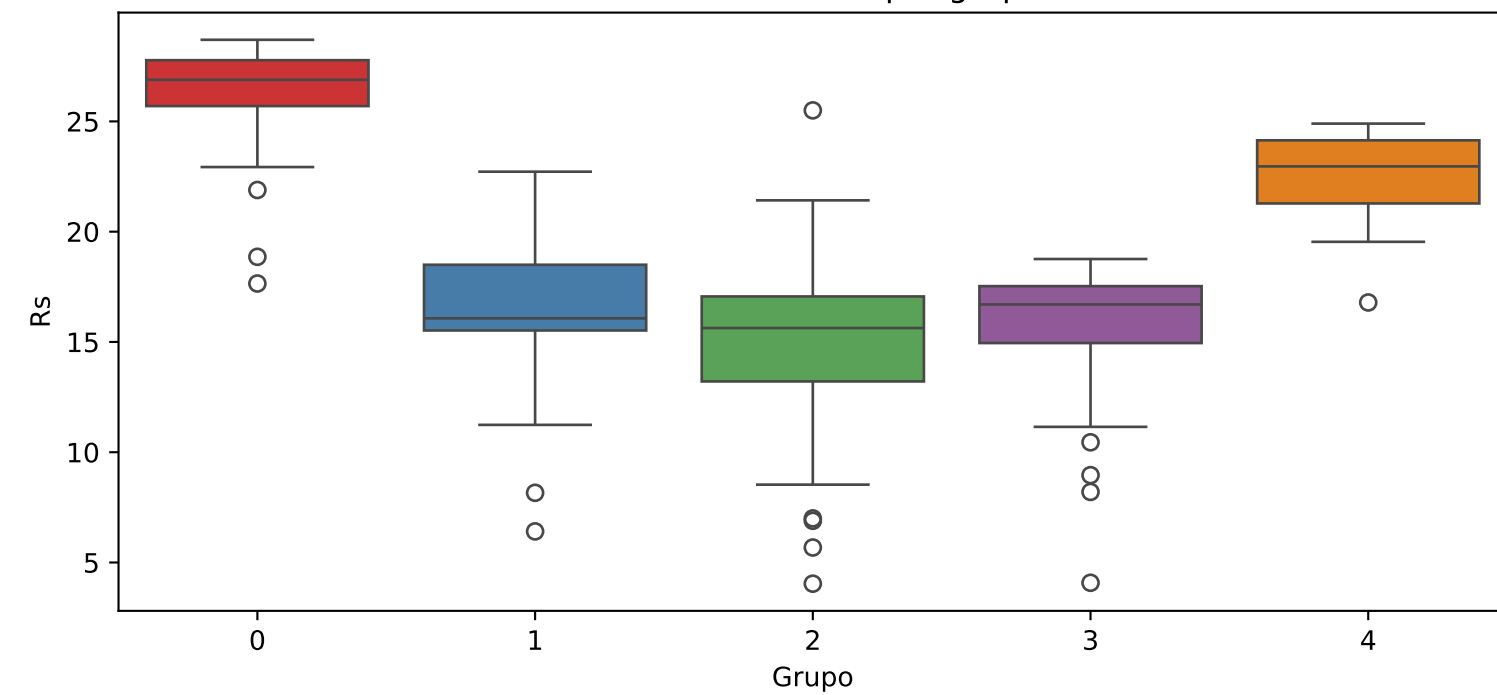
Distribución de HR por grupo



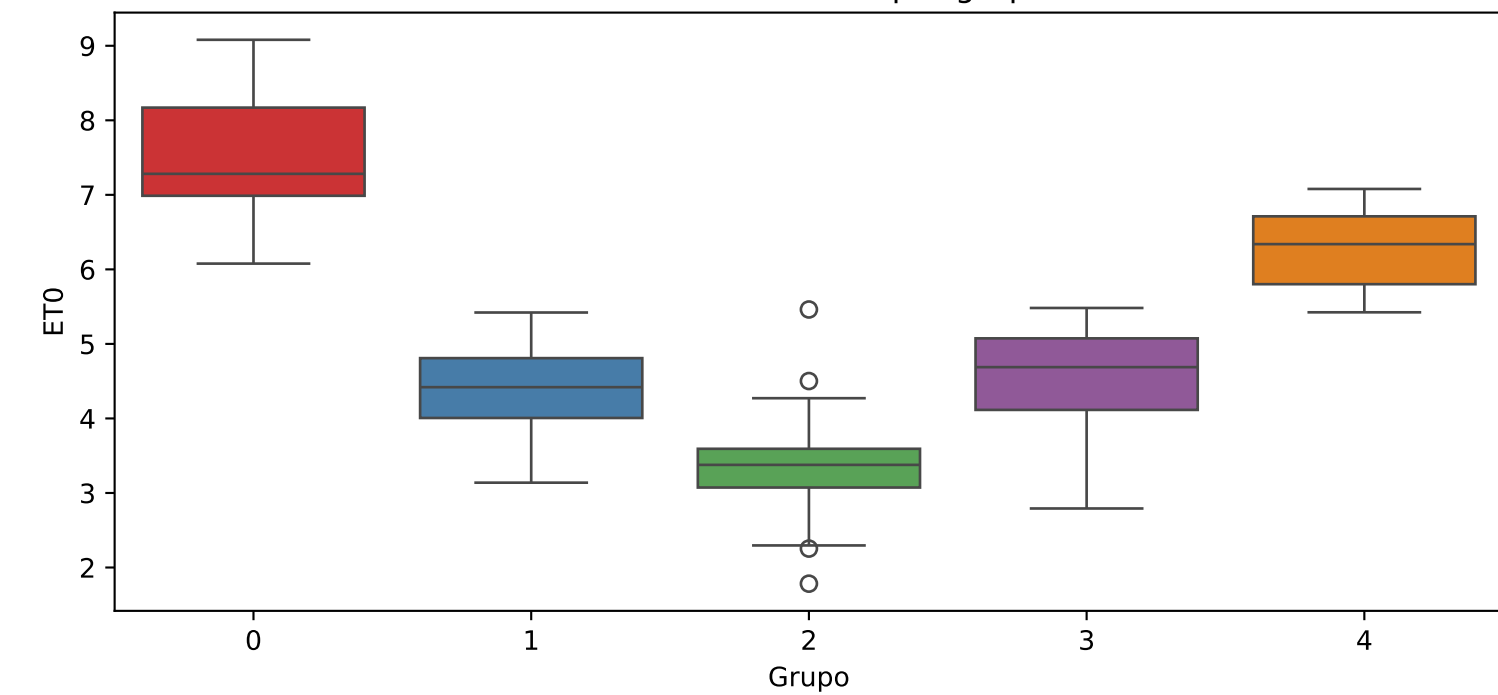
Distribución de Ux por grupo



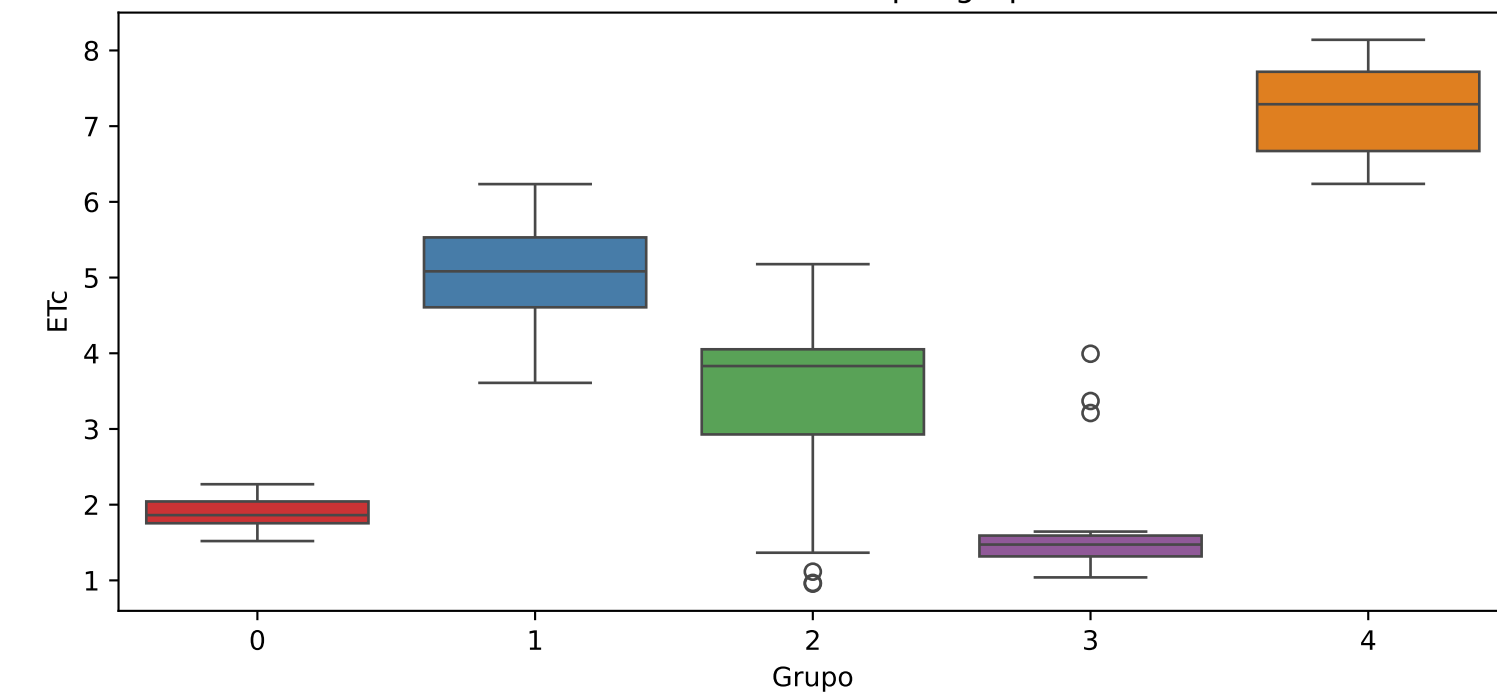
Distribución de Rs por grupo



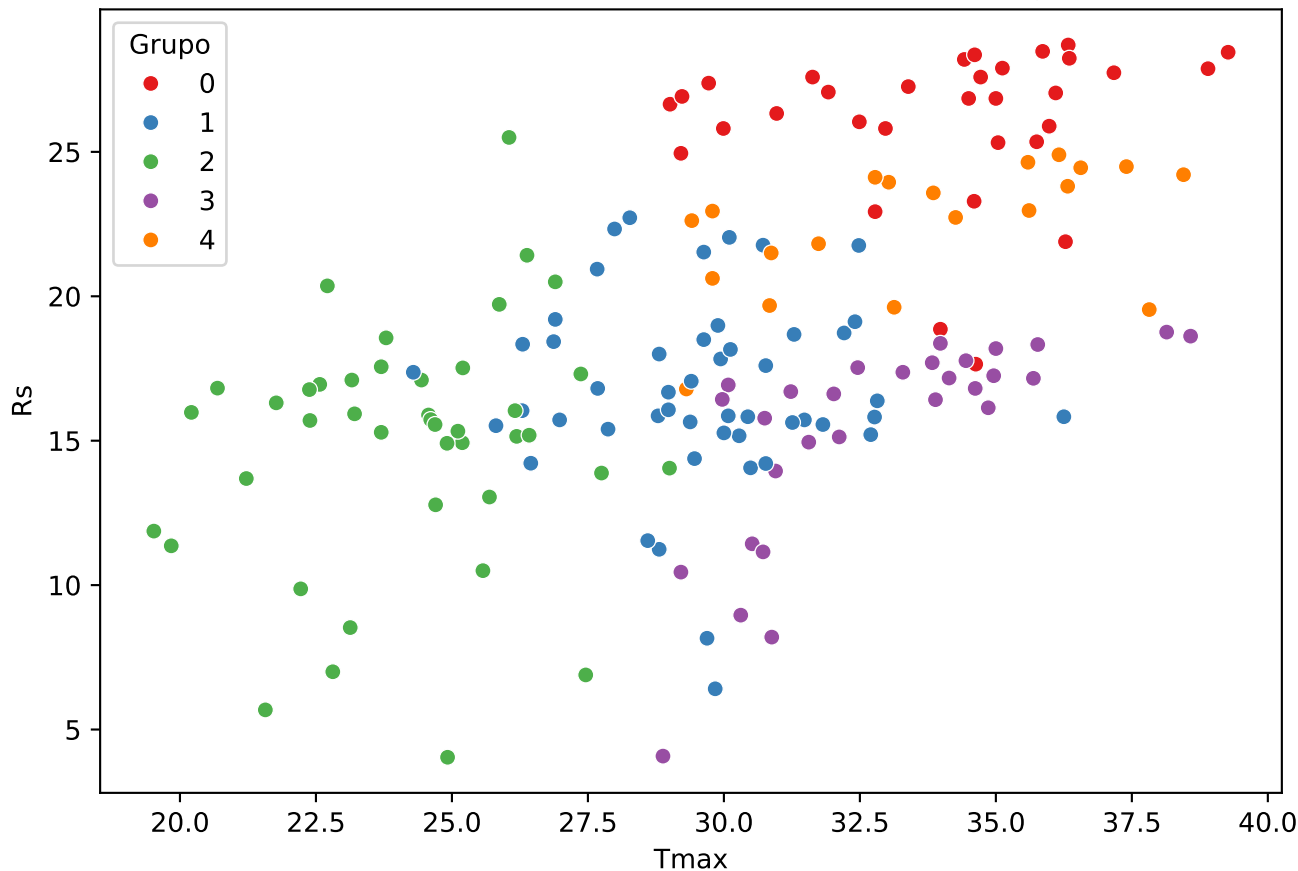
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2016-2017)



Etchojoa — 2017-2018

Días del ciclo: 172

ETc total [mm]: 640.8

ETverde total [mm]: 20.8

ETazul total [mm]: 620.0

Tmax / Tmin [°C]: 39.0 / 9.8

Etchojoa — 2017-2018 · Resultados y métricas

[Etchojoa 2017-2018] Regresión Lineal ET0 — R^2 : 0.9698 MSE: 0.0552

[Etchojoa 2017-2018] Random Forest ET0 — R^2 : 0.8988 MSE: 0.1847

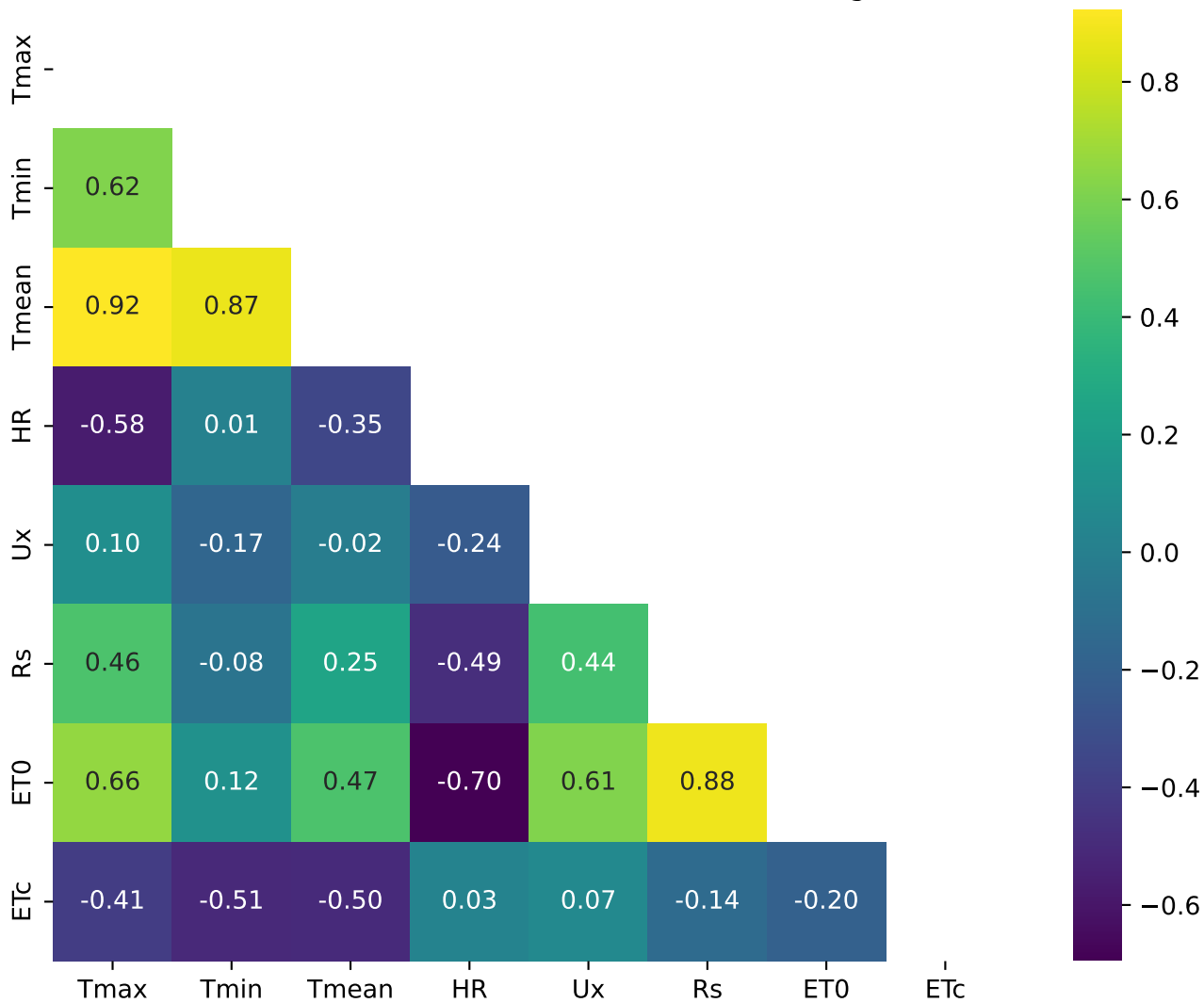
Importancias: {'Tmax': 0.06091926673982732, 'Tmin': 0.014776754327595726, 'HR': 0.03877714537689996, 'Ux': 0.0455710175143903, 'Rs': 0.8399558160412868}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	29.184107	16.678393	47.821429	1.489821	14.377500	3.804785	4.375502
1	29.062000	13.254750	38.539500	2.230750	19.160500	5.240482	6.026554
2	33.815556	19.259444	41.268333	1.847778	17.489444	5.170218	1.509300
3	33.733846	16.448077	31.945000	2.453077	26.965000	7.717282	1.929320
4	22.978571	13.528571	64.319286	2.091429	13.544286	3.117774	3.585440

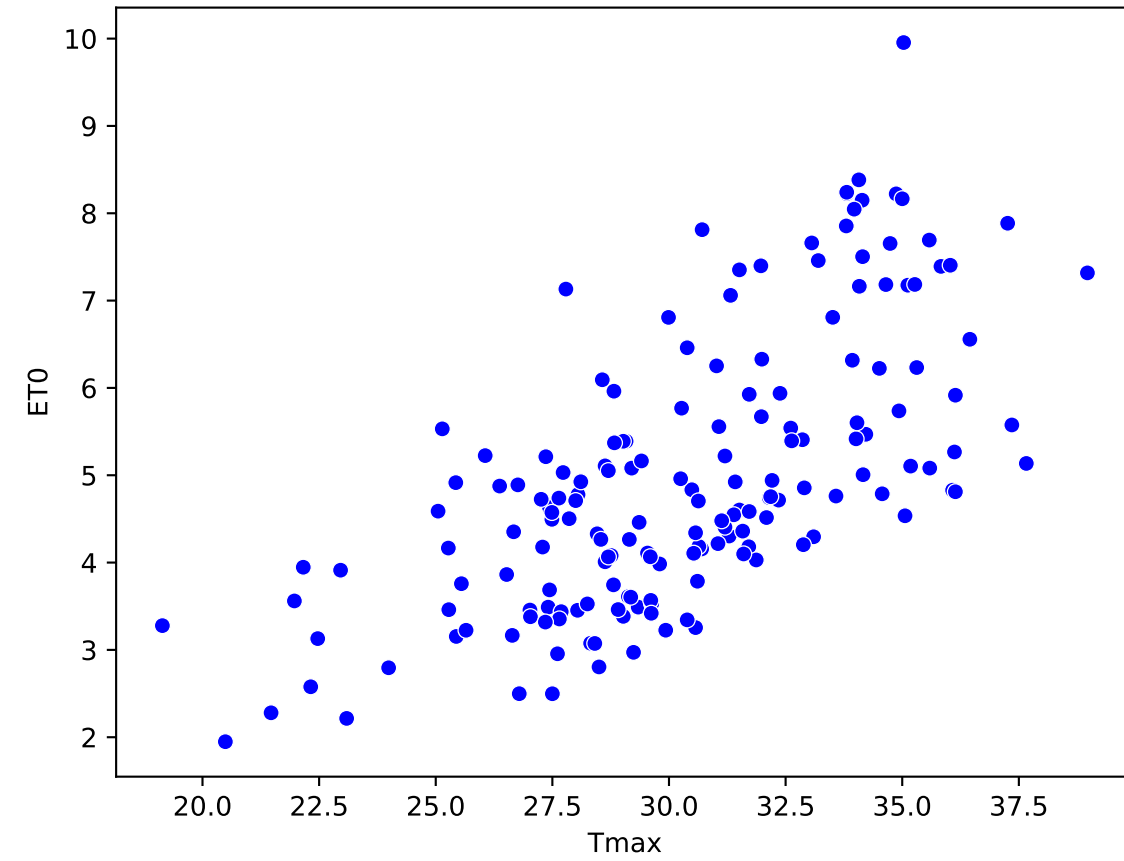
Etchojoa — 2017-2018

Matriz de Correlación entre Variables Meteorológicas

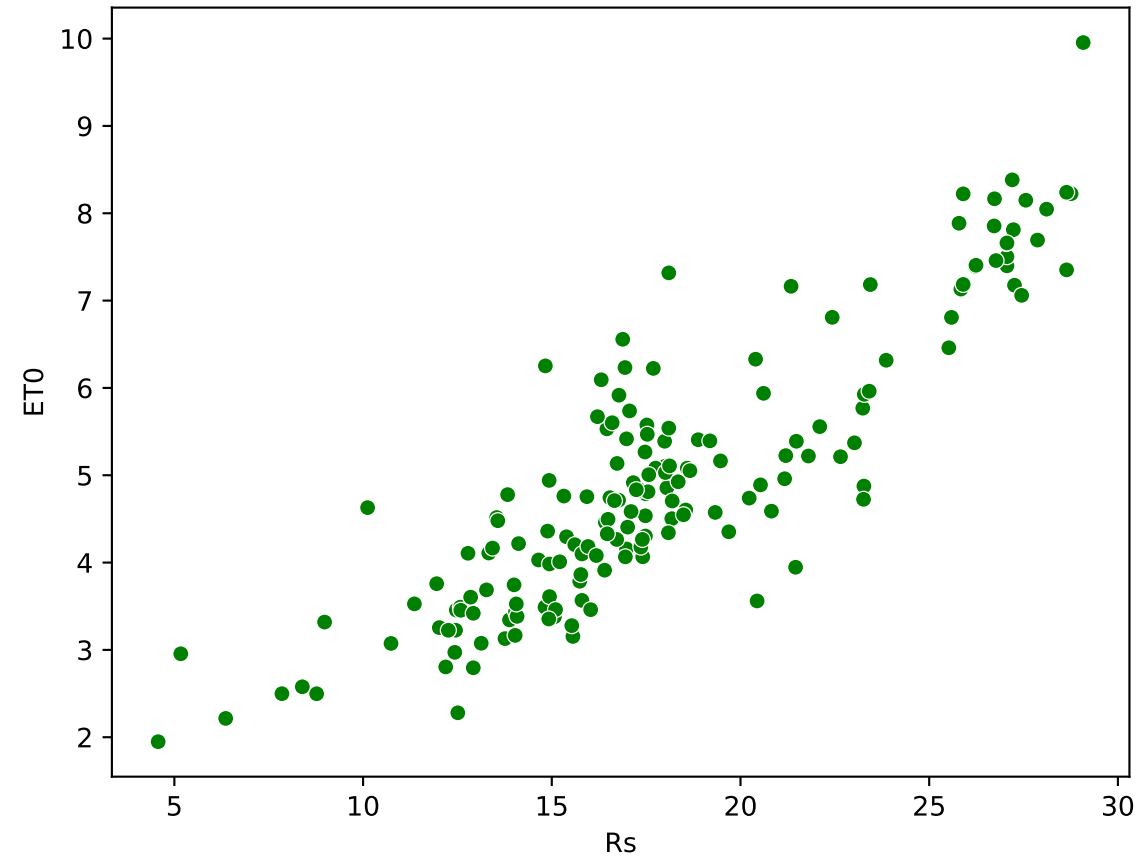


Dispersión — Etchojoa (2017-2018)

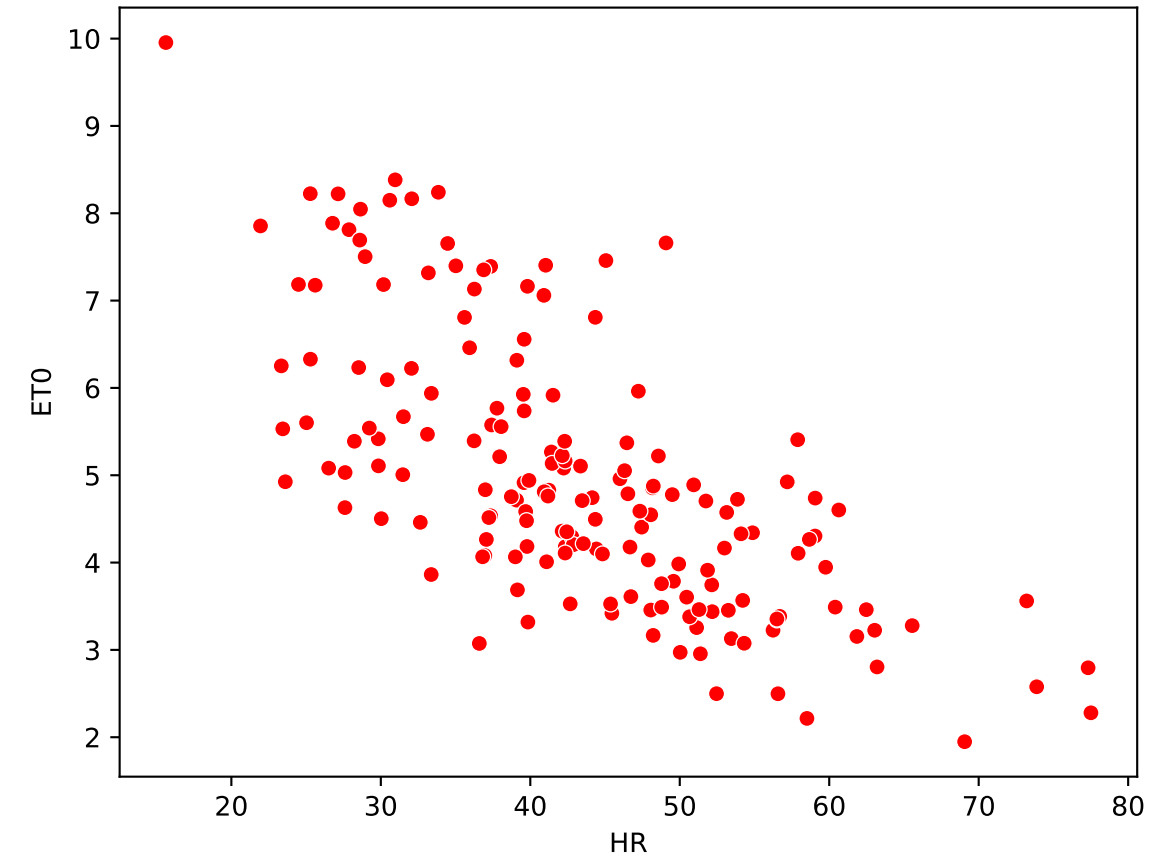
Tmax vs ET0



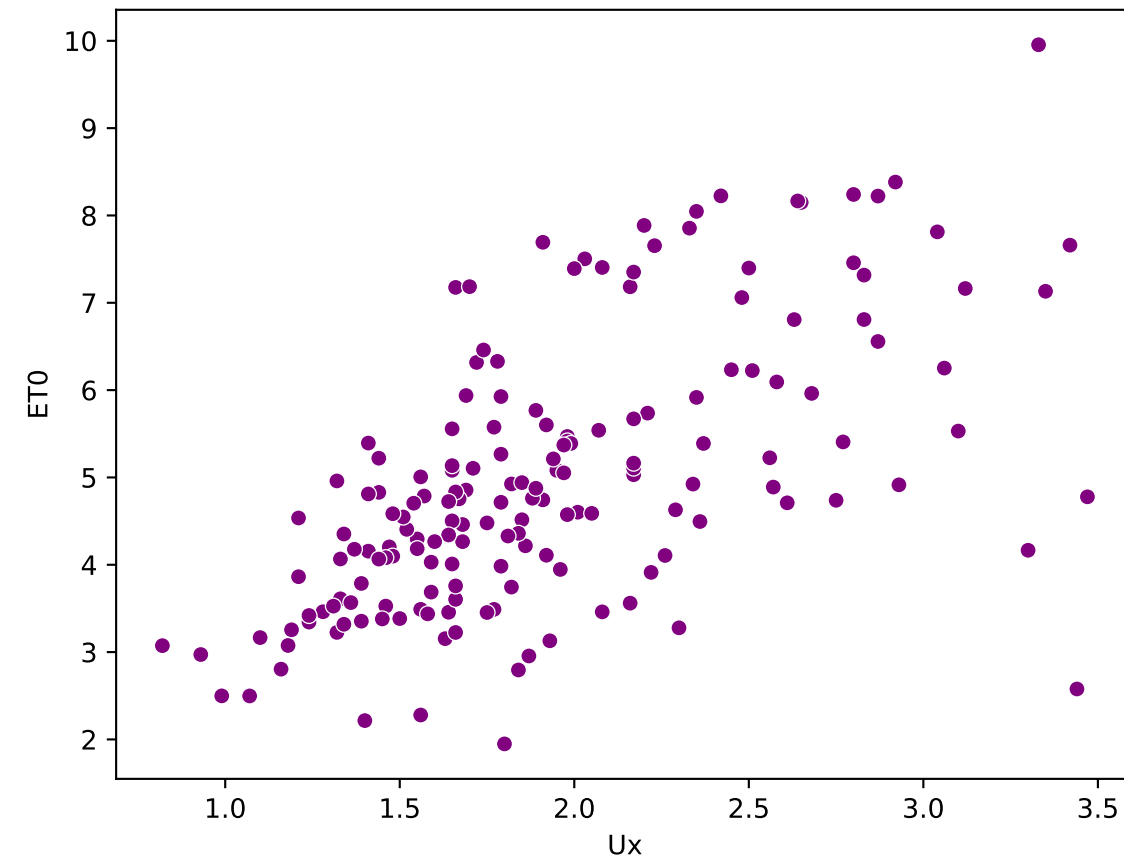
Rs vs ET0



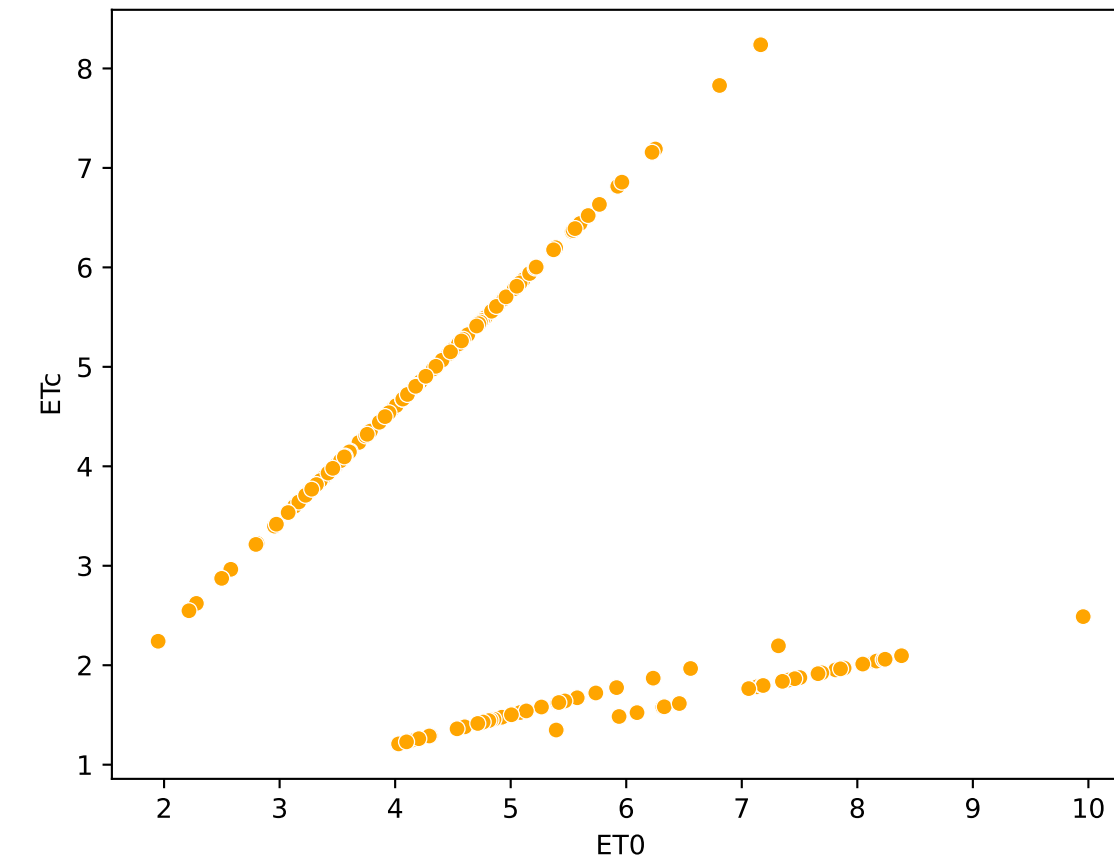
HR vs ET0



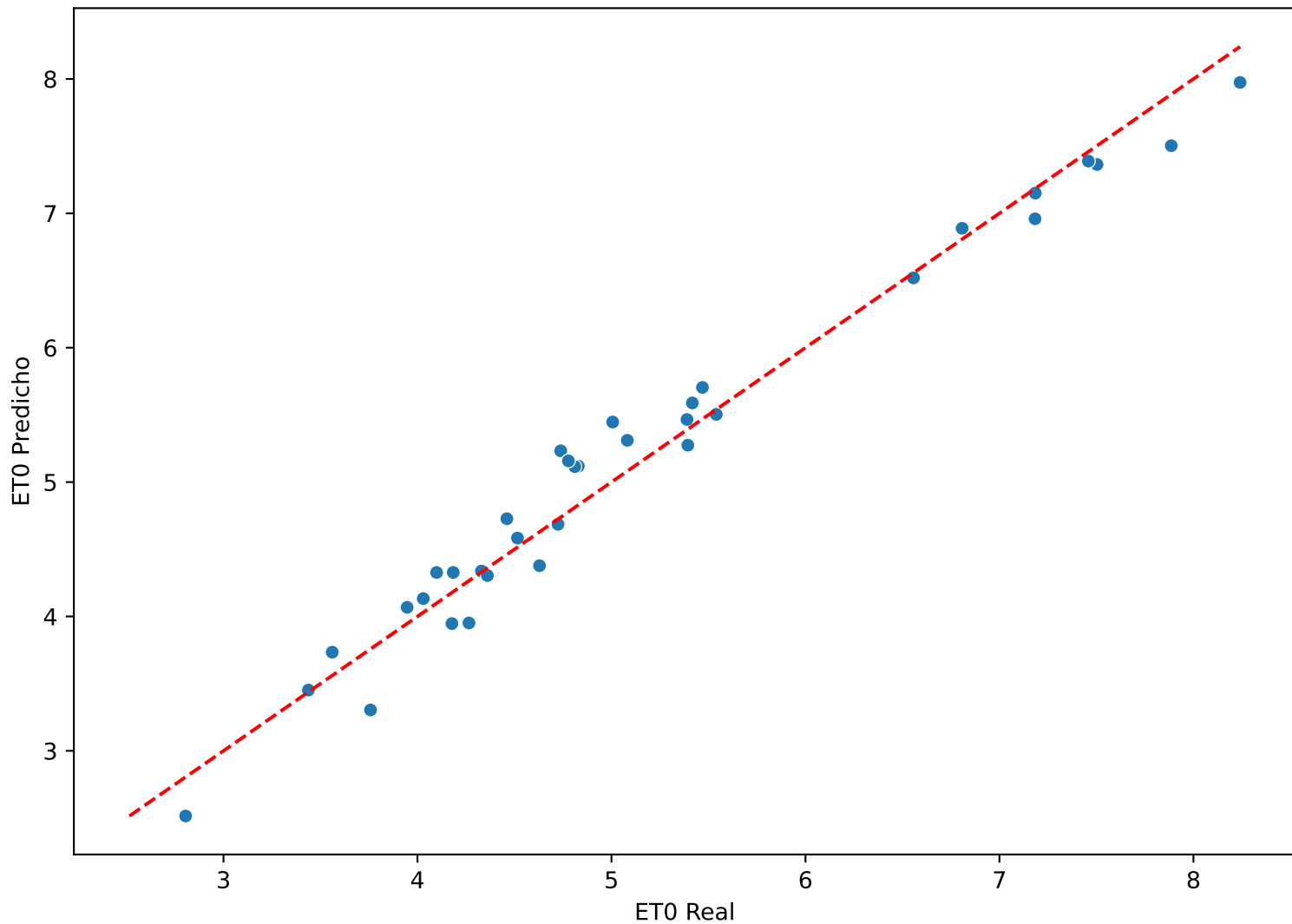
Ux vs ET0



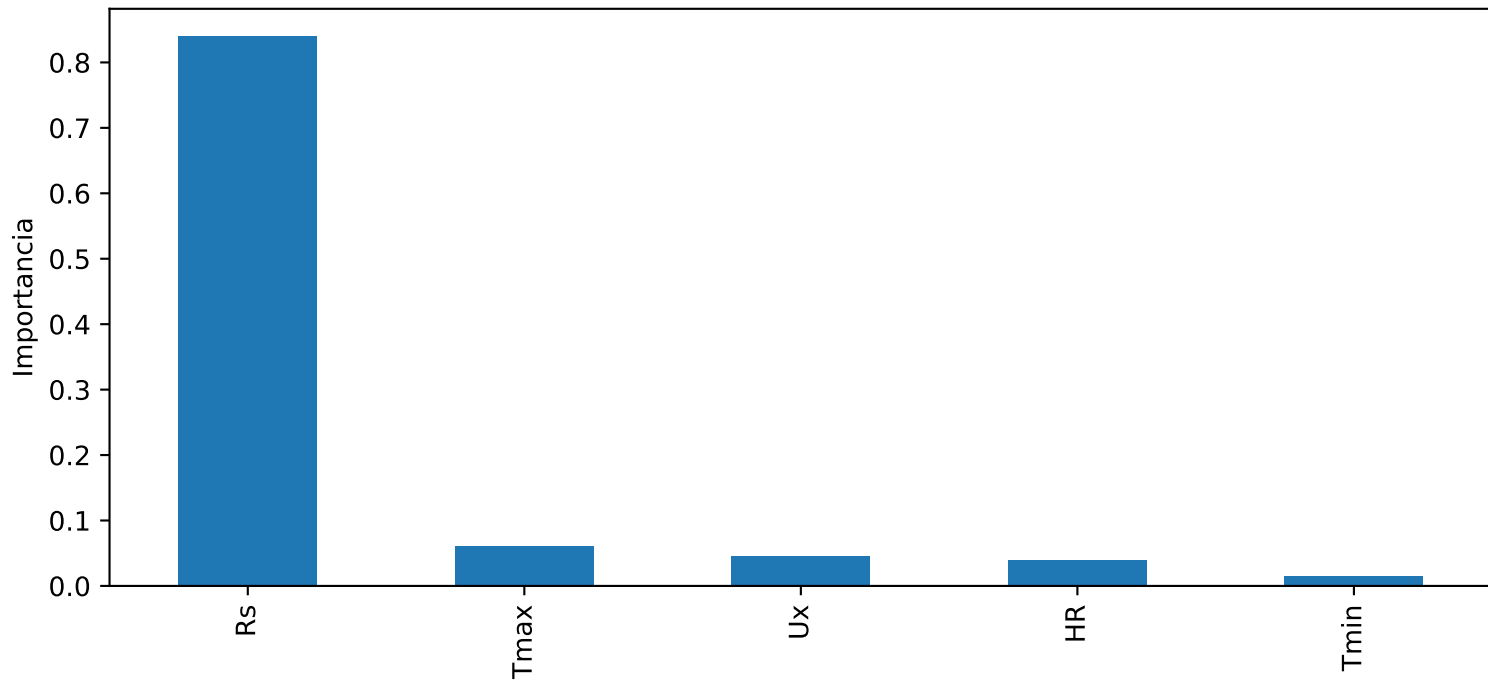
ET0 vs ETC



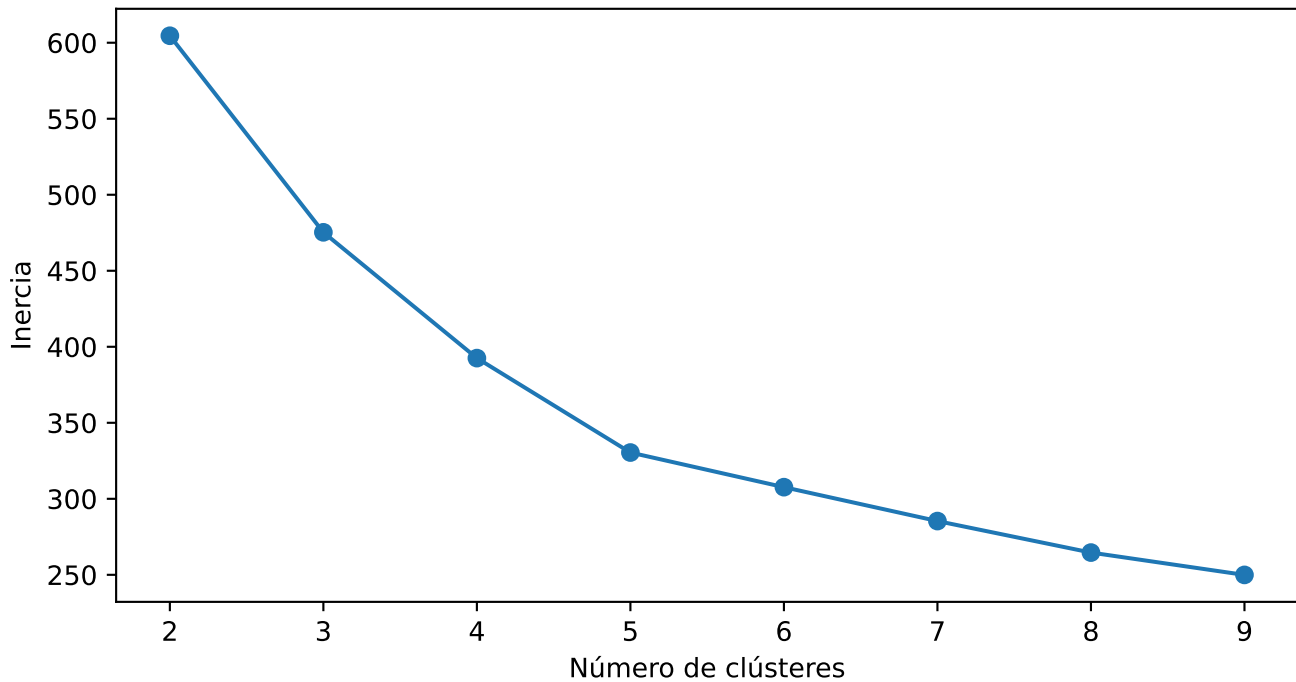
Comparación entre ET0 Real y Predicho — Etchojoa (2017-2018)



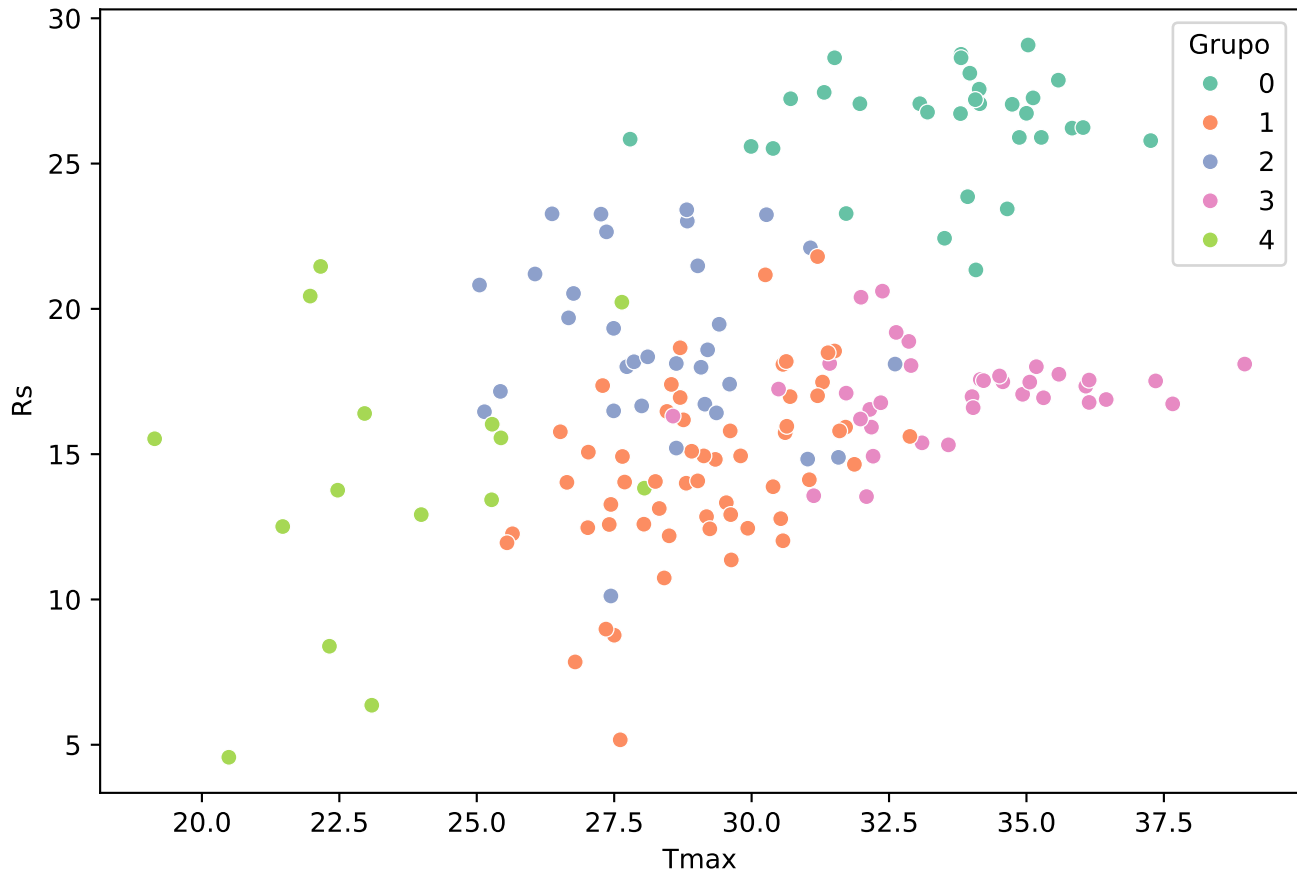
Importancia de variables (RF) — Etchojoa (2017-2018)



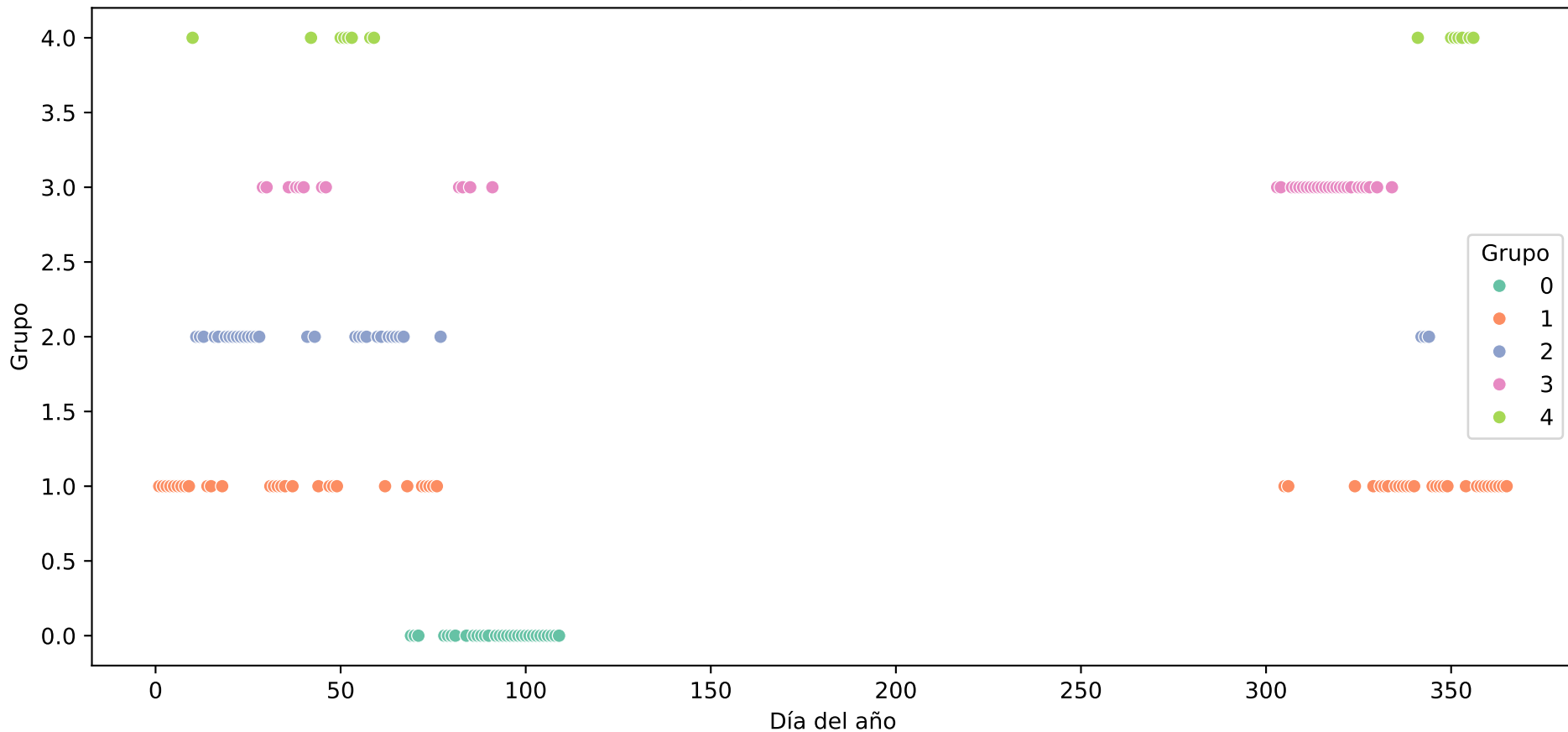
Método del codo



Clasificación de días climáticos — Etchojoa (2017-2018)

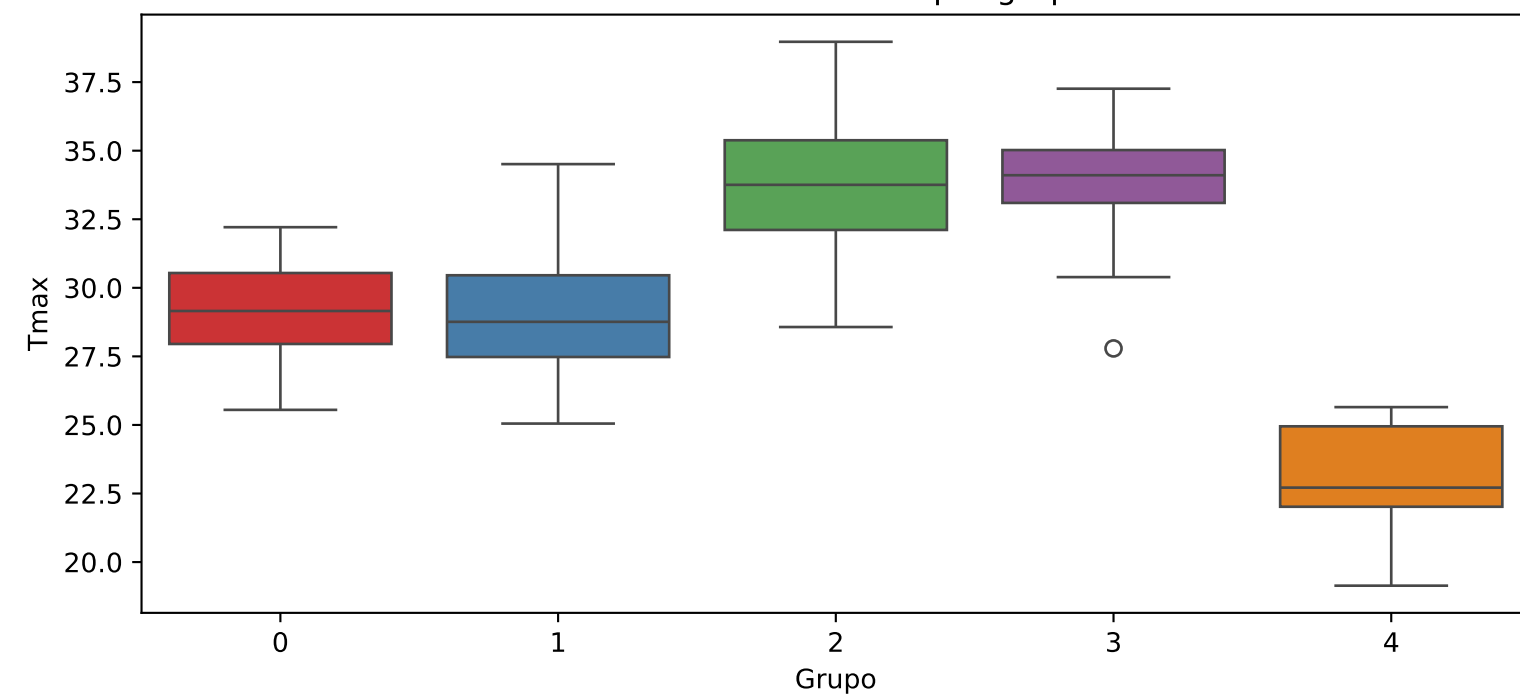


Distribución de días por grupo — Etchojoa (2017-2018)

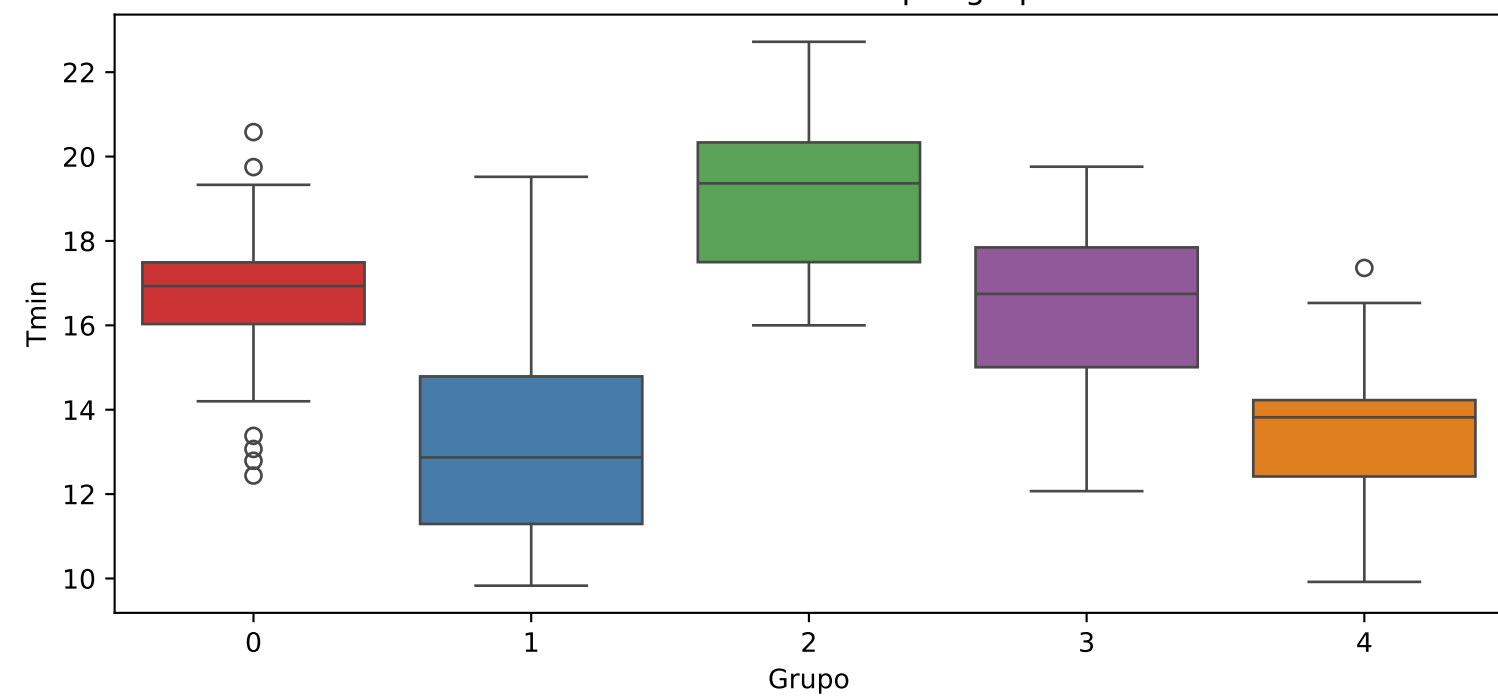


Boxplots por grupo — Etchojoa (2017-2018)

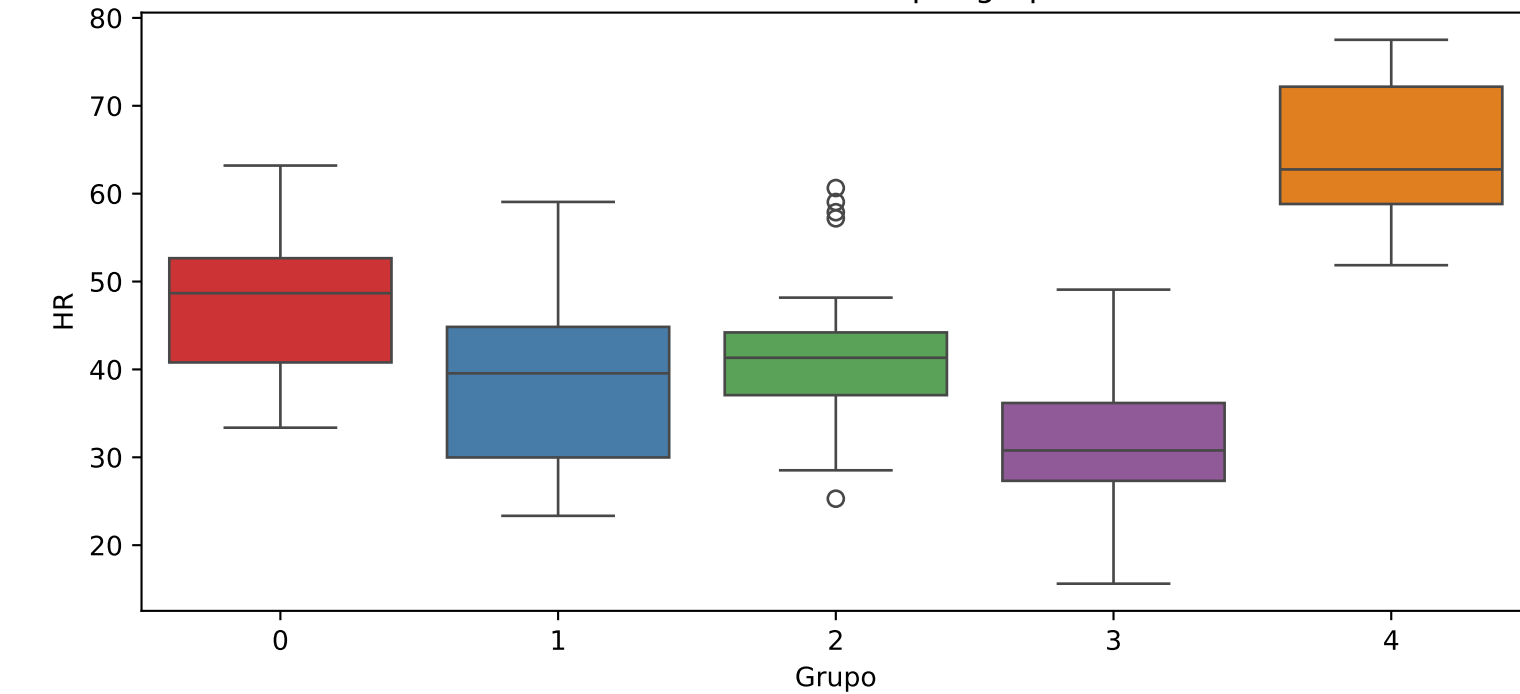
Distribución de Tmax por grupo



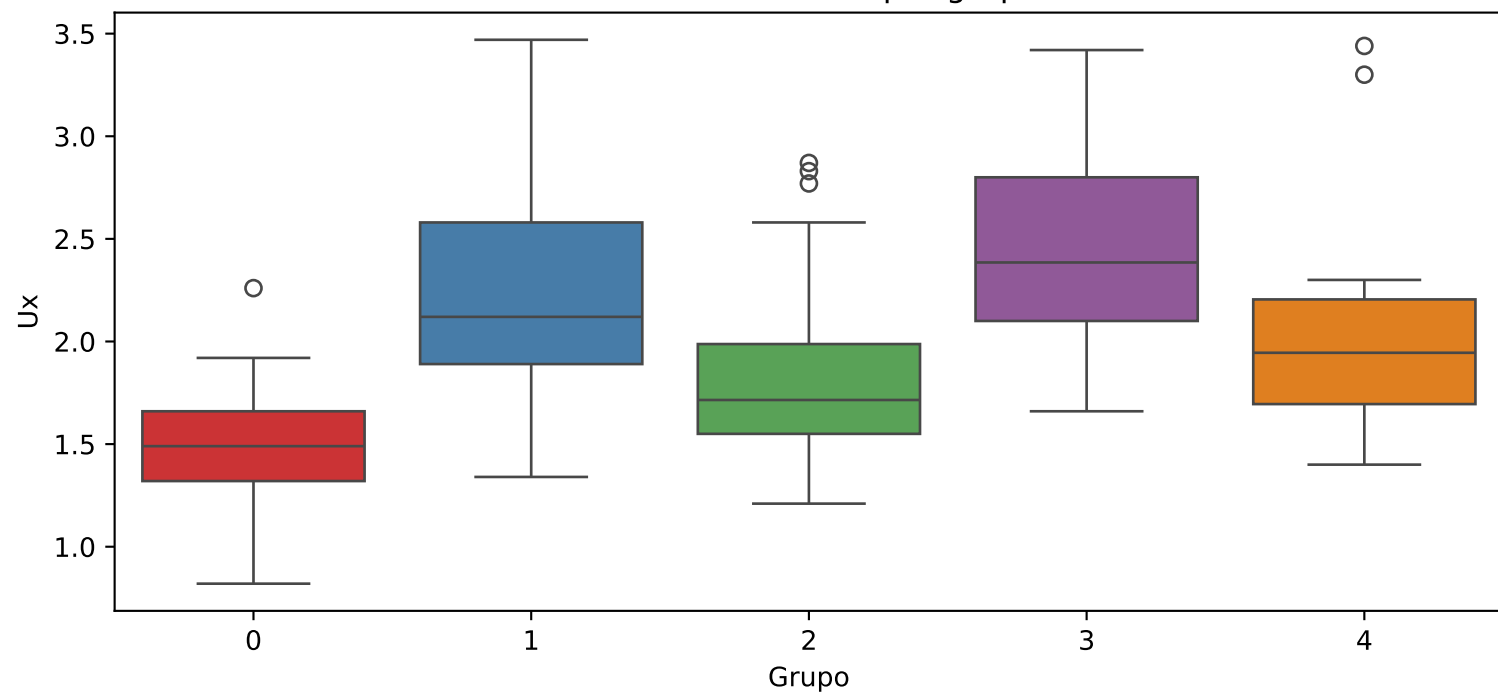
Distribución de Tmin por grupo



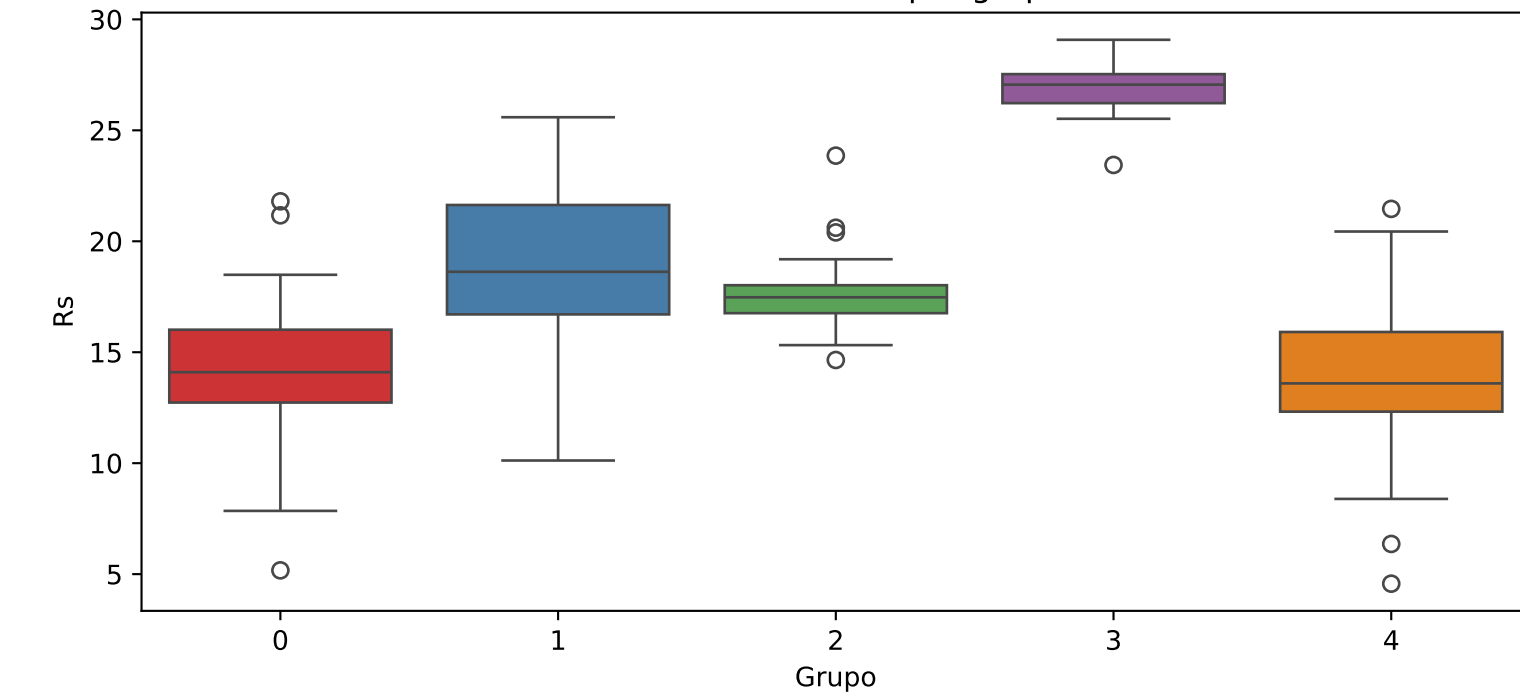
Distribución de HR por grupo



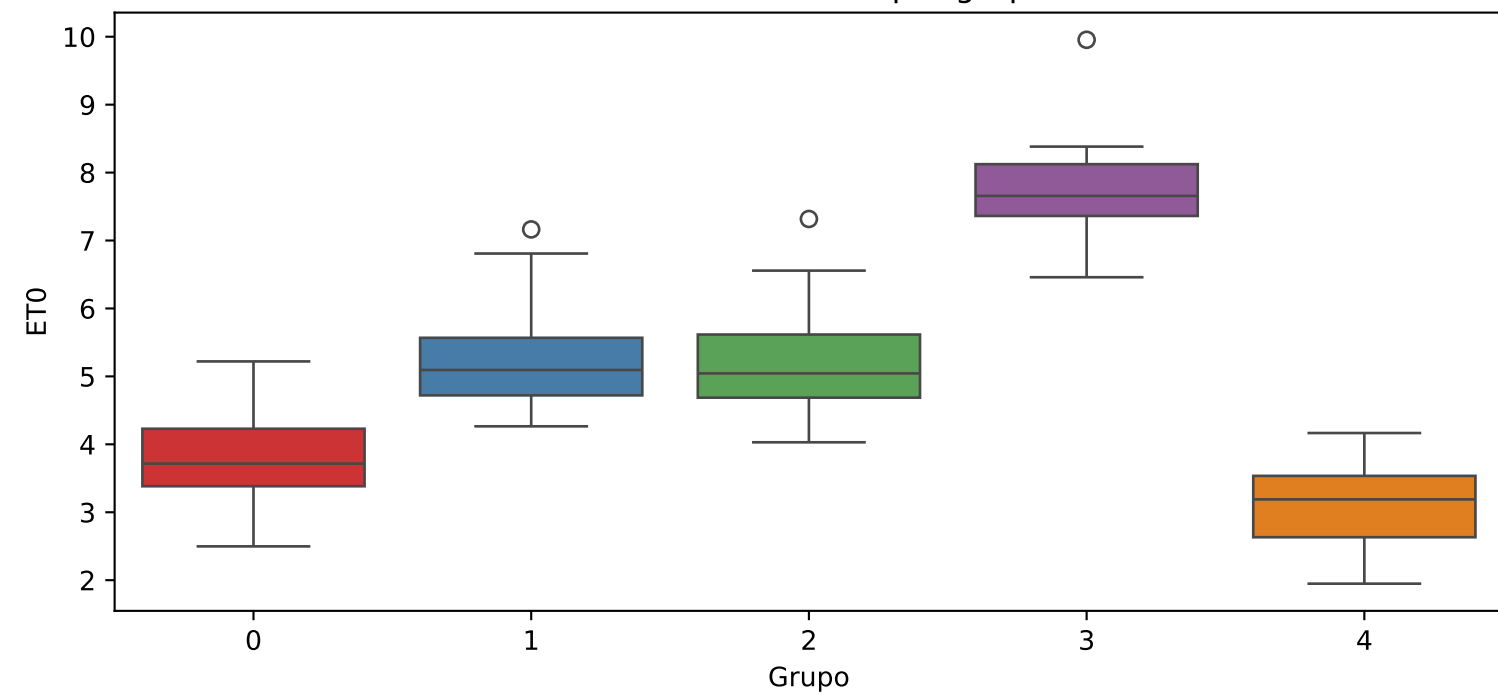
Distribución de Ux por grupo



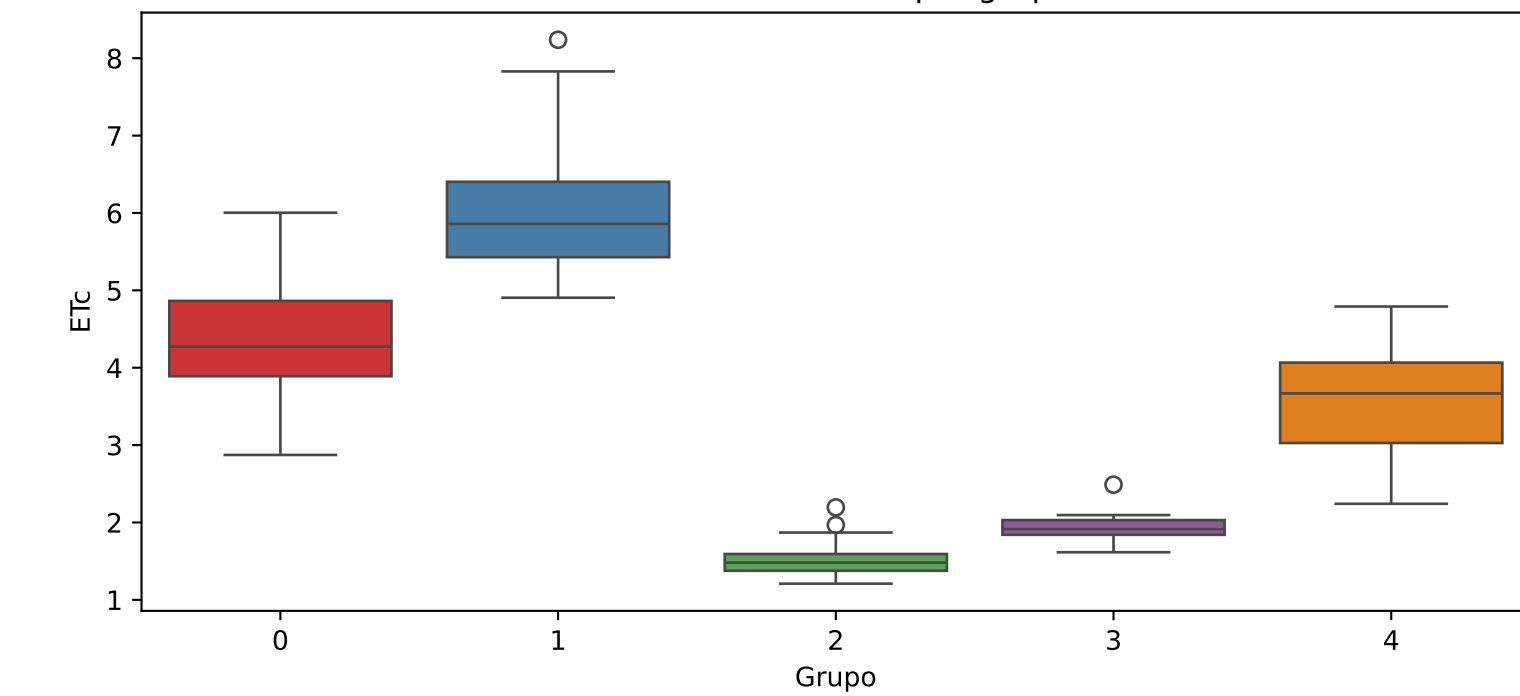
Distribución de Rs por grupo



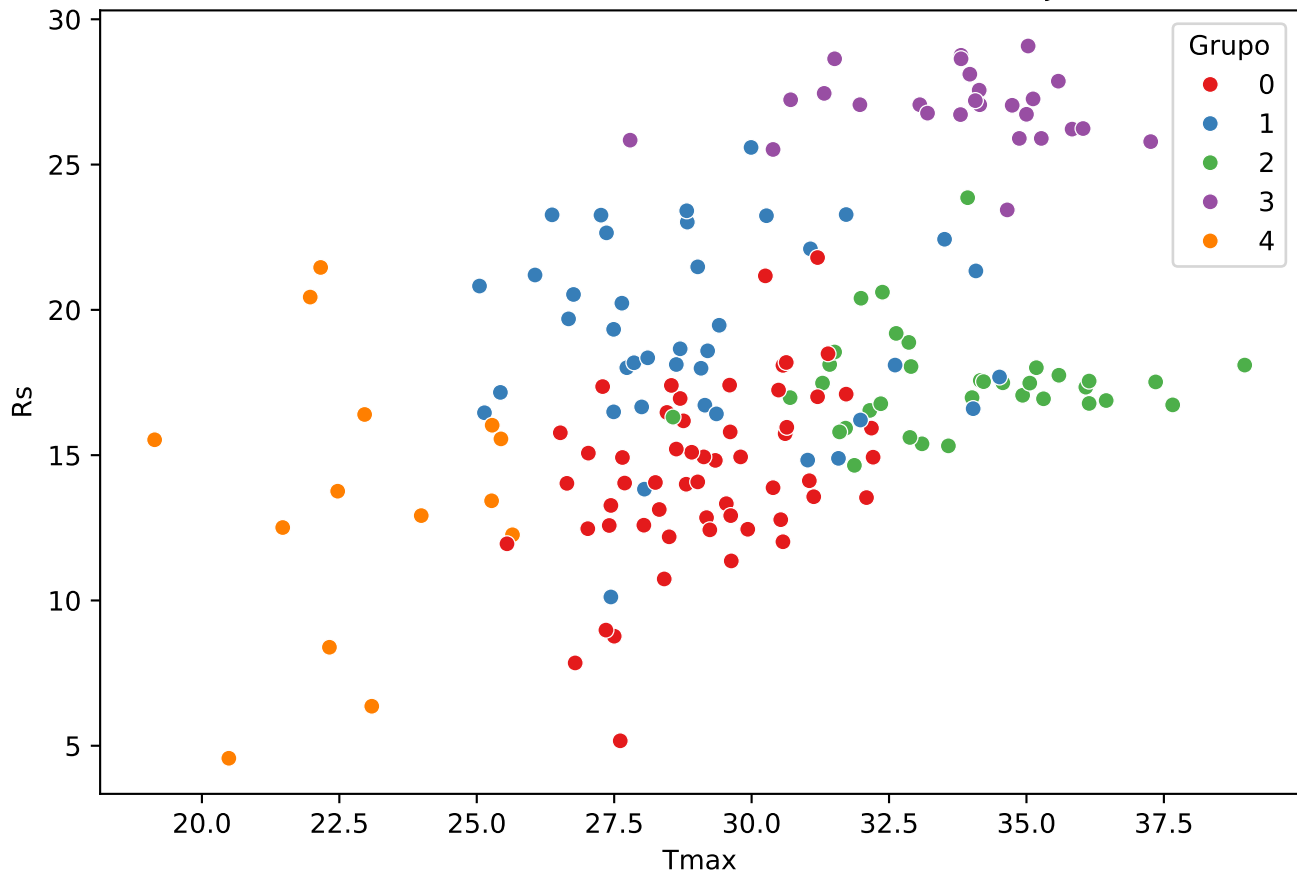
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2017-2018)



Etchojoa — 2018-2019

Días del ciclo: 172

ETc total [mm]: 588.9

ETverde total [mm]: 23.7

ETazul total [mm]: 565.3

Tmax / Tmin [°C]: 38.3 / 5.8

Etchojoa — 2018-2019 · Resultados y métricas

[Etchojoa 2018-2019] Regresión Lineal ET0 — R^2 : 0.9851 MSE: 0.0362

[Etchojoa 2018-2019] Random Forest ET0 — R^2 : 0.9663 MSE: 0.0820

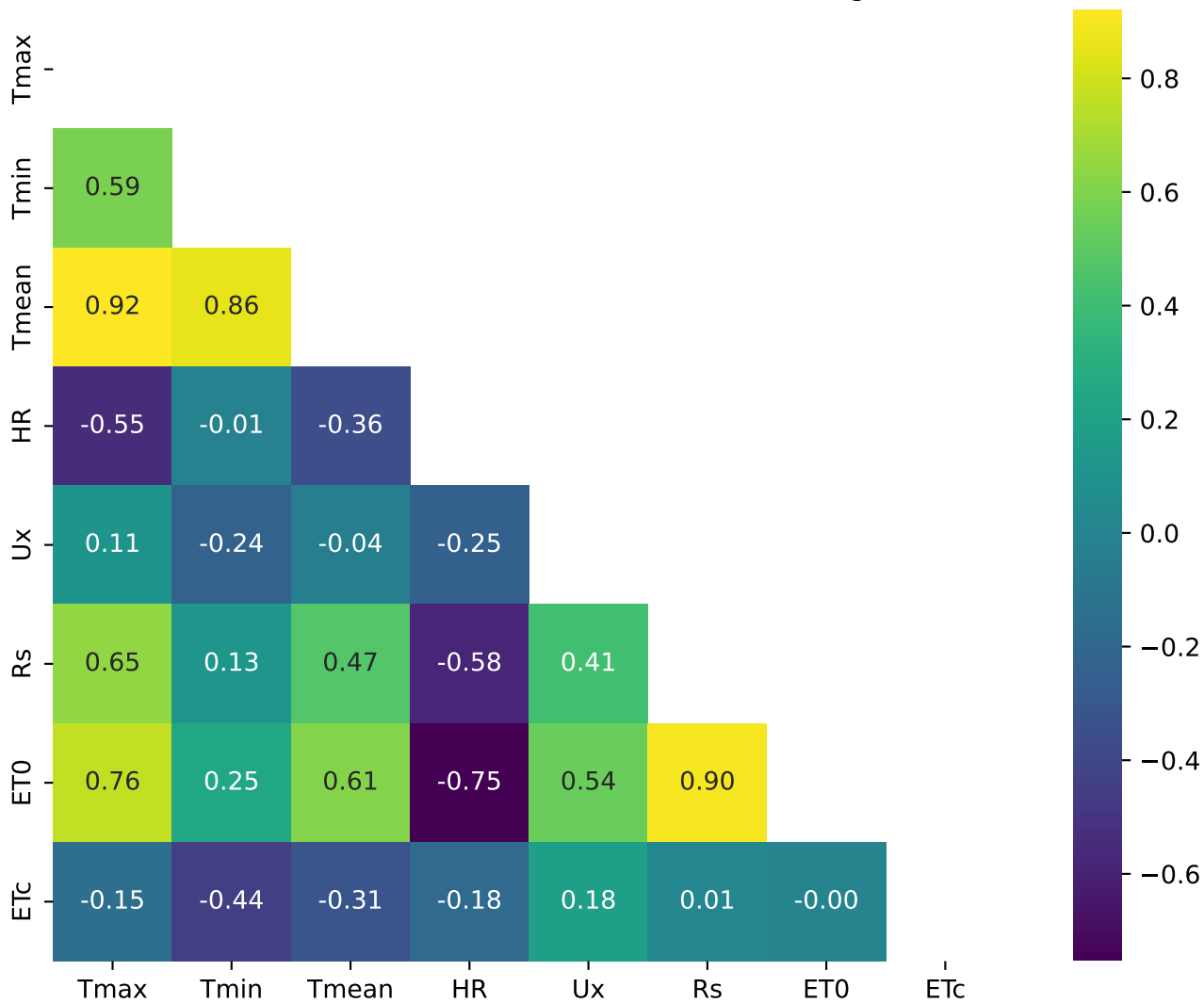
Importancias: {'Tmax': 0.08477072011656894, 'Tmin': 0.013906304302400616, 'HR': 0.09921967369606756, 'Ux': 0.027081698423102978, 'Rs': 0.7750216034618599}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	30.063214	14.923929	39.609643	1.948929	20.028571	5.330007	6.129508
1	25.498936	14.647021	58.912979	1.597660	12.099149	2.986836	3.398473
2	25.305405	10.657838	48.220270	2.091081	17.059189	4.017783	4.524037
3	29.458966	17.273448	55.725172	1.548276	16.515862	3.958773	1.169026
4	32.725806	16.181935	34.540645	2.345806	25.772581	7.184143	1.816017

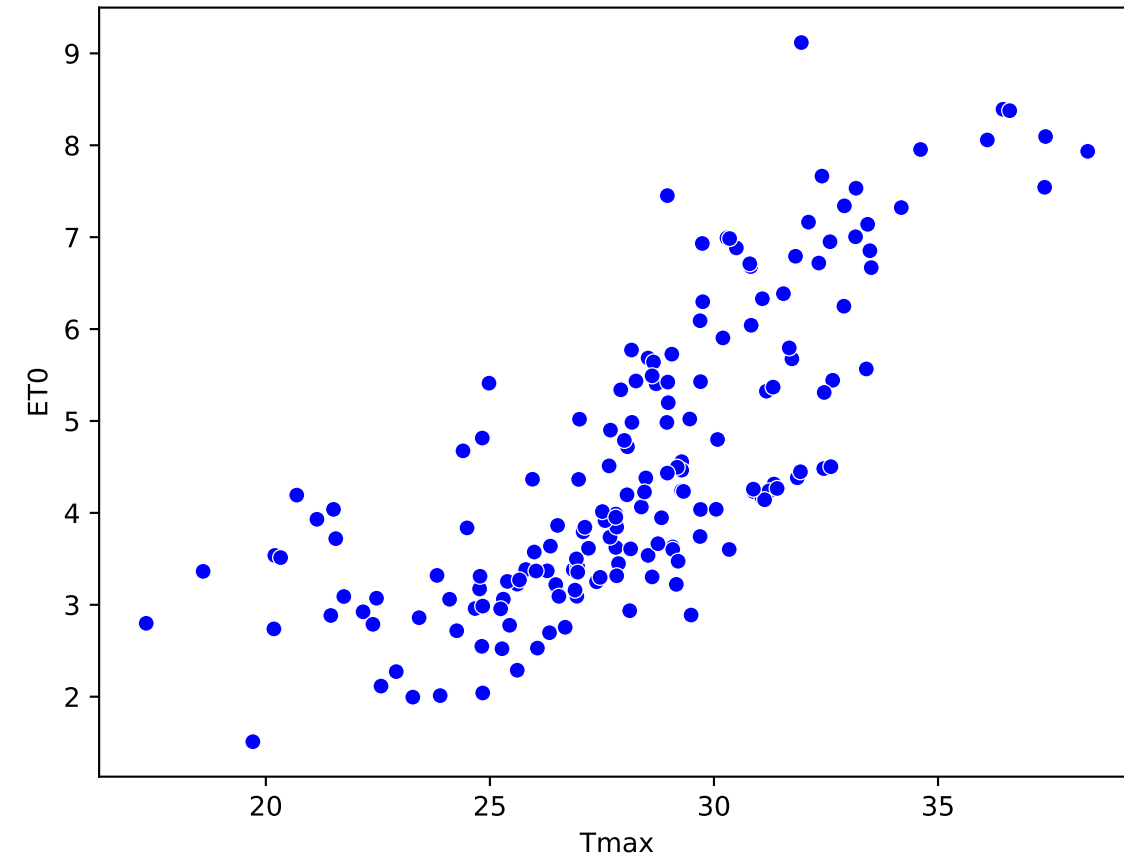
Etchojoa — 2018-2019

Matriz de Correlación entre Variables Meteorológicas

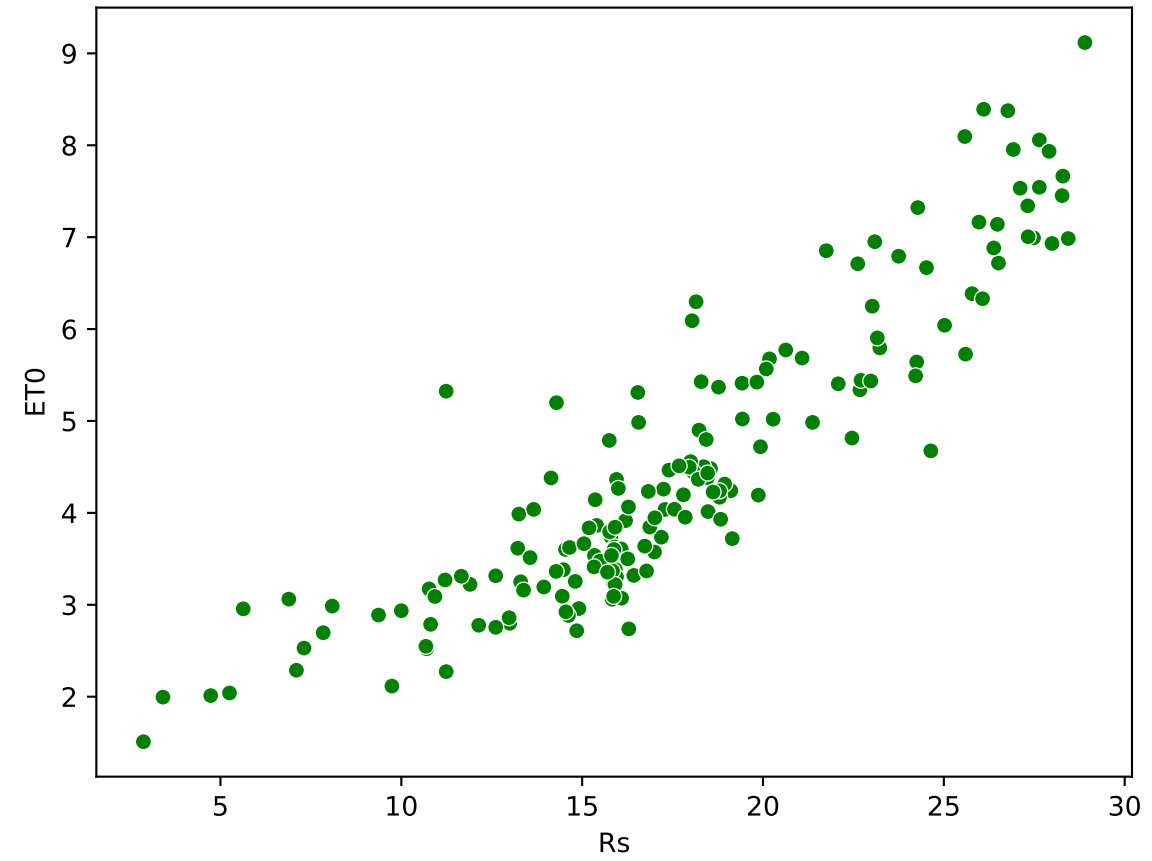


Dispersión — Etchojoa (2018-2019)

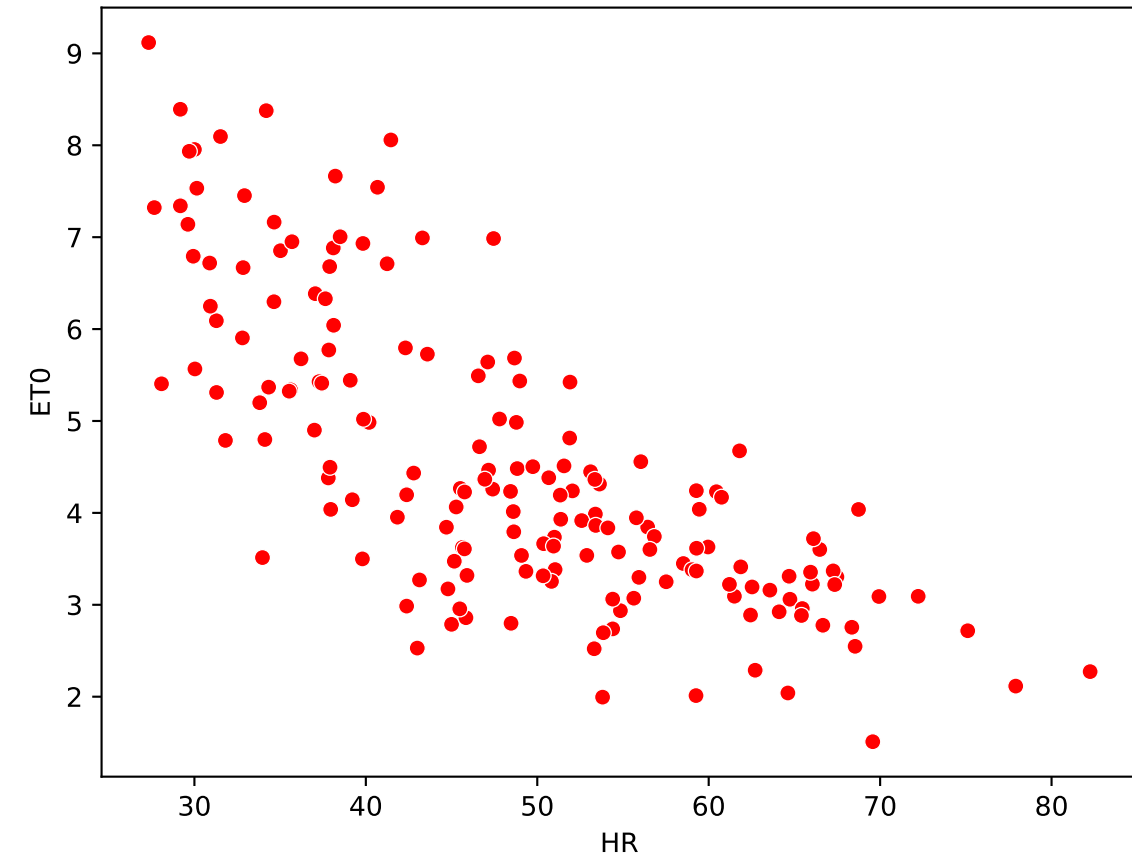
Tmax vs ET0



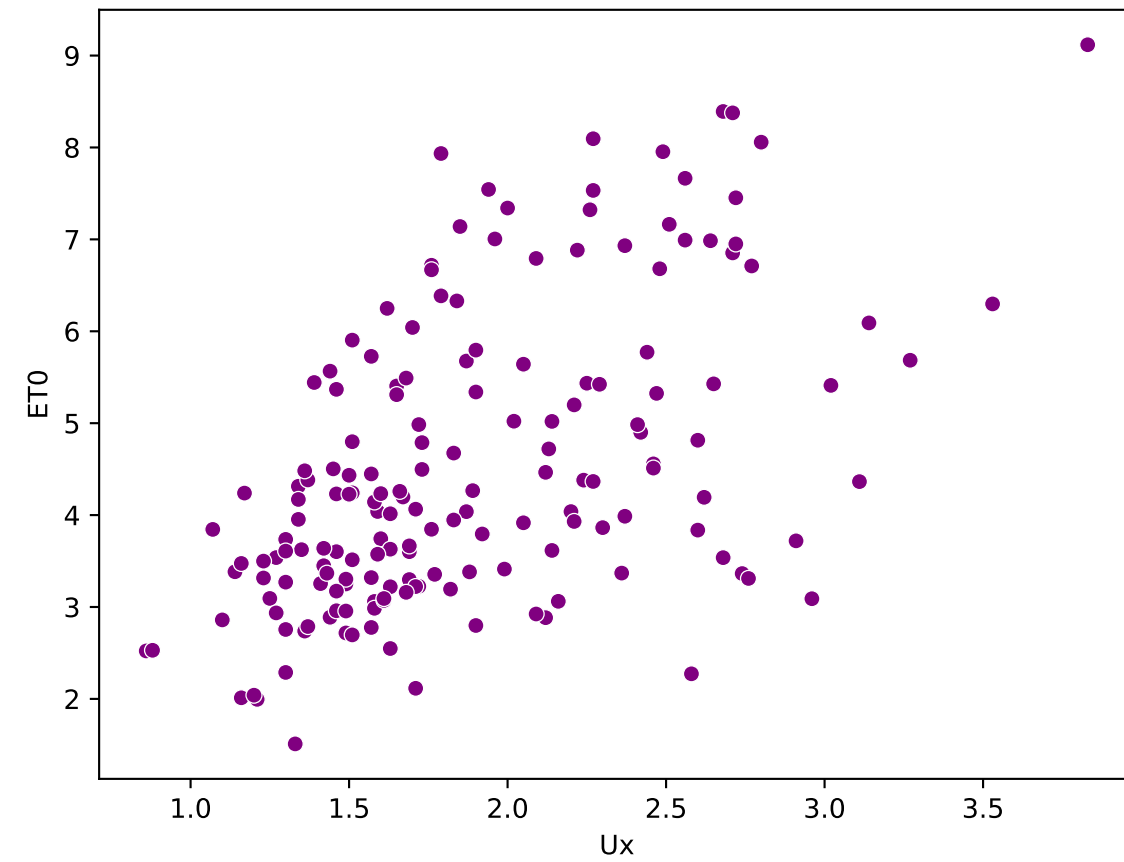
Rs vs ET0



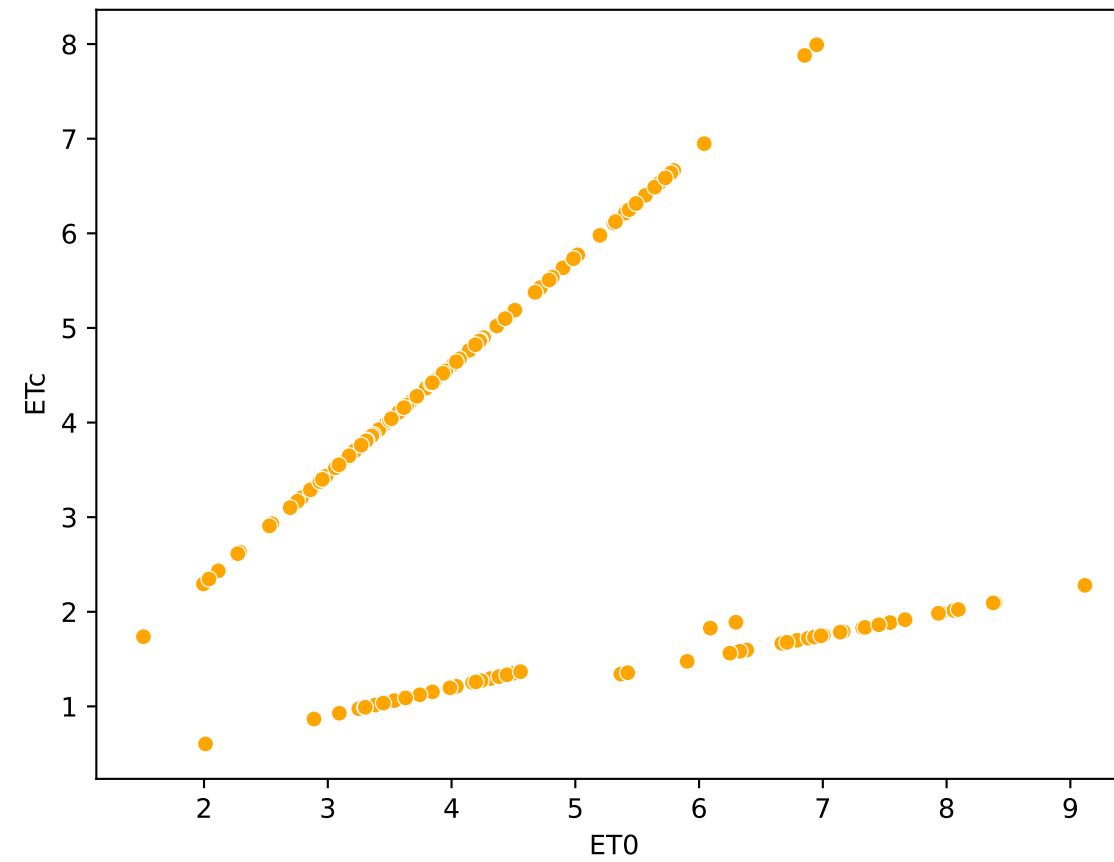
HR vs ET0



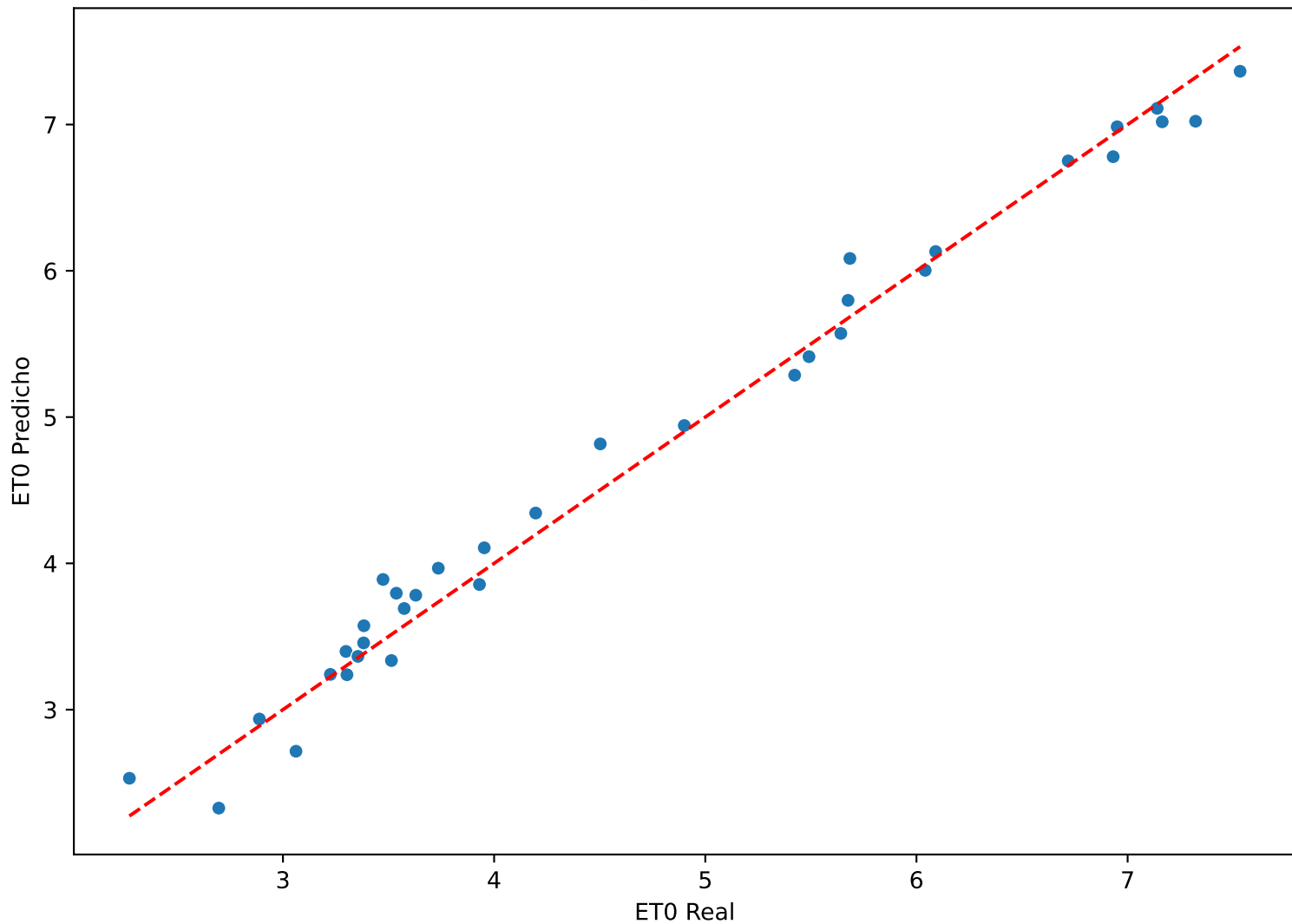
Ux vs ET0



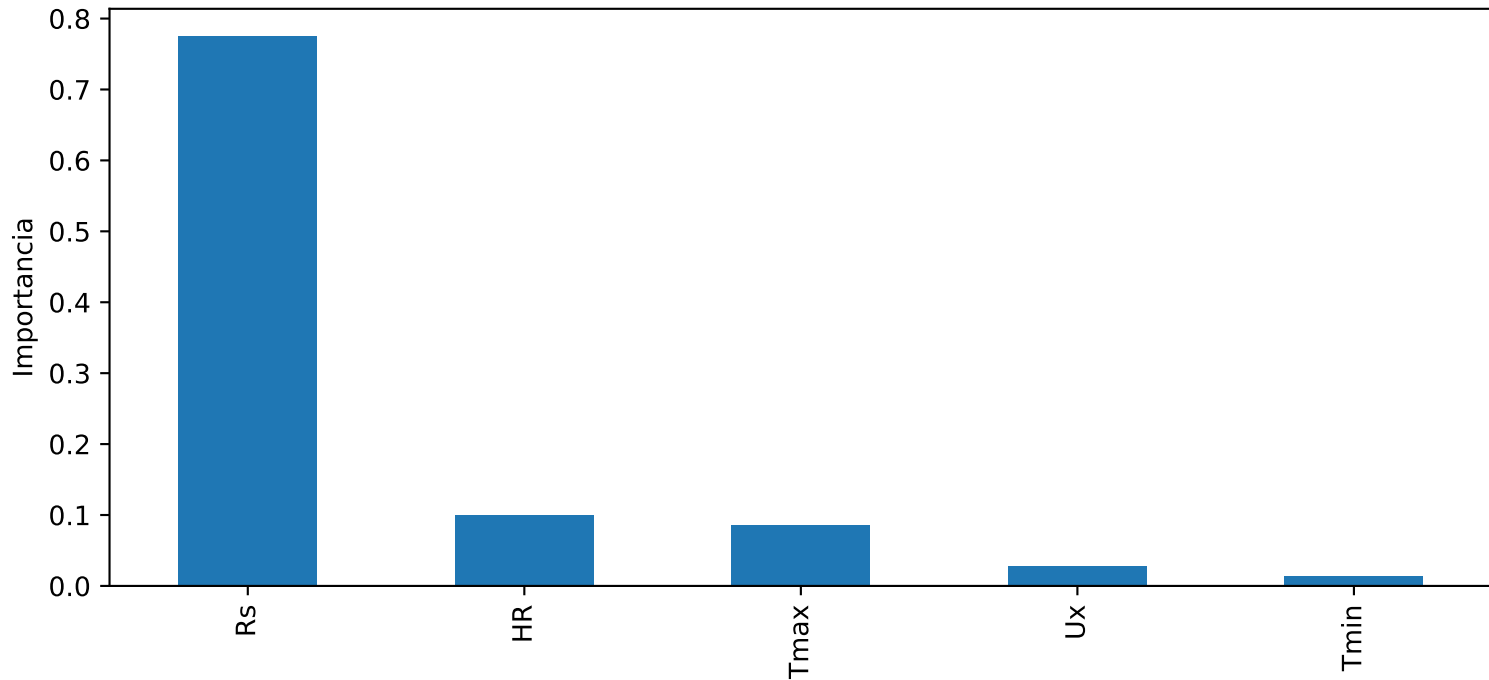
ET0 vs ETc



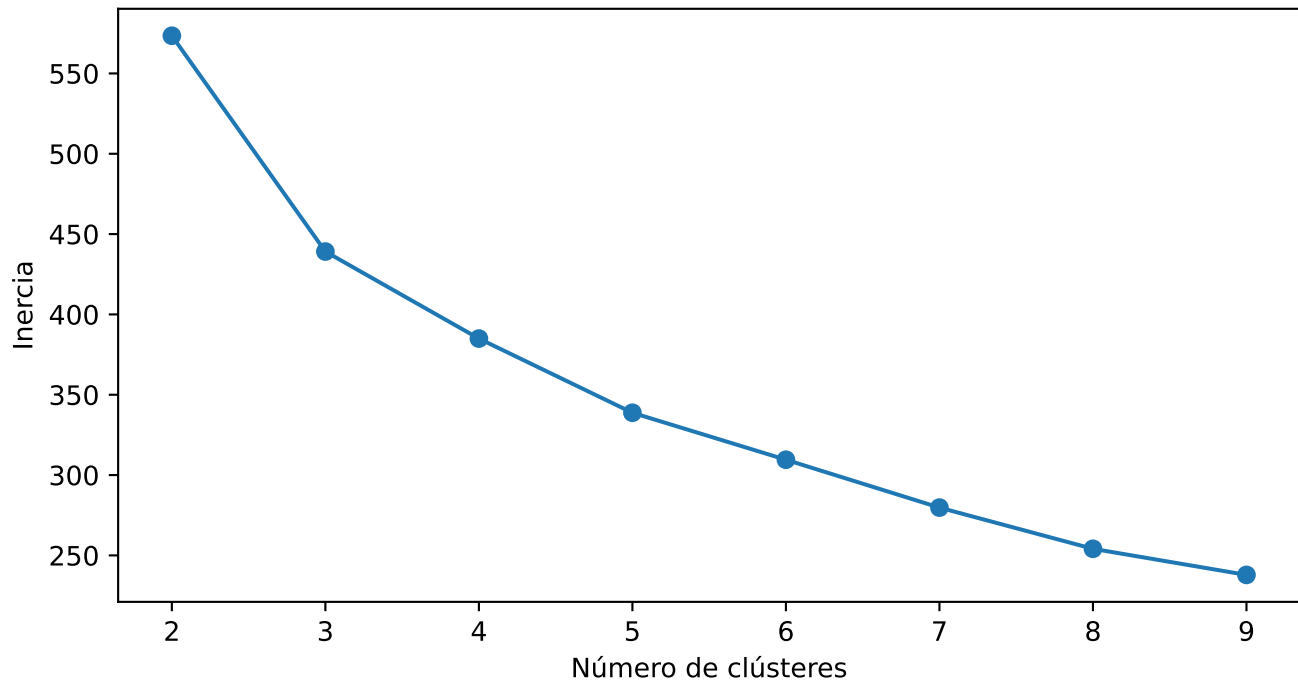
Comparación entre ET0 Real y Predicho — Etchojoa (2018-2019)



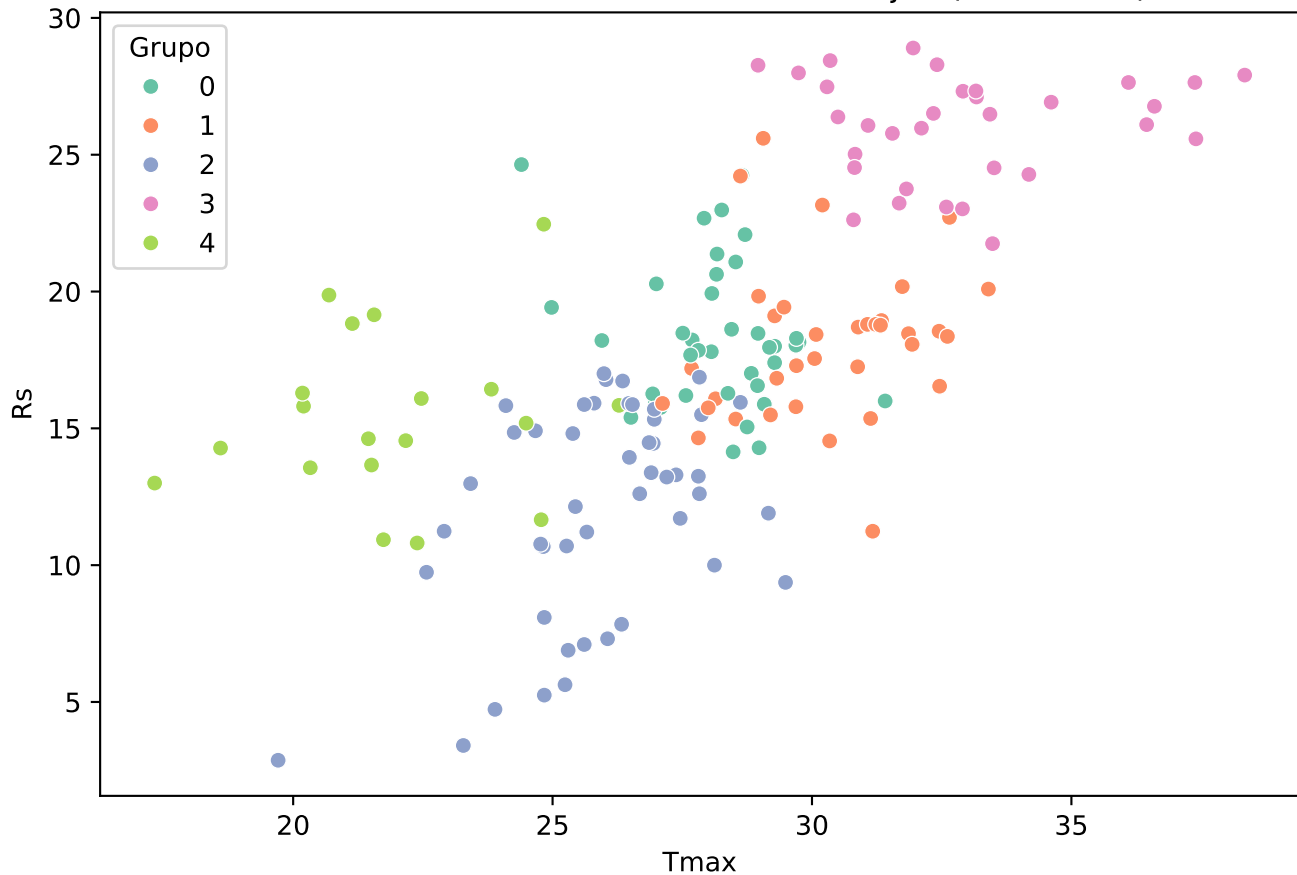
Importancia de variables (RF) — Etchojoa (2018-2019)



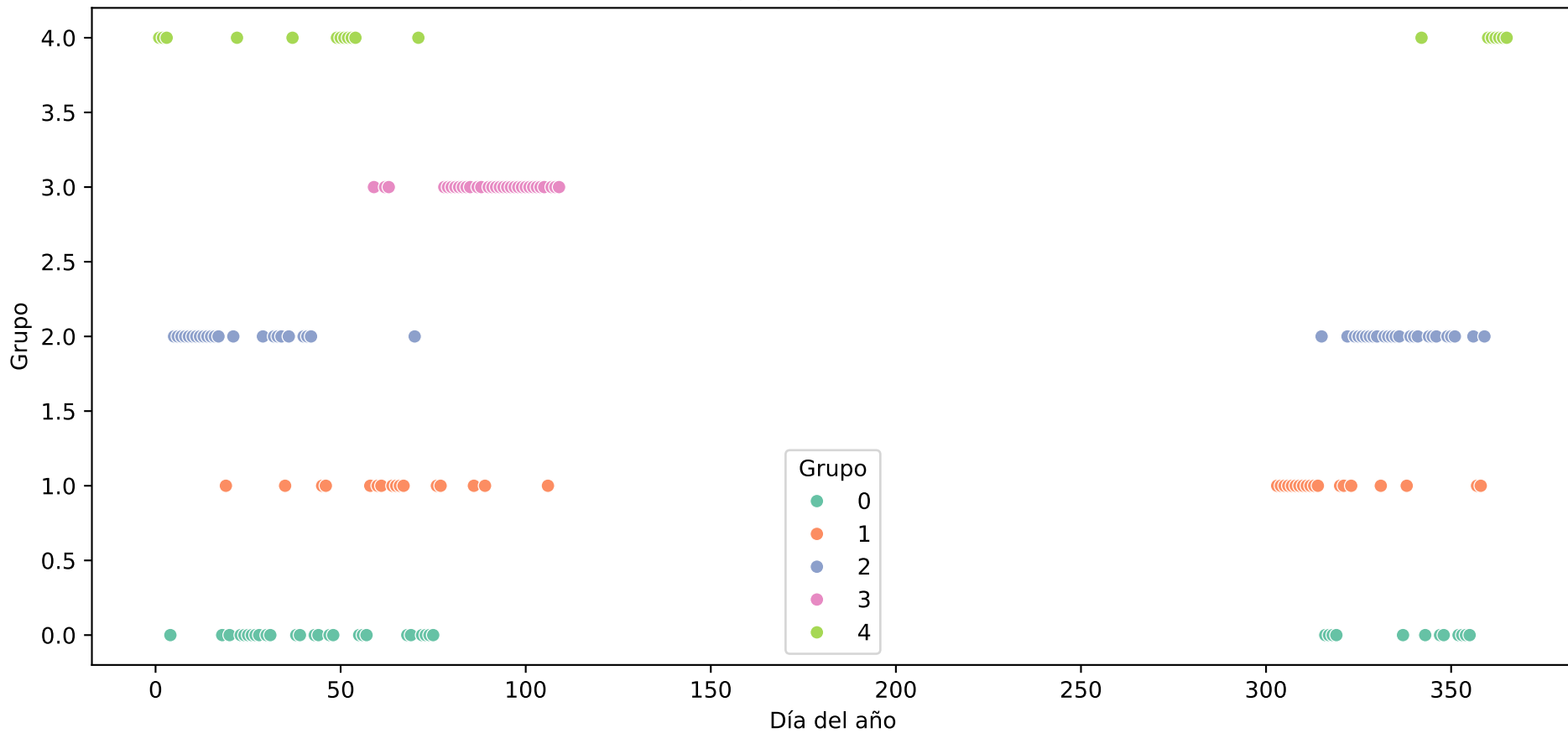
Método del codo



Clasificación de días climáticos — Etchojoa (2018-2019)

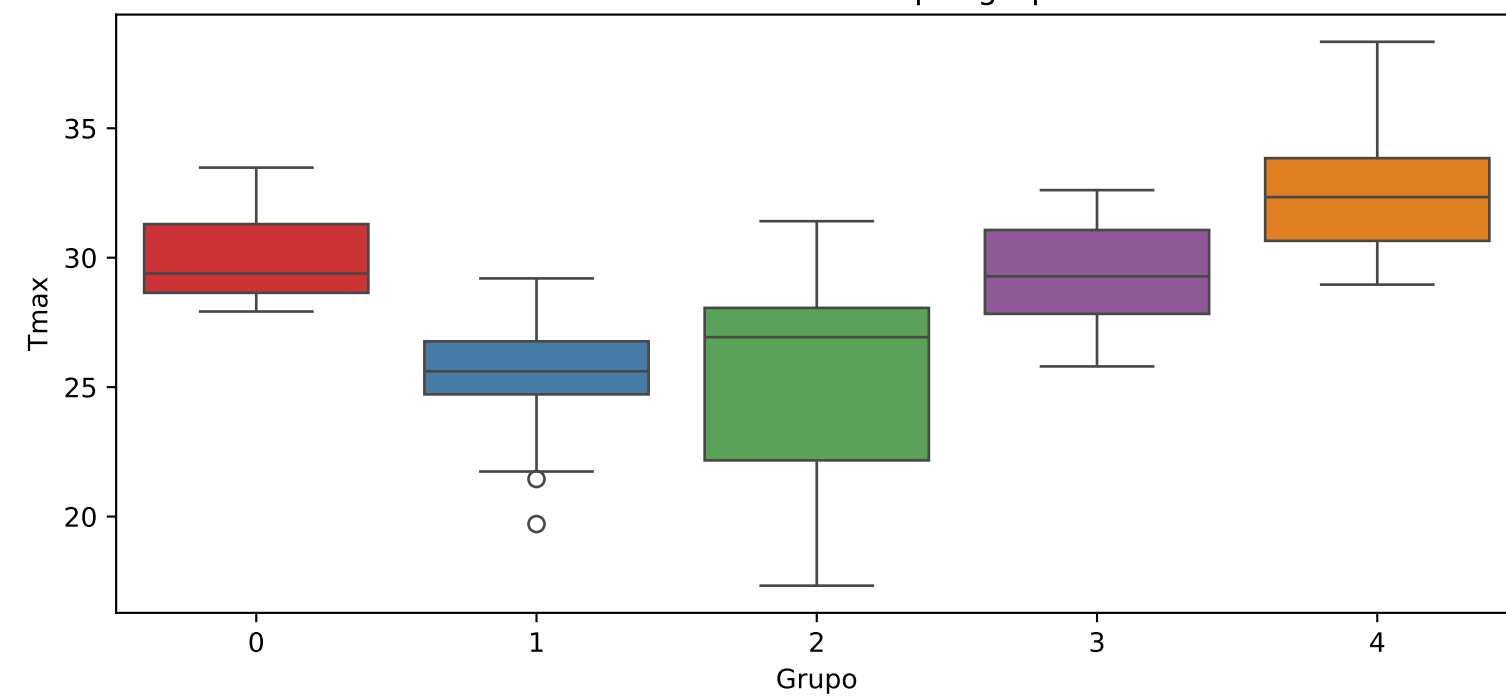


Distribución de días por grupo — Etchojoa (2018-2019)

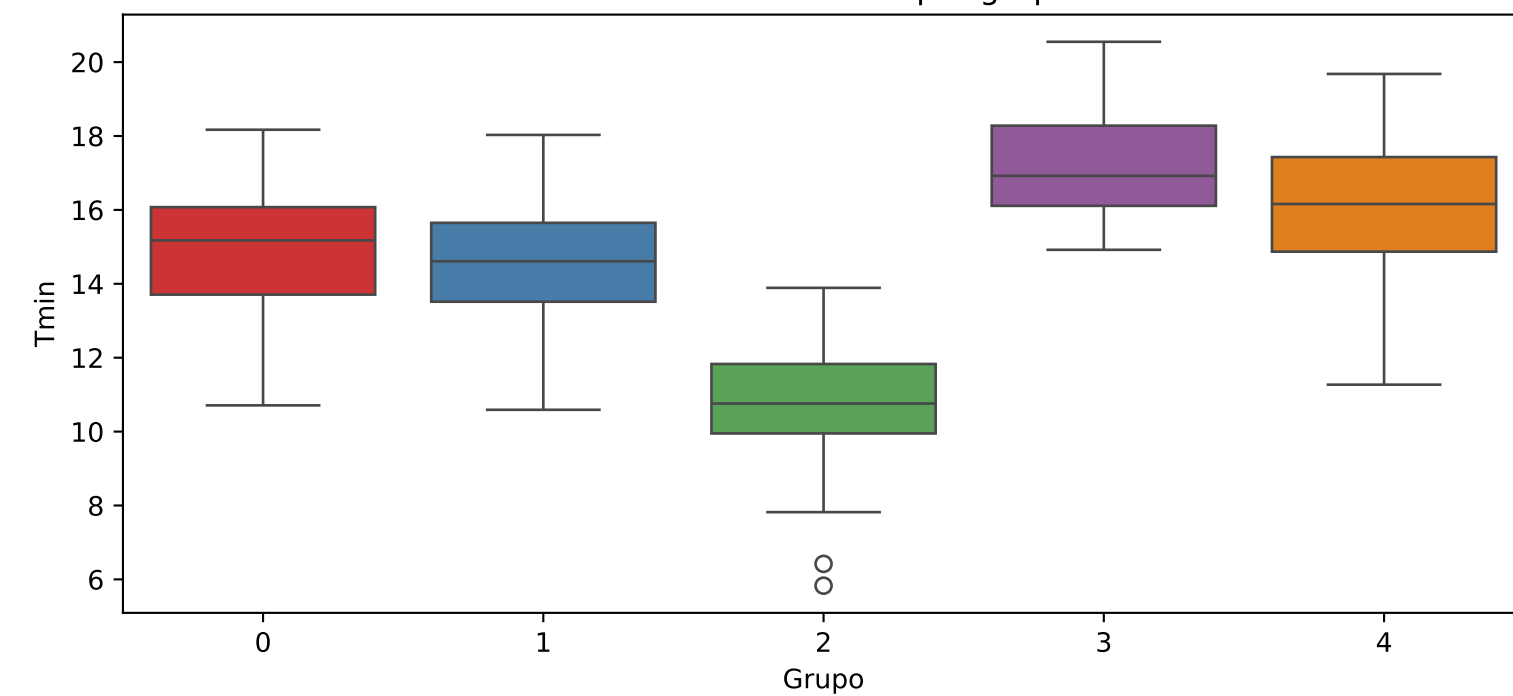


Boxplots por grupo — Etchojoa (2018-2019)

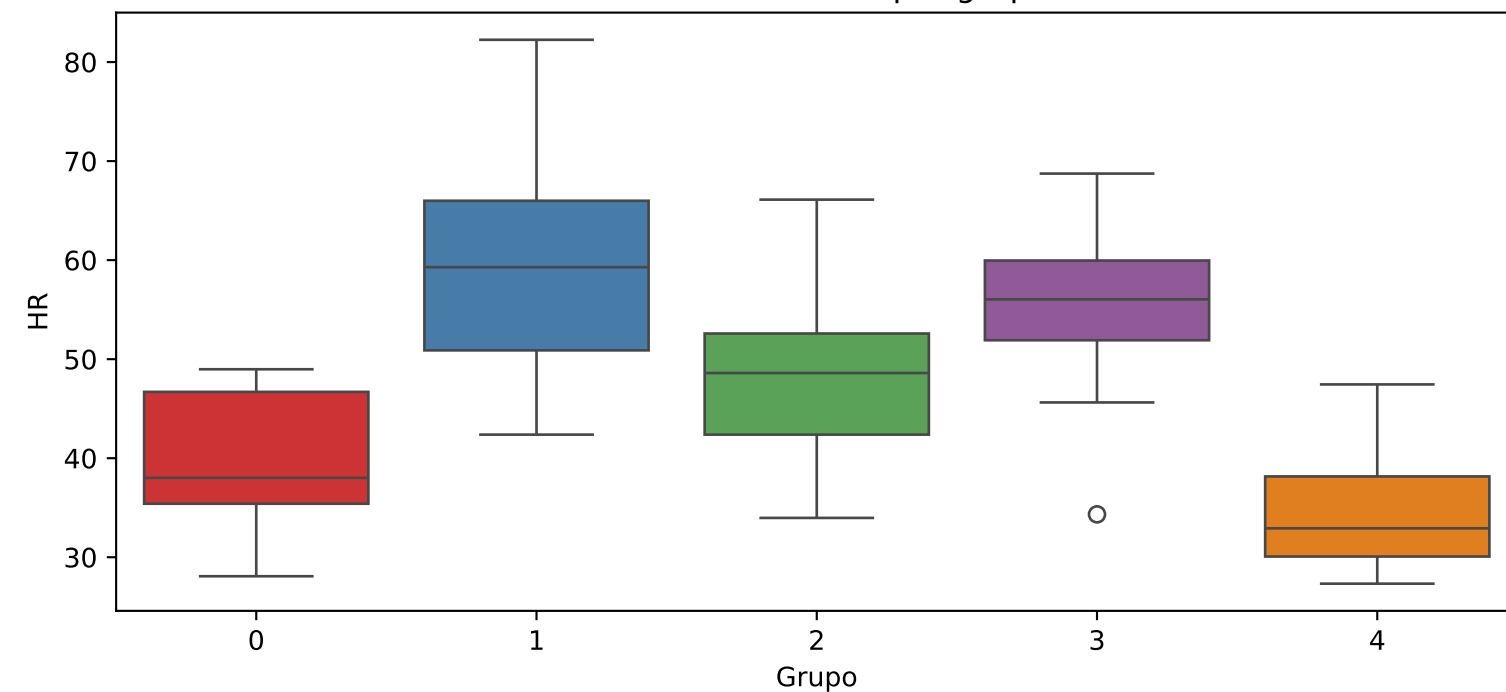
Distribución de Tmax por grupo



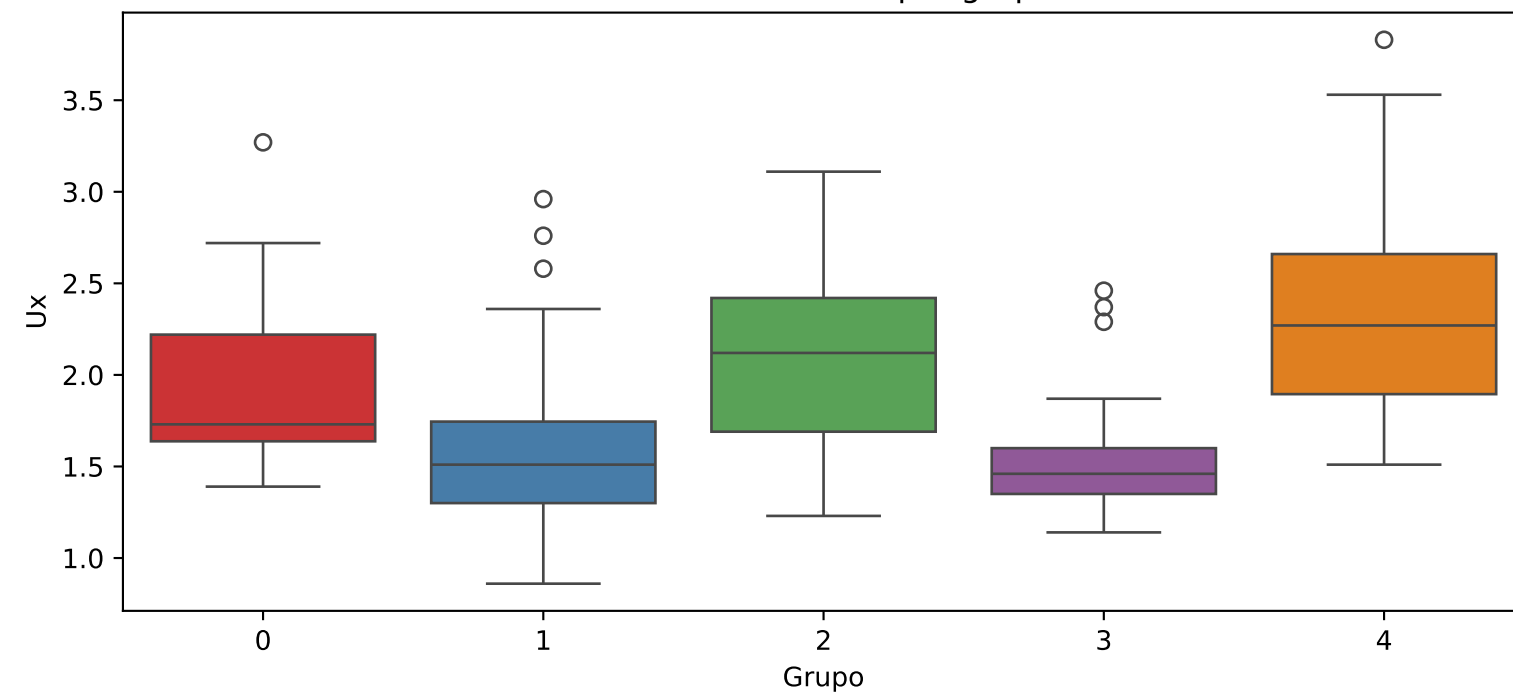
Distribución de Tmin por grupo



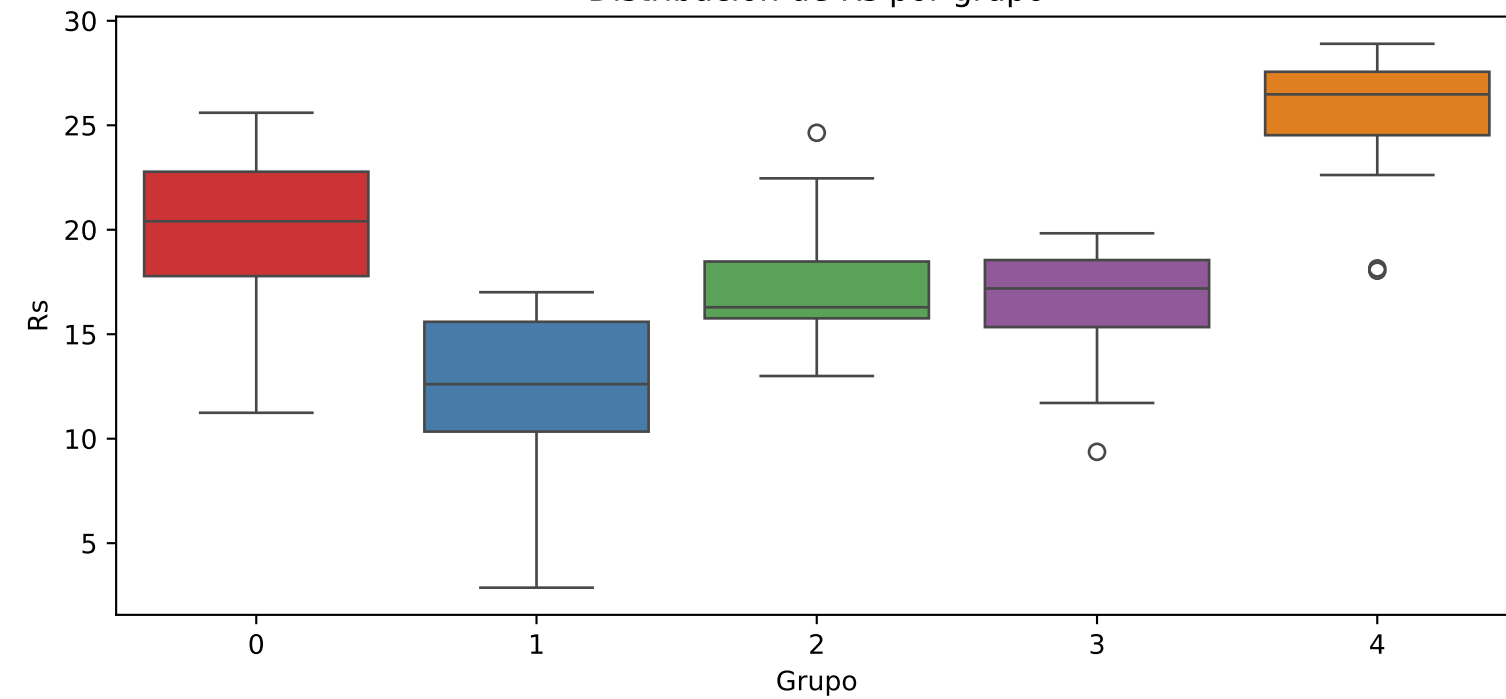
Distribución de HR por grupo



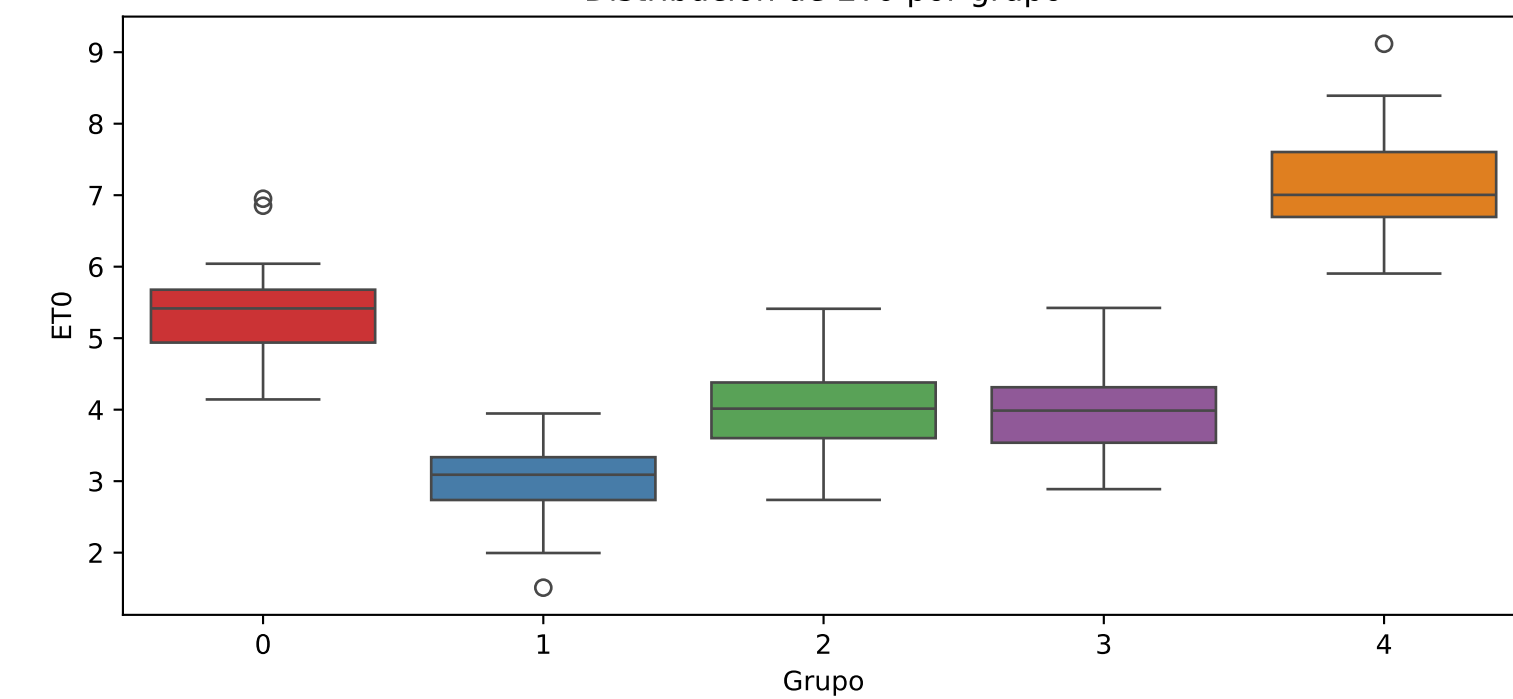
Distribución de Ux por grupo



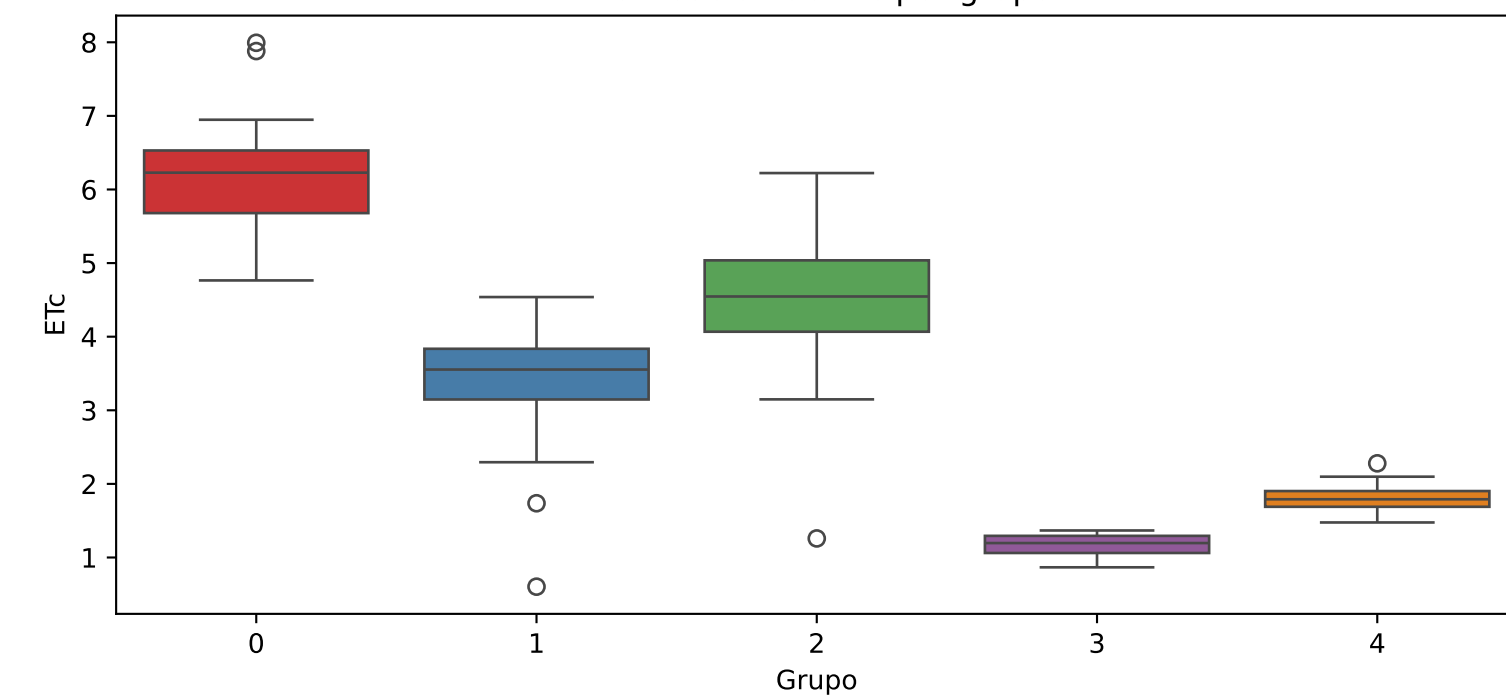
Distribución de Rs por grupo



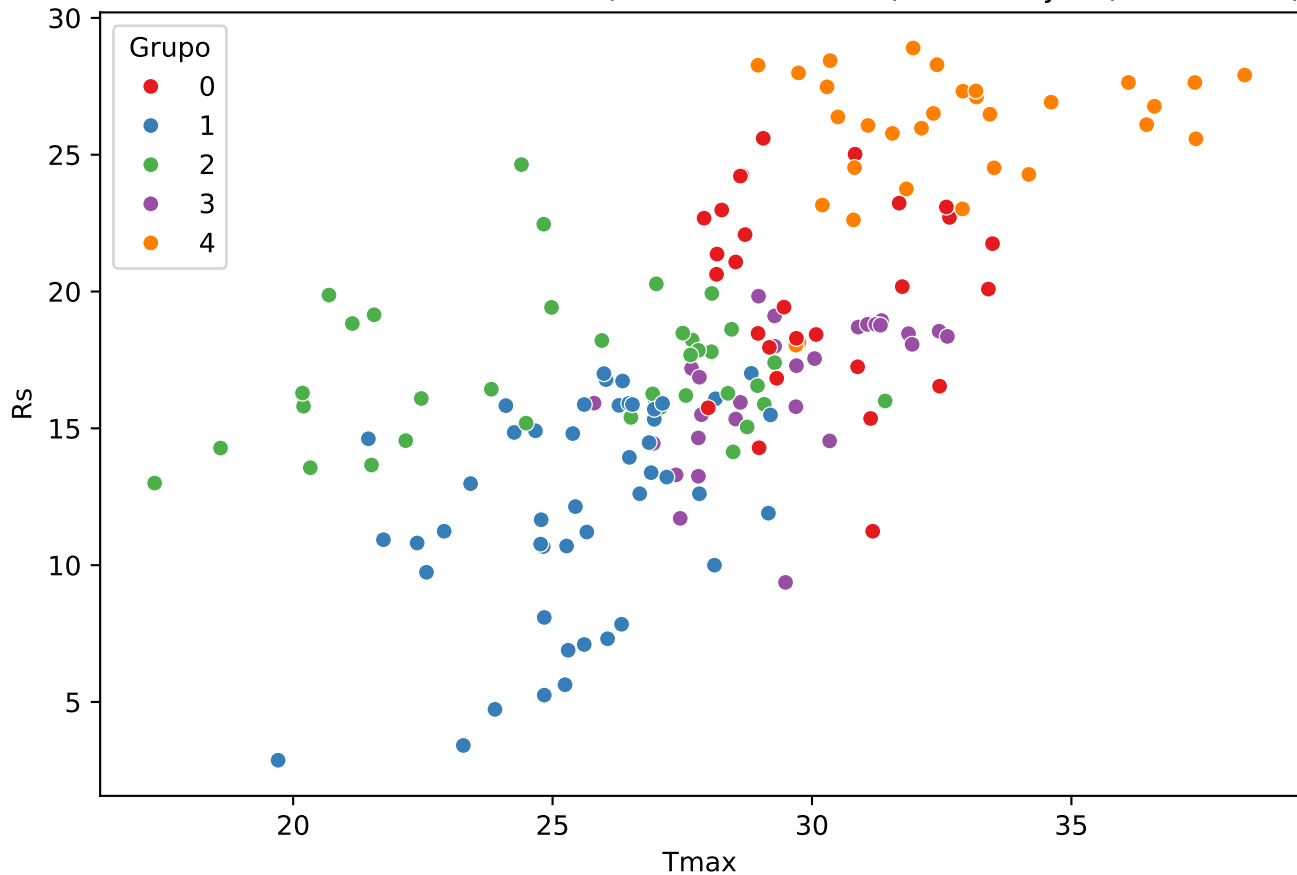
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2018-2019)



Etchojoa — 2019-2020

Días del ciclo: 172

ETc total [mm]: 551.8

ETverde total [mm]: 37.2

ETazul total [mm]: 514.6

Tmax / Tmin [°C]: 35.9 / 5.2

Etchojoa — 2019-2020 · Resultados y métricas

[Etchojoa 2019-2020] Regresión Lineal ET0 — R^2 : 0.9743 MSE: 0.0679

[Etchojoa 2019-2020] Random Forest ET0 — R^2 : 0.9615 MSE: 0.1019

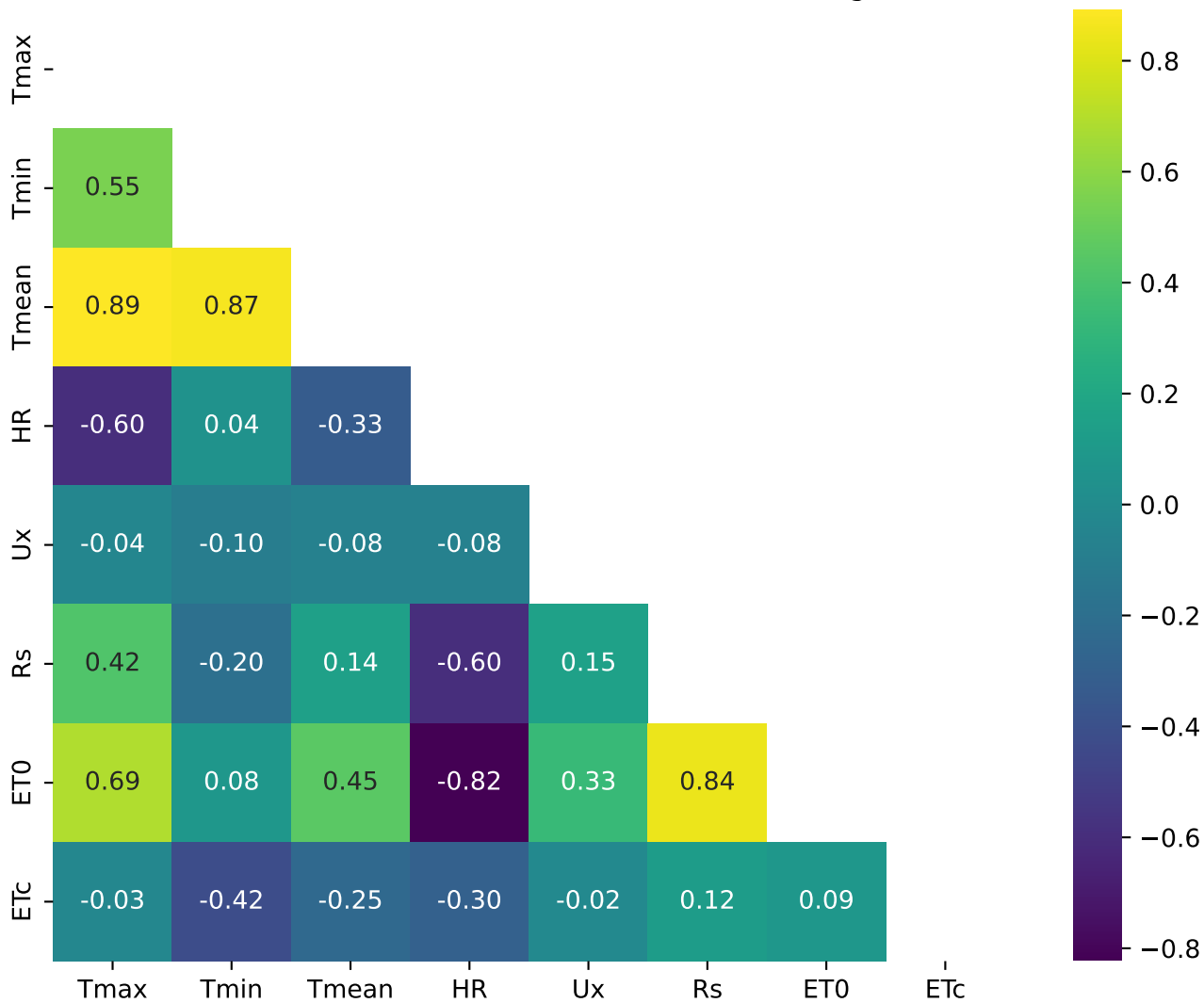
Importancias: {'Tmax': 0.0862656180033425, 'Tmin': 0.013220261475605908, 'HR': 0.3615971740728285, 'Ux': 0.027955116046523794, 'Rs': 0.5109618304016994}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	22.633421	13.246316	69.868684	2.104211	12.497895	2.746555	2.875181
1	31.023571	15.586429	38.756071	2.266071	24.020714	6.519259	1.638808
2	29.760690	19.018276	60.455172	1.836207	13.651379	3.734014	1.099120
3	27.228039	13.870588	54.466078	1.570000	15.397451	3.581526	4.118755
4	29.606538	13.957692	42.845000	2.252308	18.747692	5.173830	5.949904

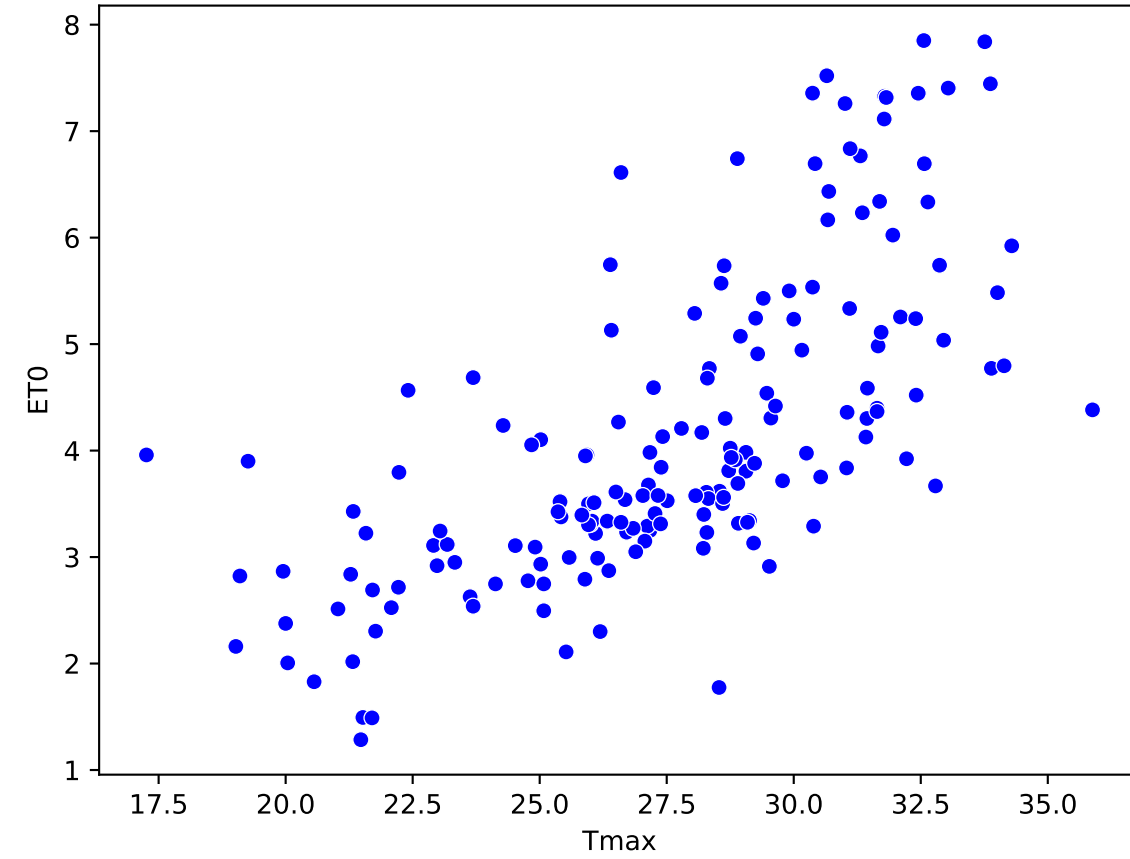
Etchojoa — 2019-2020

Matriz de Correlación entre Variables Meteorológicas

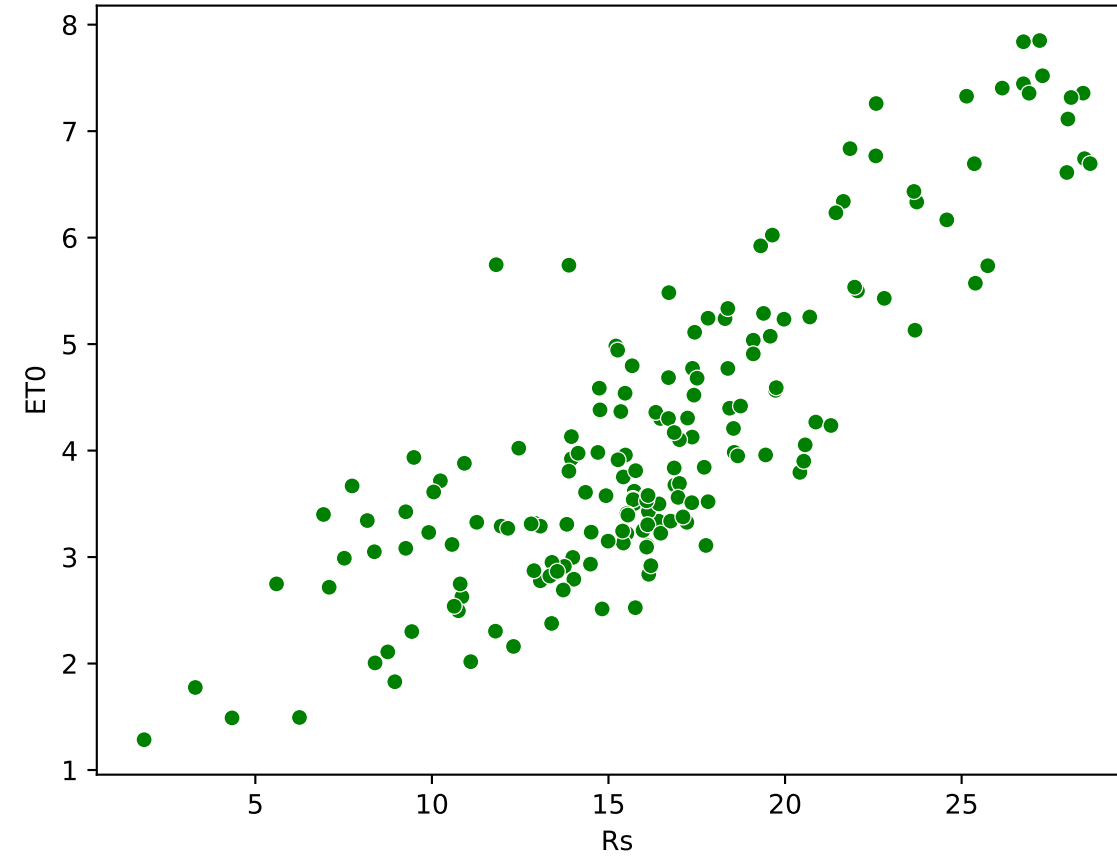


Dispersión — Etchojoa (2019-2020)

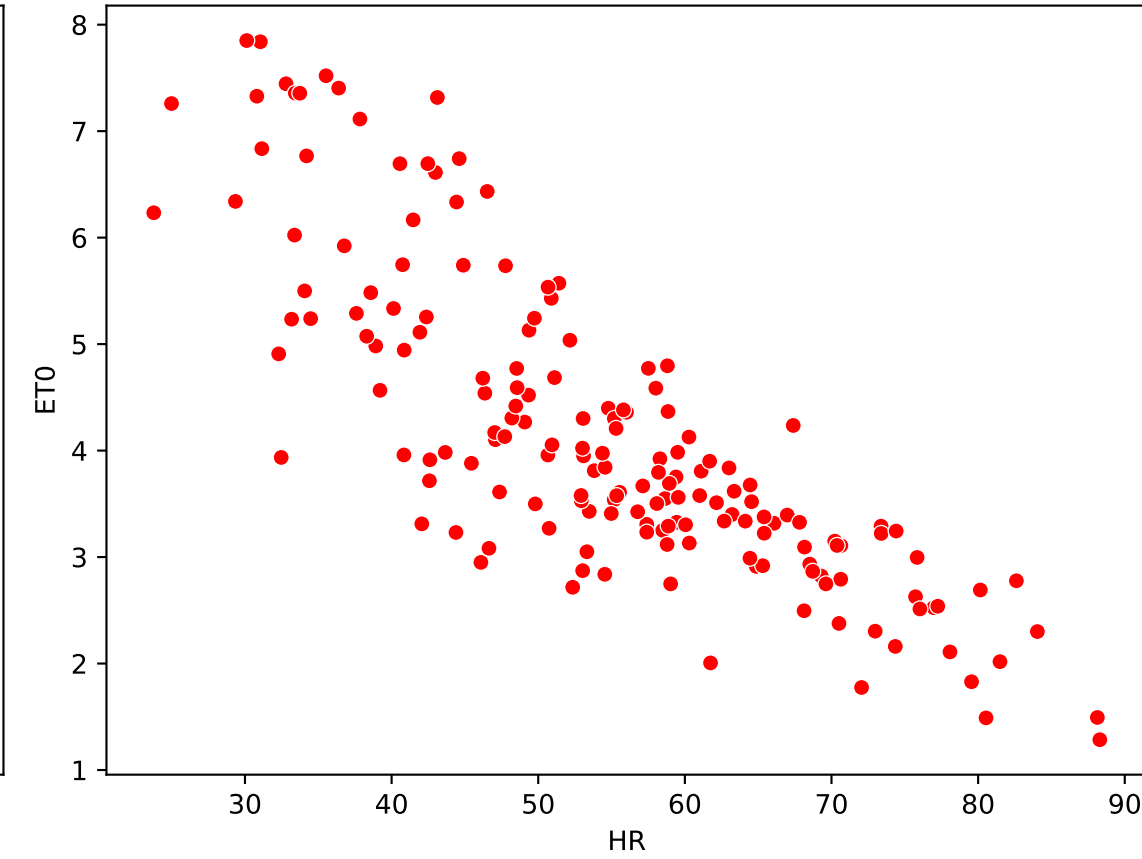
Tmax vs ET0



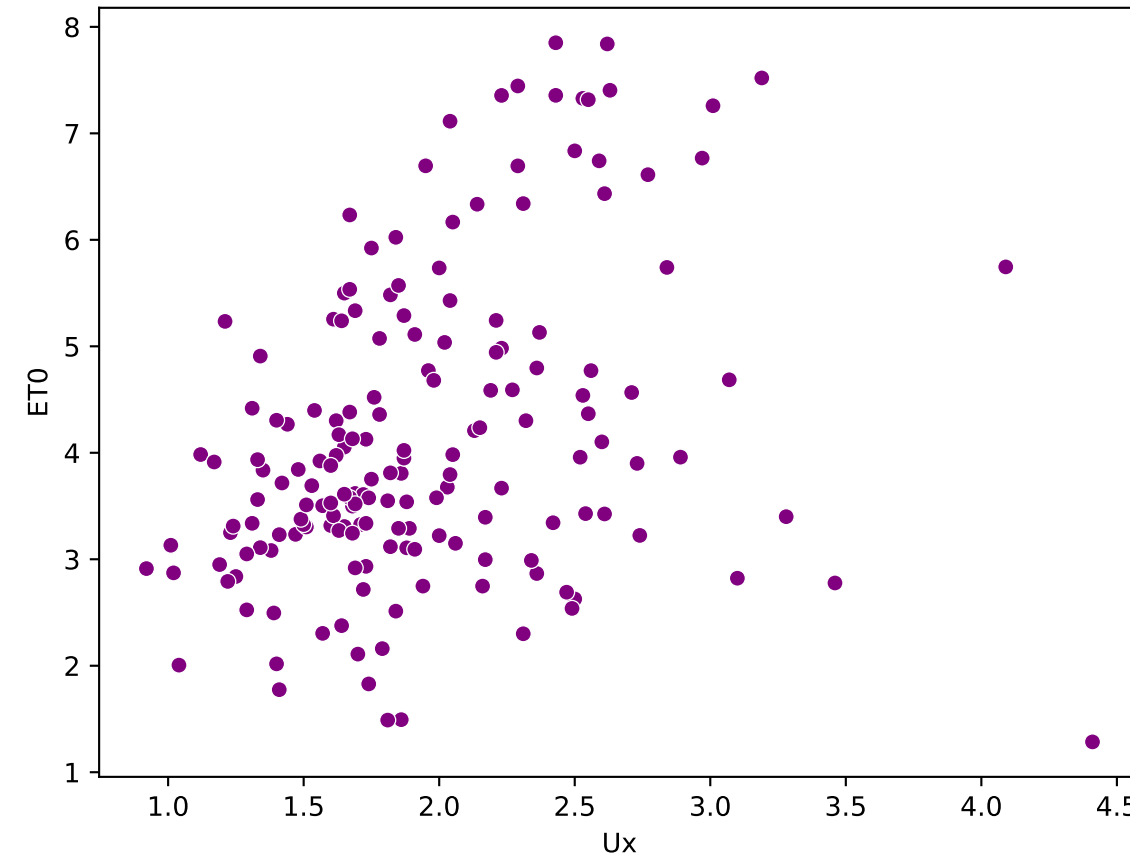
Rs vs ET0



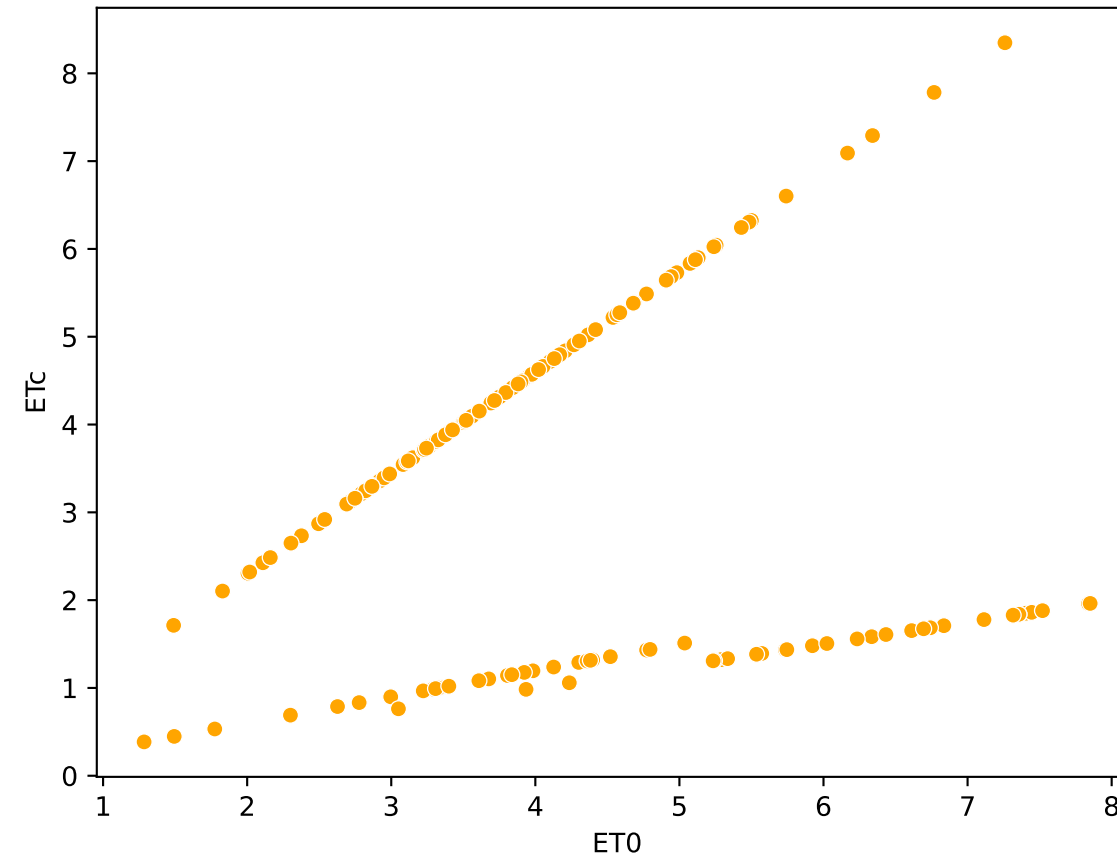
HR vs ET0



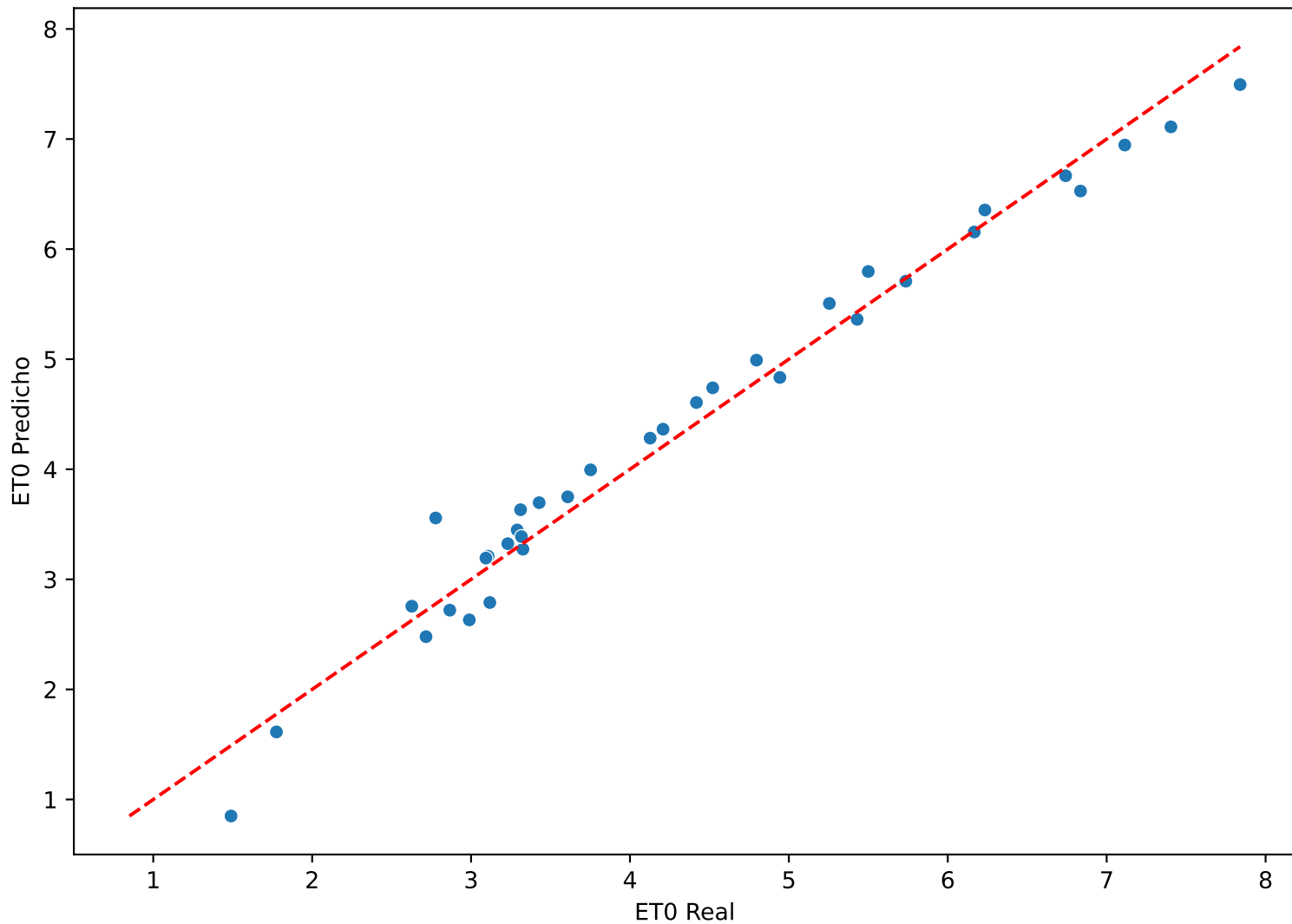
Ux vs ET0



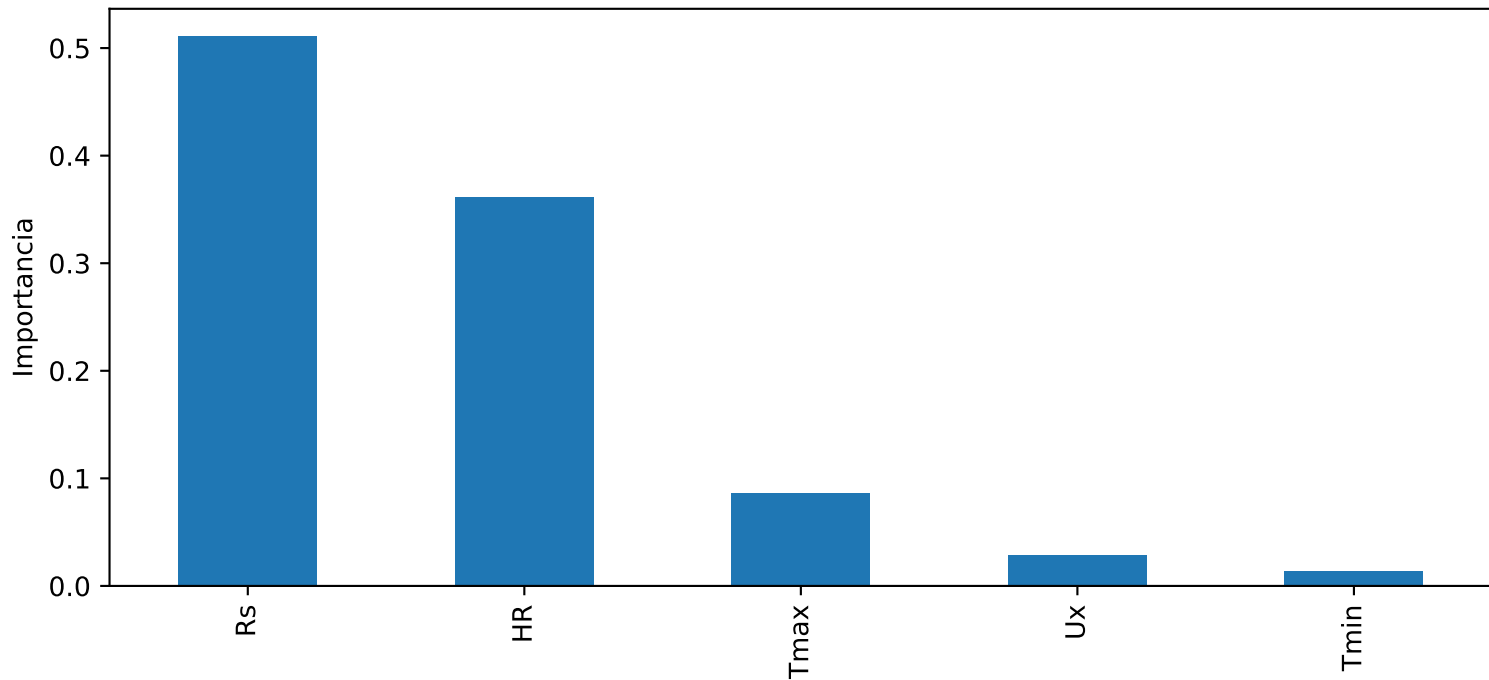
ET0 vs ETc



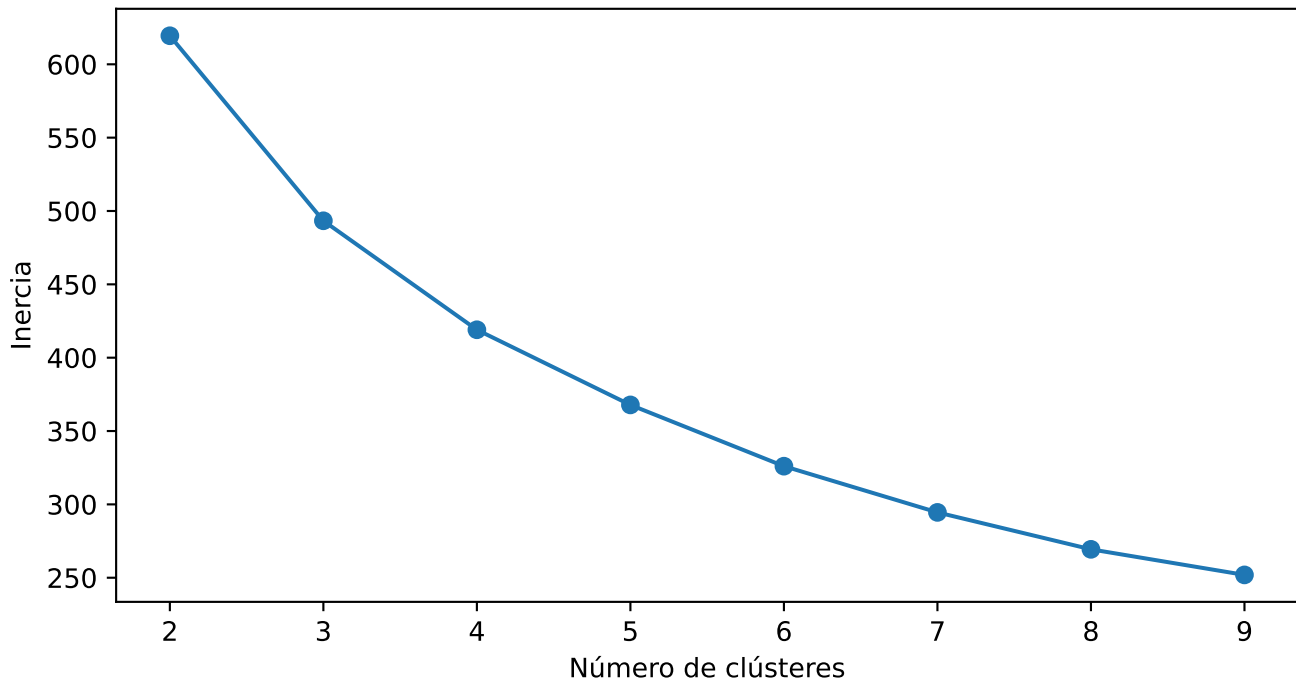
Comparación entre ET0 Real y Predicho — Etchojoa (2019-2020)



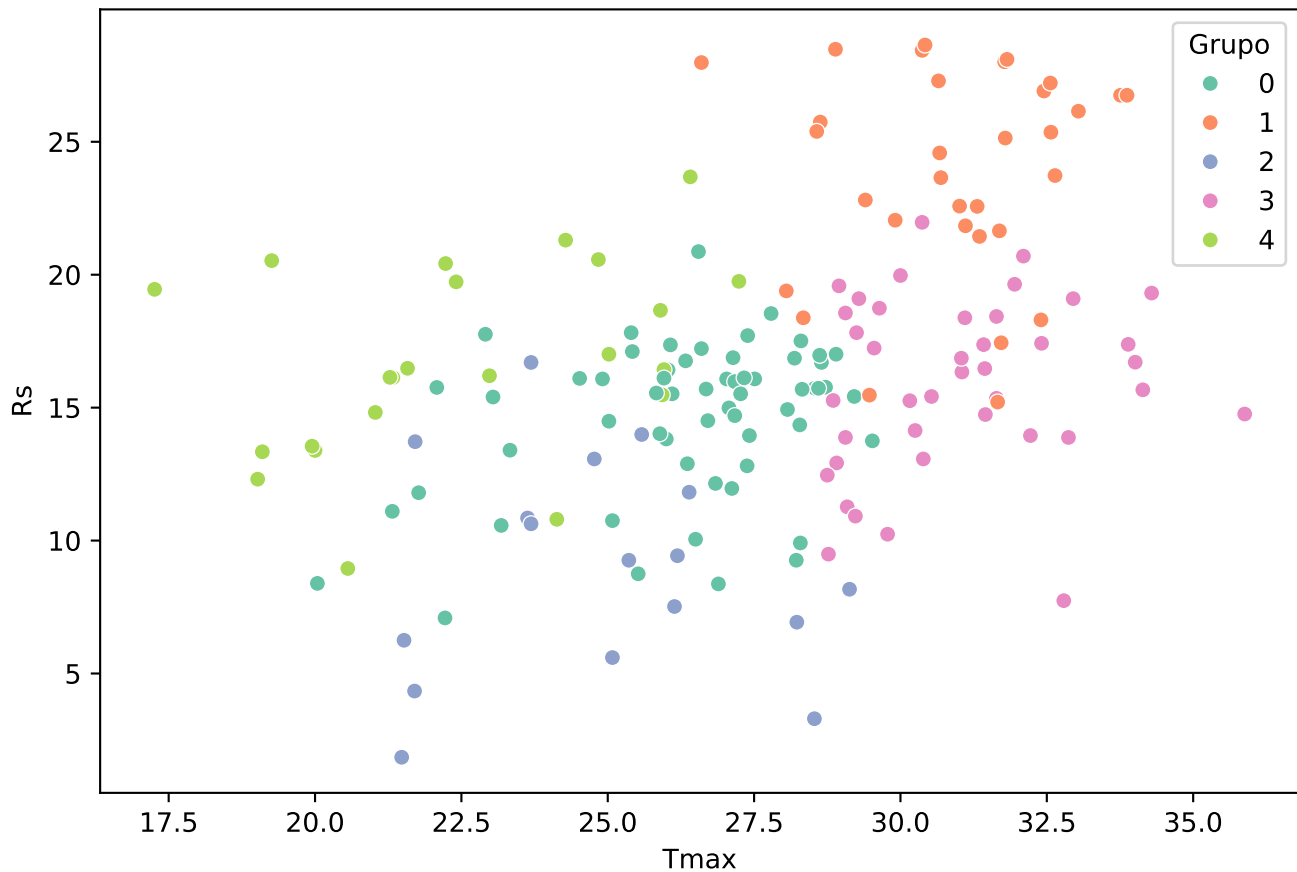
Importancia de variables (RF) — Etchojoa (2019-2020)



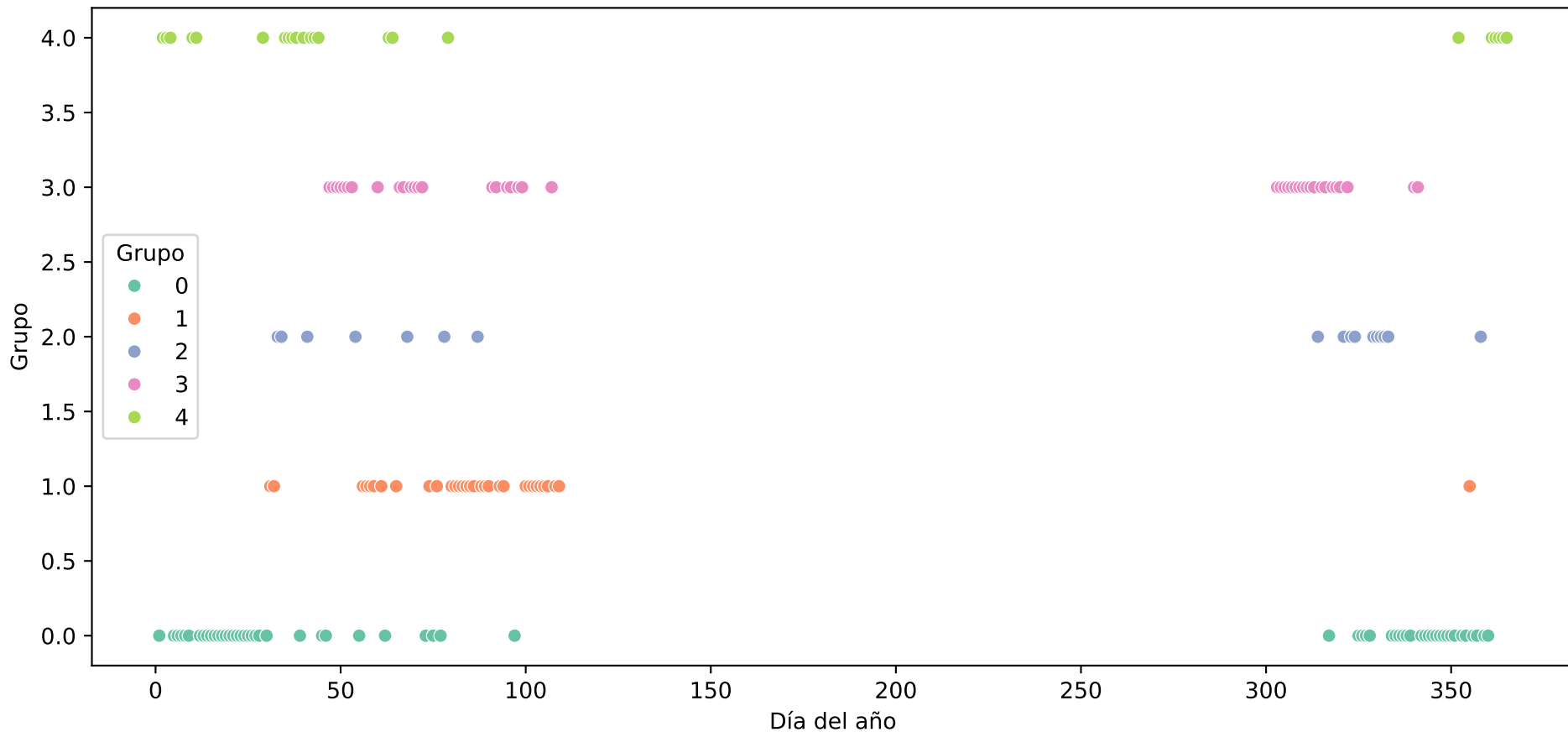
Método del codo



Clasificación de días climáticos — Etchojoa (2019-2020)

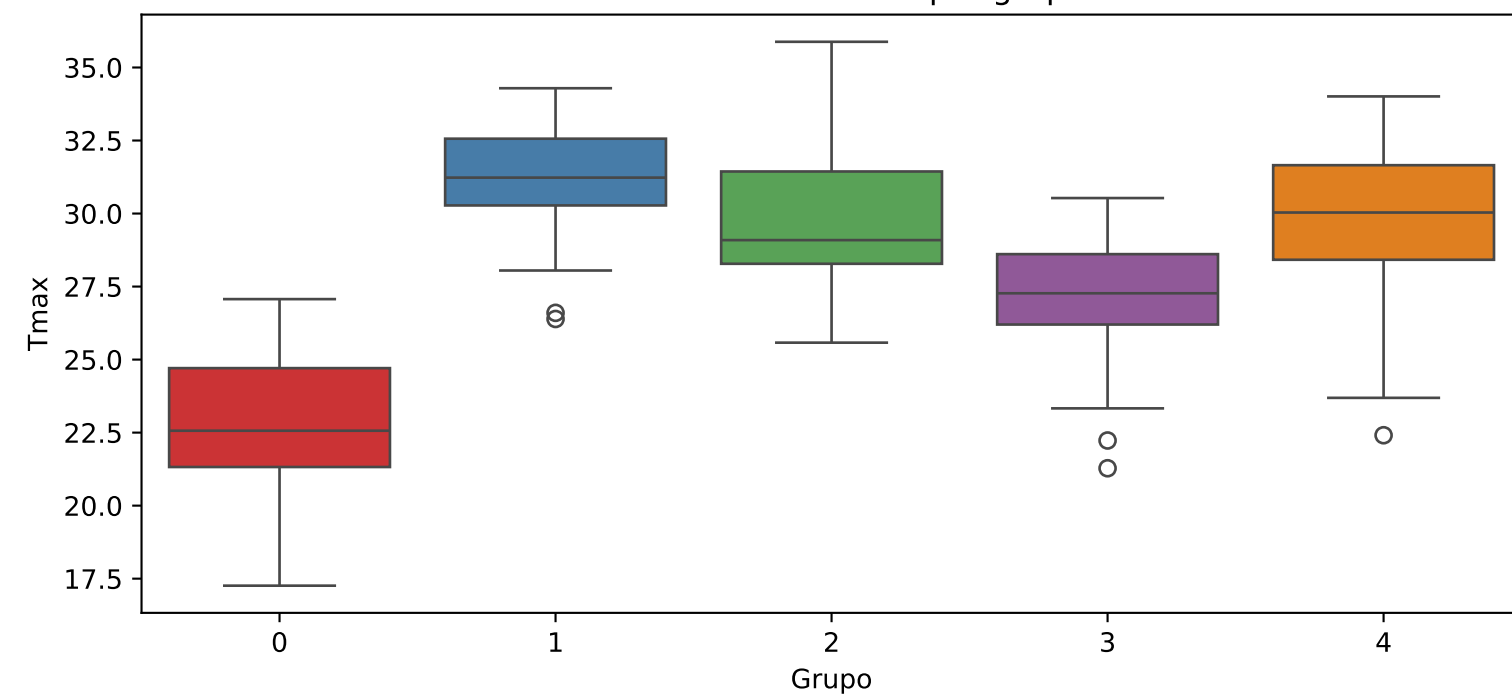


Distribución de días por grupo — Etchojoa (2019-2020)

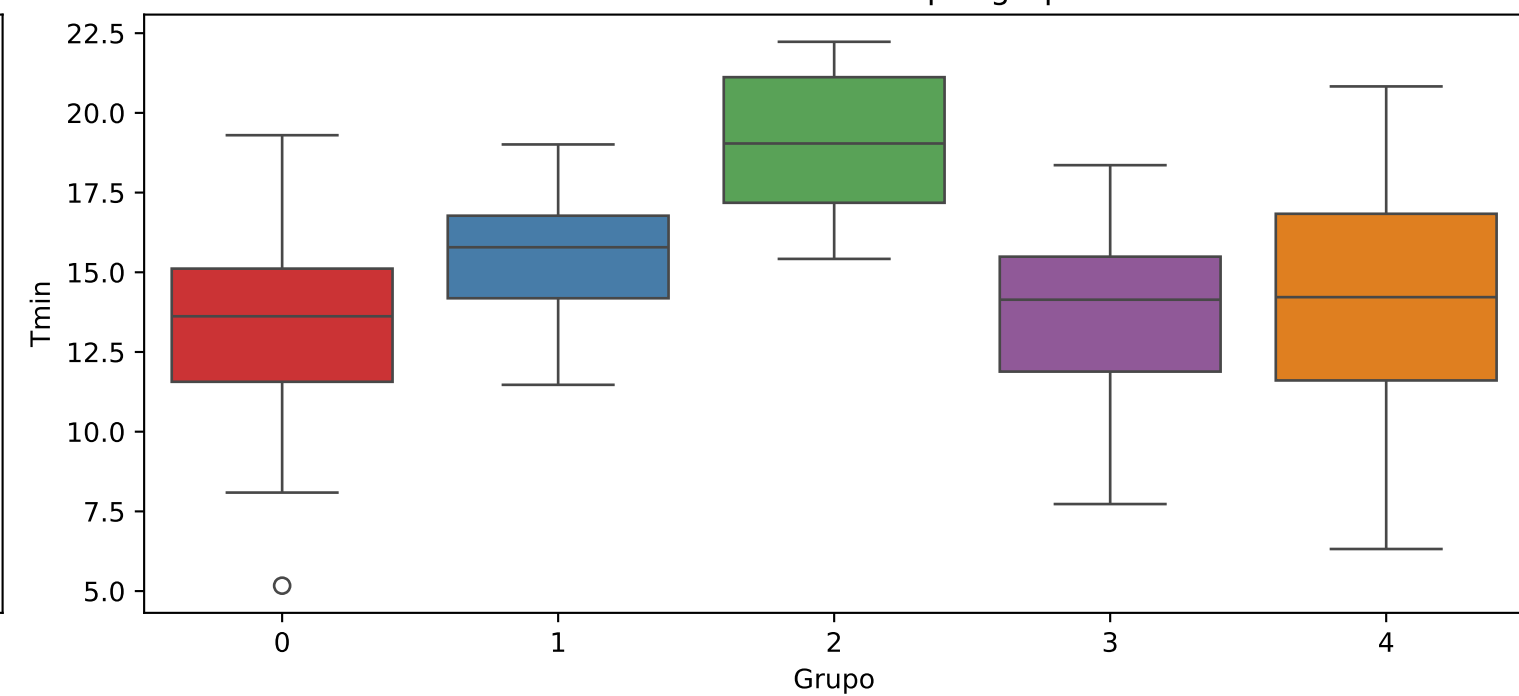


Boxplots por grupo — Etchojoa (2019-2020)

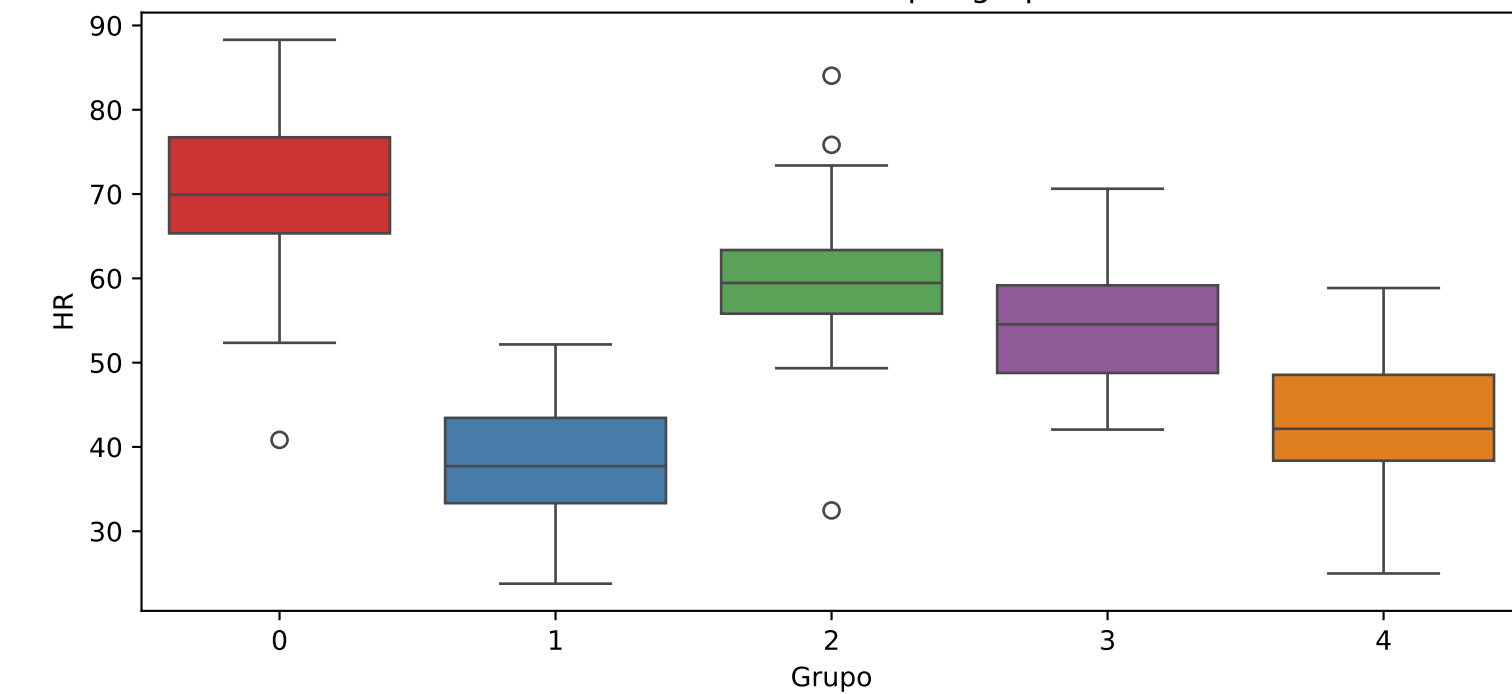
Distribución de Tmax por grupo



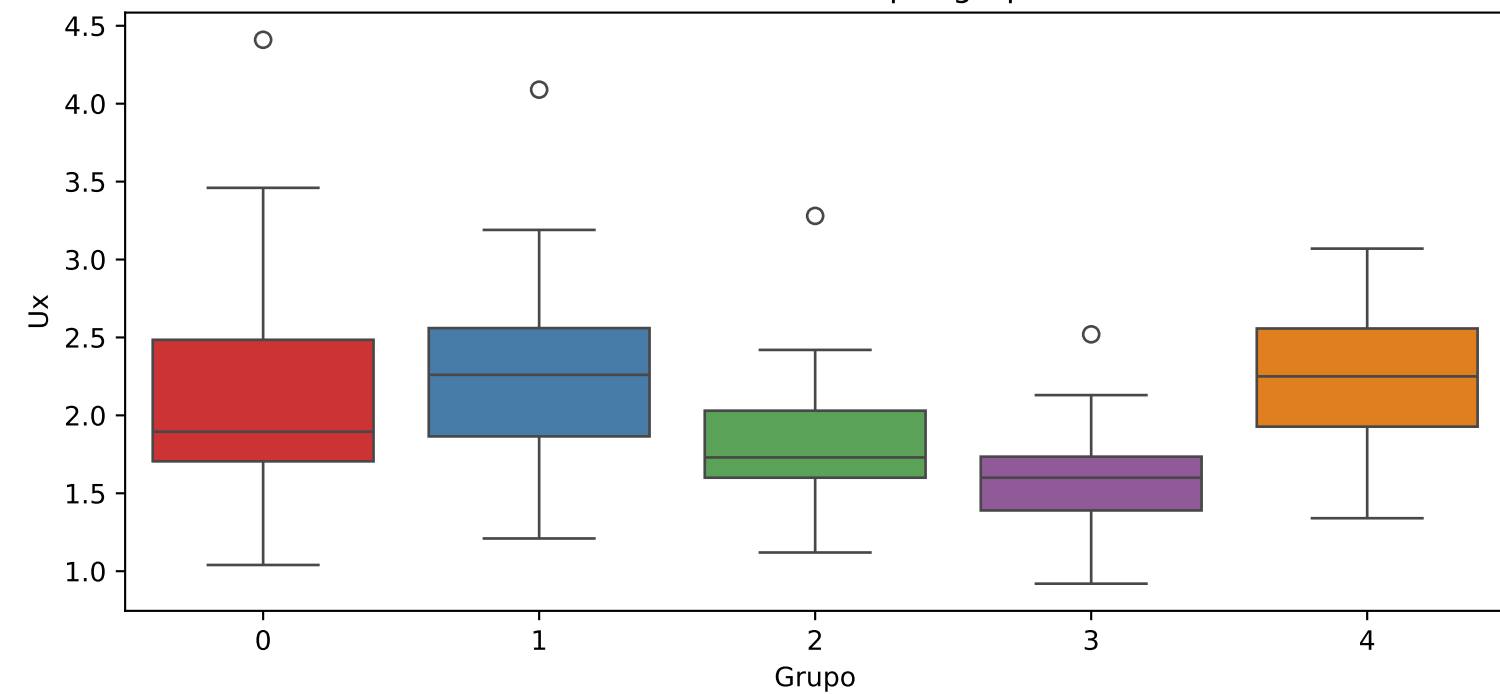
Distribución de Tmin por grupo



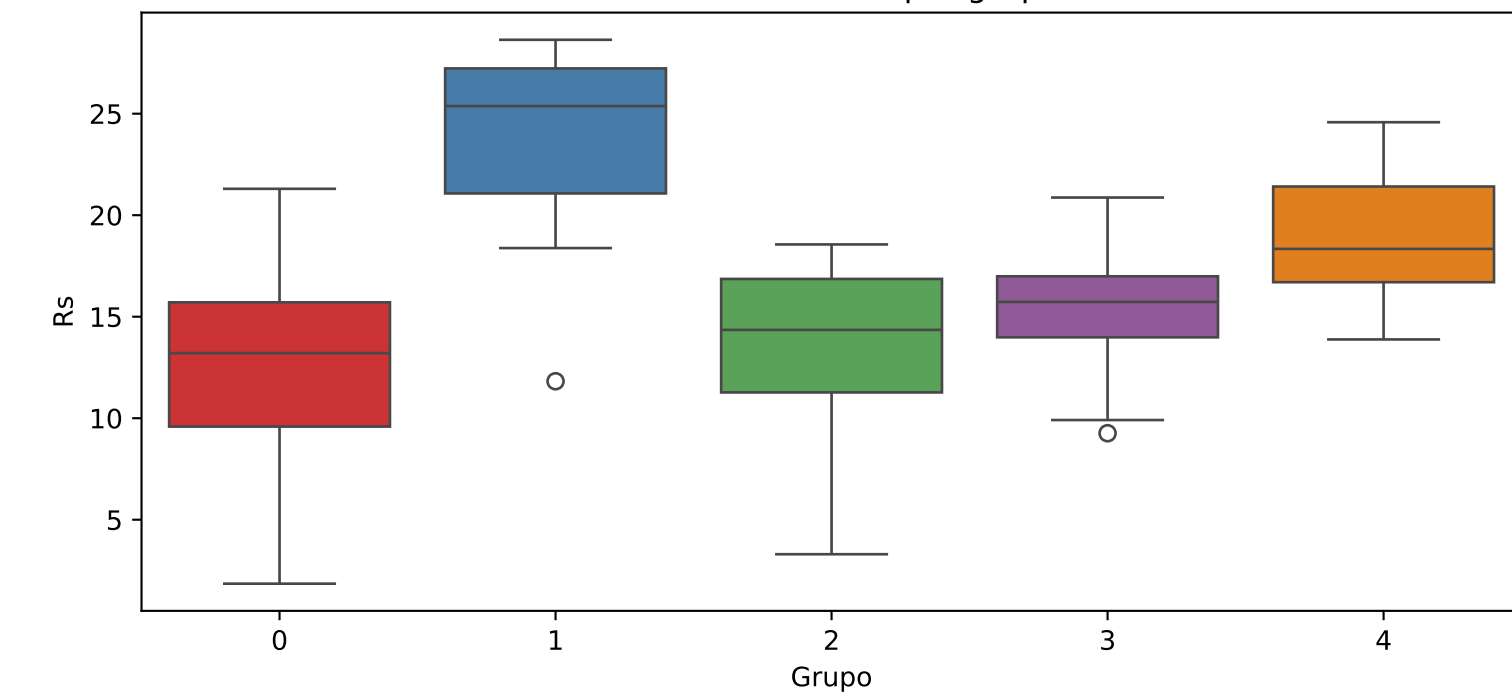
Distribución de HR por grupo



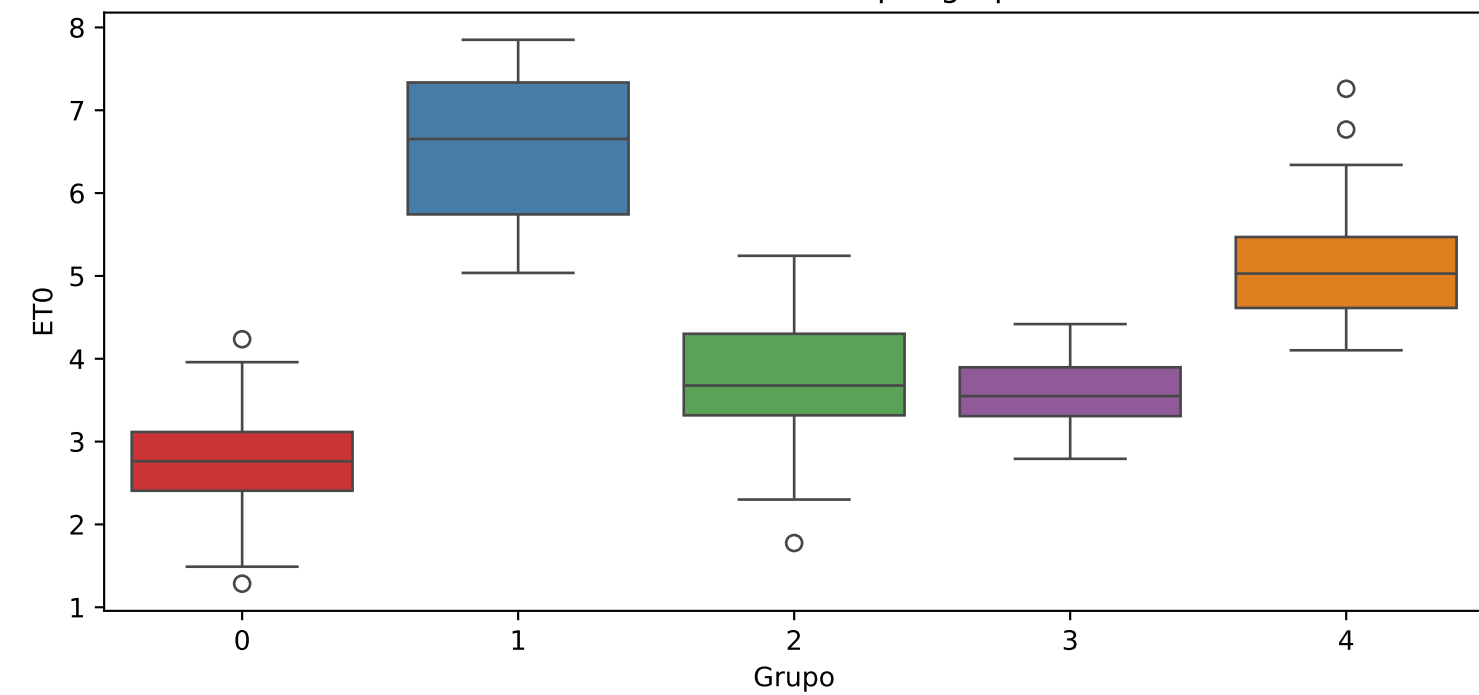
Distribución de Ux por grupo



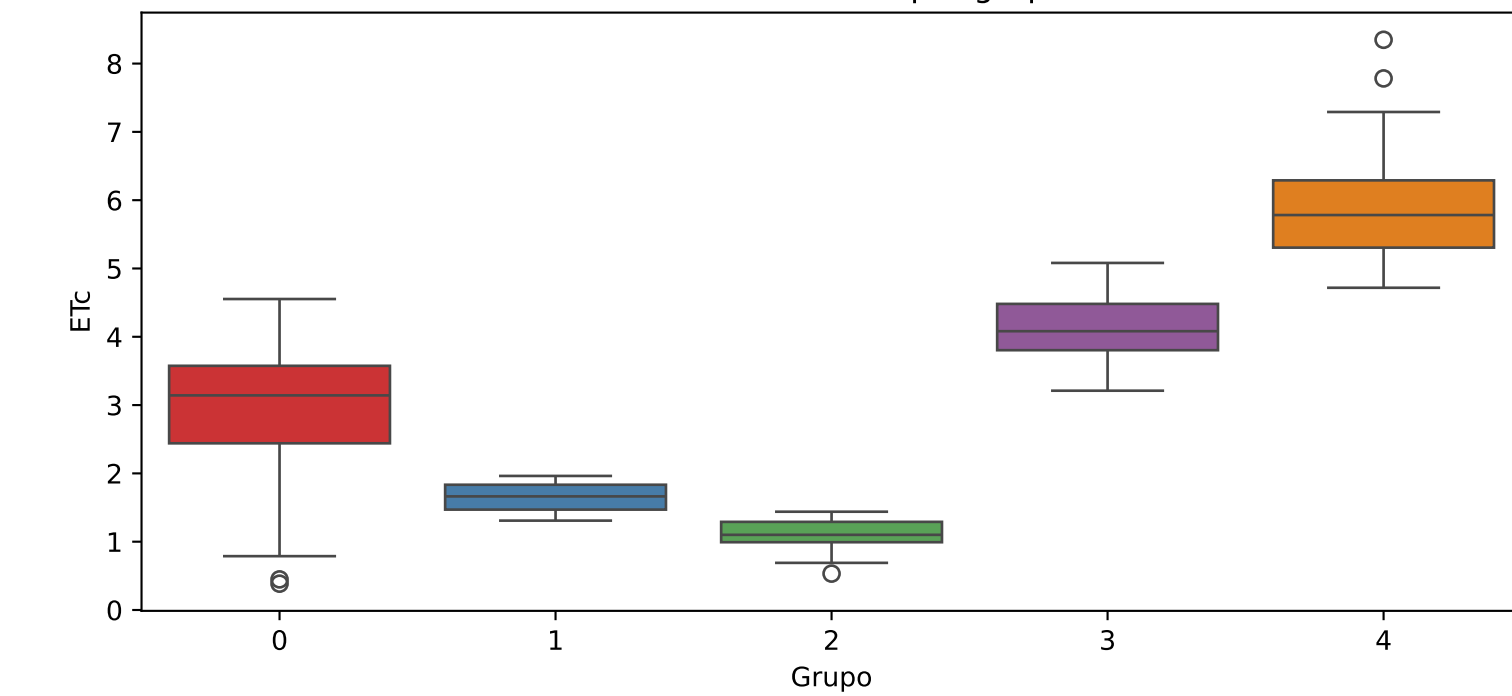
Distribución de Rs por grupo



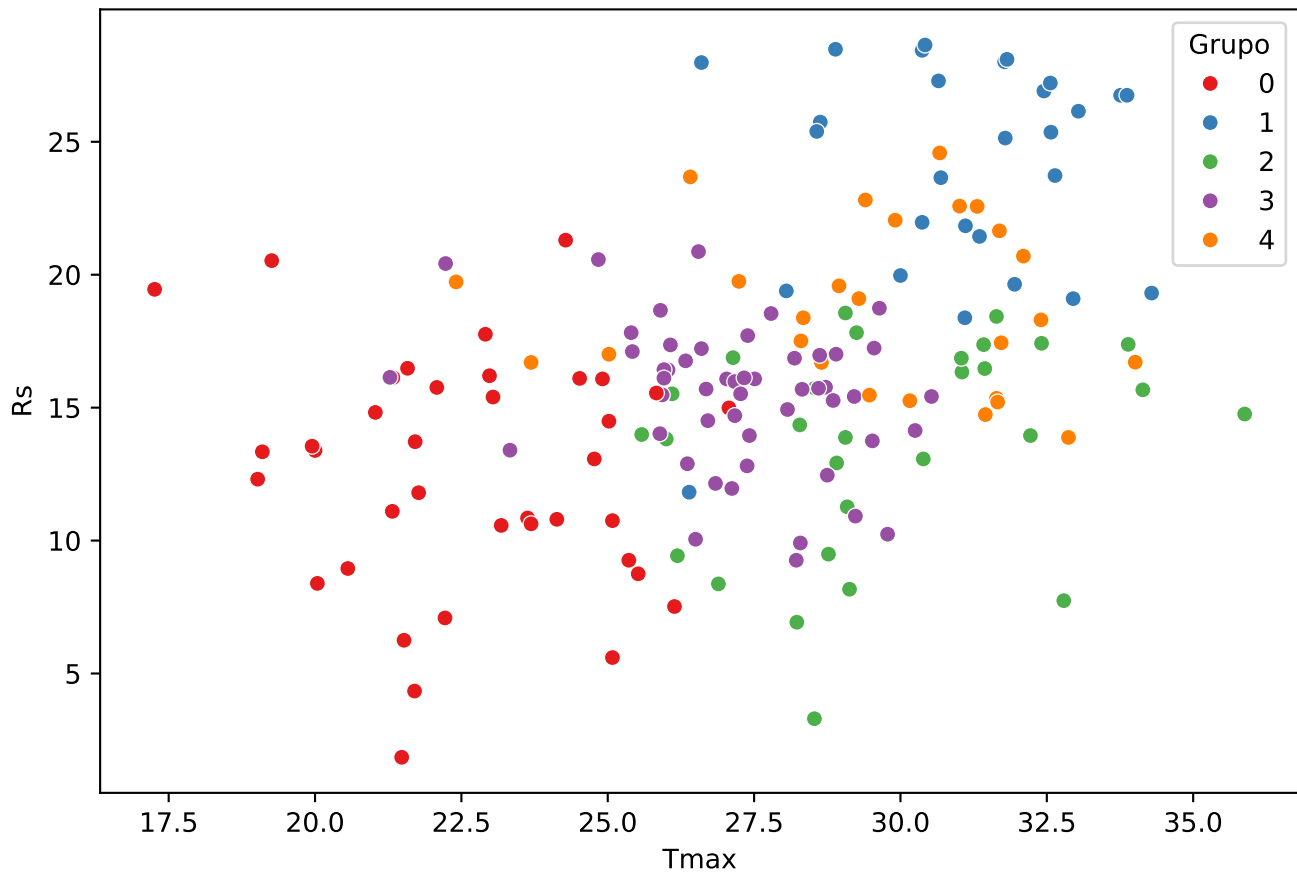
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2019-2020)



Etchojoa — 2020-2021

Días del ciclo: 172

ETc total [mm]: 674.5

ETverde total [mm]: 12.0

ETazul total [mm]: 662.4

Tmax / Tmin [°C]: 40.8 / 7.7

Etchojoa — 2020-2021 · Resultados y métricas

[Etchojoa 2020-2021] Regresión Lineal ET0 — R^2 : 0.9502 MSE: 0.1147

[Etchojoa 2020-2021] Random Forest ET0 — R^2 : 0.9543 MSE: 0.1051

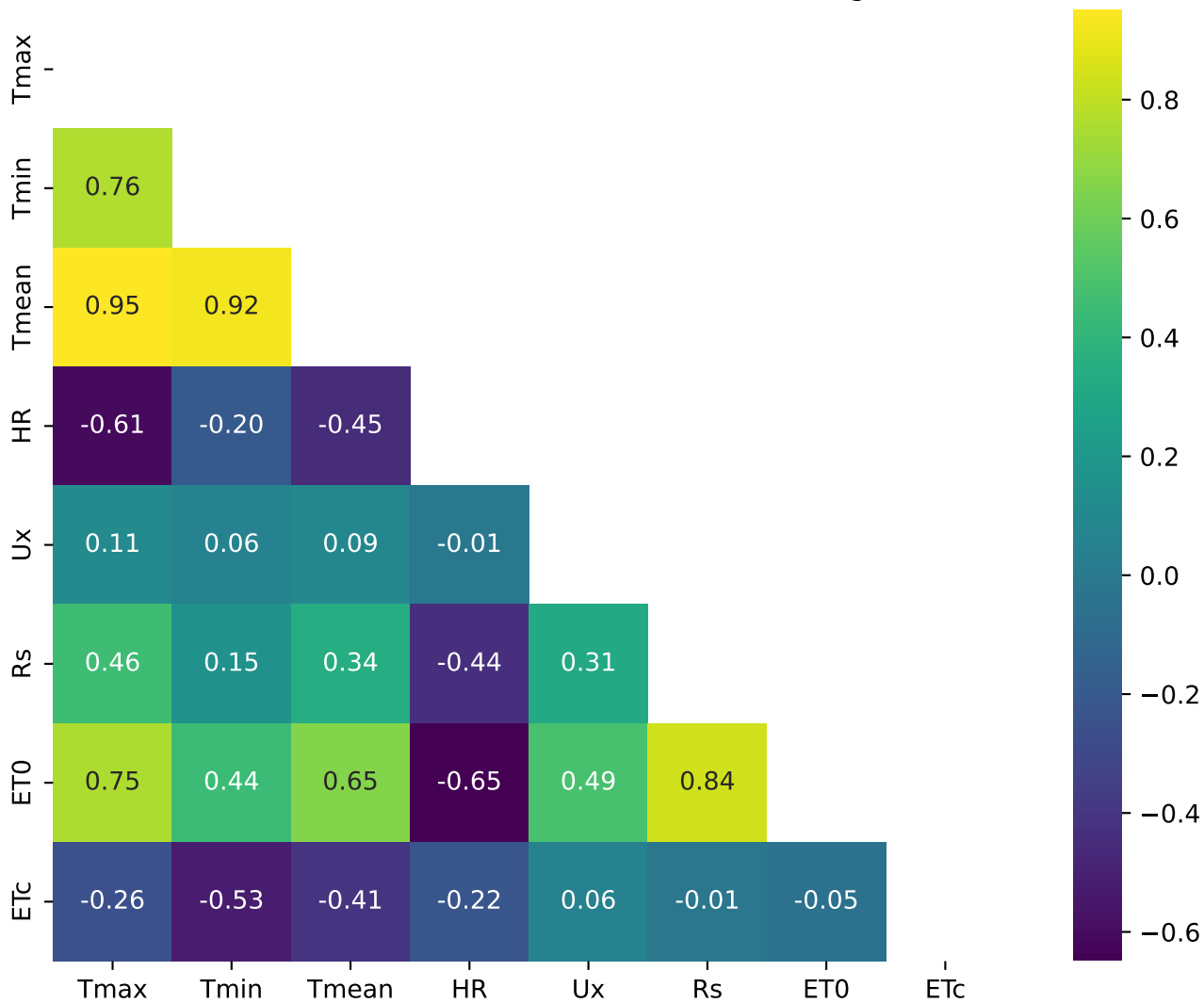
Importancias: {'Tmax': 0.1624628103212766, 'Tmin': 0.04586273482775064, 'HR': 0.07768011419574951, 'Ux': 0.04563075538595213, 'Rs': 0.668363585269271}

Estadísticas descriptivas por grupo (medias):

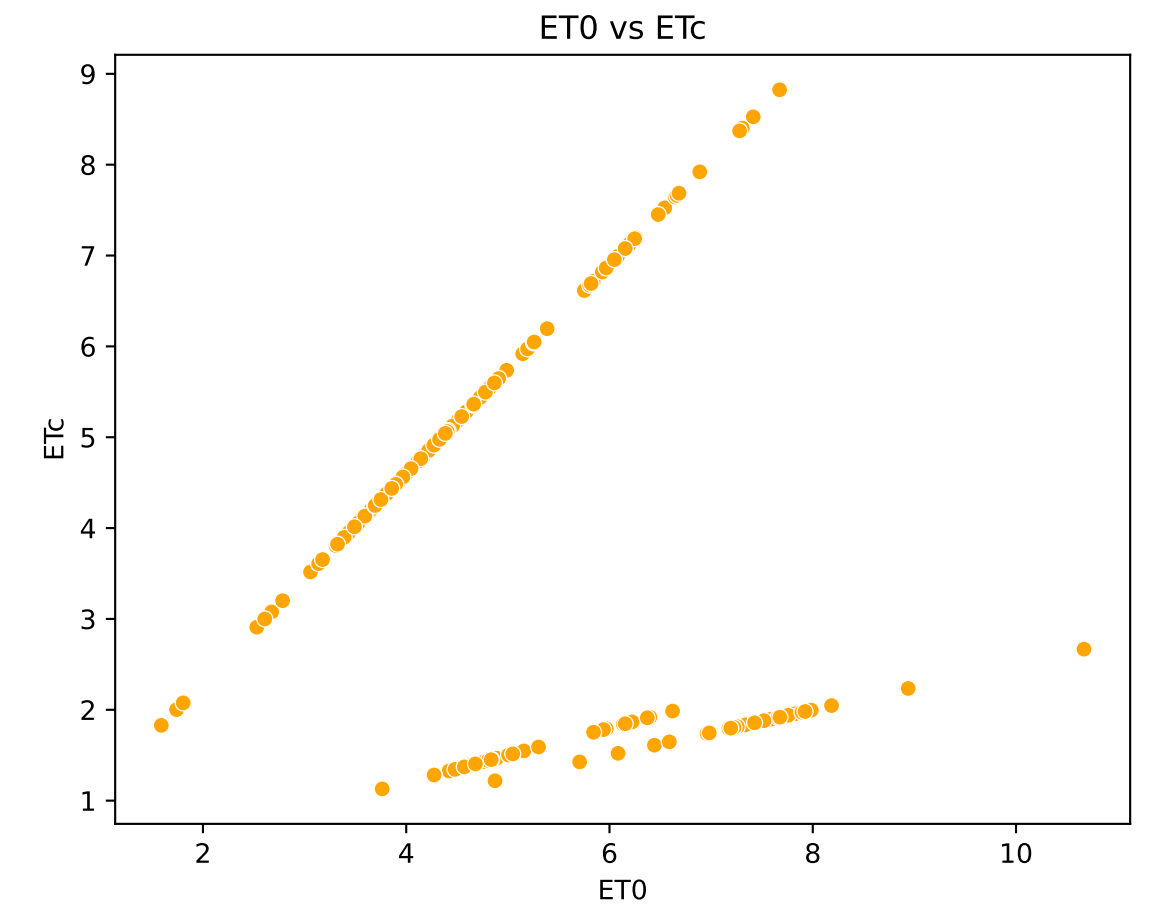
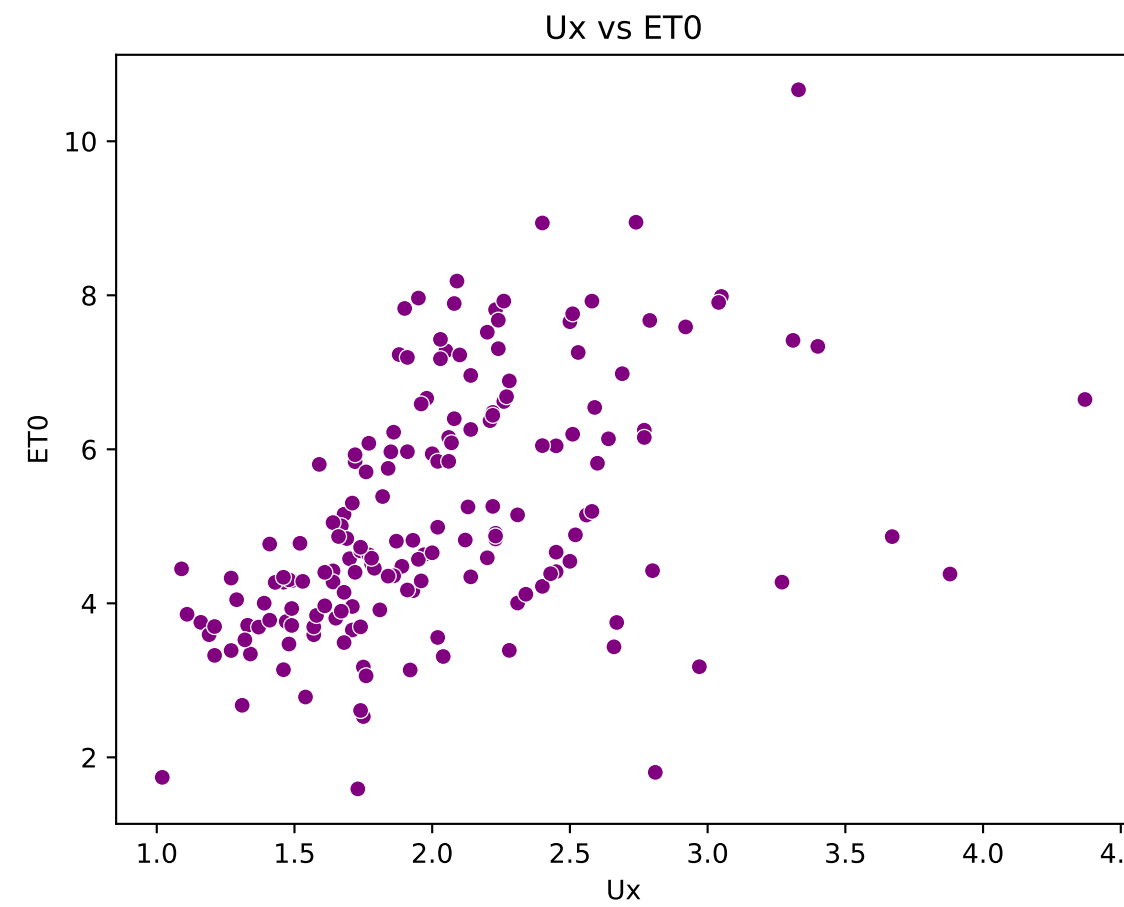
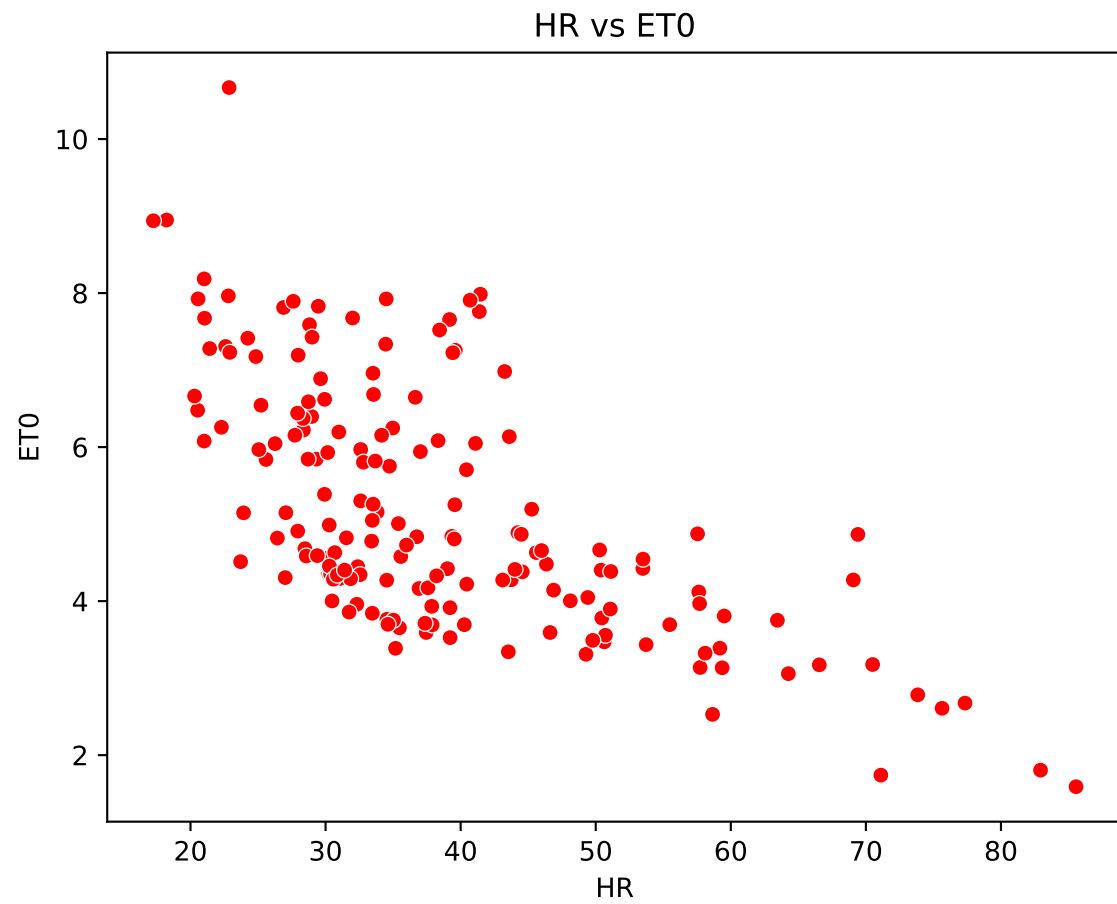
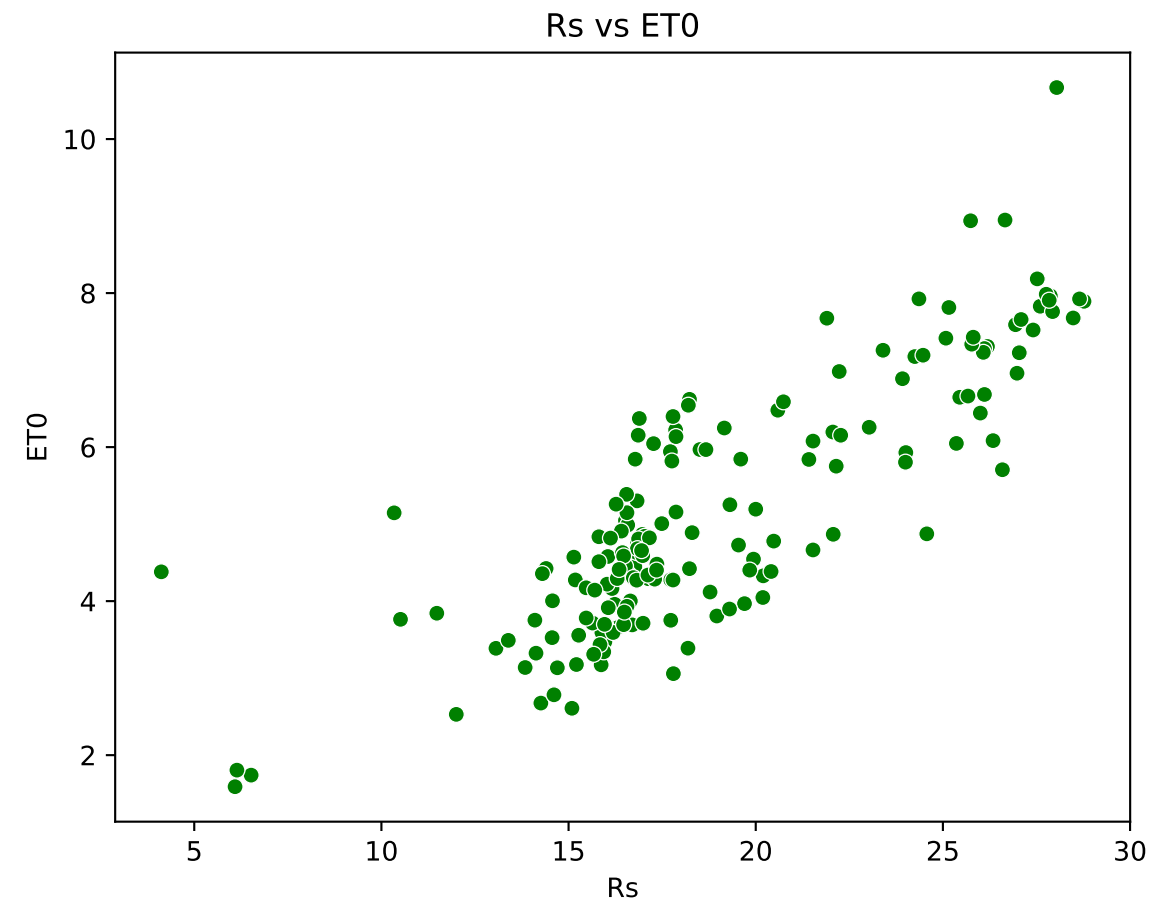
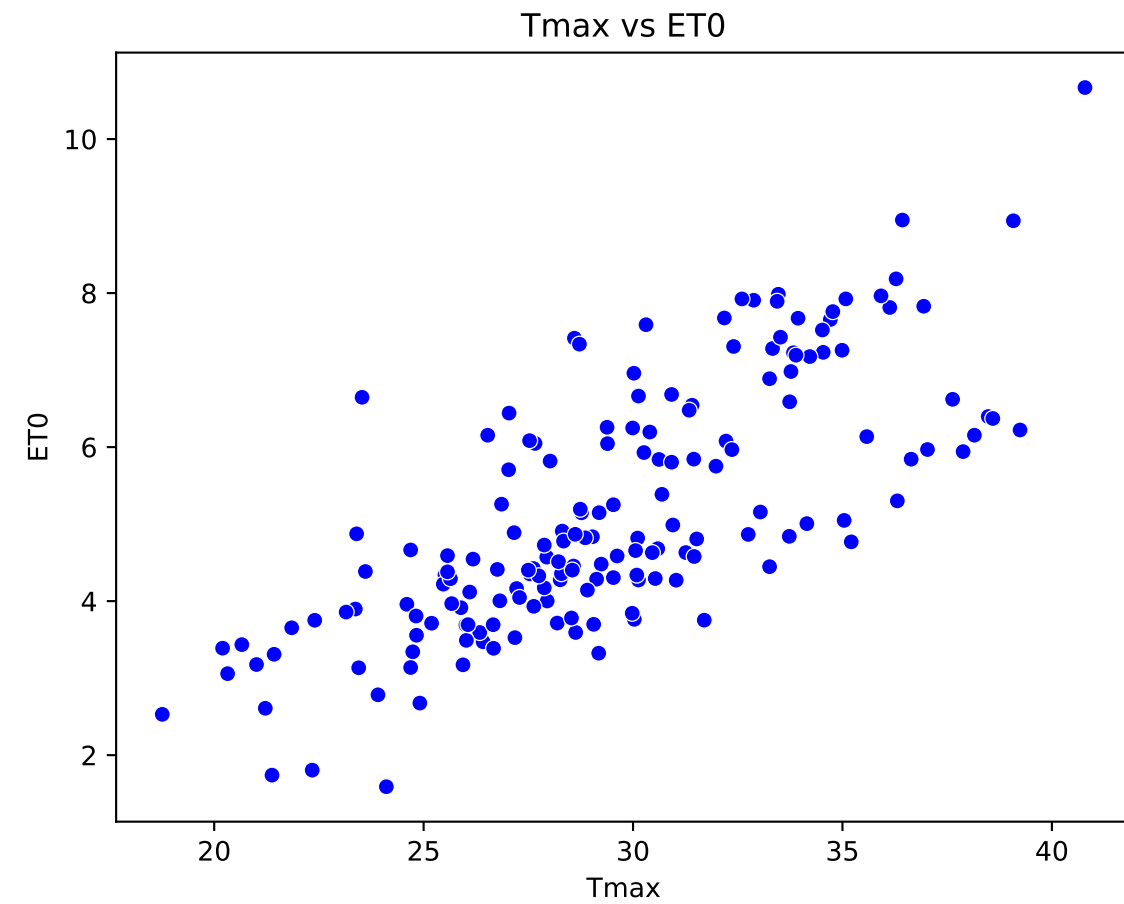
	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	27.861207	12.543793	35.620517	1.715862	16.765862	4.307669	4.731880
1	33.288387	19.249355	38.120000	1.983548	16.826774	5.136924	1.633351
2	23.768333	12.008667	60.474667	2.037667	15.356667	3.400300	3.764134
3	30.351200	13.751200	28.876400	2.354800	22.300400	6.350214	7.302746
4	33.842857	17.264286	30.870000	2.393571	26.506786	7.696366	1.924091

Etchojoa — 2020-2021

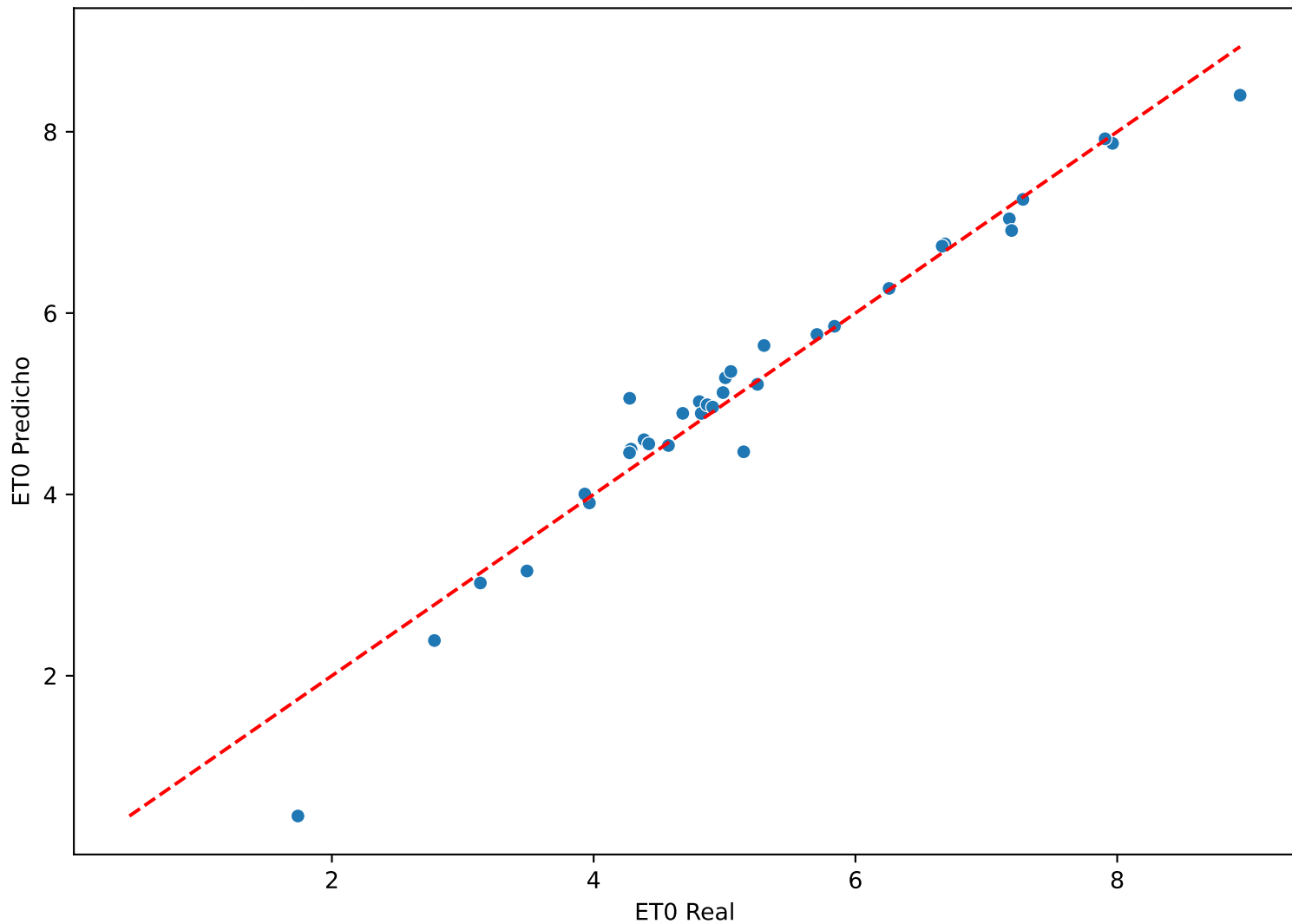
Matriz de Correlación entre Variables Meteorológicas



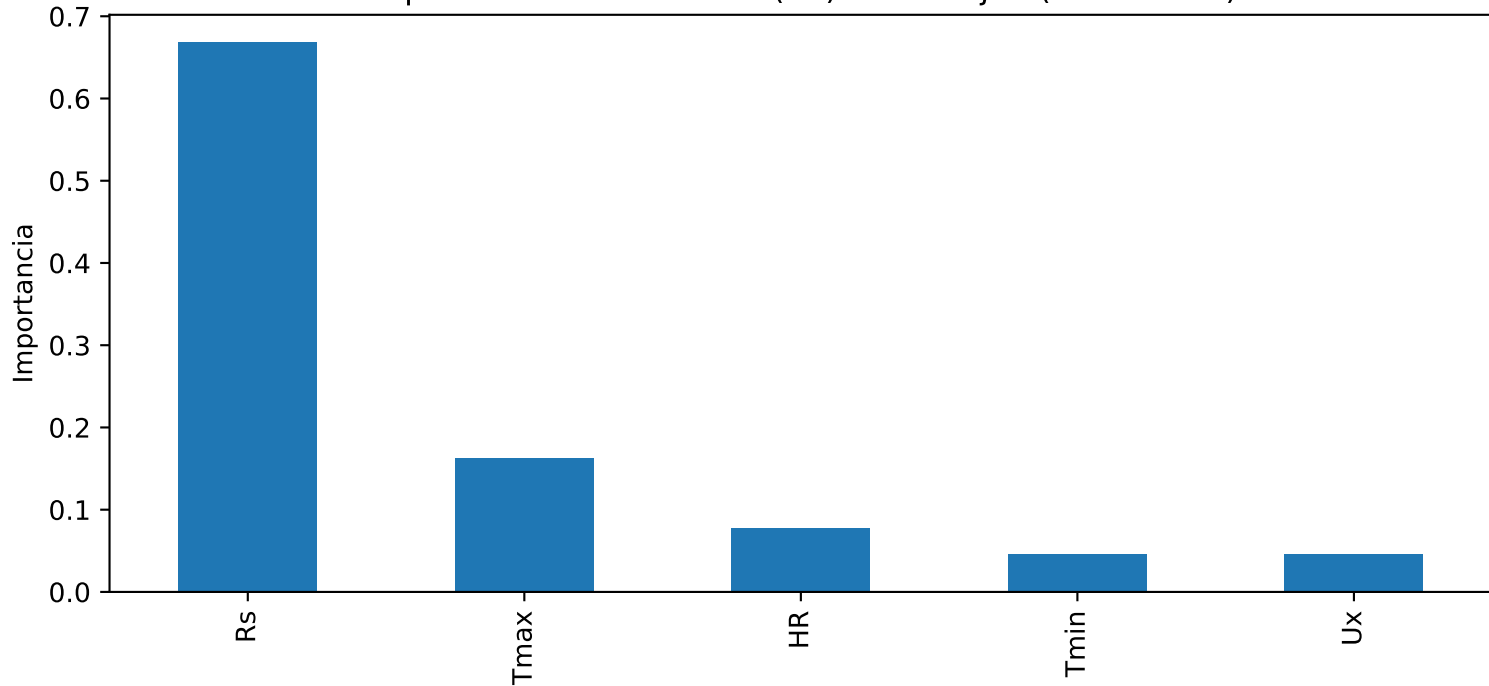
Dispersión — Etchojoa (2020-2021)



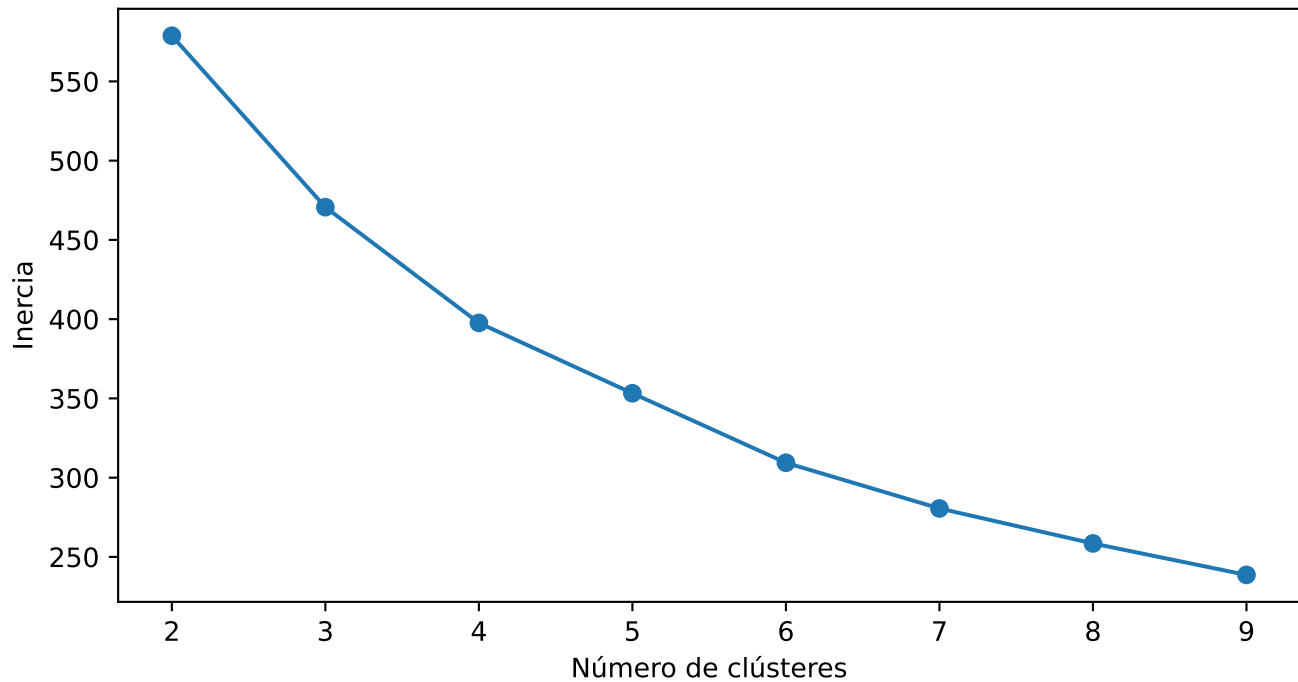
Comparación entre ET0 Real y Predicho — Etchojoa (2020-2021)



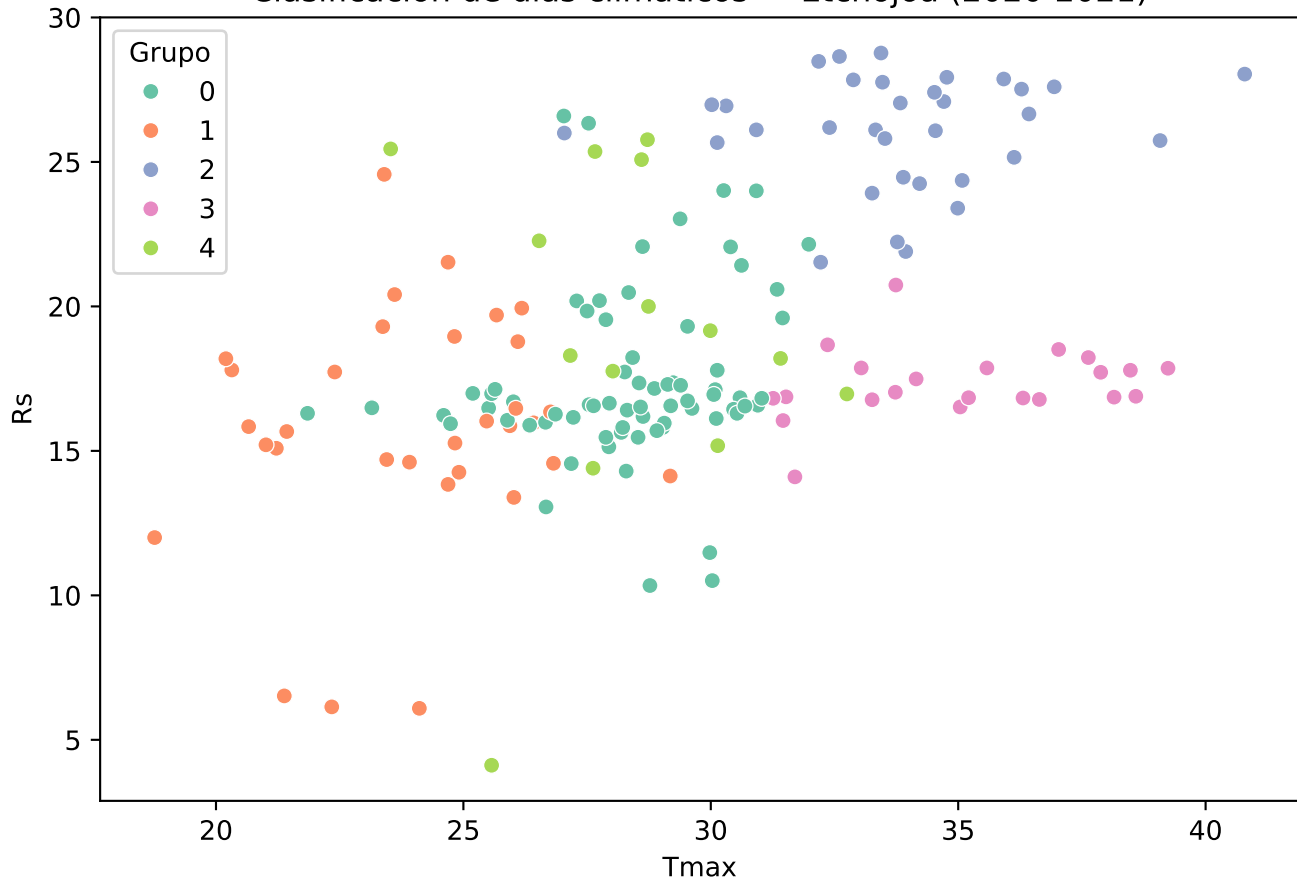
Importancia de variables (RF) — Etchojoa (2020-2021)



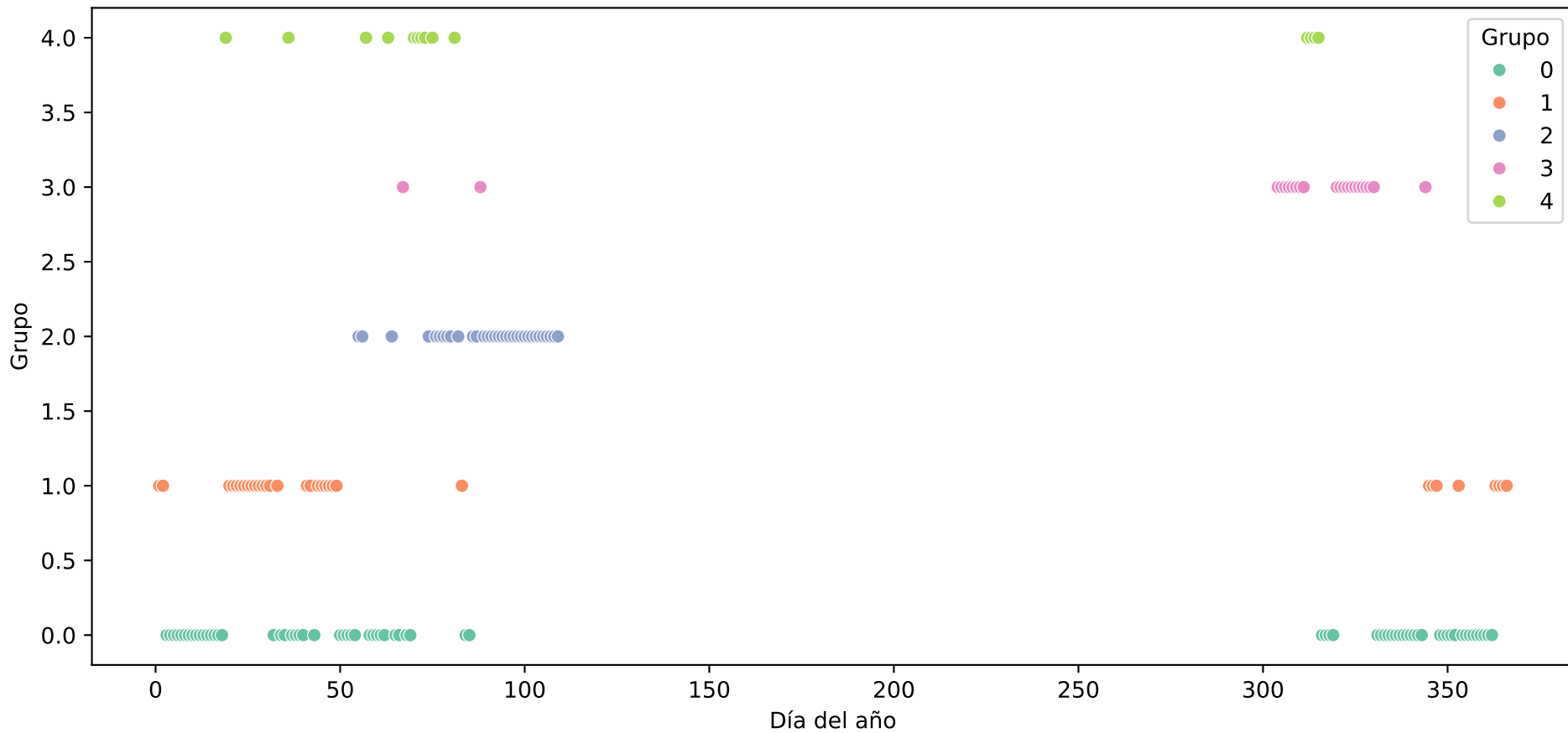
Método del codo



Clasificación de días climáticos — Etchojoa (2020-2021)

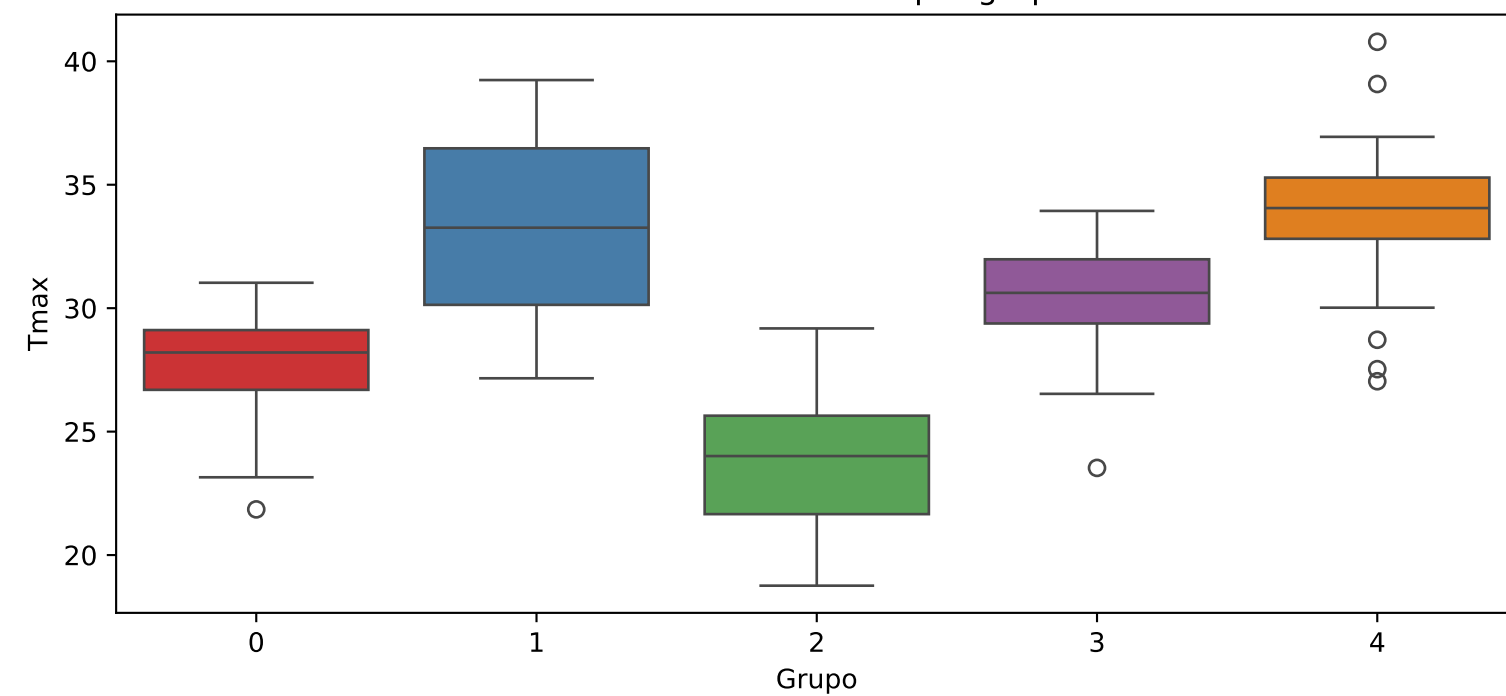


Distribución de días por grupo — Etchojoa (2020-2021)

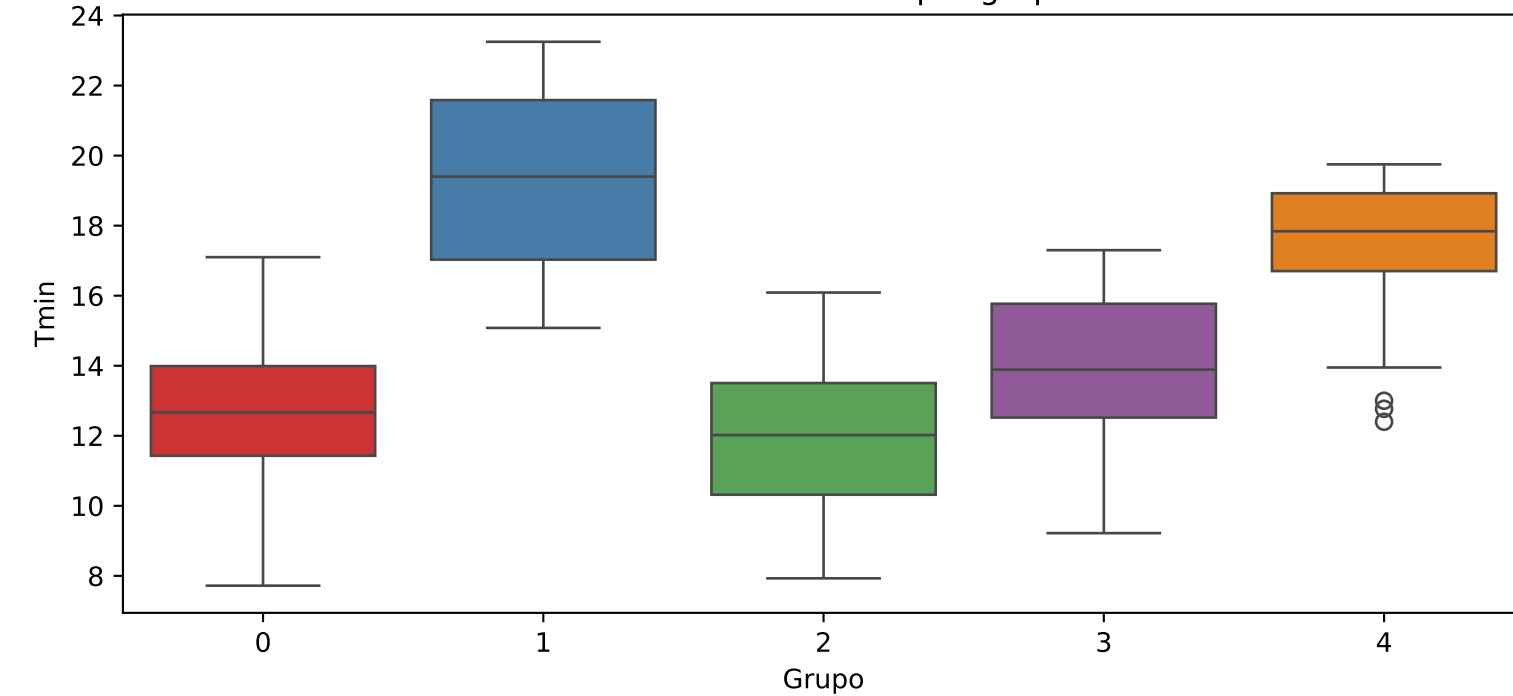


Boxplots por grupo — Etchojoa (2020-2021)

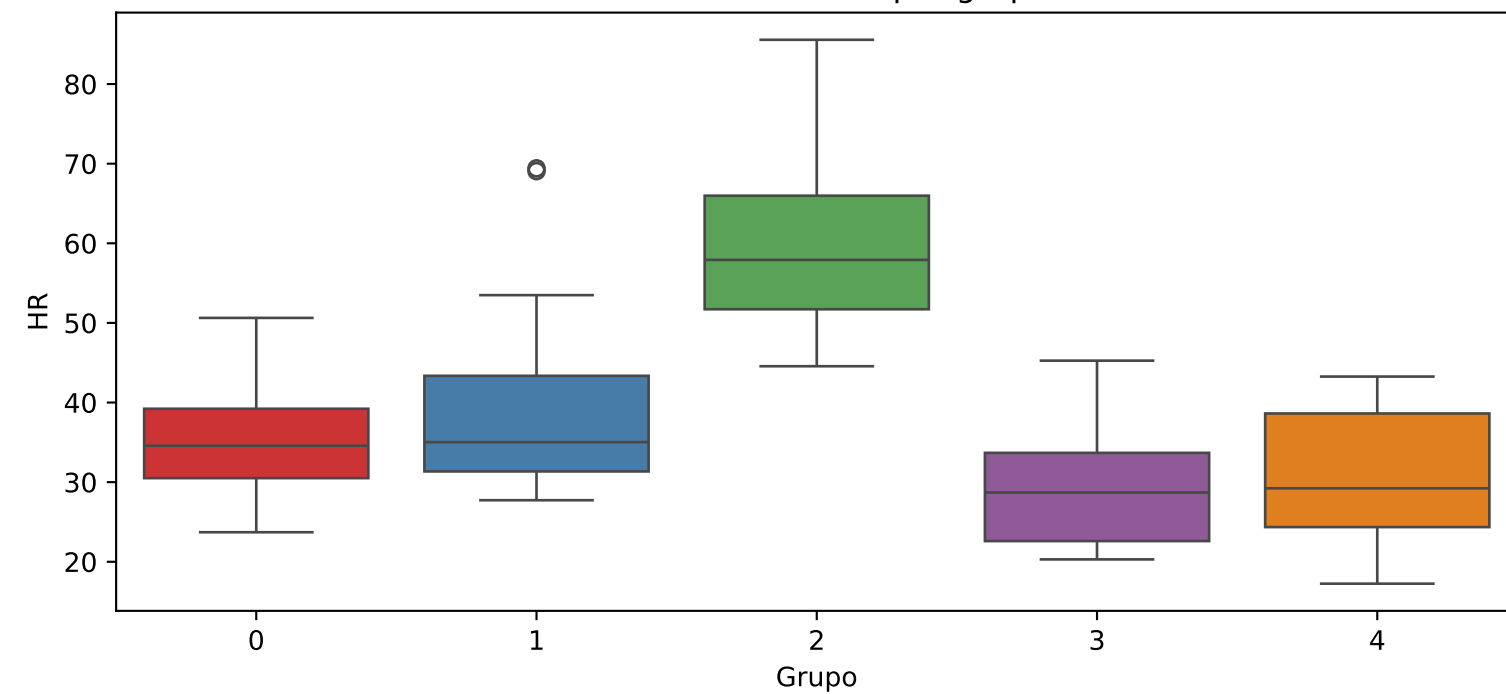
Distribución de Tmax por grupo



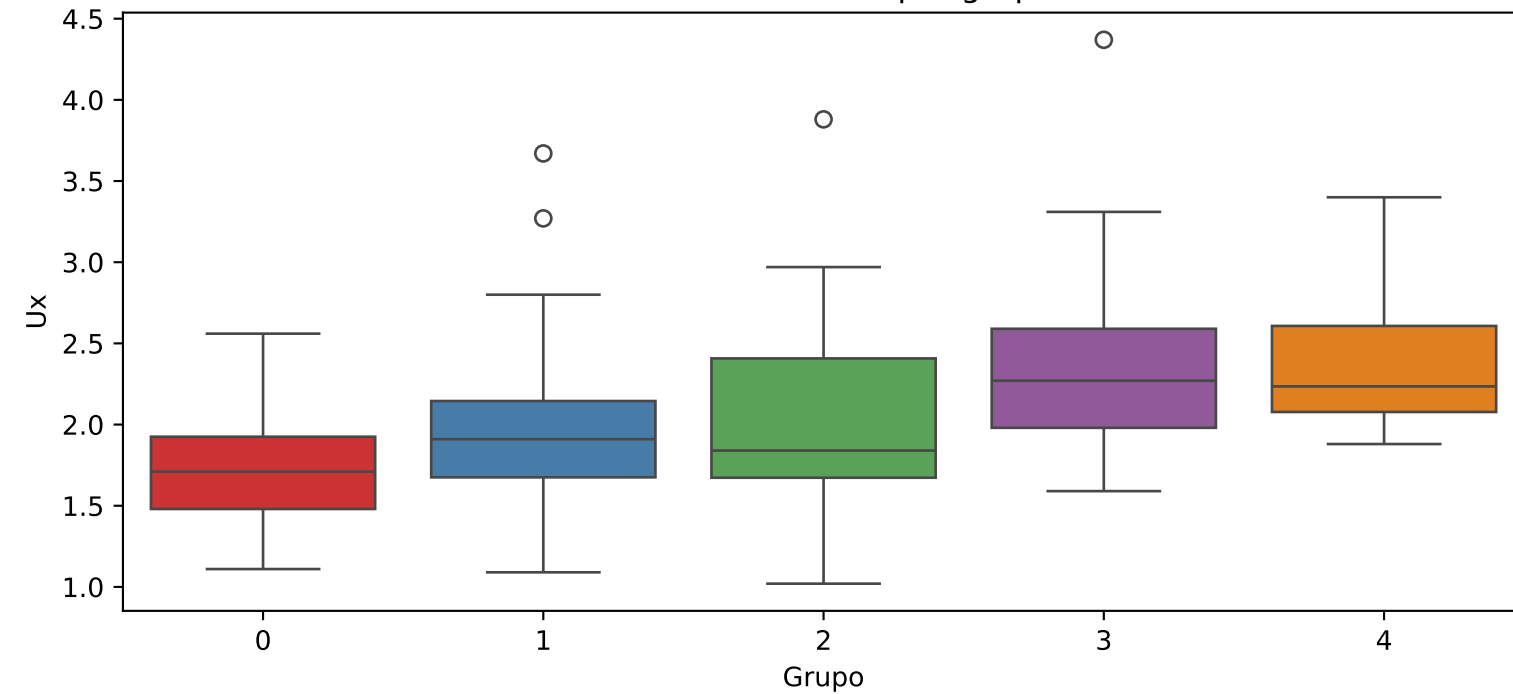
Distribución de Tmin por grupo



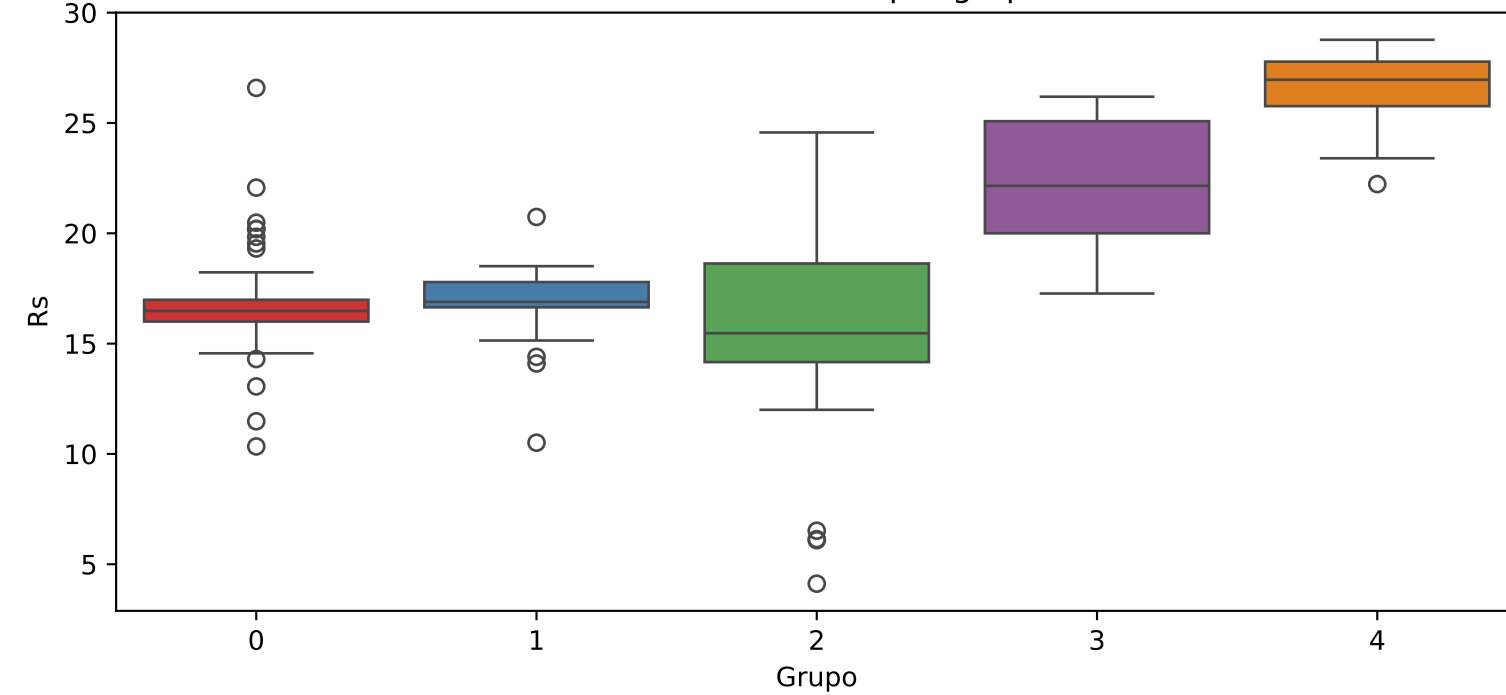
Distribución de HR por grupo



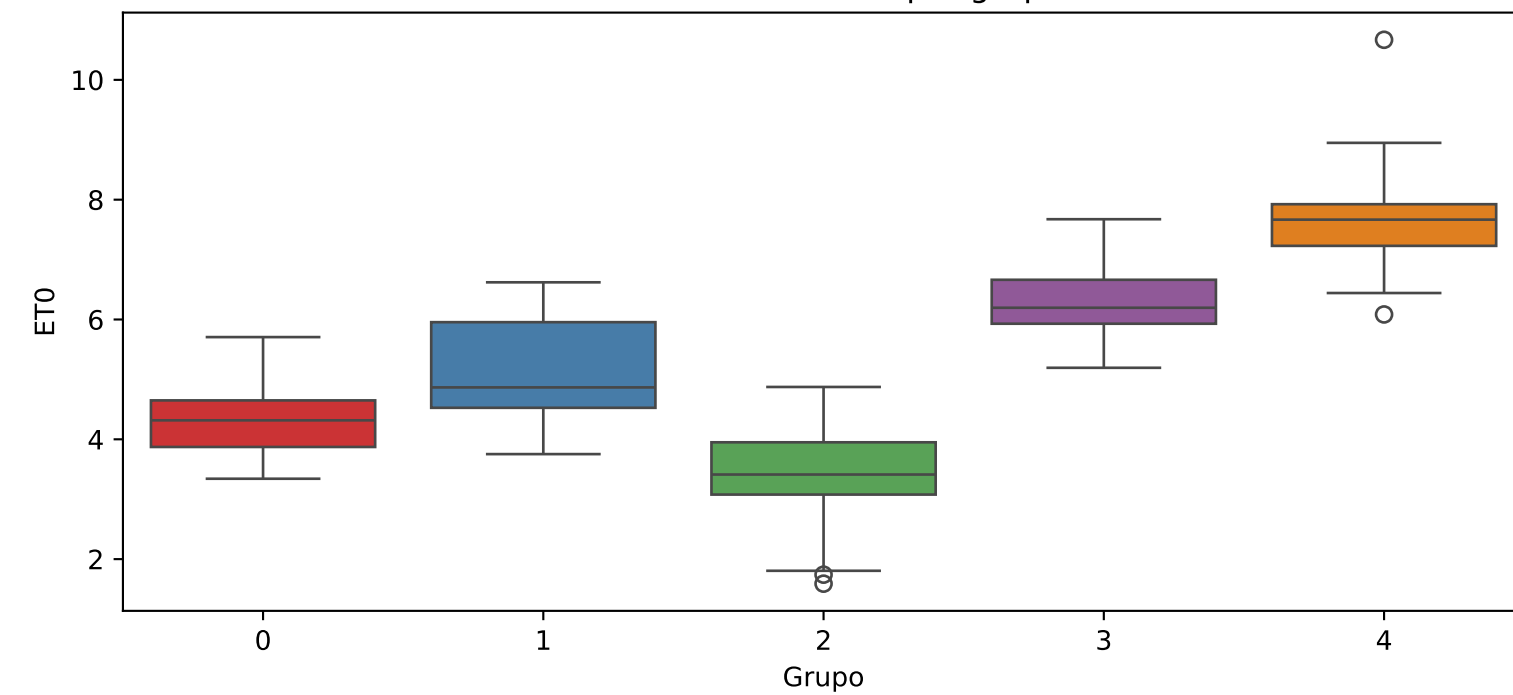
Distribución de Ux por grupo



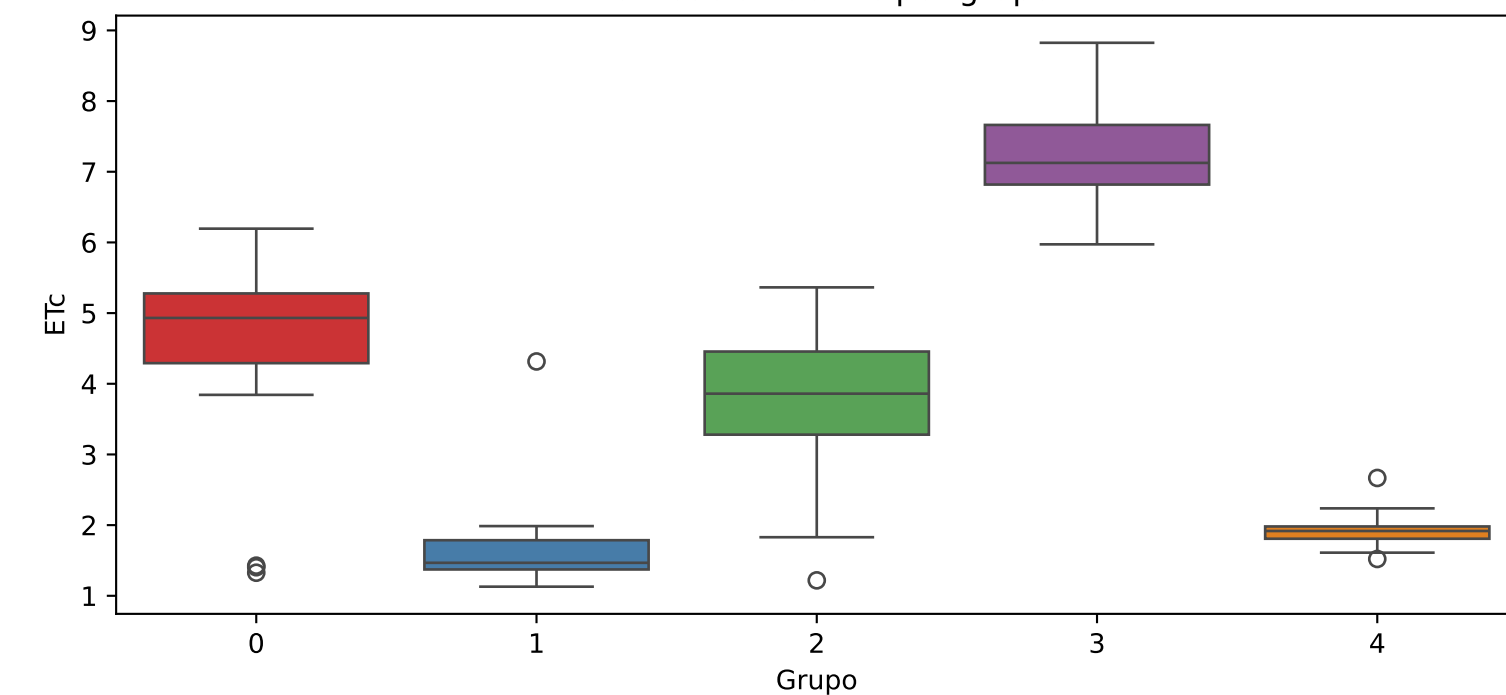
Distribución de Rs por grupo



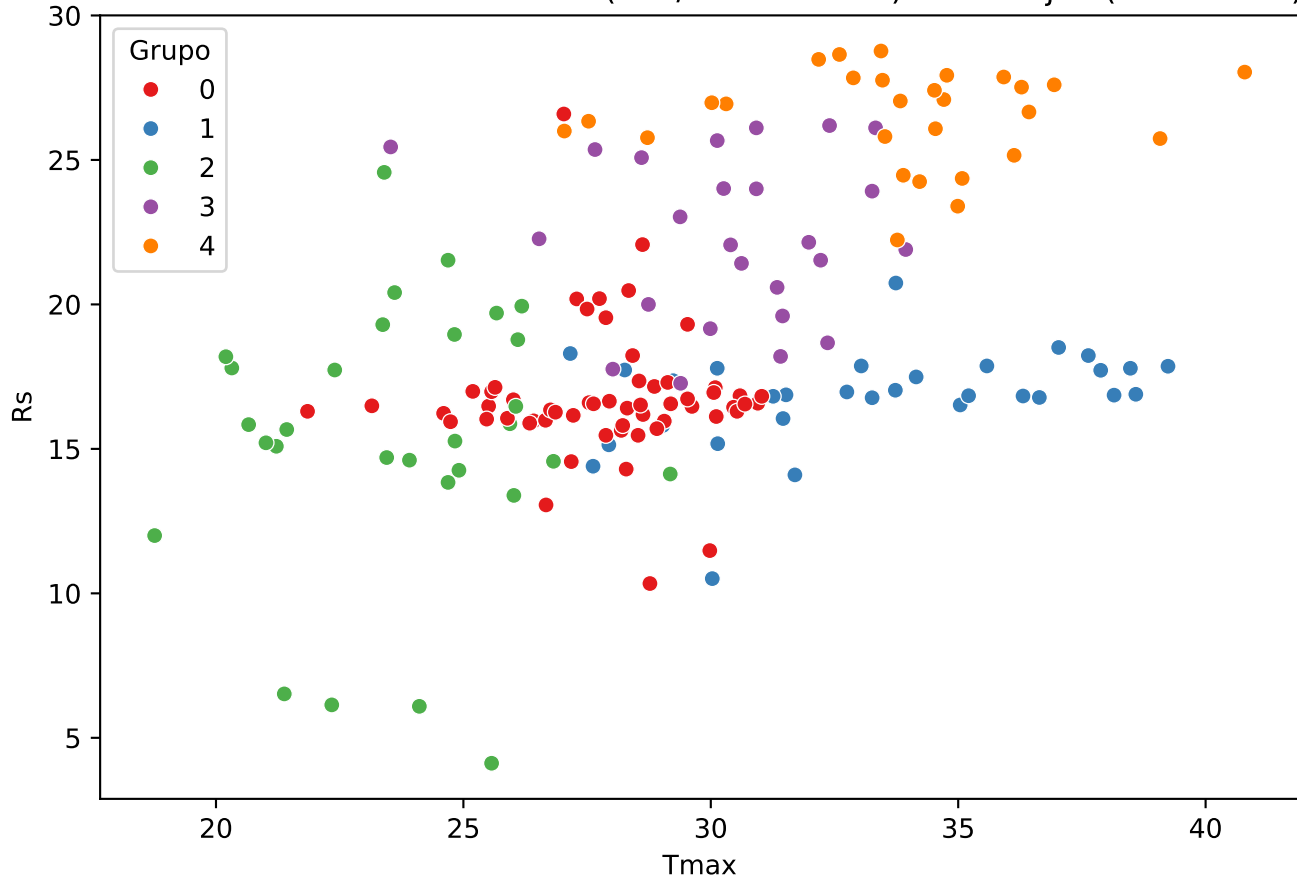
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2020-2021)



Etchojoa — 2021-2022

Días del ciclo: 172

ETc total [mm]: 673.4

ETverde total [mm]: 8.9

ETazul total [mm]: 664.4

Tmax / Tmin [°C]: 39.5 / 9.0

Etchojoa — 2021-2022 · Resultados y métricas

[Etchojoa 2021-2022] Regresión Lineal ET0 — R^2 : 0.9801 MSE: 0.0462

[Etchojoa 2021-2022] Random Forest ET0 — R^2 : 0.9288 MSE: 0.1658

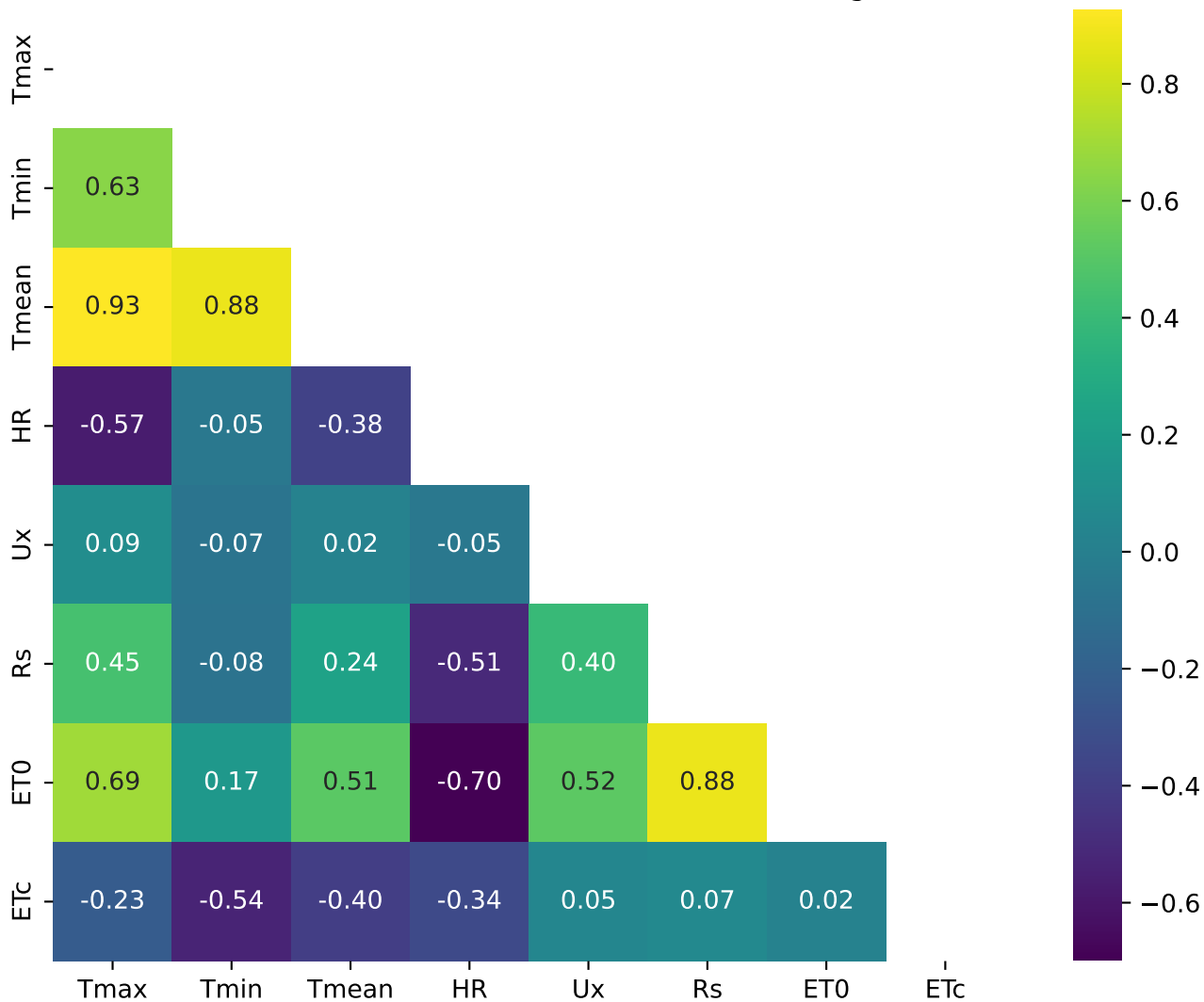
Importancias: {'Tmax': 0.1269853848096993, 'Tmin': 0.008636761104584632, 'HR': 0.10328193607402673, 'Ux': 0.02428976104473047, 'Rs': 0.7368061569669588}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	27.513846	13.471346	45.919808	1.880192	16.849808	4.163473	4.787994
1	33.030968	16.670645	37.897097	2.473871	26.106129	7.241812	1.833368
2	25.220000	15.095238	63.206667	1.772381	12.190476	2.943695	2.744849
3	33.041389	18.865000	40.289722	1.637778	16.536944	4.750528	2.399186
4	30.271875	13.581563	31.100938	2.134062	22.731875	6.074387	6.985545

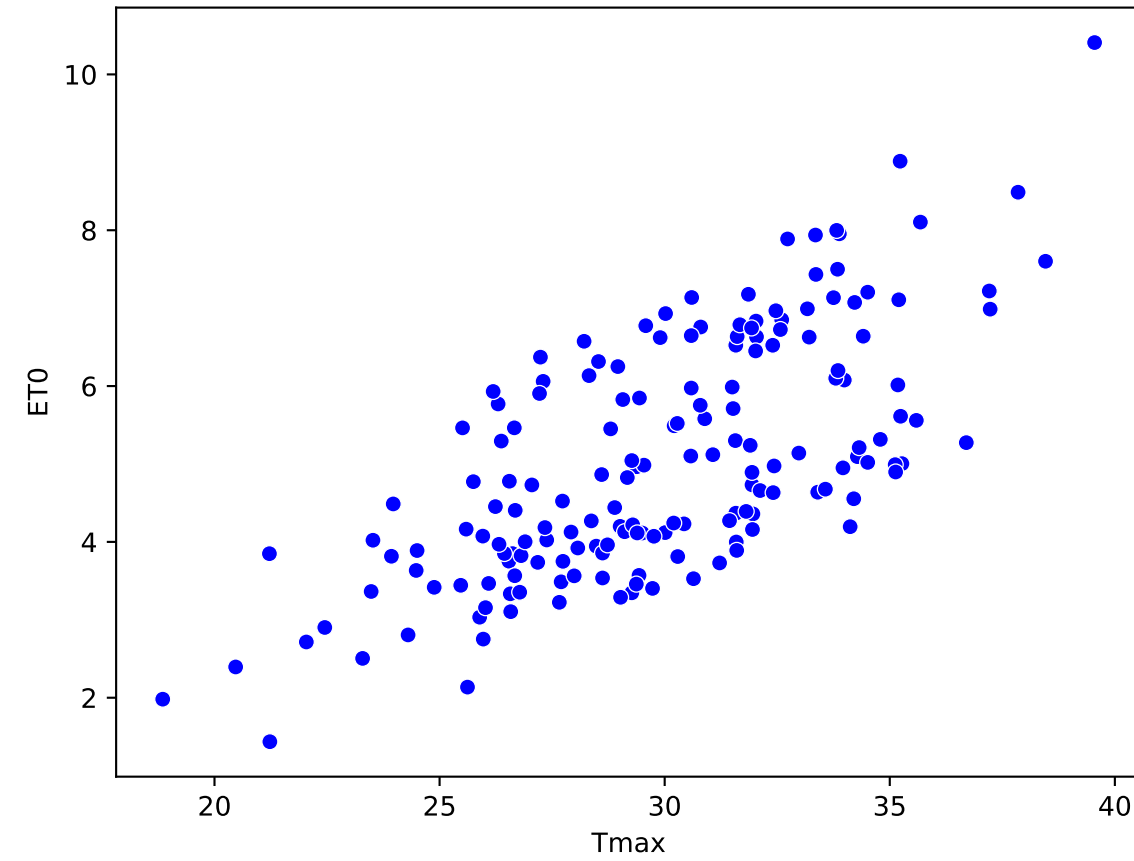
Etchojoa — 2021-2022

Matriz de Correlación entre Variables Meteorológicas

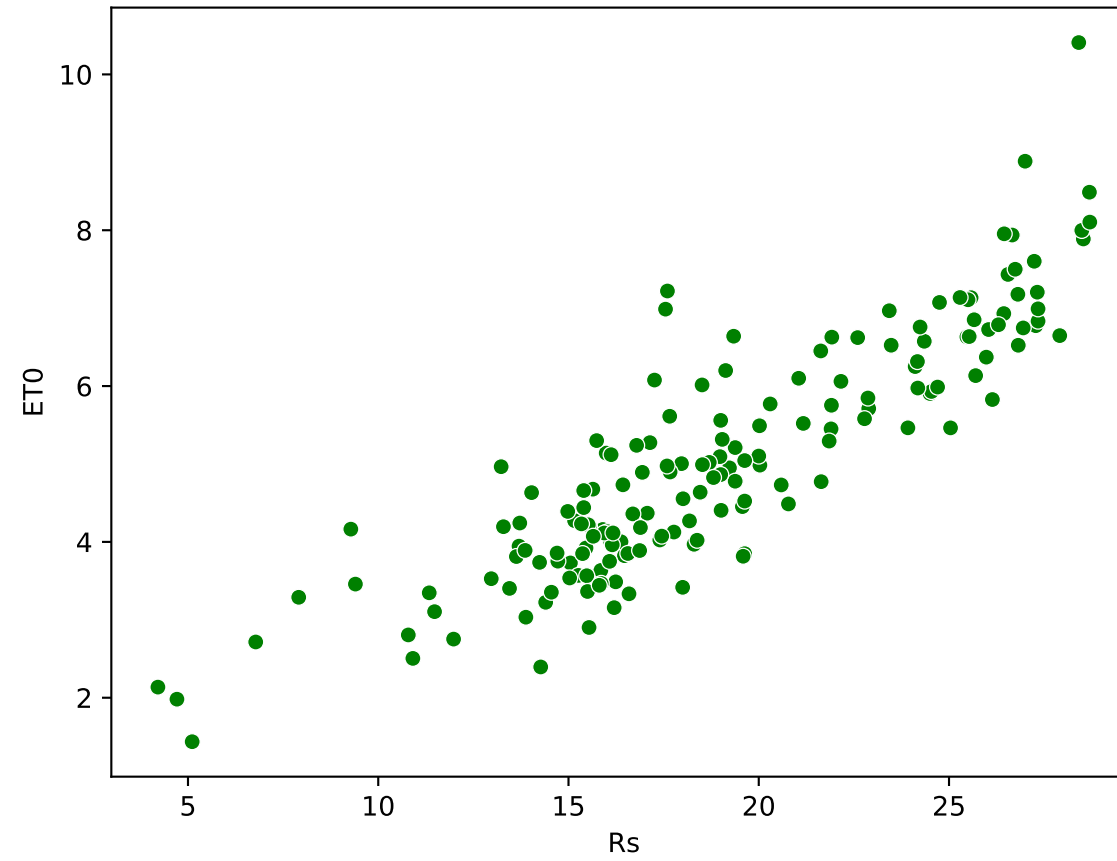


Dispersión — Etchojoa (2021-2022)

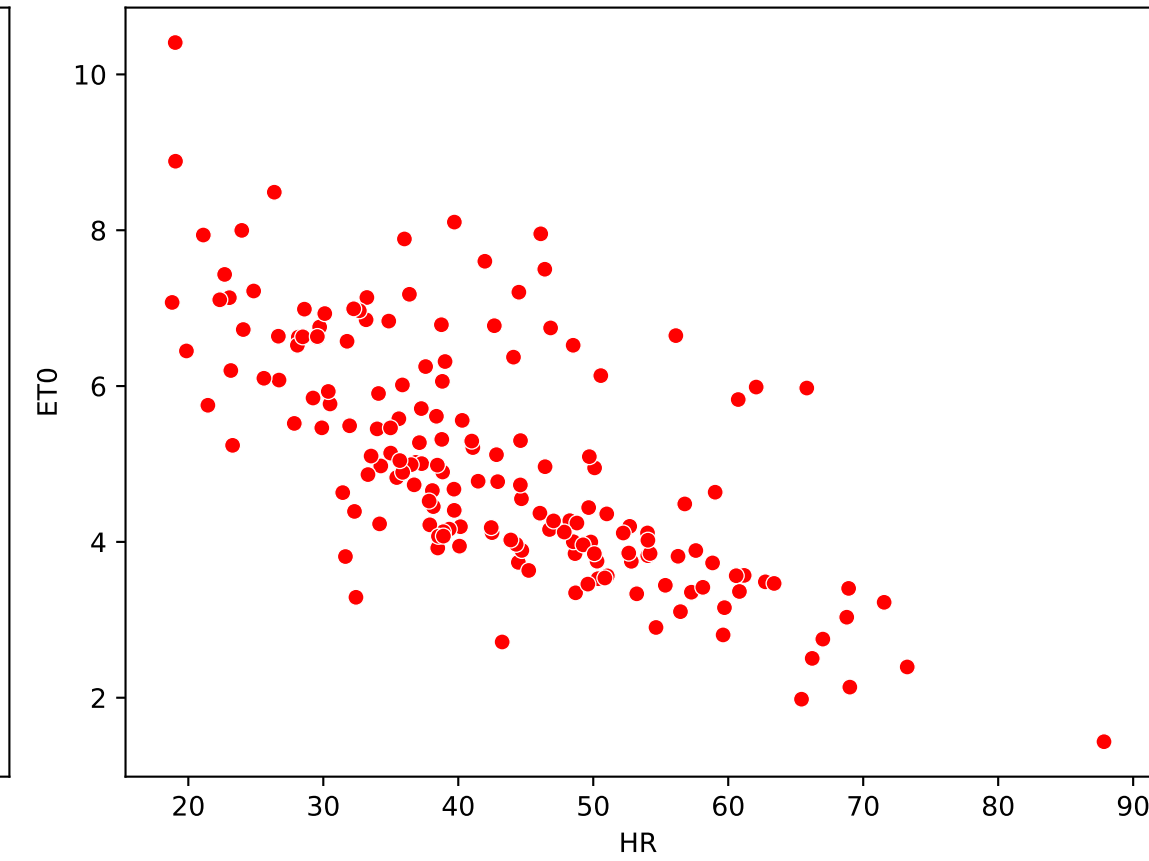
Tmax vs ET0



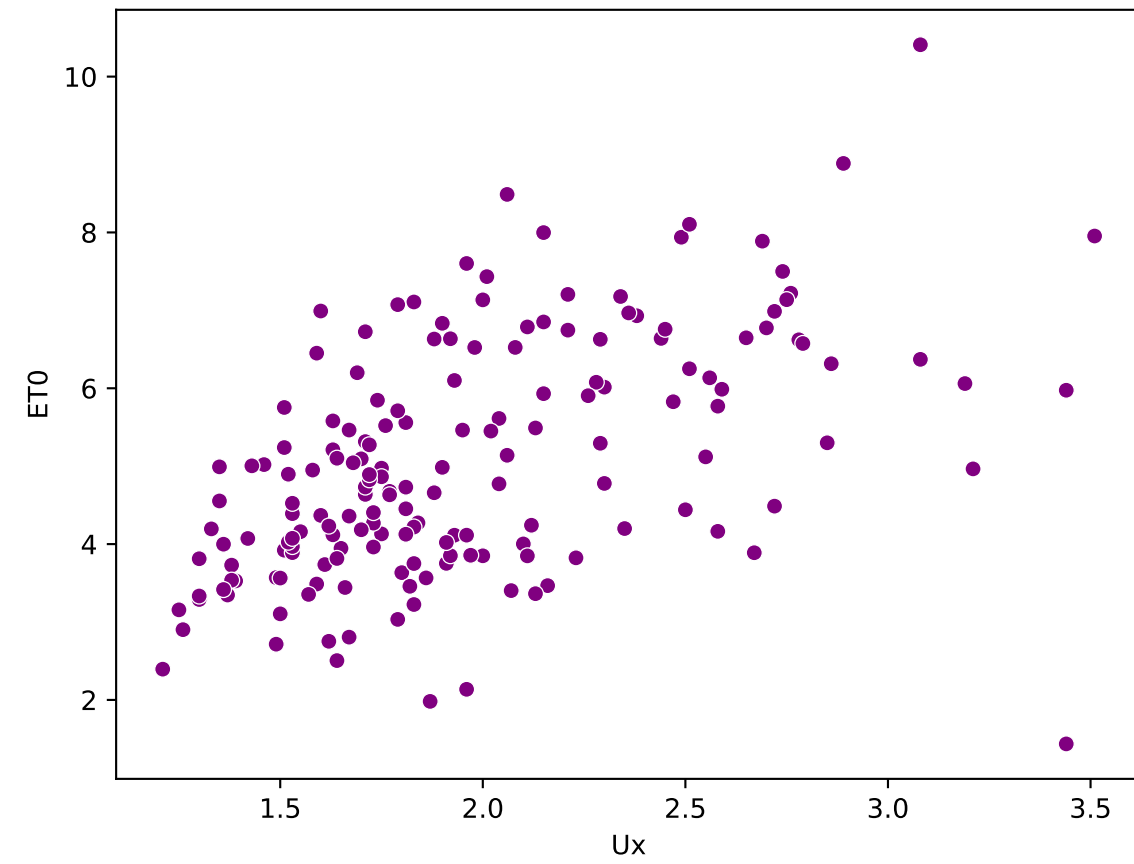
Rs vs ET0



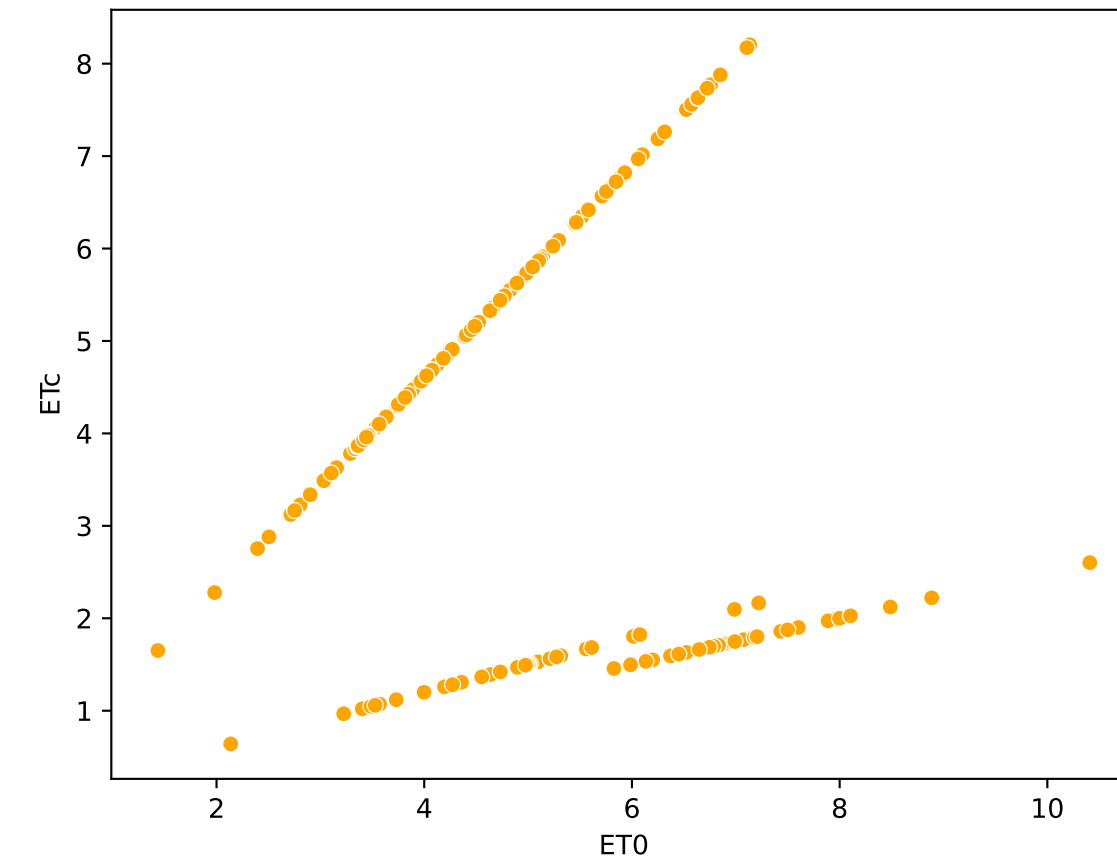
HR vs ET0



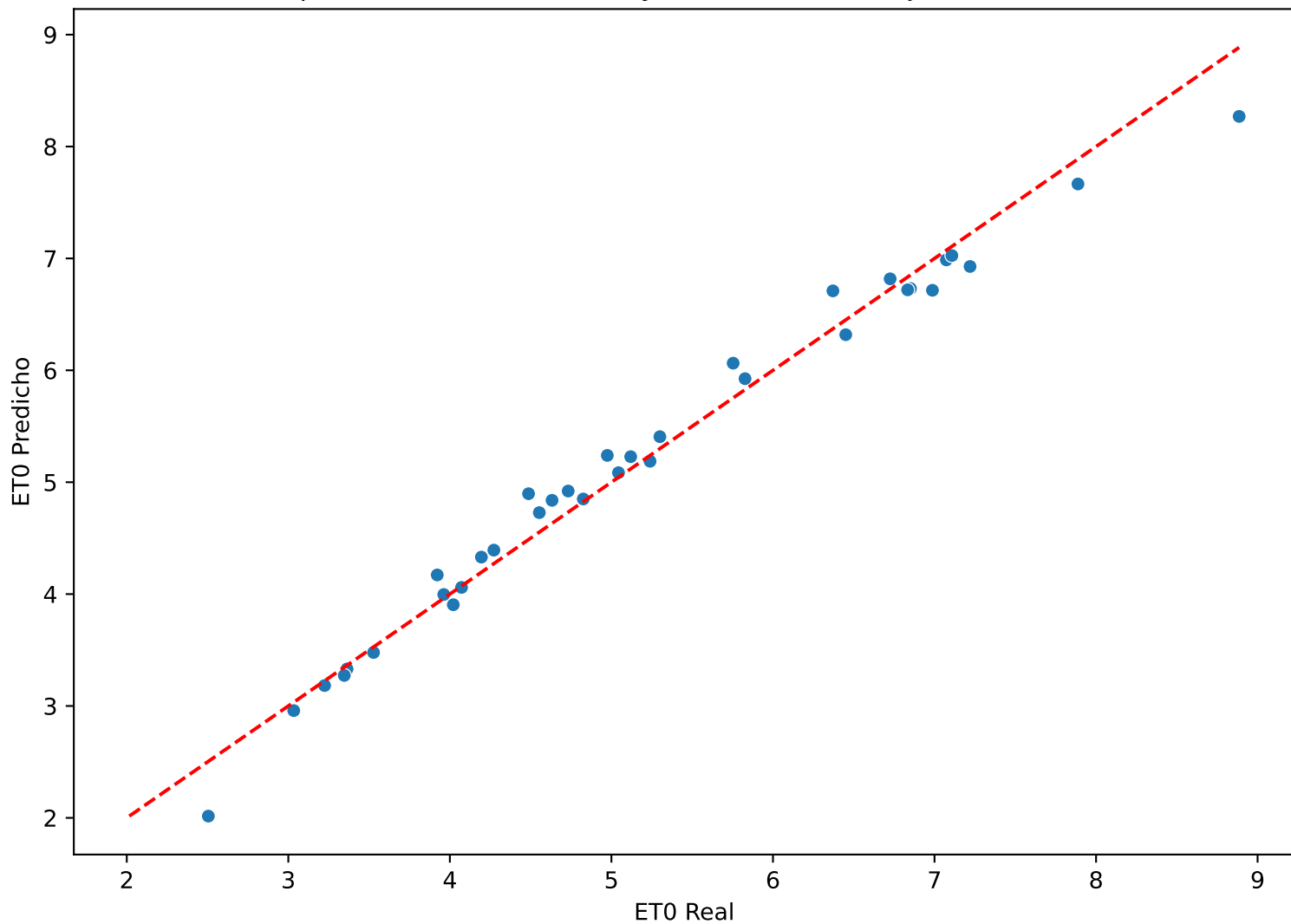
Ux vs ET0



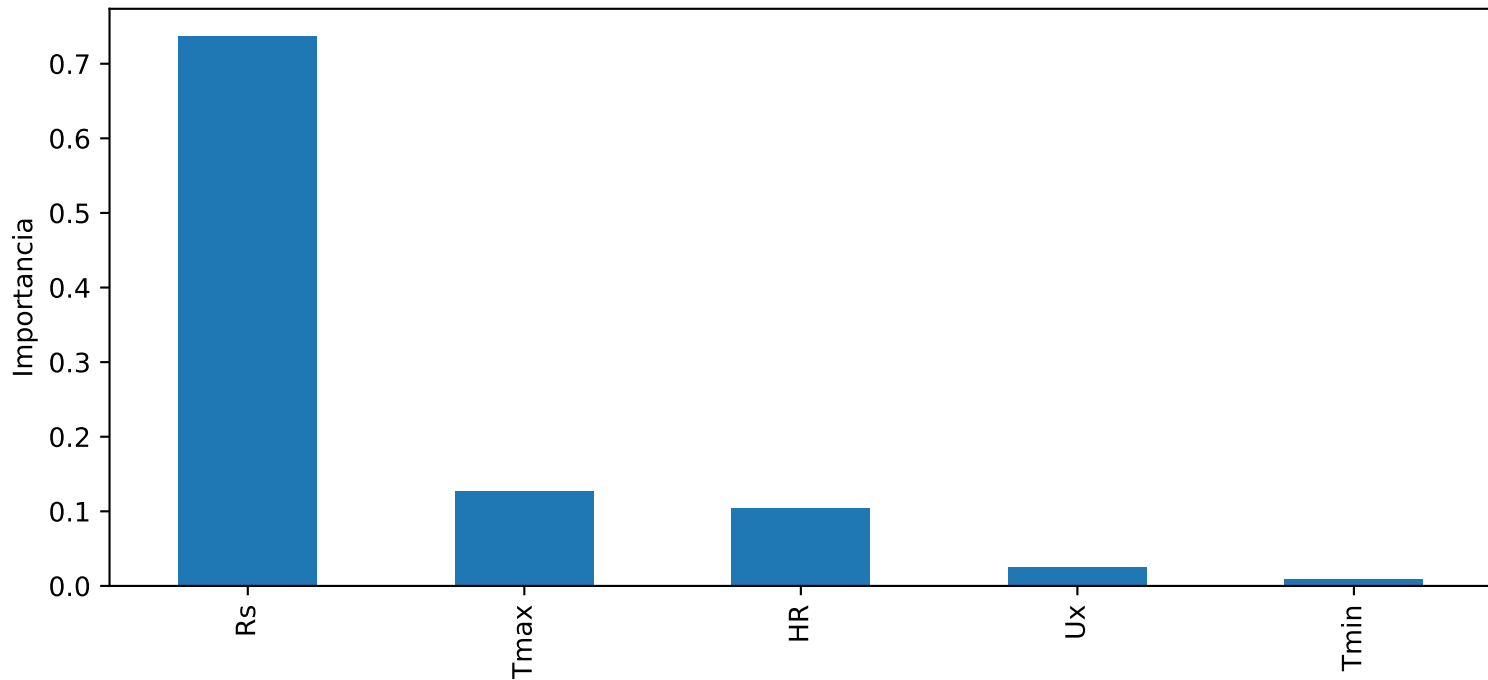
ET0 vs ETc



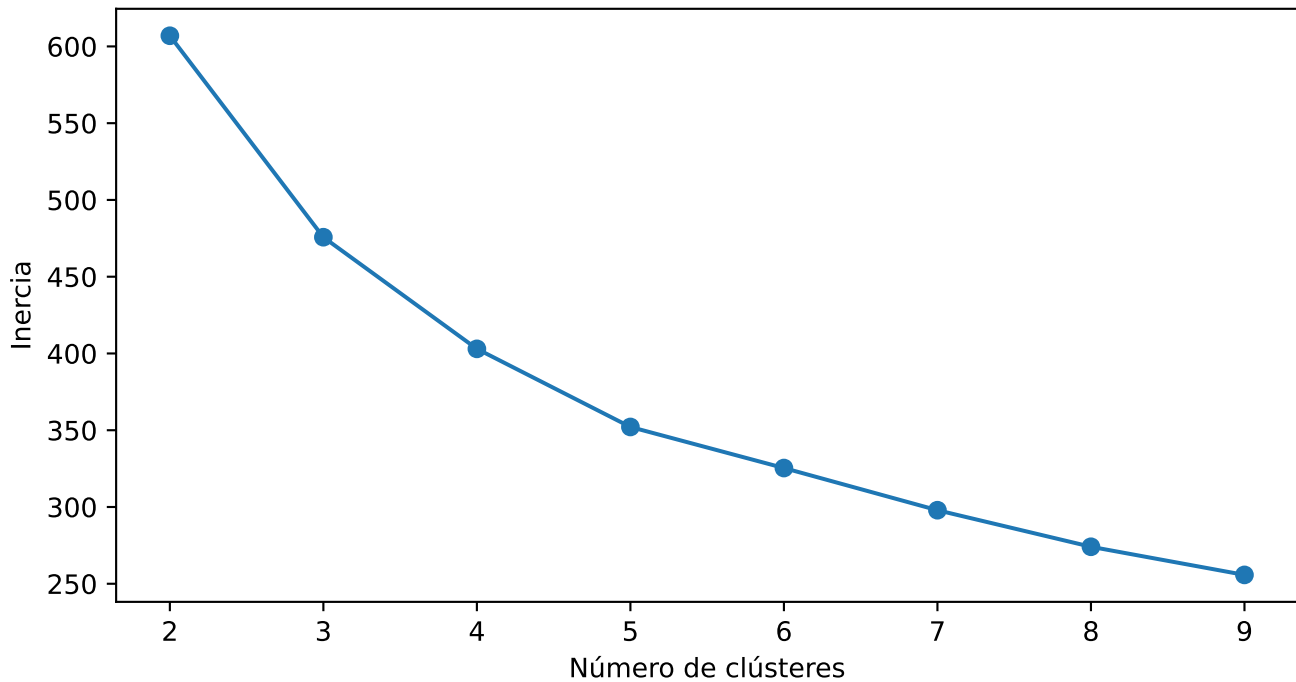
Comparación entre ET0 Real y Predicho — Etchojoa (2021-2022)



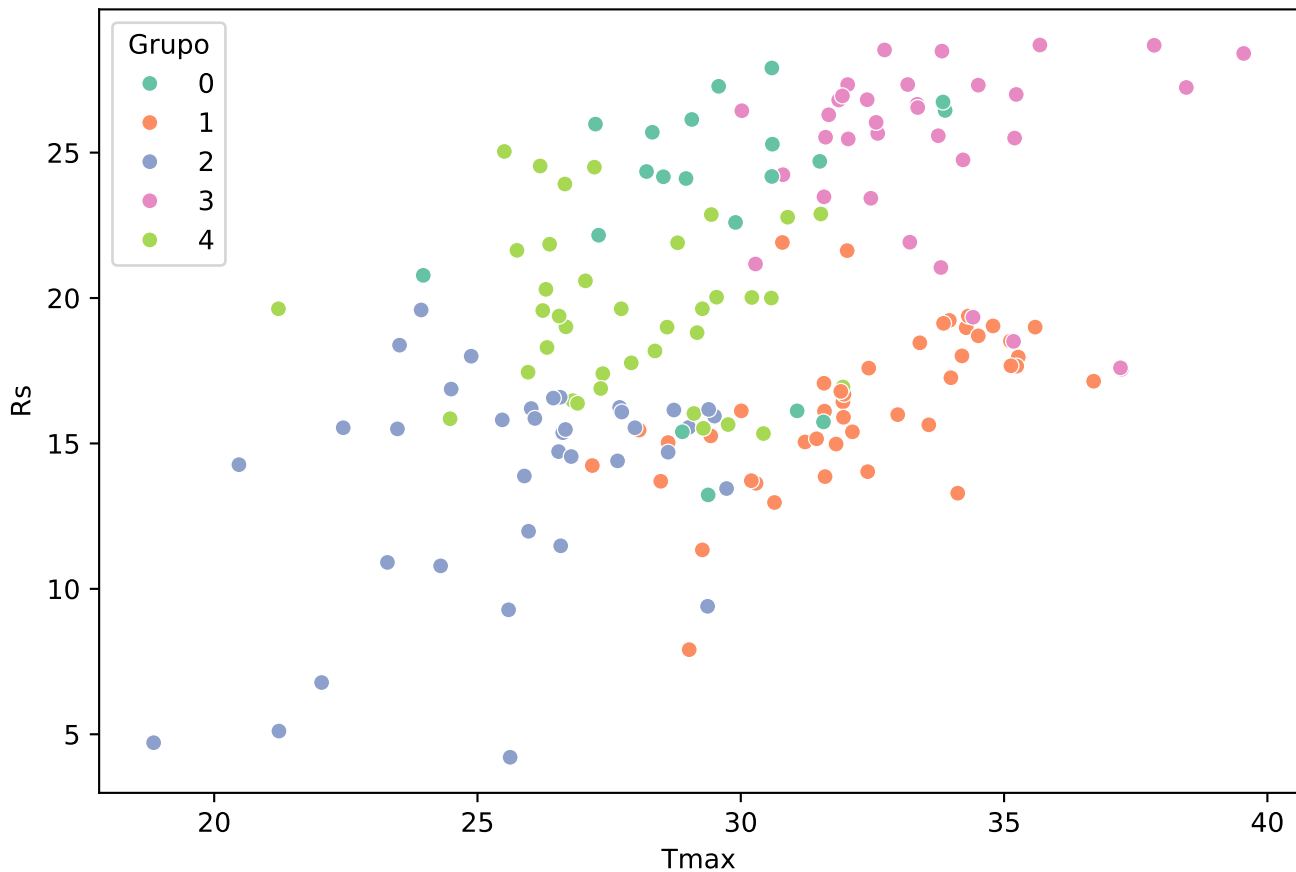
Importancia de variables (RF) — Etchojoa (2021-2022)



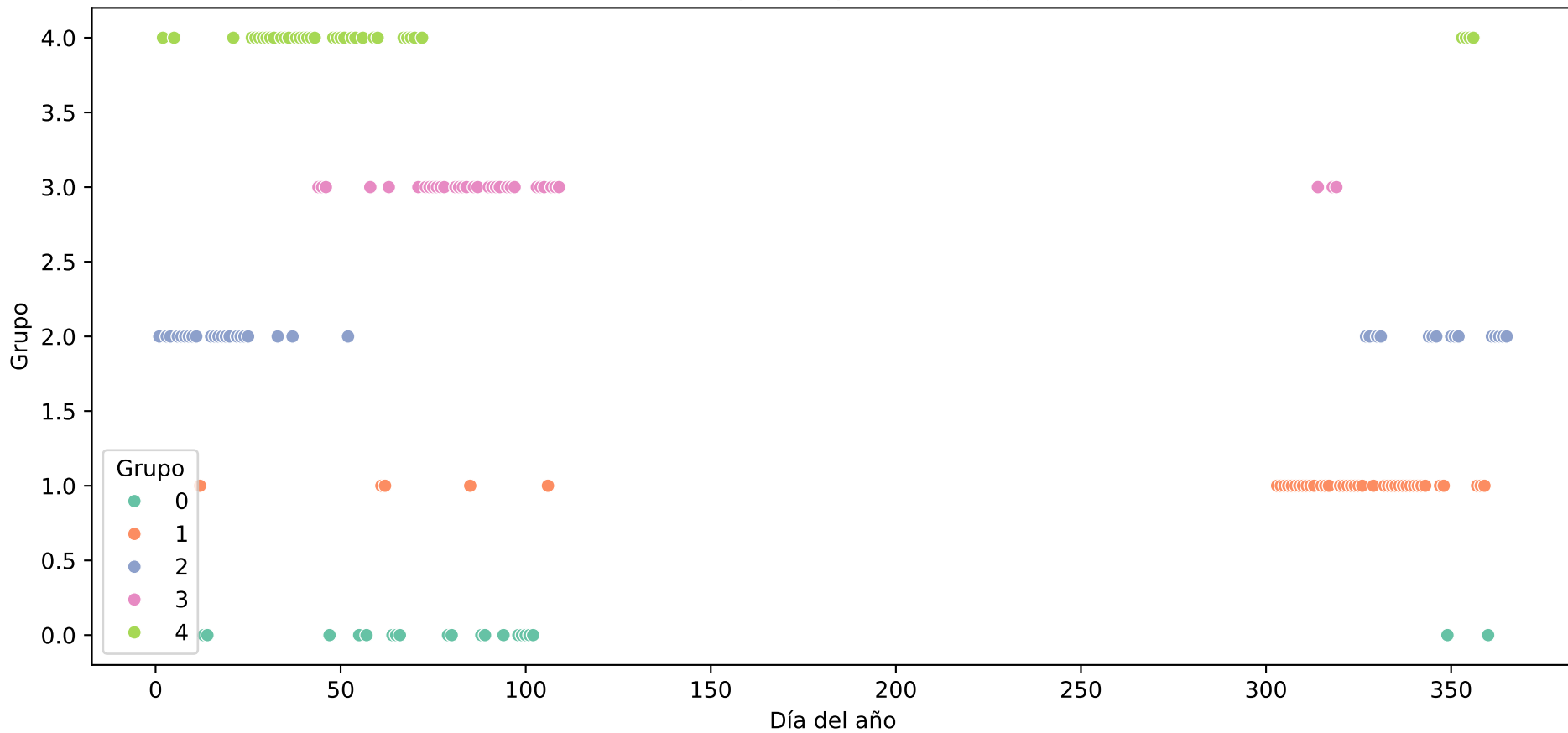
Método del codo



Clasificación de días climáticos — Etchojoa (2021-2022)

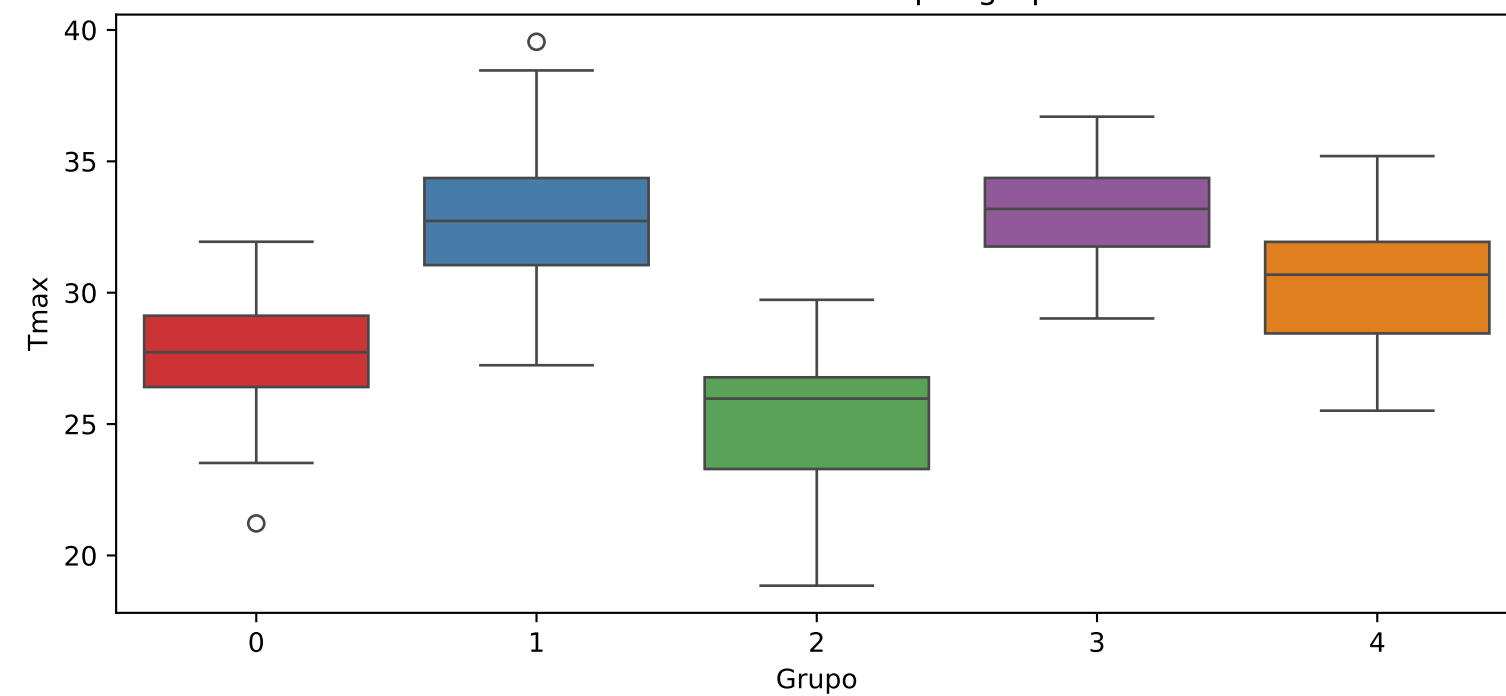


Distribución de días por grupo — Etchojoa (2021-2022)

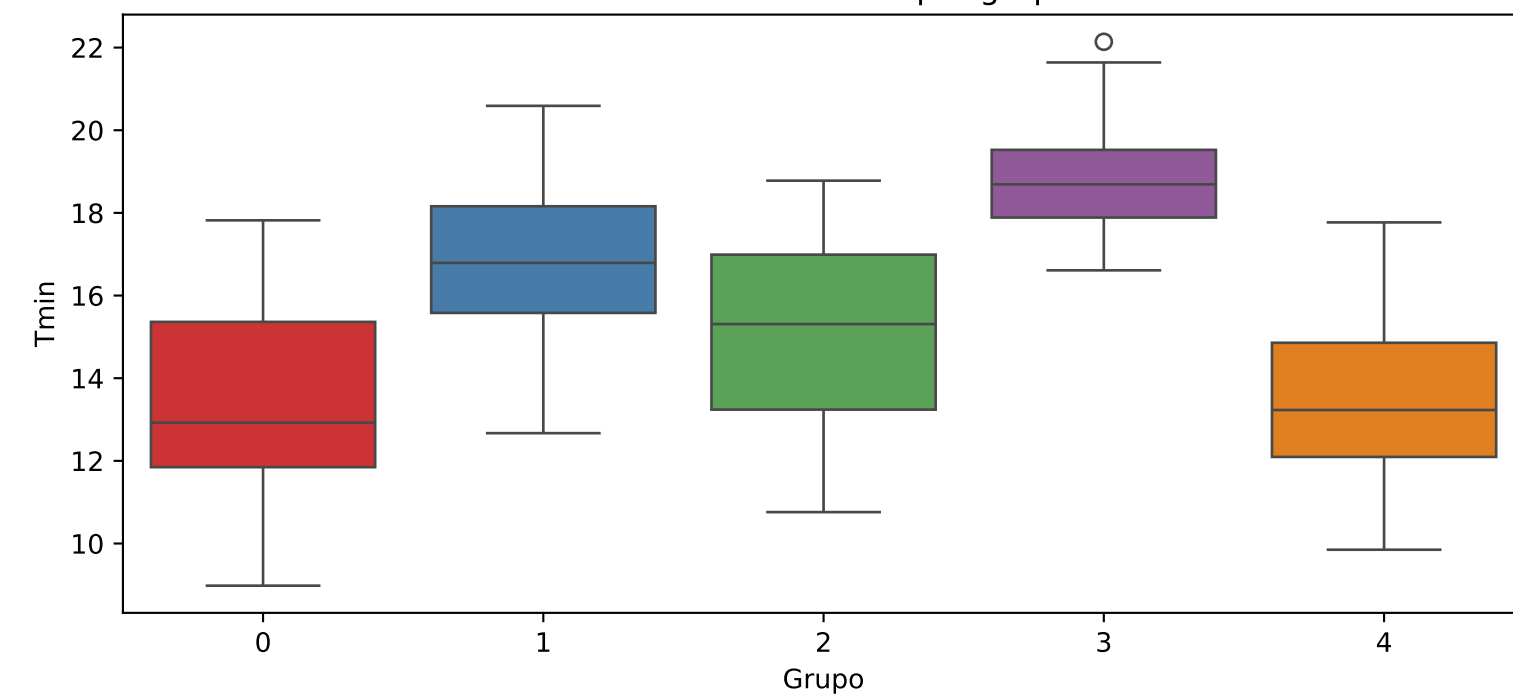


Boxplots por grupo — Etchojoa (2021-2022)

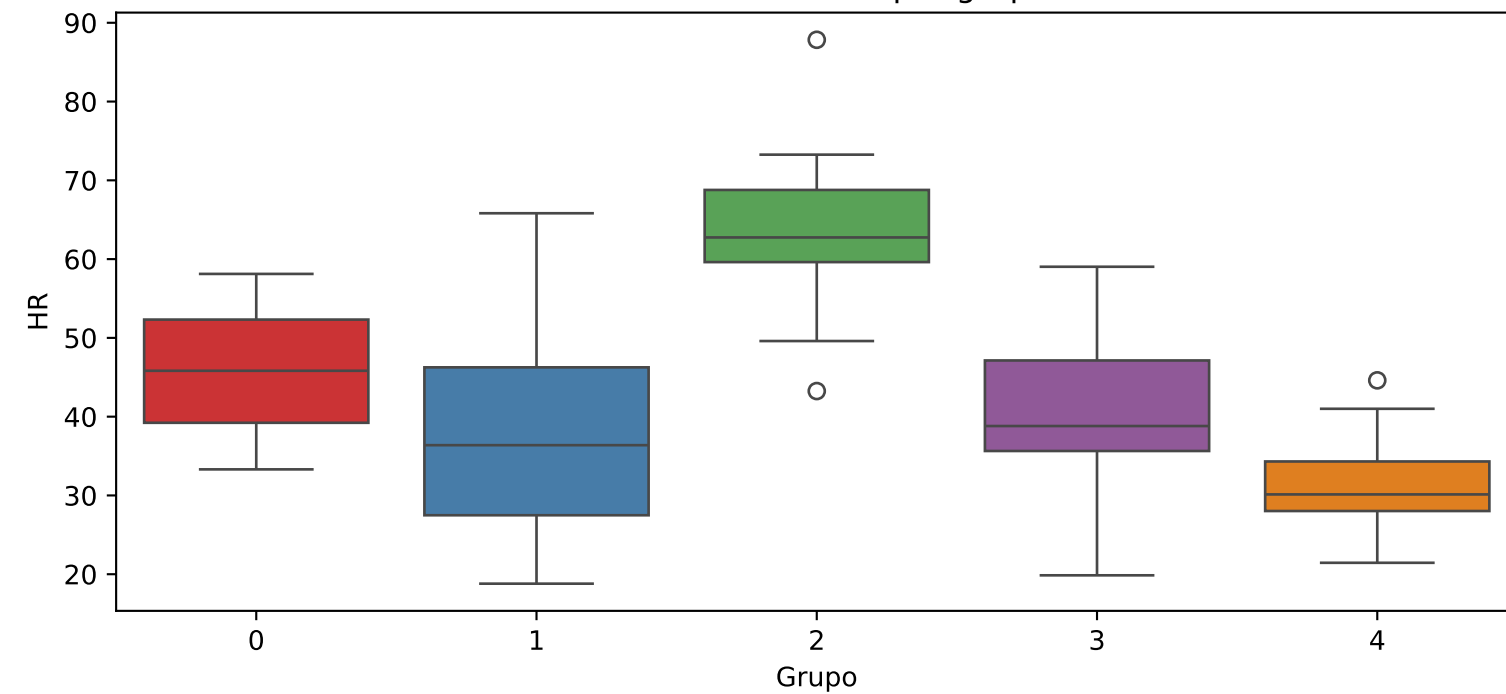
Distribución de Tmax por grupo



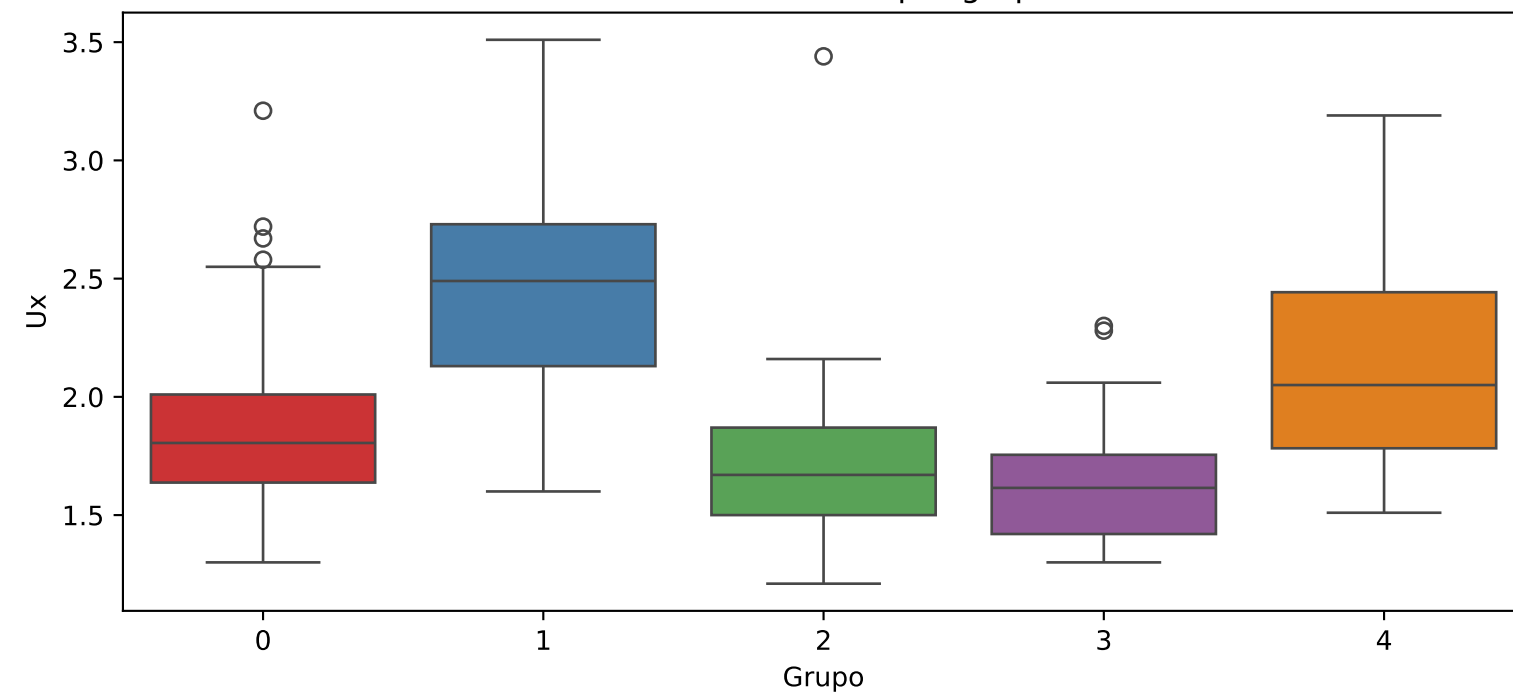
Distribución de Tmin por grupo



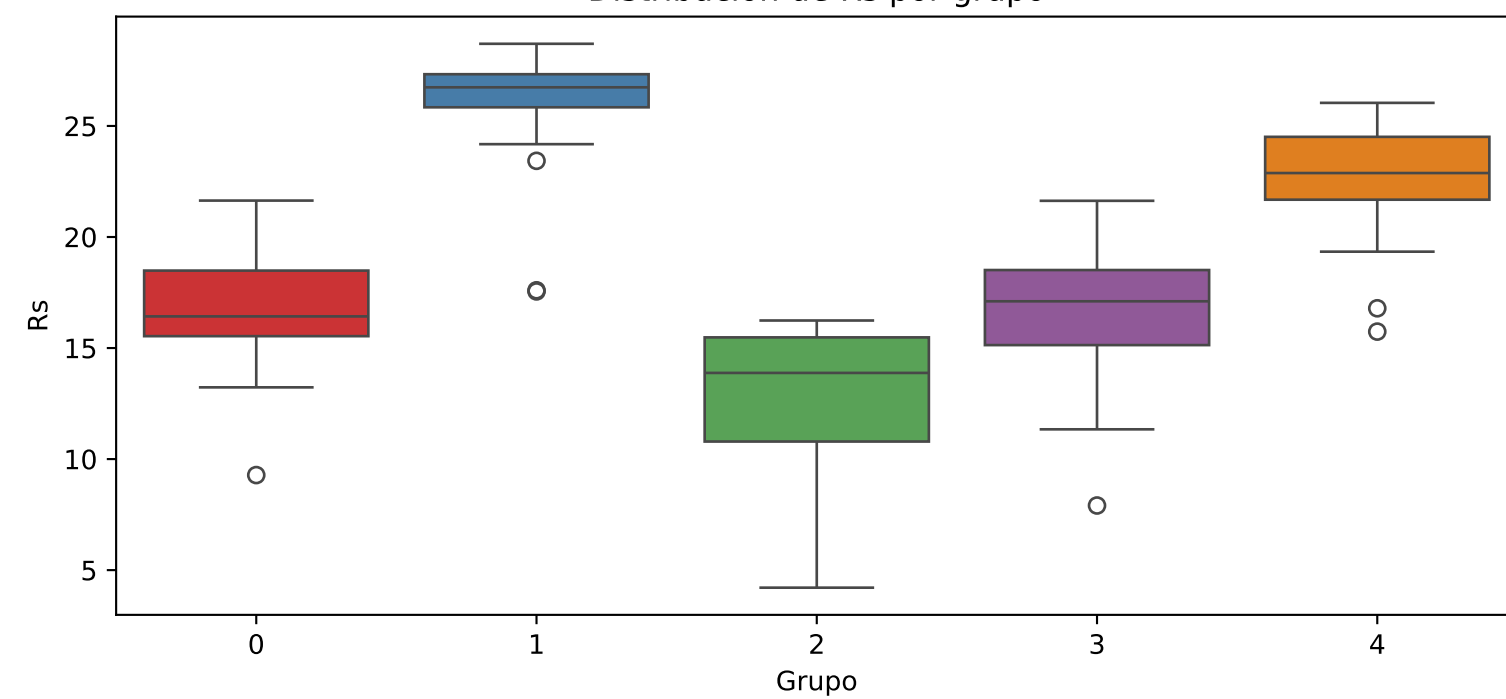
Distribución de HR por grupo



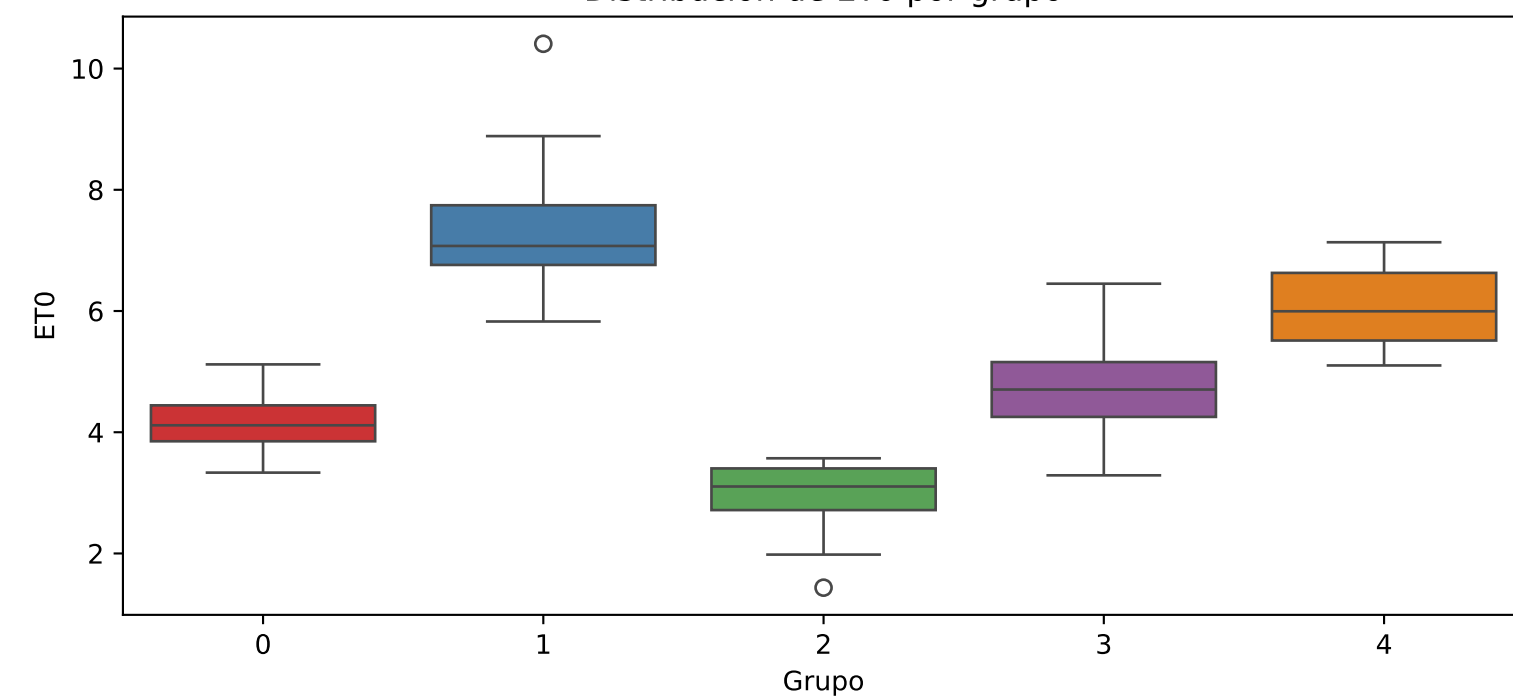
Distribución de Ux por grupo



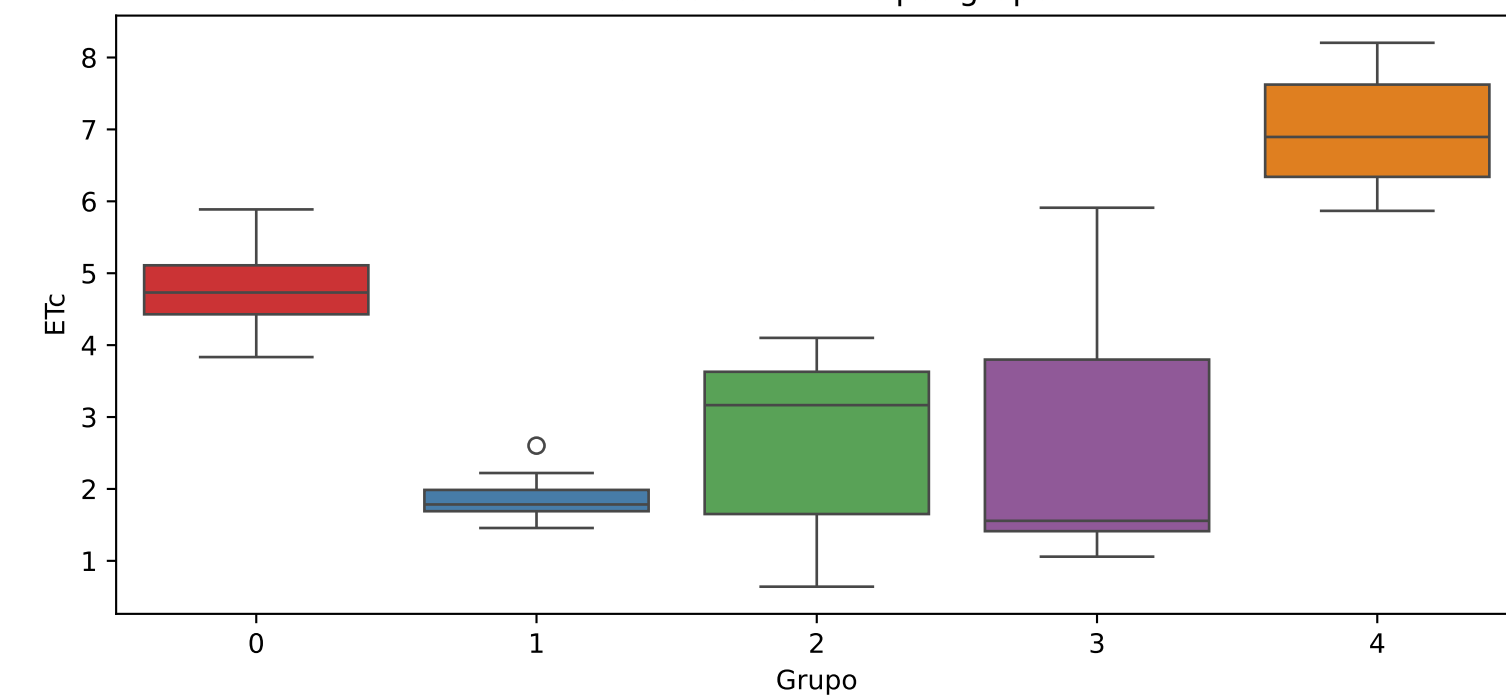
Distribución de Rs por grupo



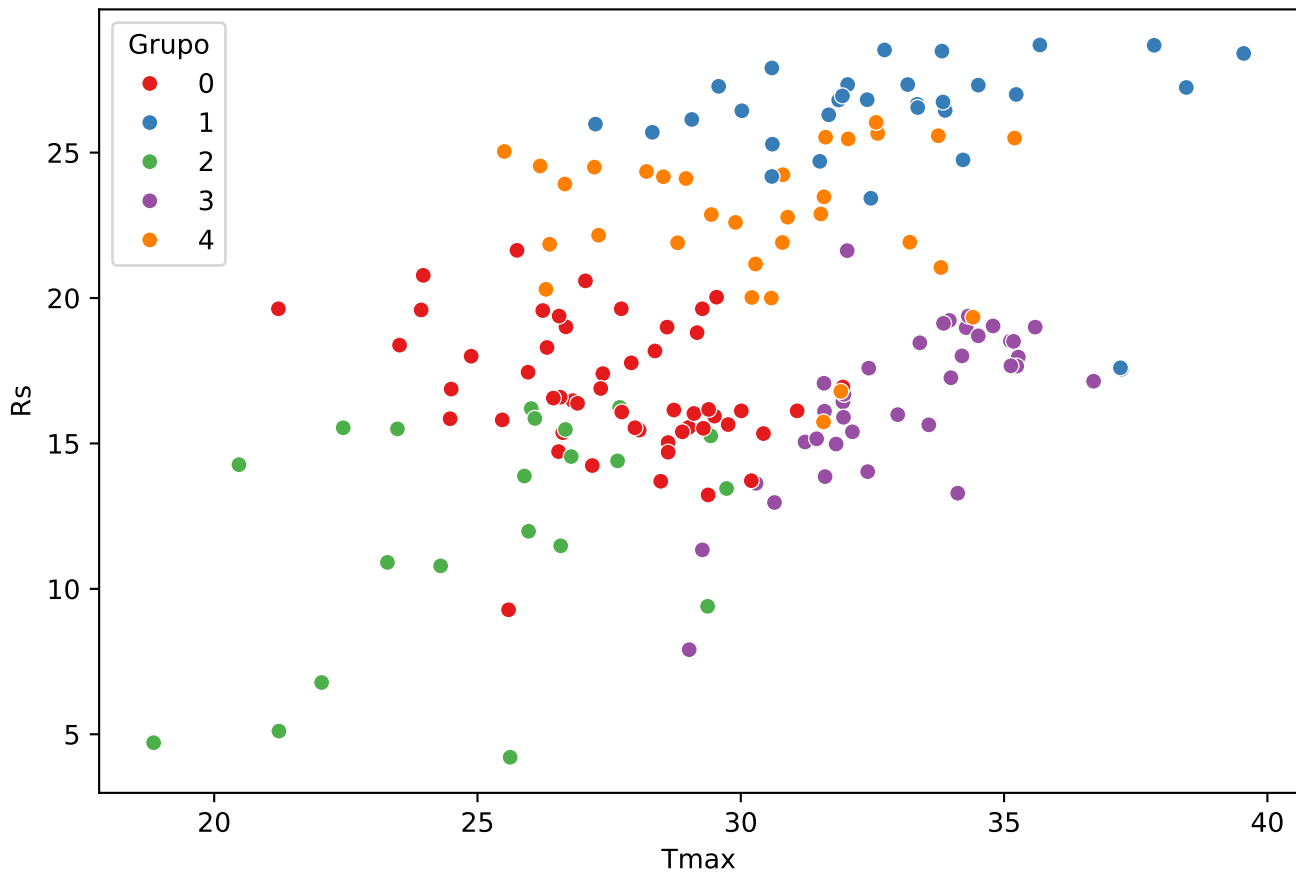
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2021-2022)



Etchojoa — 2022-2023

Días del ciclo: 172

ETc total [mm]: 657.2

ETverde total [mm]: 14.7

ETazul total [mm]: 642.5

Tmax / Tmin [°C]: 37.4 / 6.6

Etchojoa — 2022-2023 · Resultados y métricas

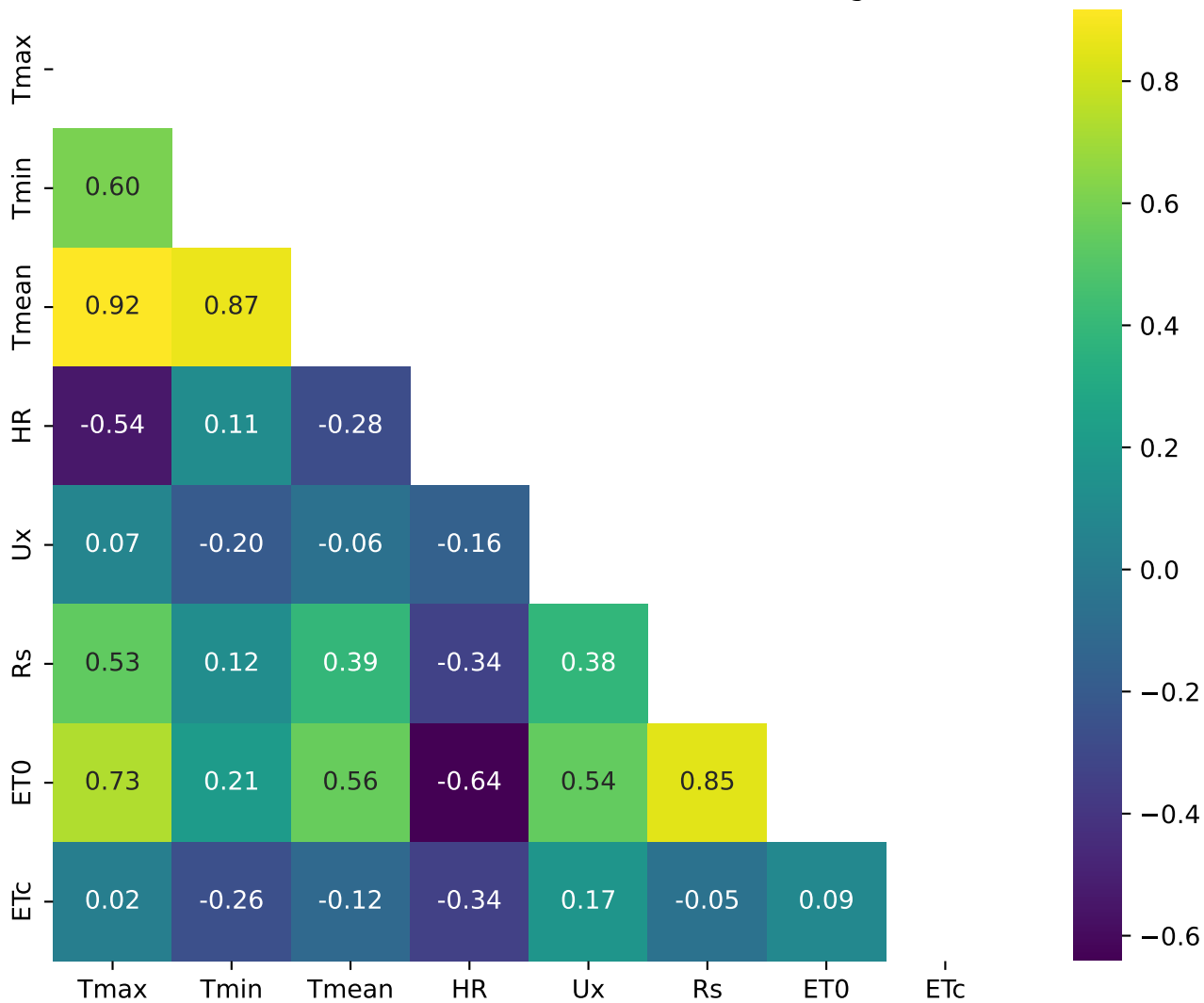
[Etchojoa 2022-2023] Regresión Lineal ET0 — R²: 0.9595 MSE: 0.0958
[Etchojoa 2022-2023] Random Forest ET0 — R²: 0.9163 MSE: 0.1978
Importancias: {'Tmax': 0.1314483726082369, 'Tmin': 0.010611199412273413, 'HR': 0.1406098249186672, 'Ux': 0.03326579561289601, 'Rs': 0.6840648074479265}

Estadísticas descriptivas por grupo (medias):

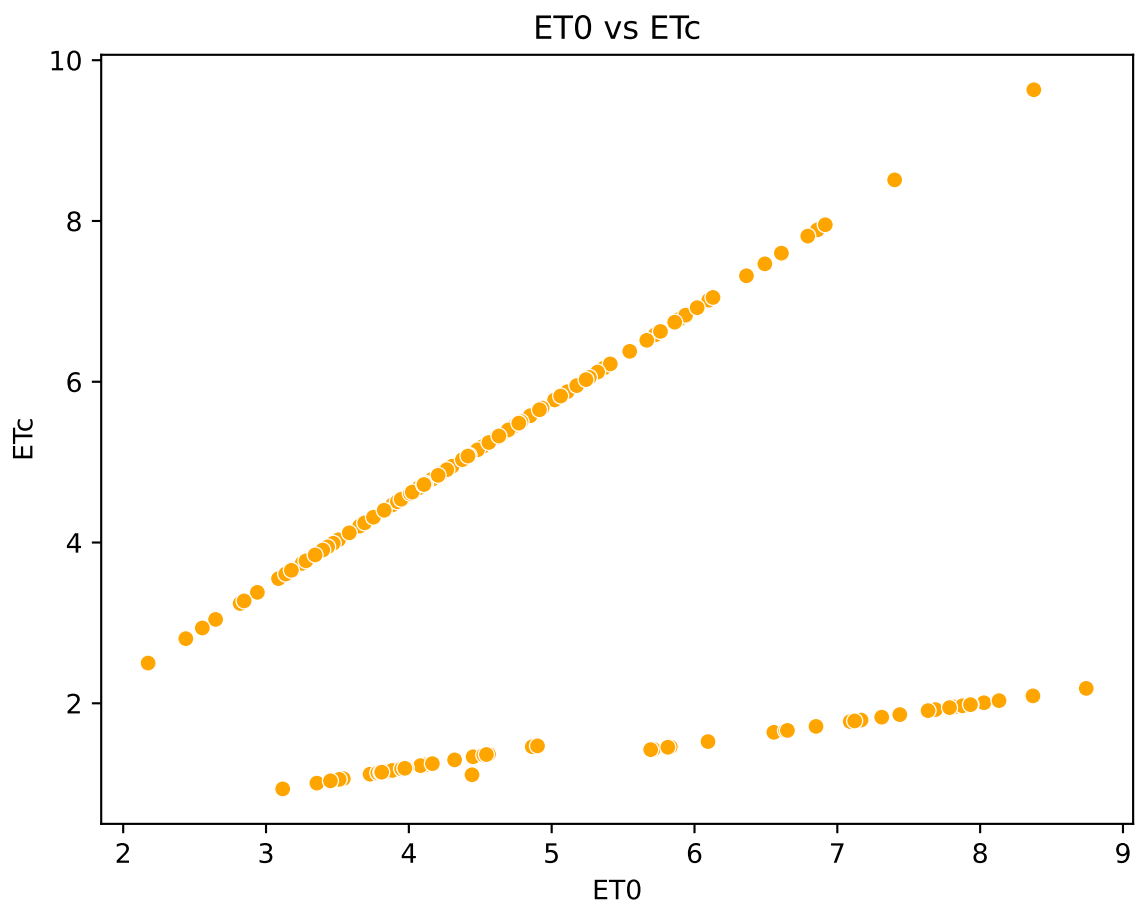
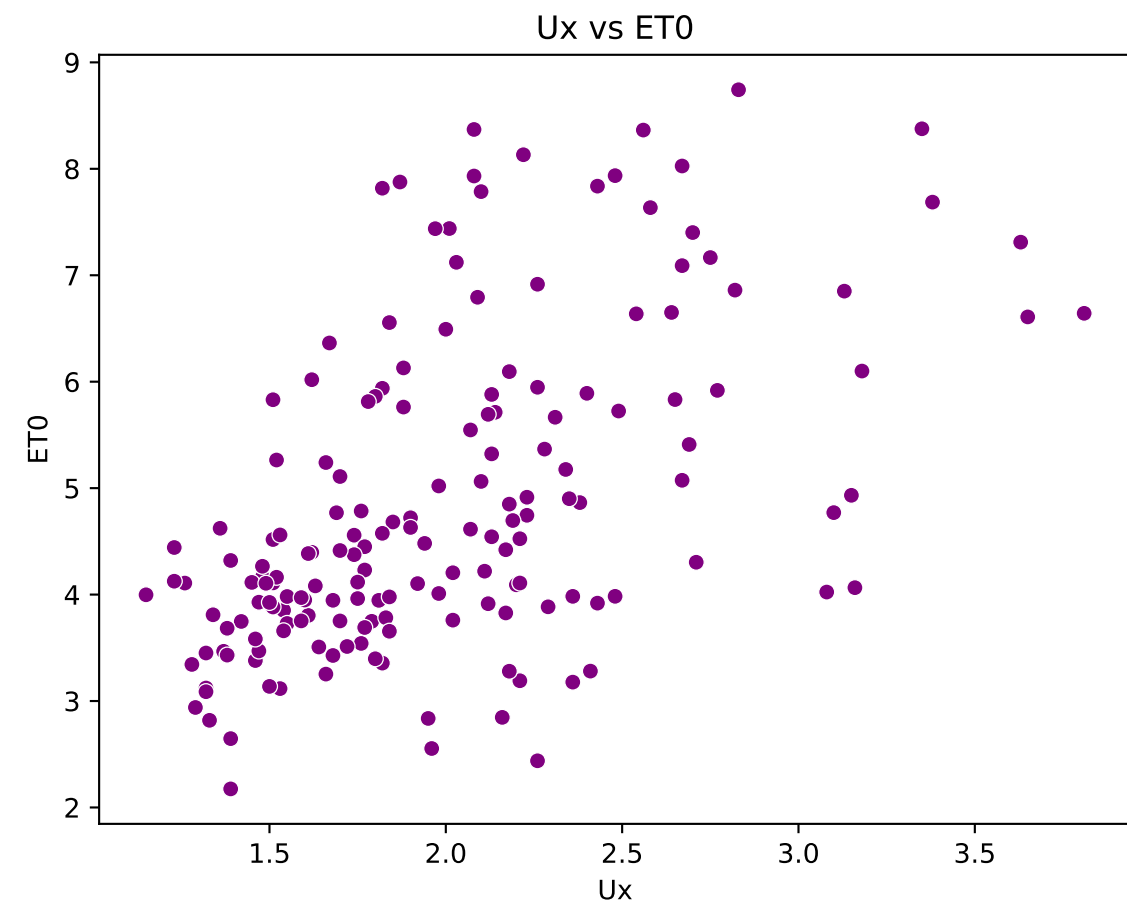
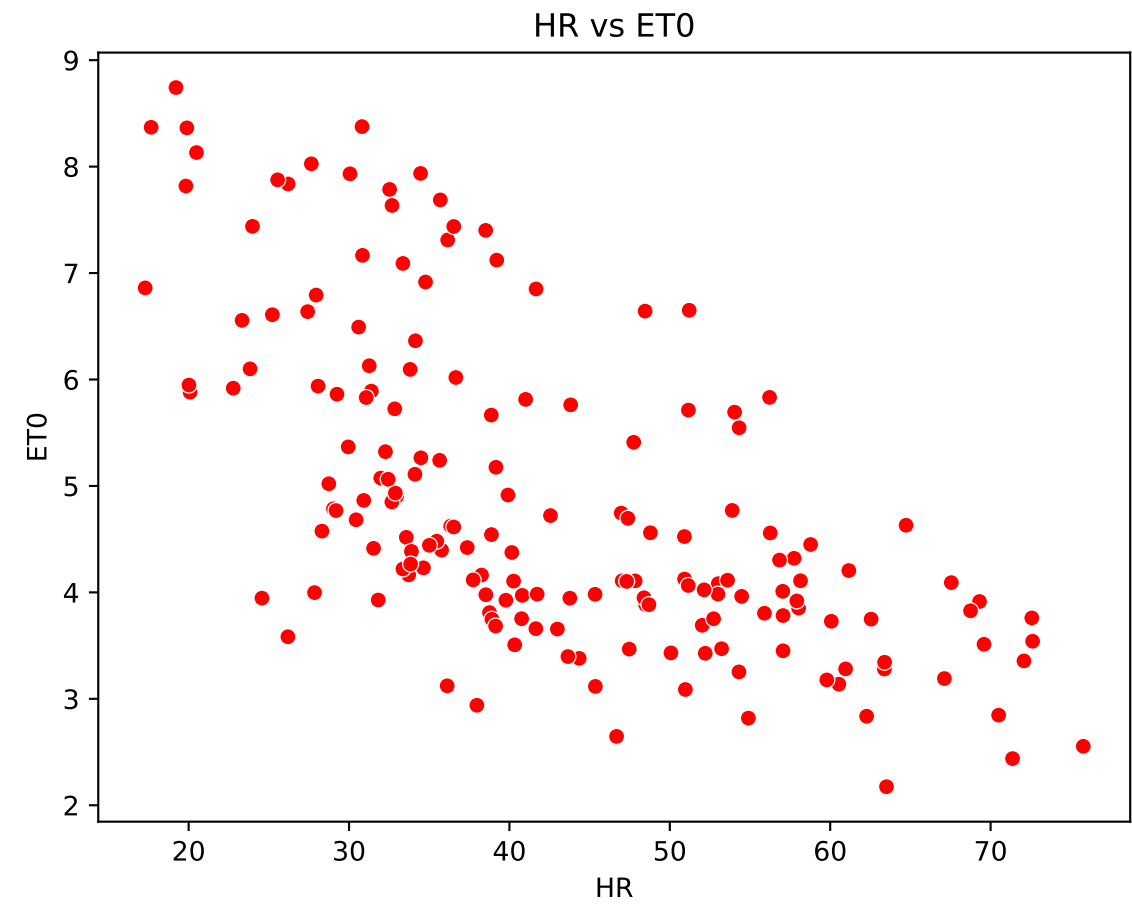
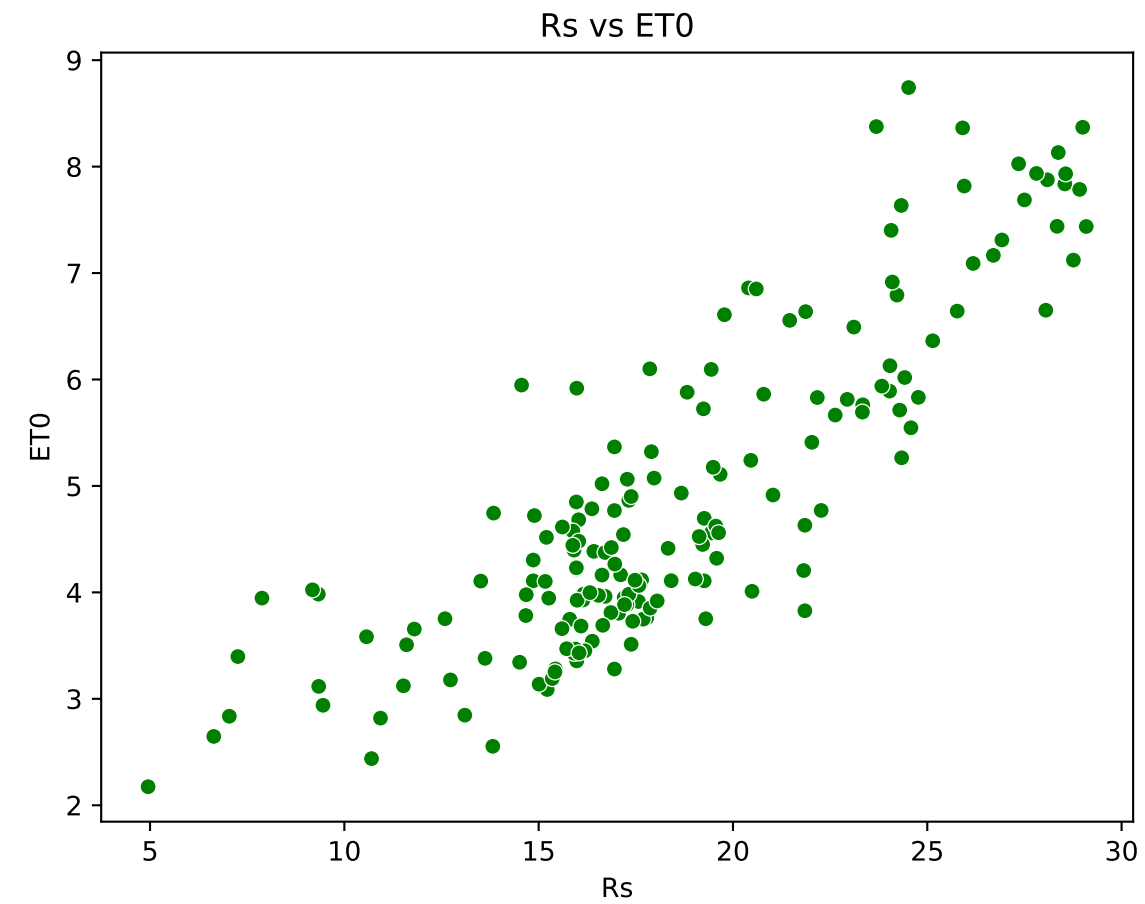
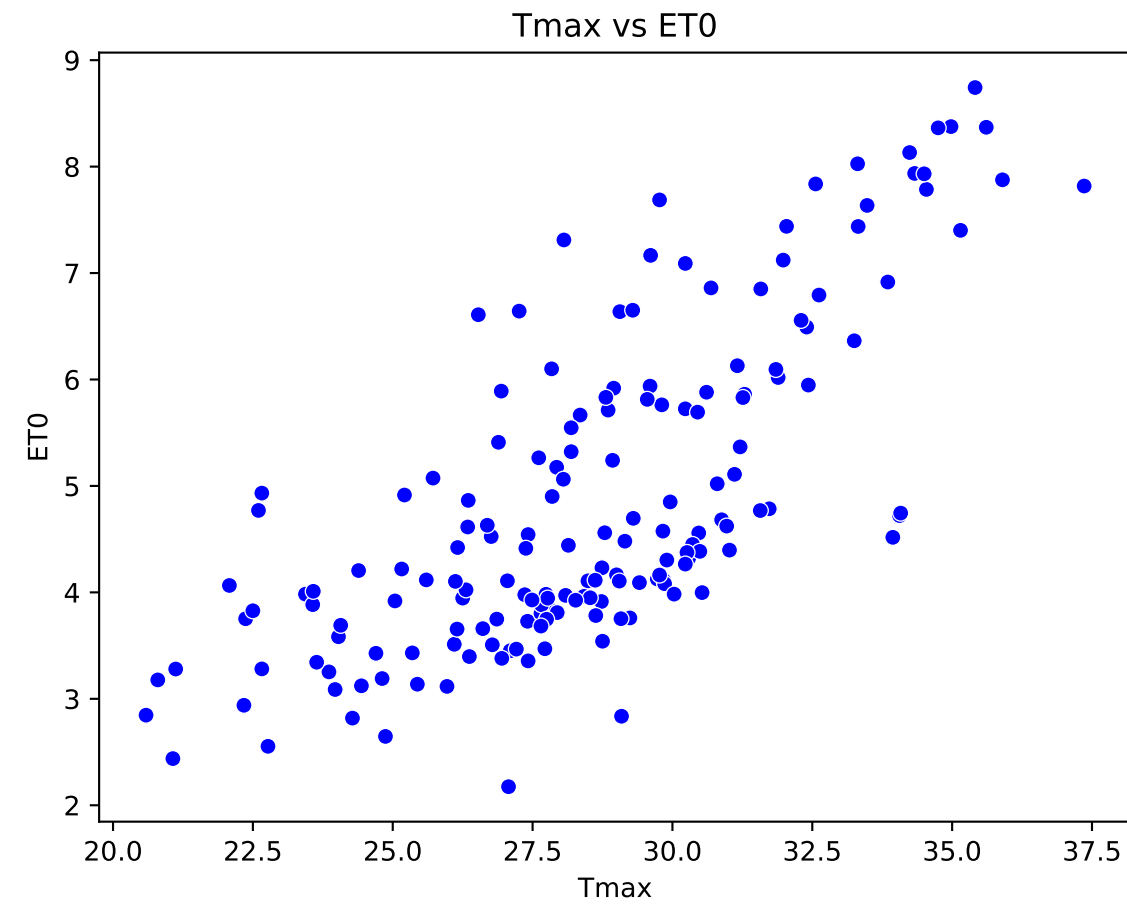
	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	28.641212	16.660606	58.308788	1.766364	16.550000	3.946020	2.047757
1	23.648261	10.537391	53.783043	2.363043	17.033043	3.889886	4.473369
2	30.444571	13.894571	32.056000	2.186857	20.397143	5.793412	6.662423
3	32.096897	15.656897	32.666207	2.426897	25.937931	7.252660	1.813165
4	27.318269	13.437115	40.471154	1.618654	14.957115	3.900821	3.864390

Etchojoa — 2022-2023

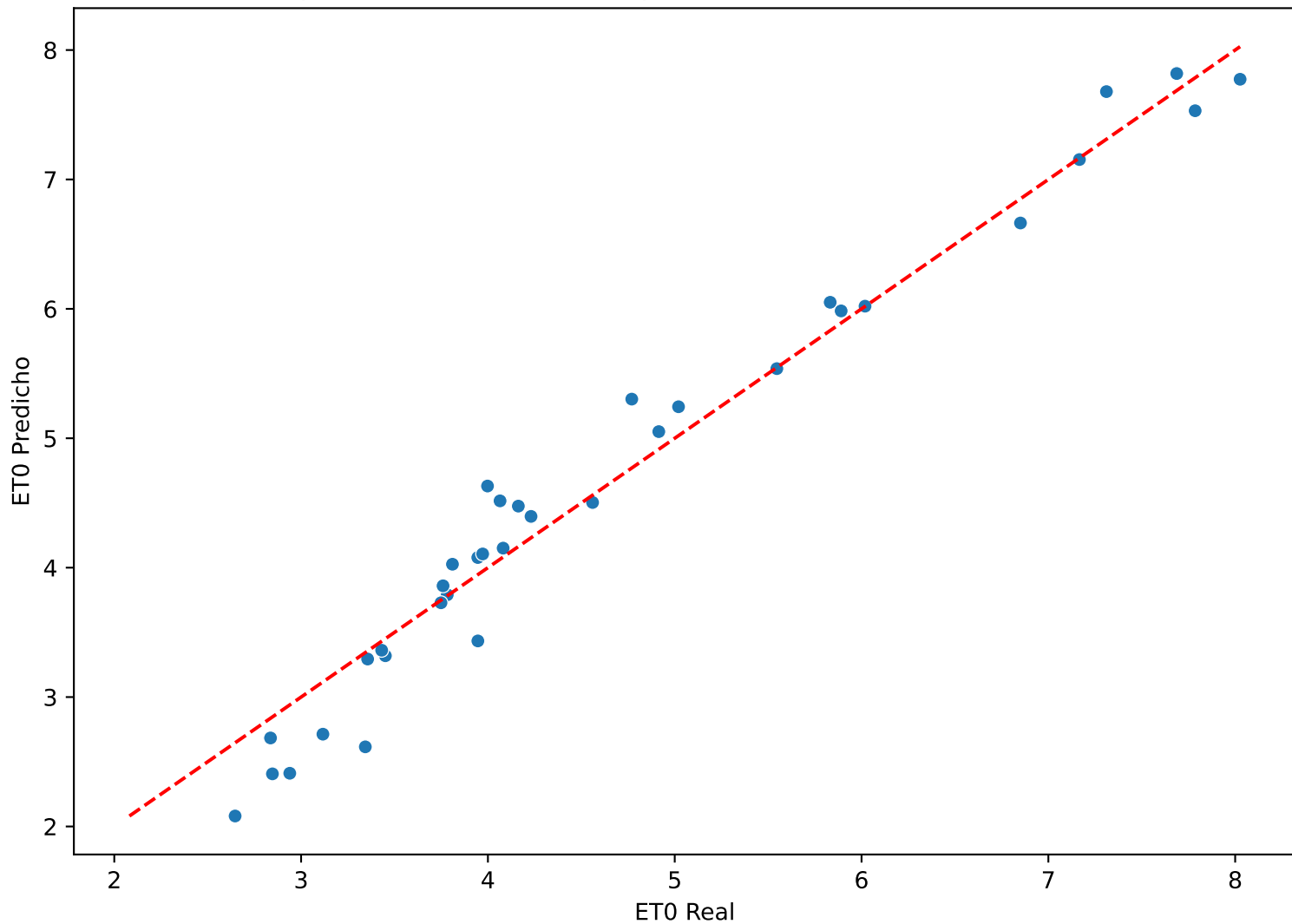
Matriz de Correlación entre Variables Meteorológicas



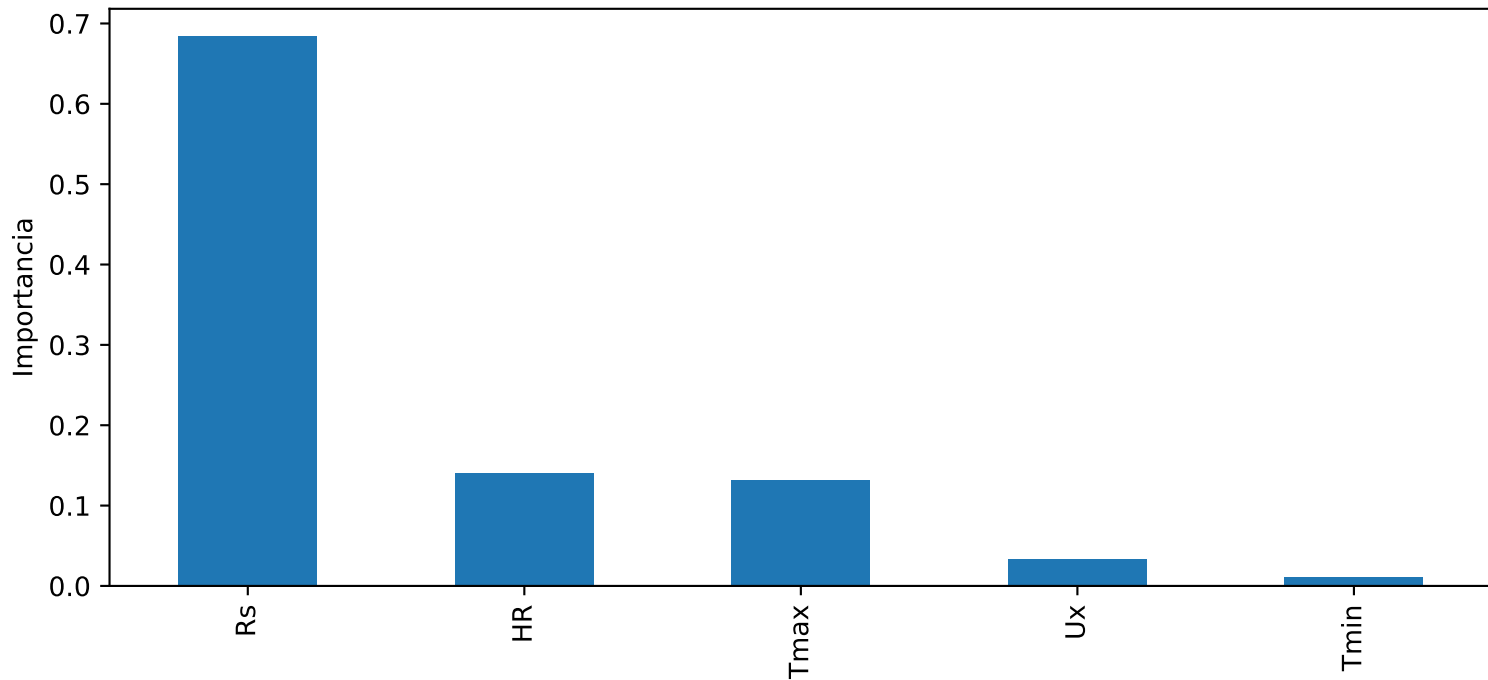
Dispersión — Etchojoa (2022-2023)



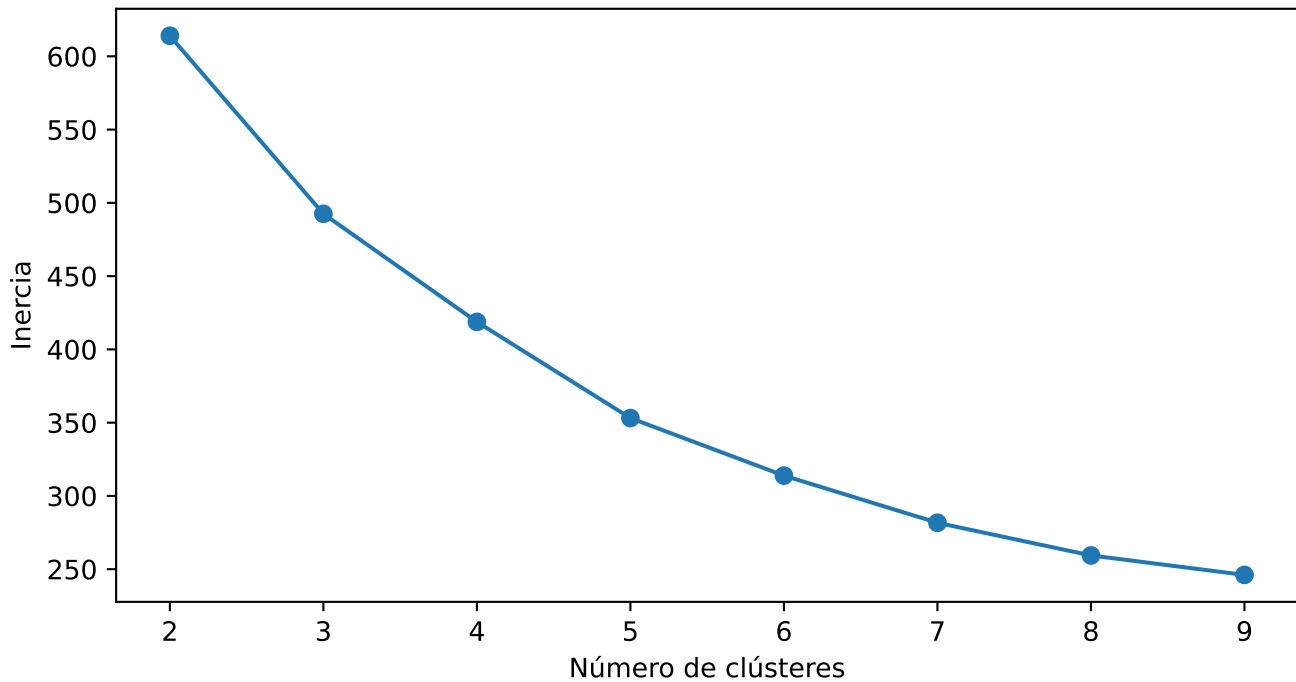
Comparación entre ET0 Real y Predicho — Etchojoa (2022-2023)



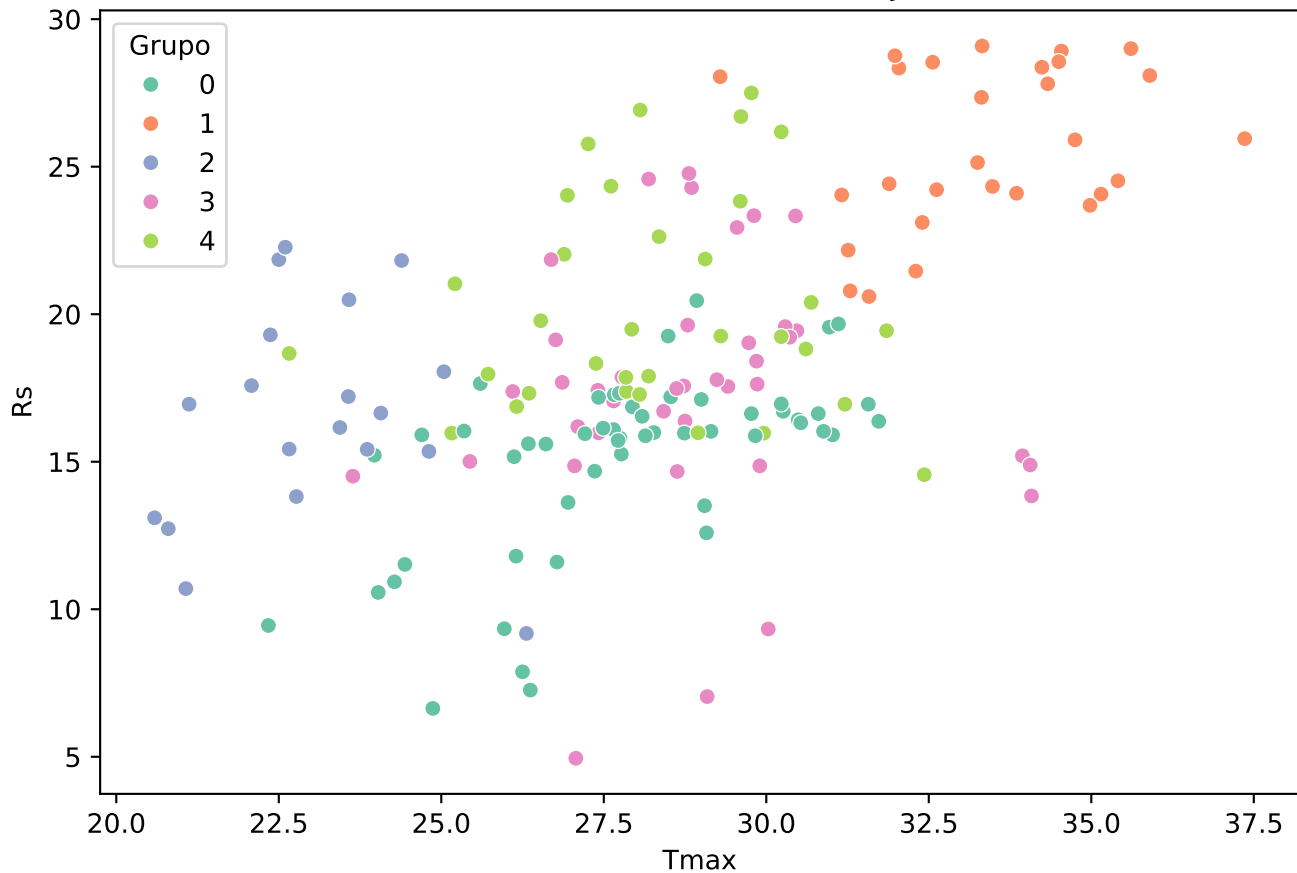
Importancia de variables (RF) — Etchojoa (2022-2023)



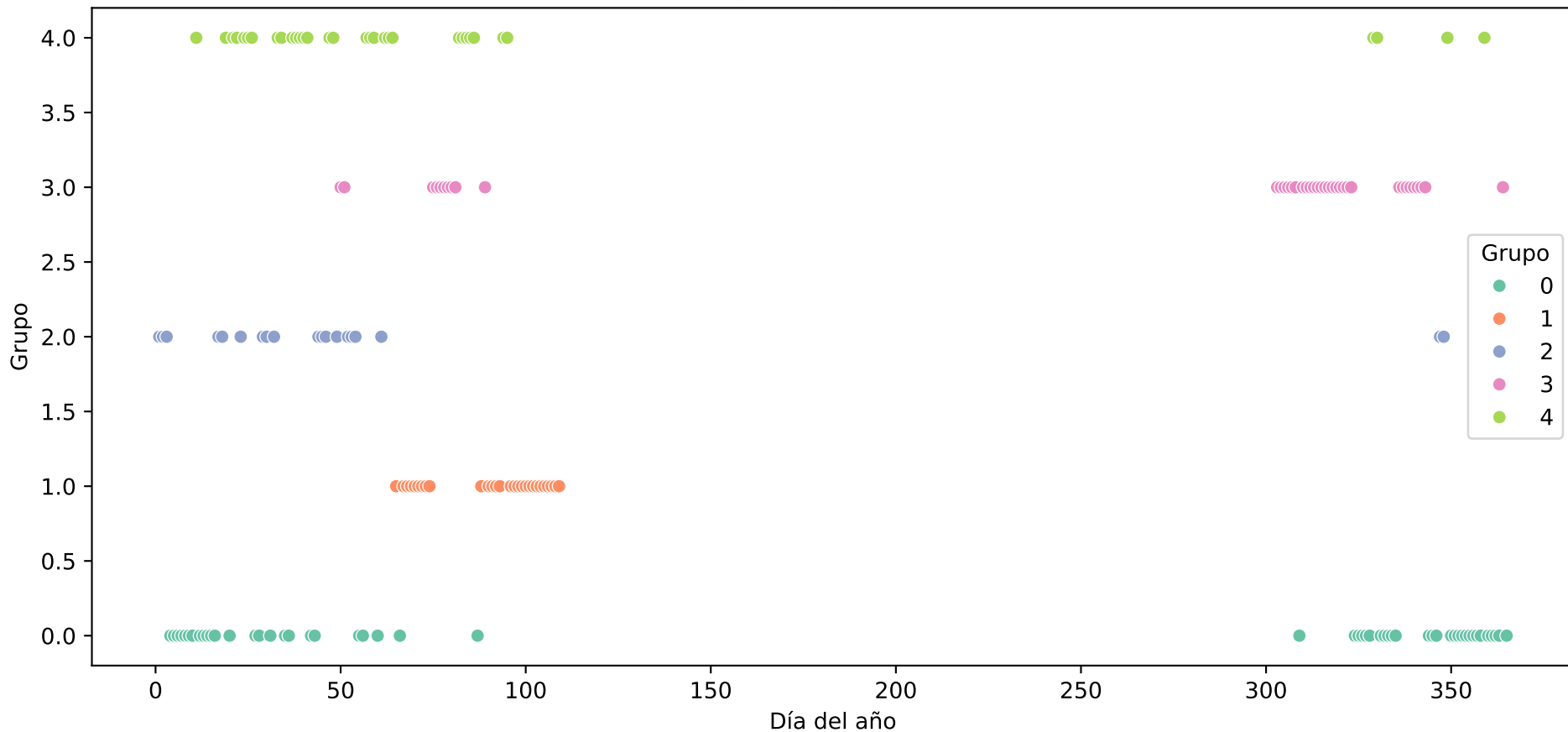
Método del codo



Clasificación de días climáticos — Etchojoa (2022-2023)

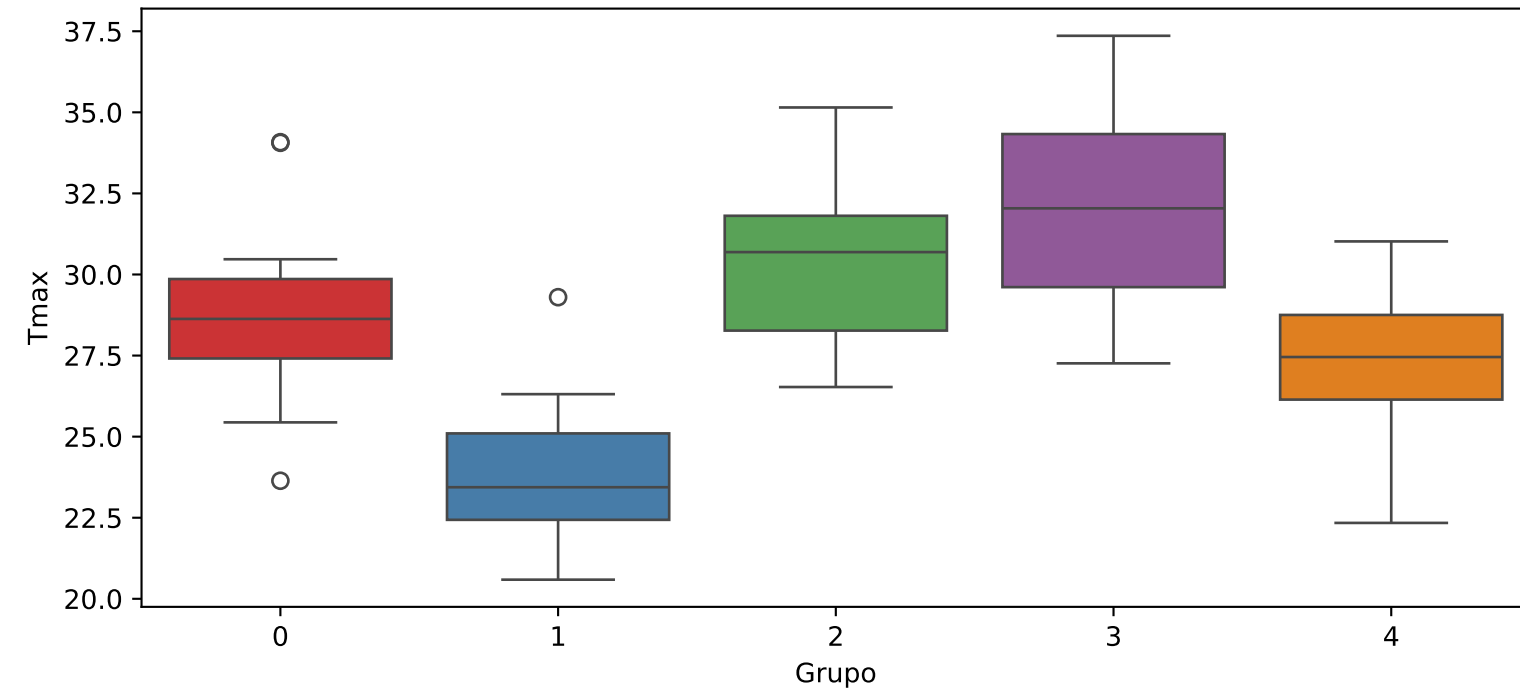


Distribución de días por grupo — Etchojoa (2022-2023)

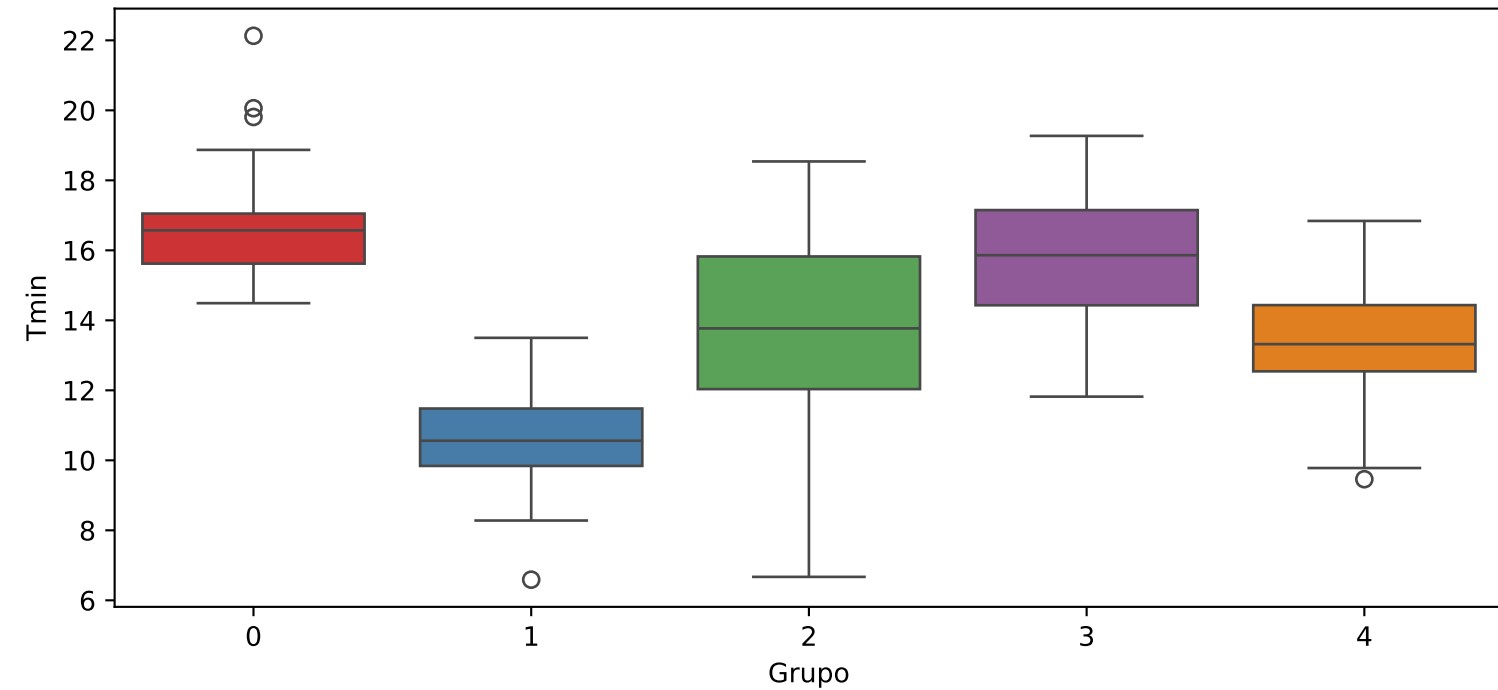


Boxplots por grupo — Etchojoa (2022-2023)

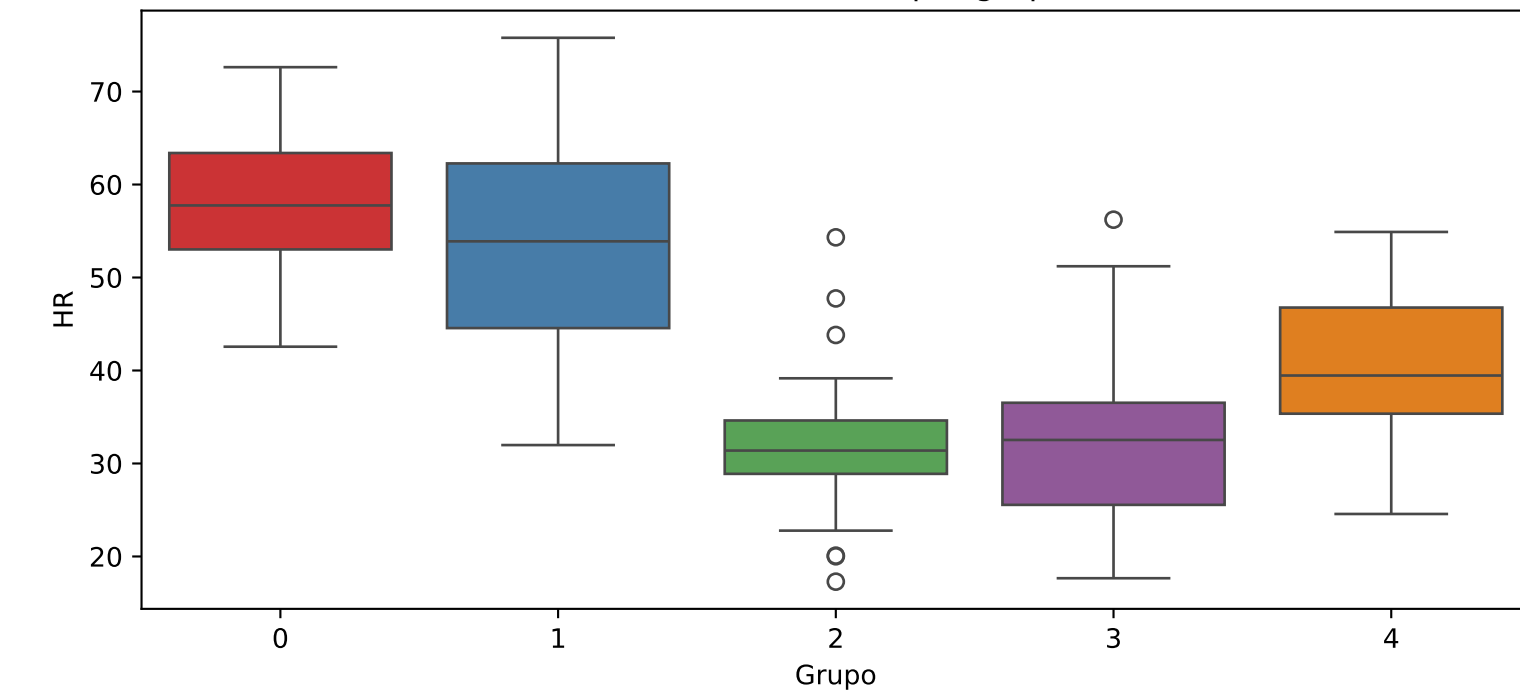
Distribución de Tmax por grupo



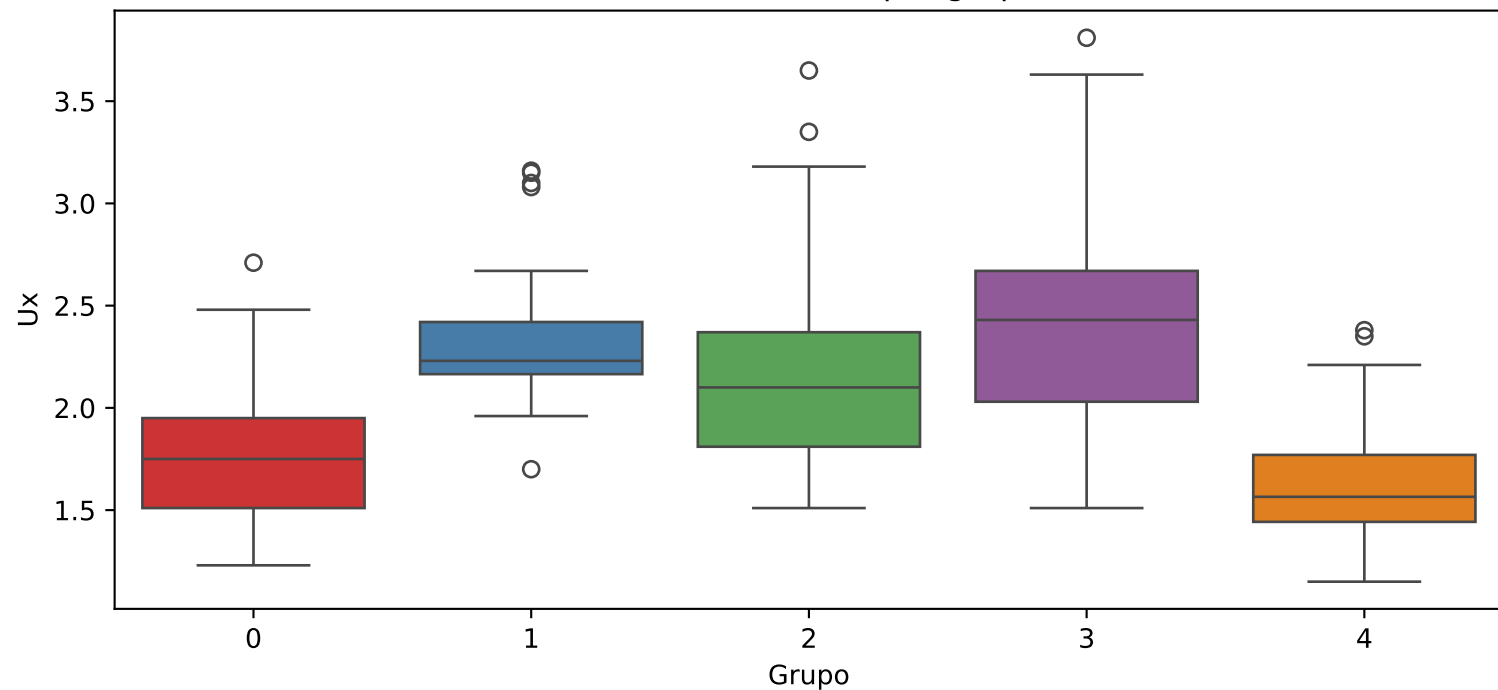
Distribución de Tmin por grupo



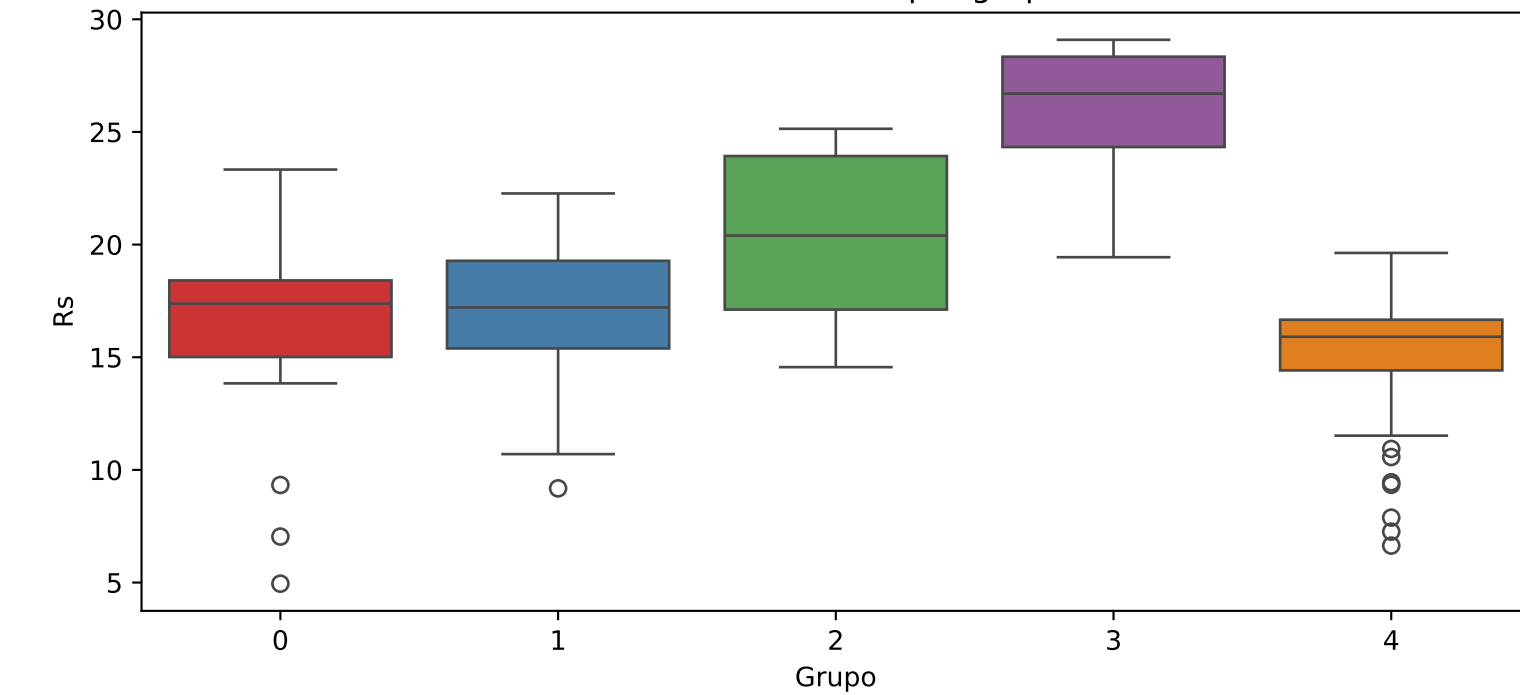
Distribución de HR por grupo



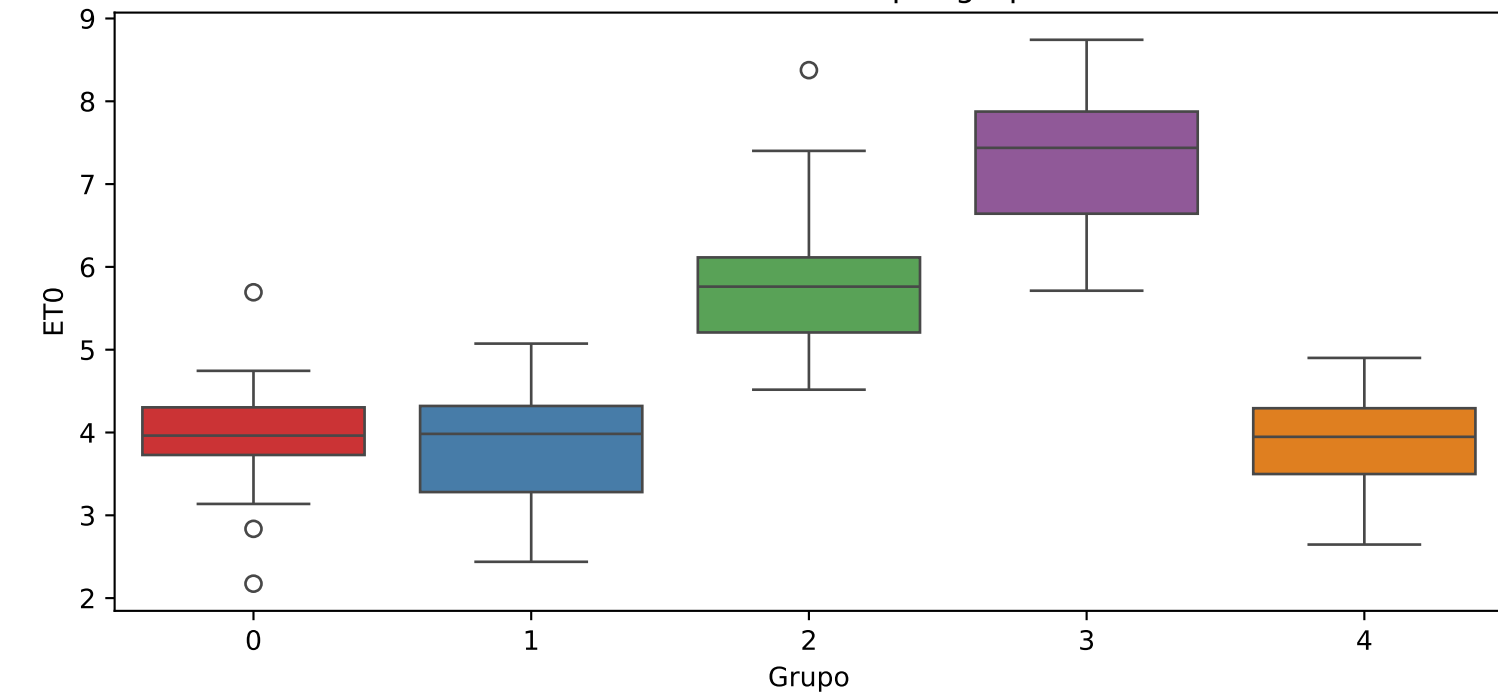
Distribución de Ux por grupo



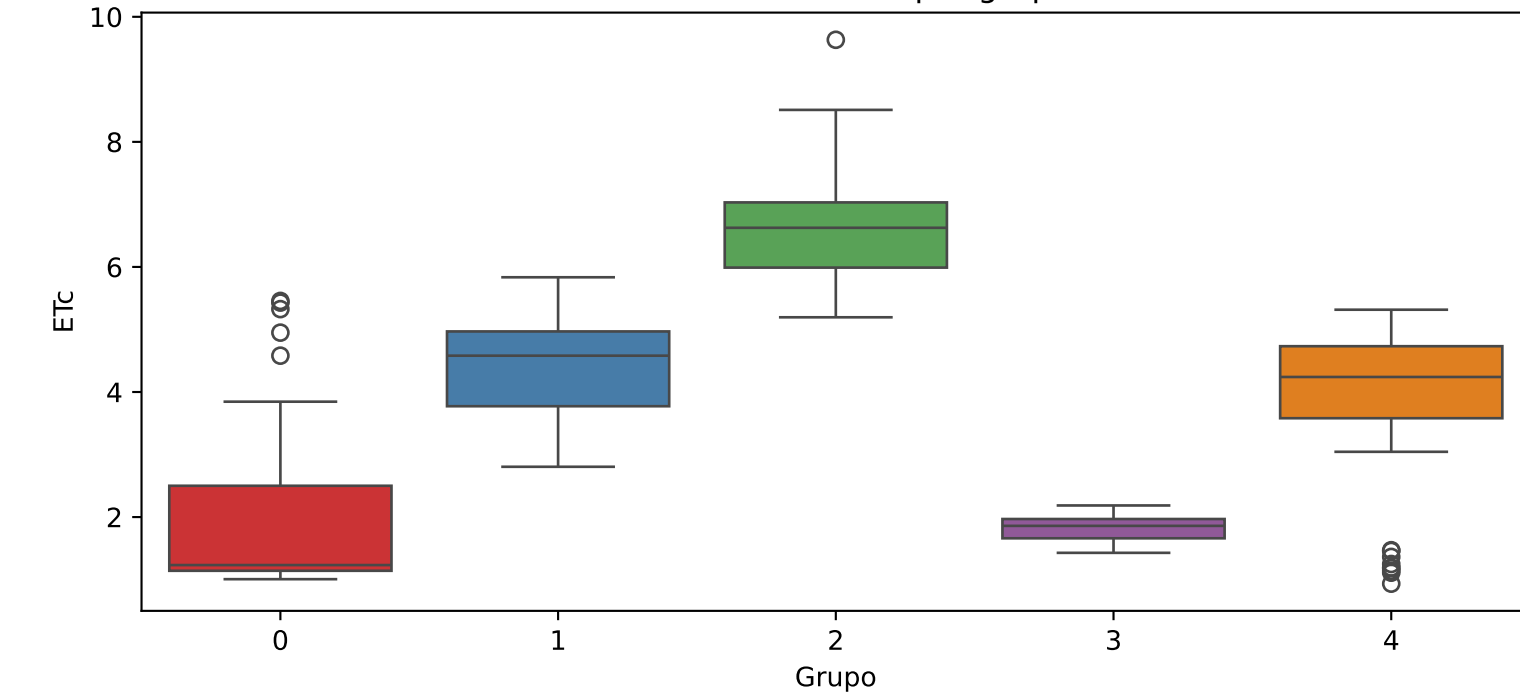
Distribución de Rs por grupo



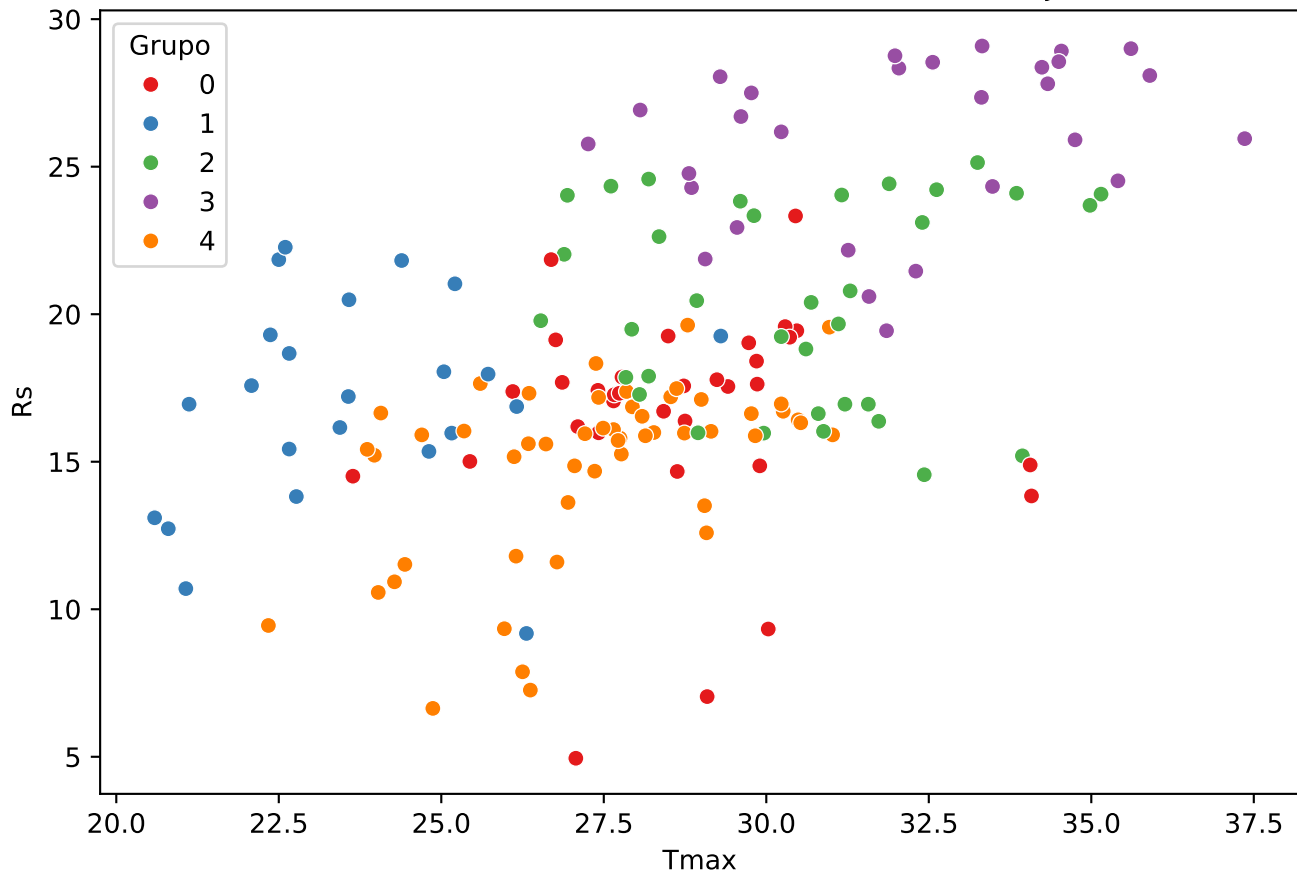
Distribución de ET0 por grupo



Distribución de ETc por grupo



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2022-2023)



Etchojoa — 2023-2024

Días del ciclo: 172

ETc total [mm]: 662.4

ETverde total [mm]: 19.5

ETazul total [mm]: 642.9

Tmax / Tmin [°C]: 39.2 / 5.4

Etchojoa — 2023-2024 · Resultados y métricas

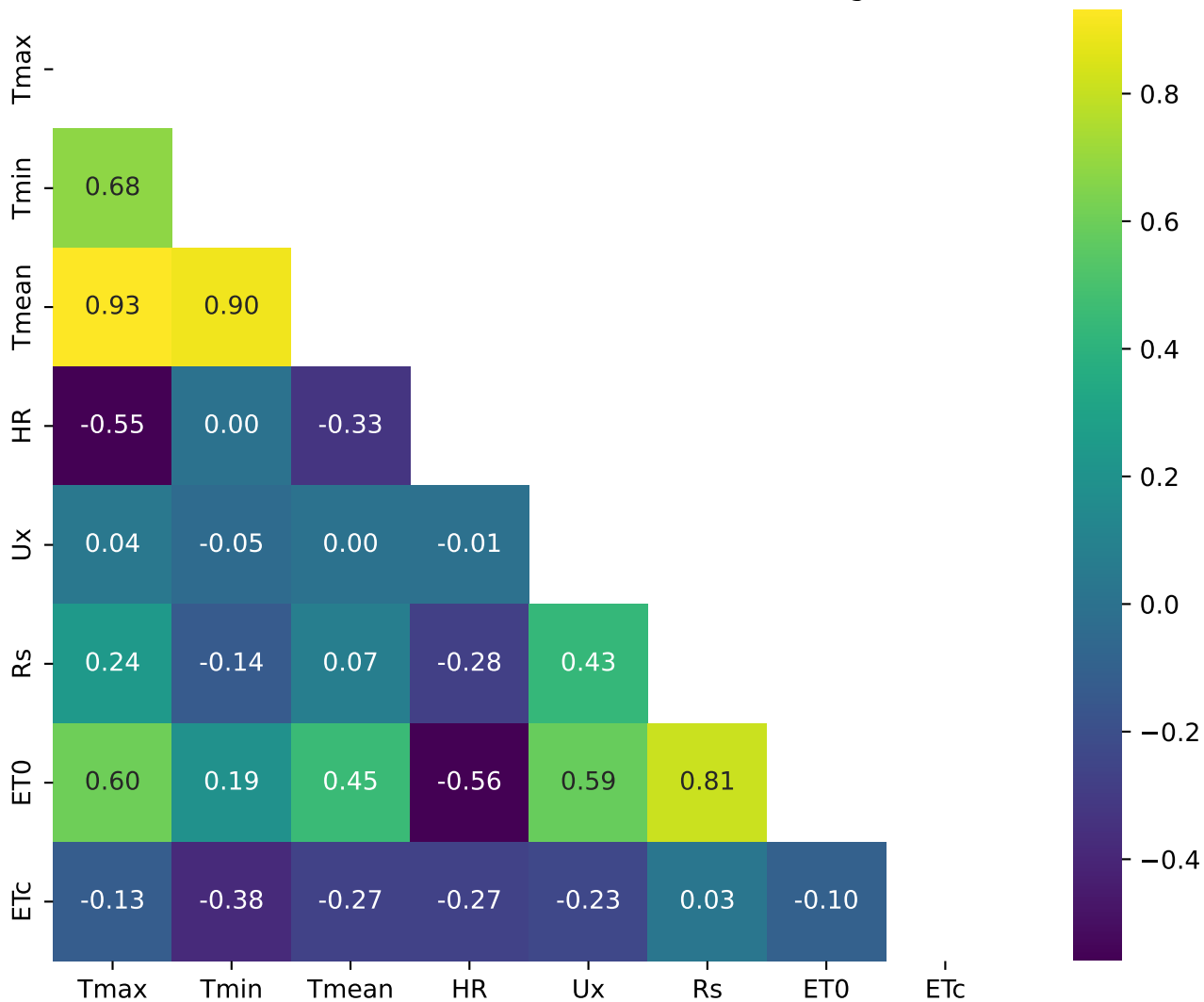
[Etchojoa 2023-2024] Regresión Lineal ET0 — R²: 0.9578 MSE: 0.0791
[Etchojoa 2023-2024] Random Forest ET0 — R²: 0.8426 MSE: 0.2953
Importancias: {'Tmax': 0.18317306763531294, 'Tmin': 0.014094671601145681, 'HR': 0.07064330967619117, 'Ux': 0.05476526199092342, 'Rs': 0.6773236890964267}

Estadísticas descriptivas por grupo (medias):

	Tmax mean	Tmin mean	HR mean	Ux mean	Rs mean	ET0 mean	ETc mean
cluster							
0	30.695439	15.393860	33.493509	1.764386	18.137895	4.987139	5.735210
1	33.964167	20.265417	43.451667	2.038750	15.696667	5.100993	1.505509
2	32.217600	16.010000	33.210400	2.666800	25.724000	7.415748	1.880919
3	25.820000	15.930714	56.815000	1.709286	12.208929	3.251208	3.012736
4	25.678684	12.308947	49.253158	2.244474	19.201316	4.491313	4.420796

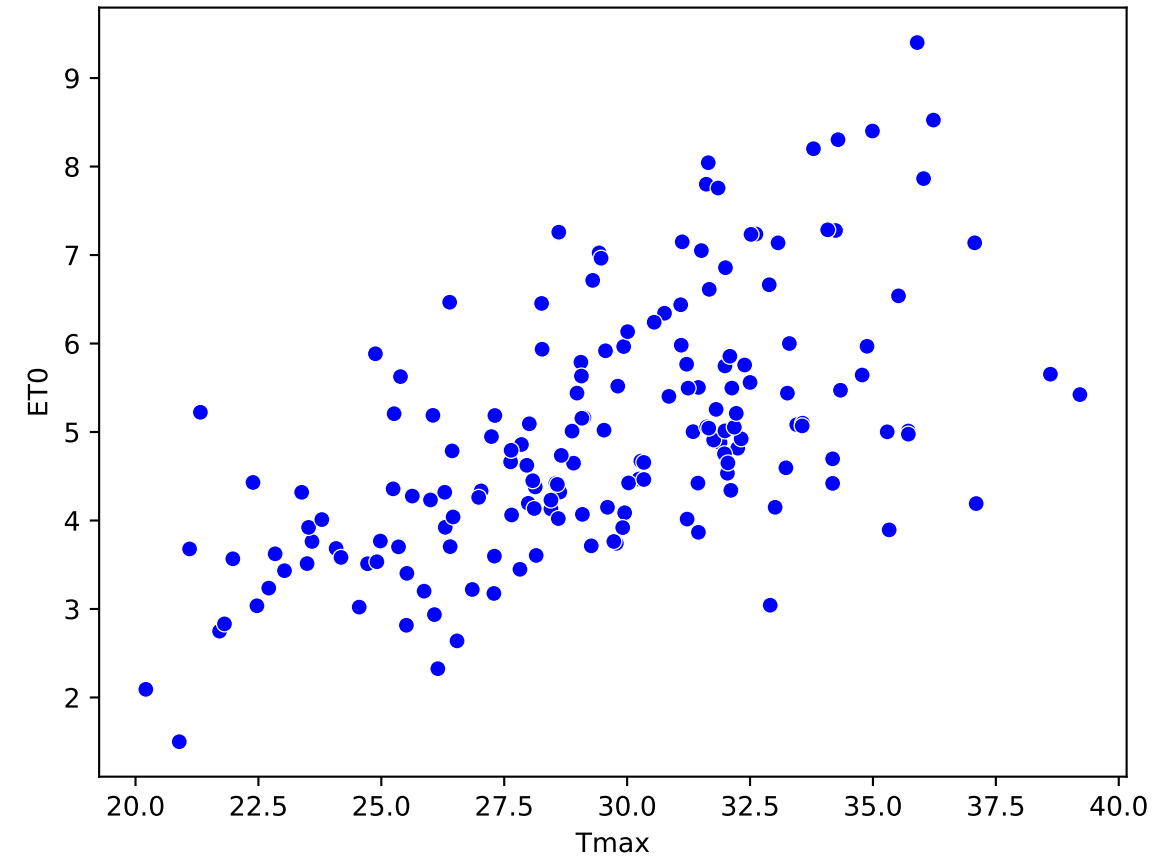
Etchojoa — 2023-2024

Matriz de Correlación entre Variables Meteorológicas

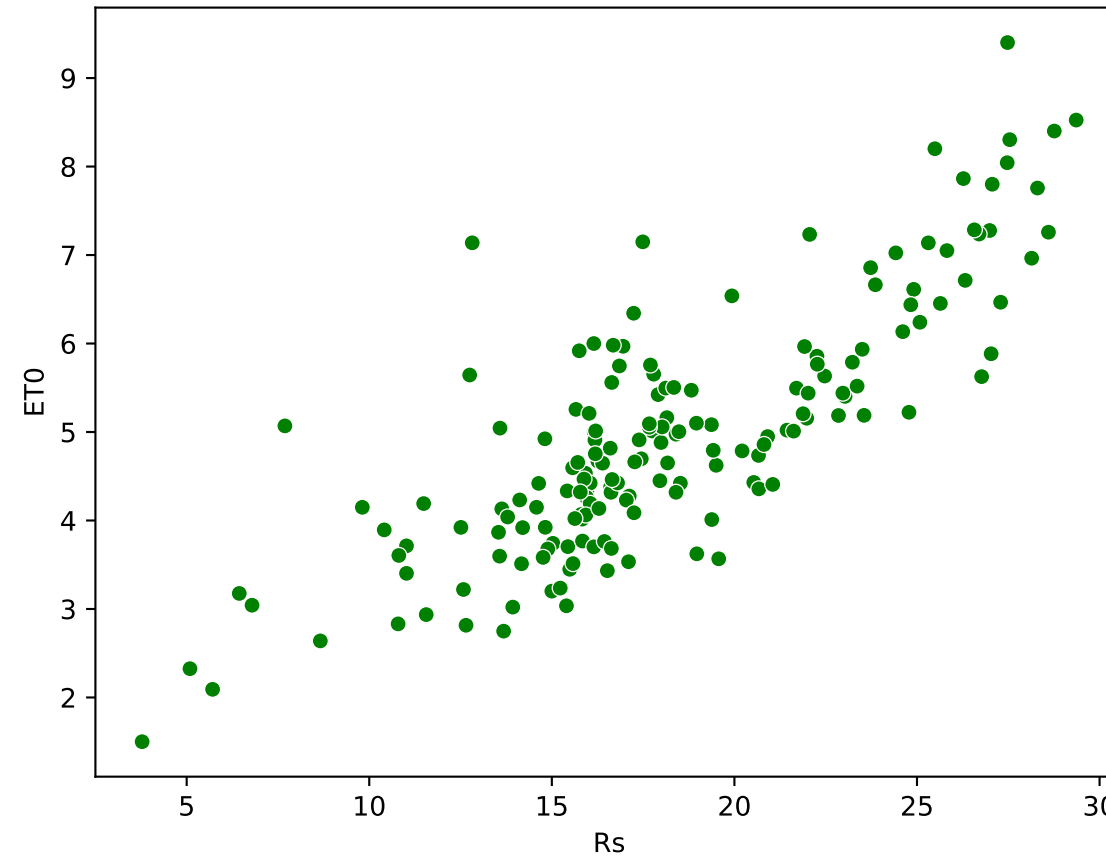


Dispersión — Etchojoa (2023-2024)

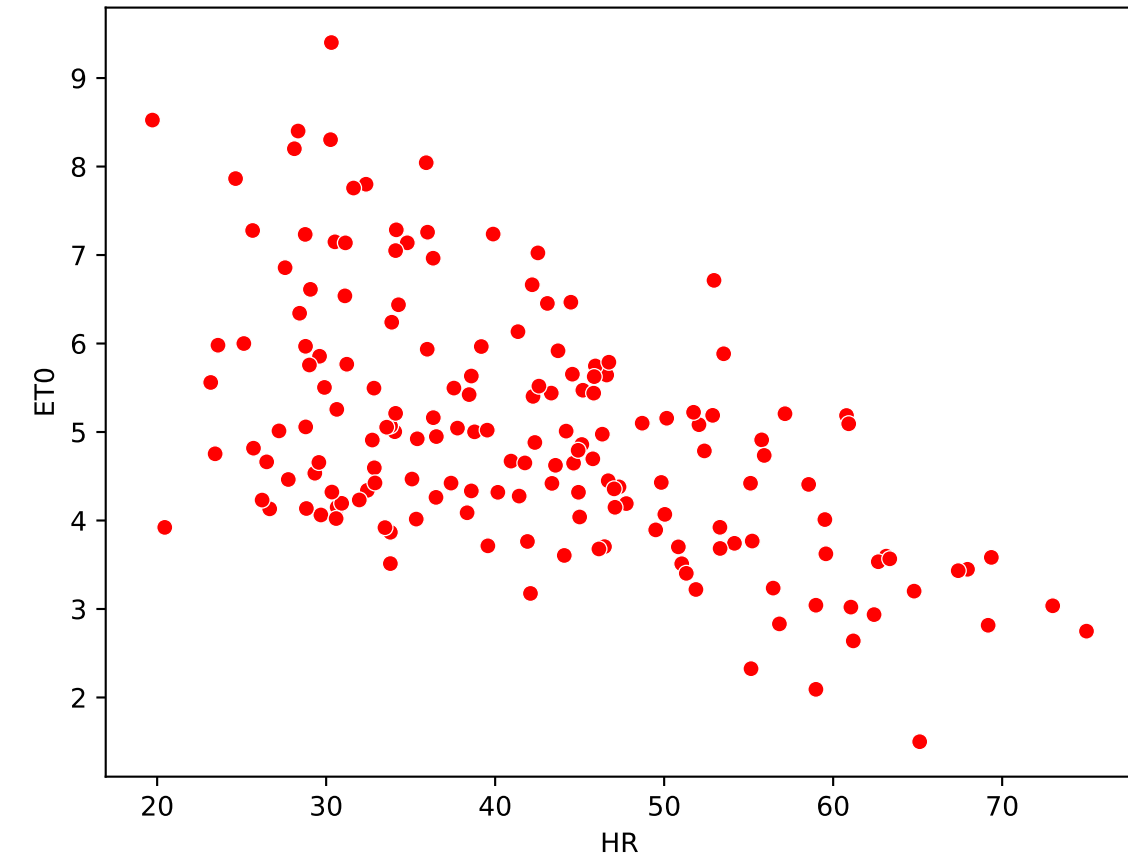
Tmax vs ET0



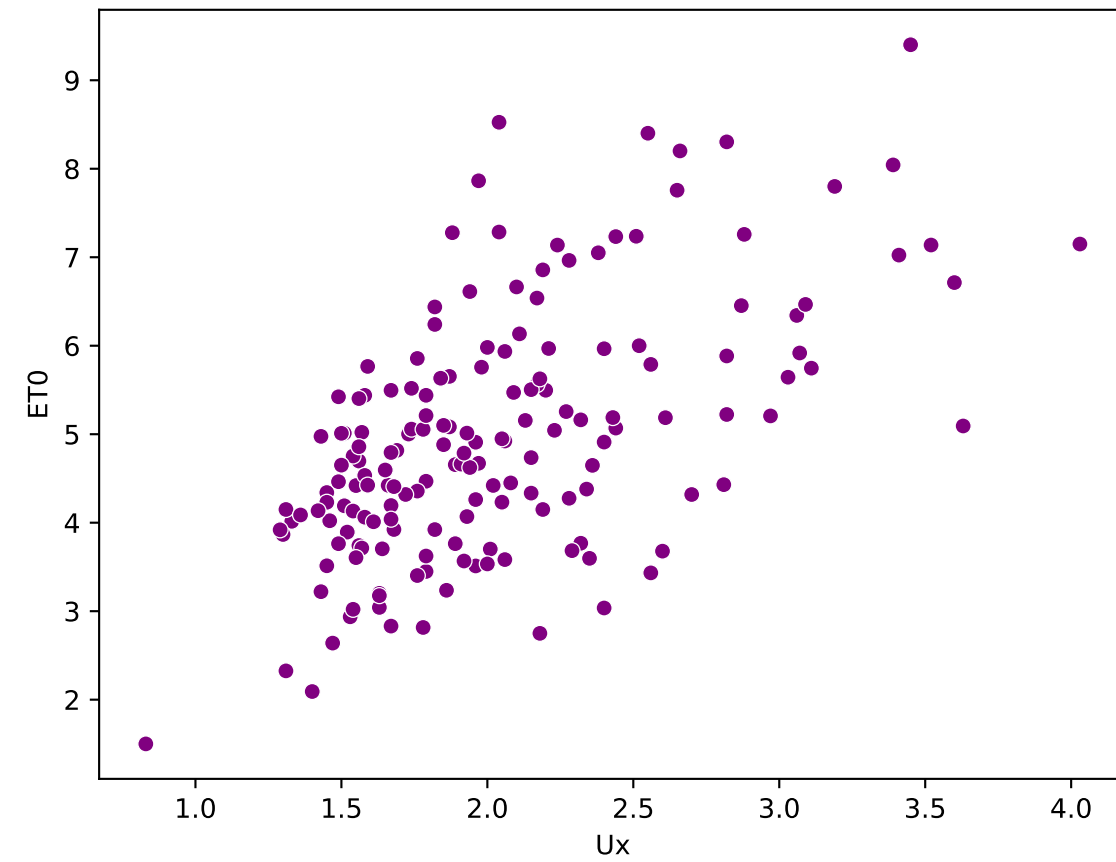
Rs vs ET0



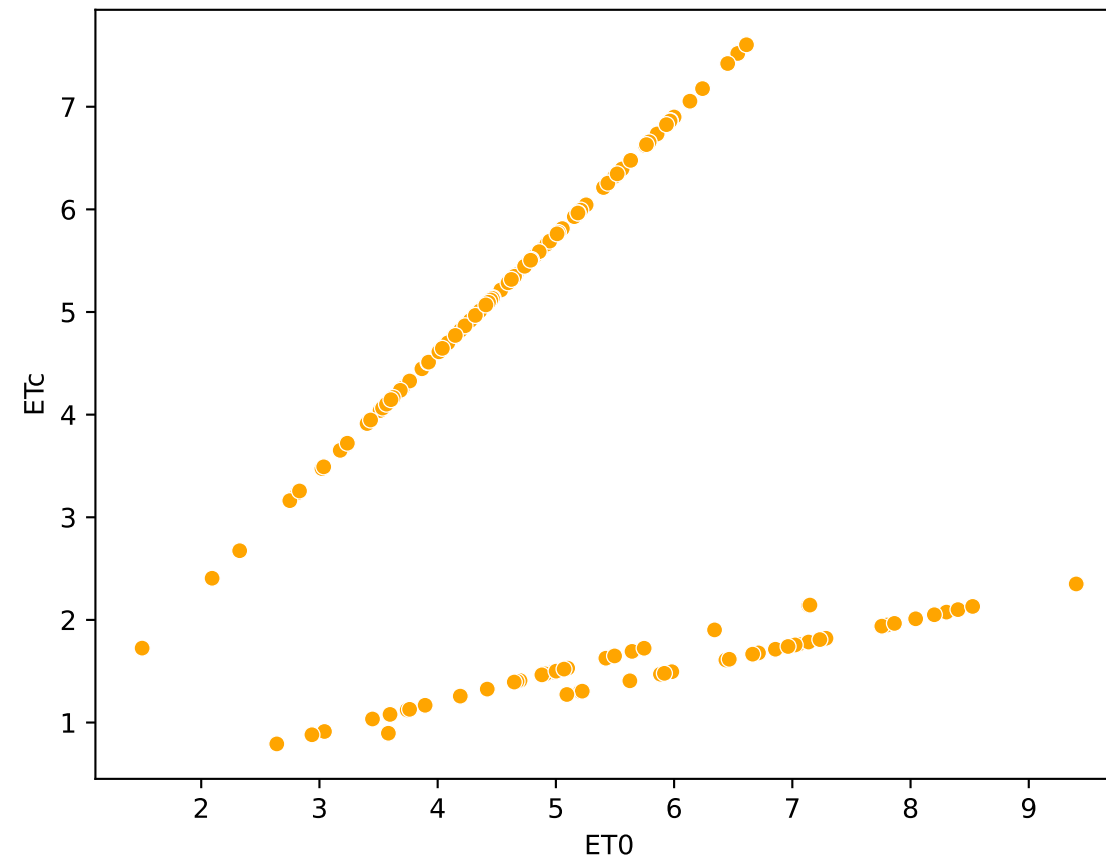
HR vs ET0



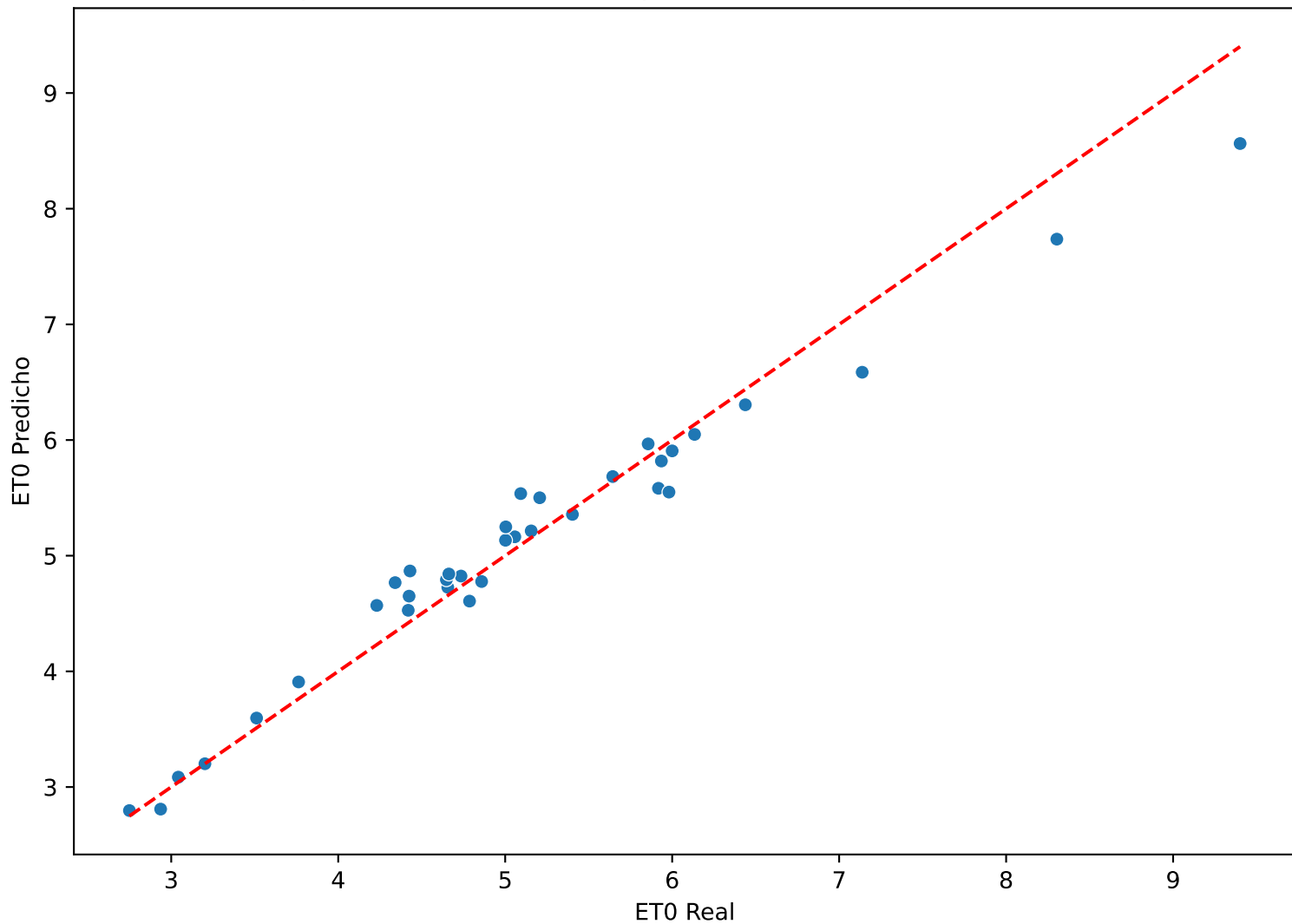
Ux vs ET0



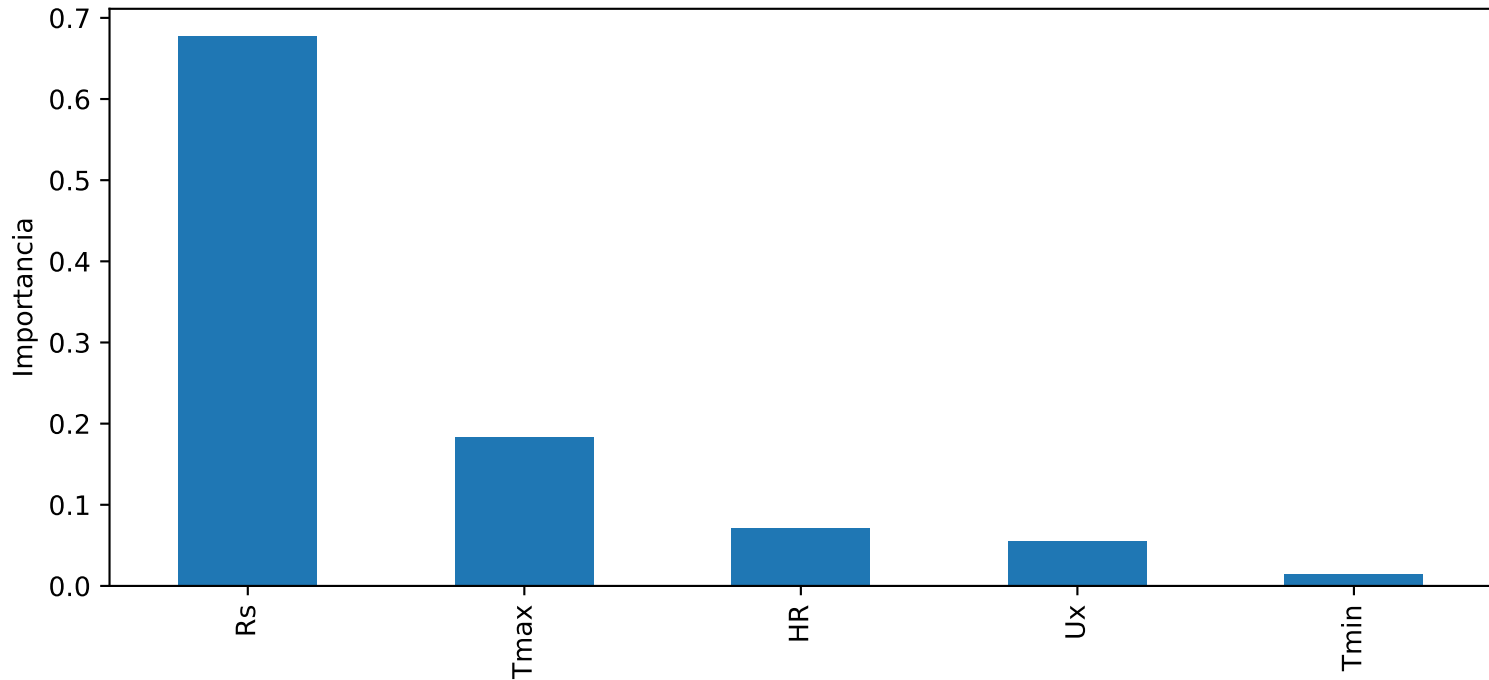
ET0 vs ETc



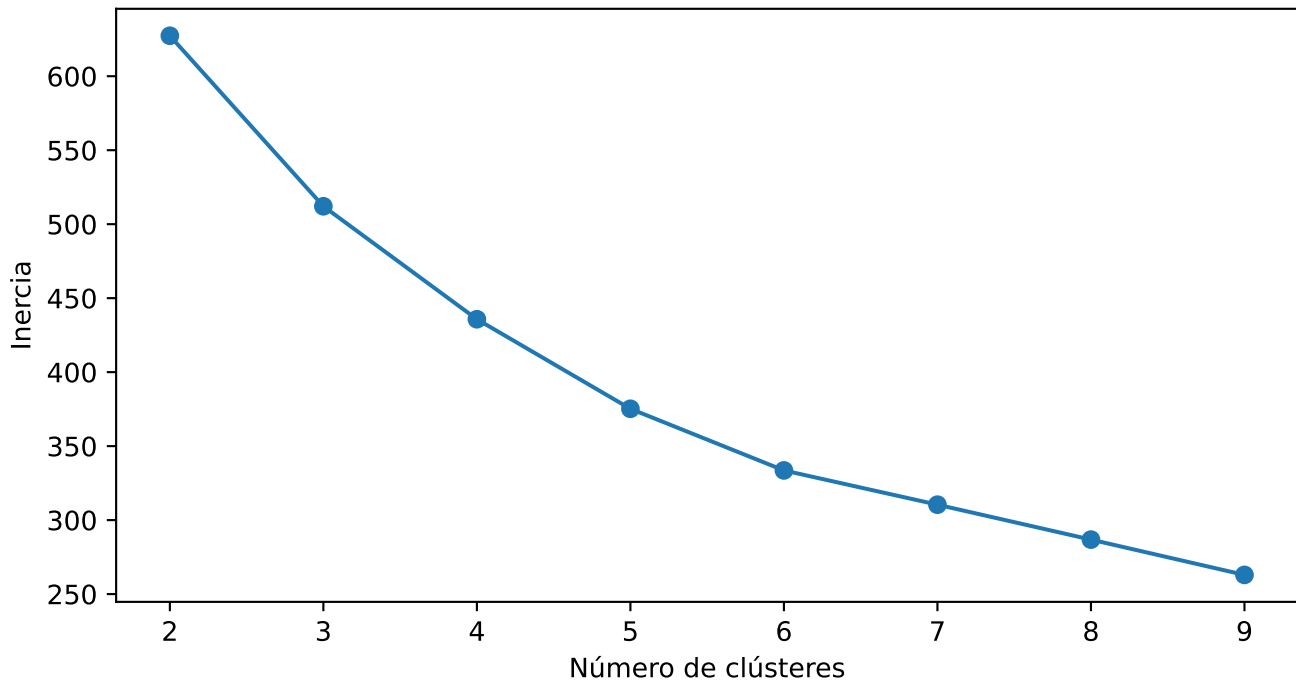
Comparación entre ET0 Real y Predicho — Etchojoa (2023-2024)



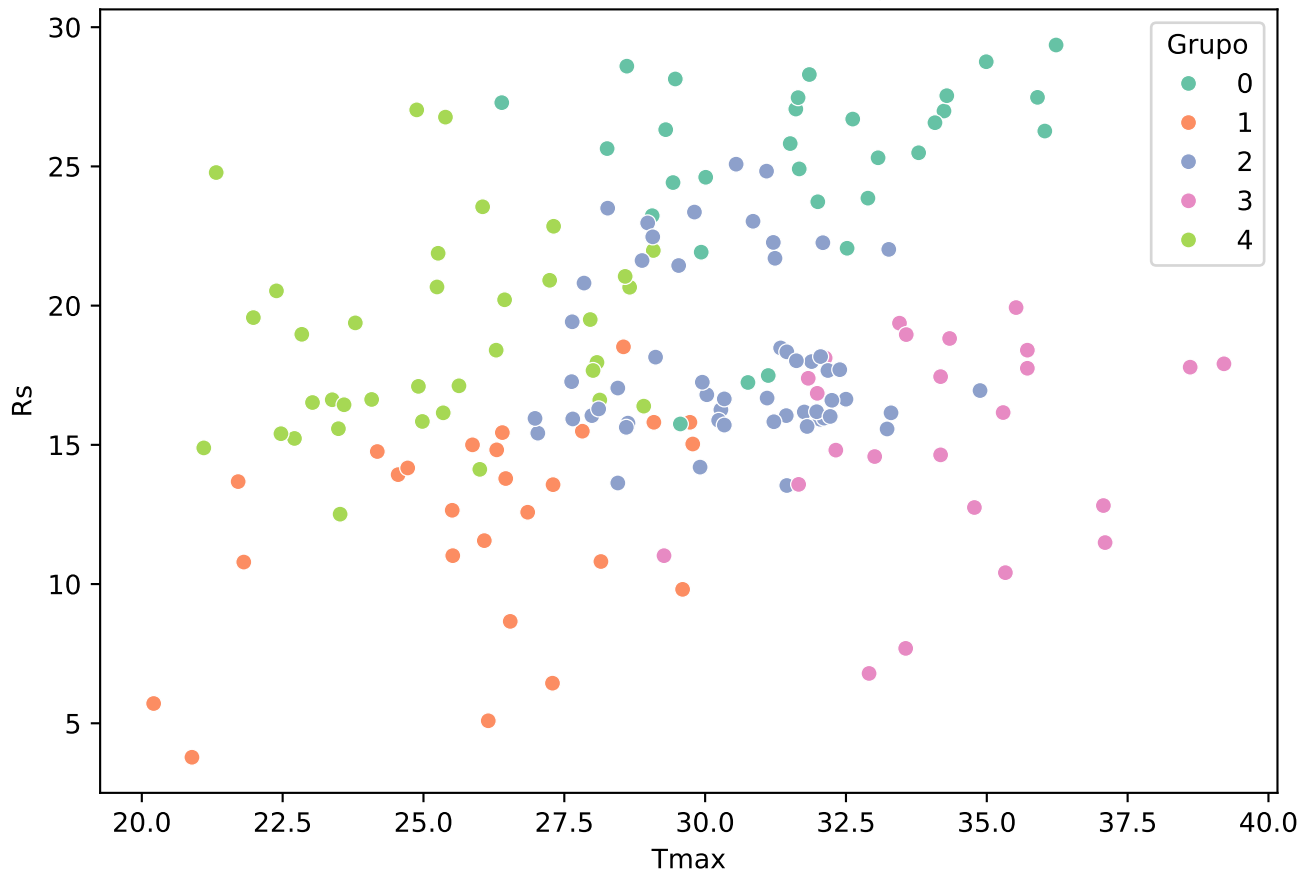
Importancia de variables (RF) — Etchojoa (2023-2024)



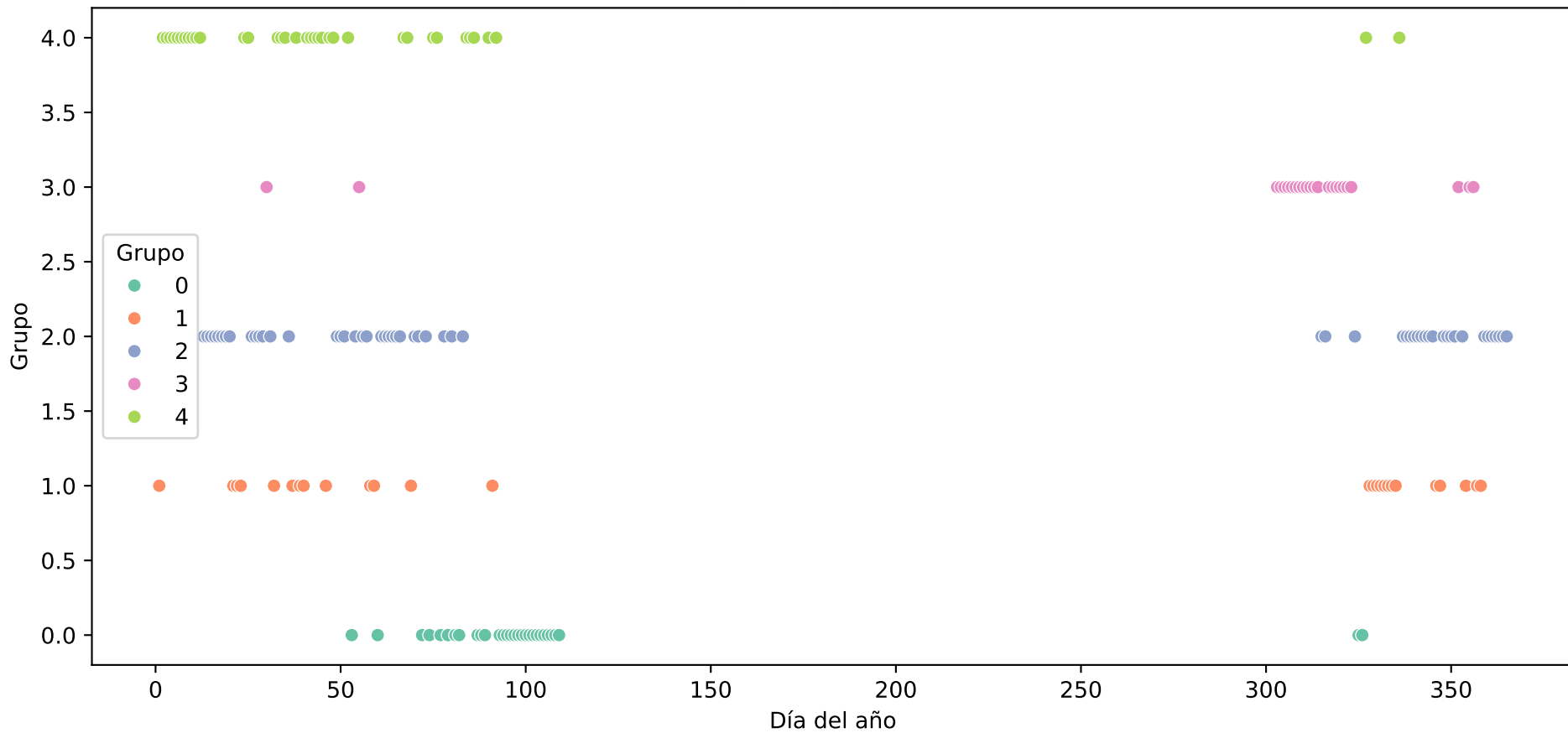
Método del codo



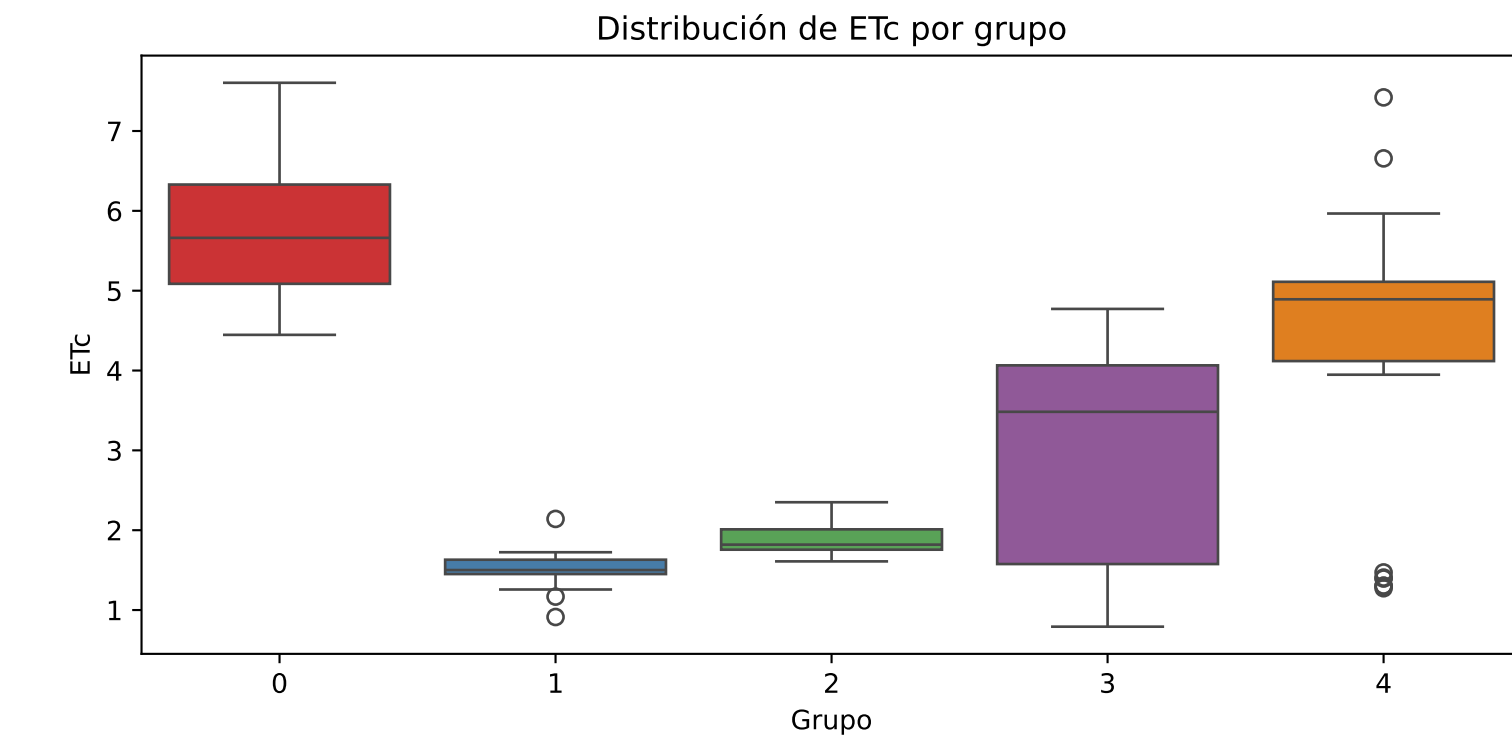
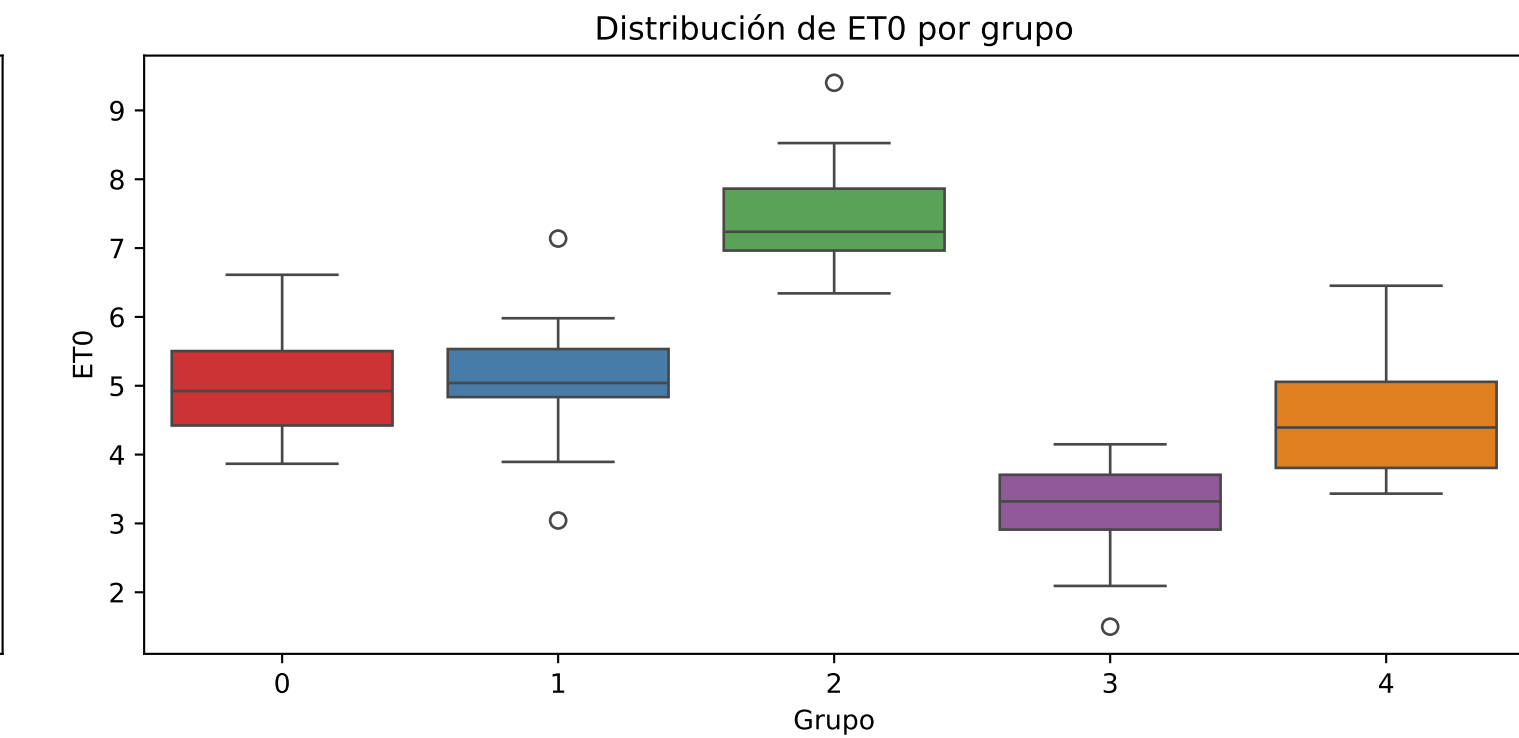
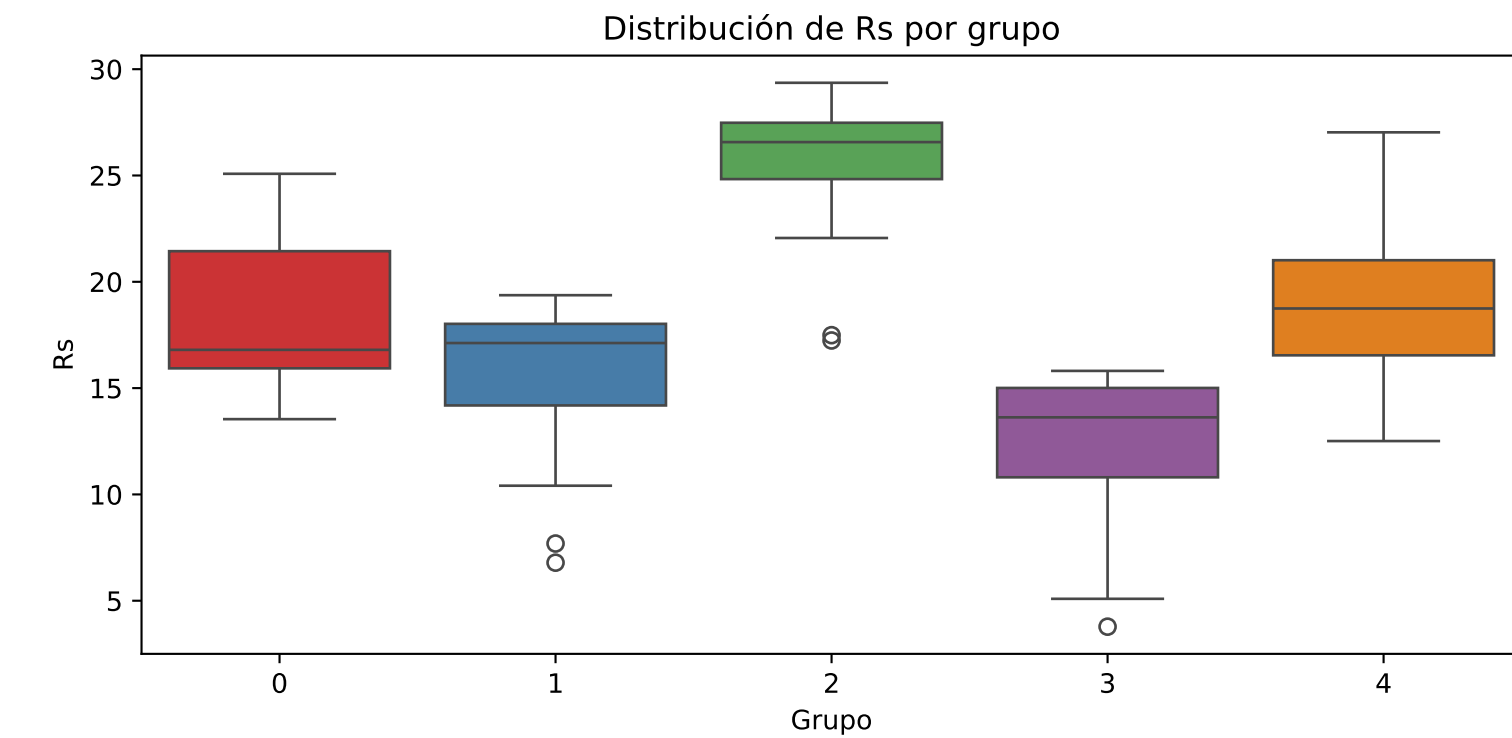
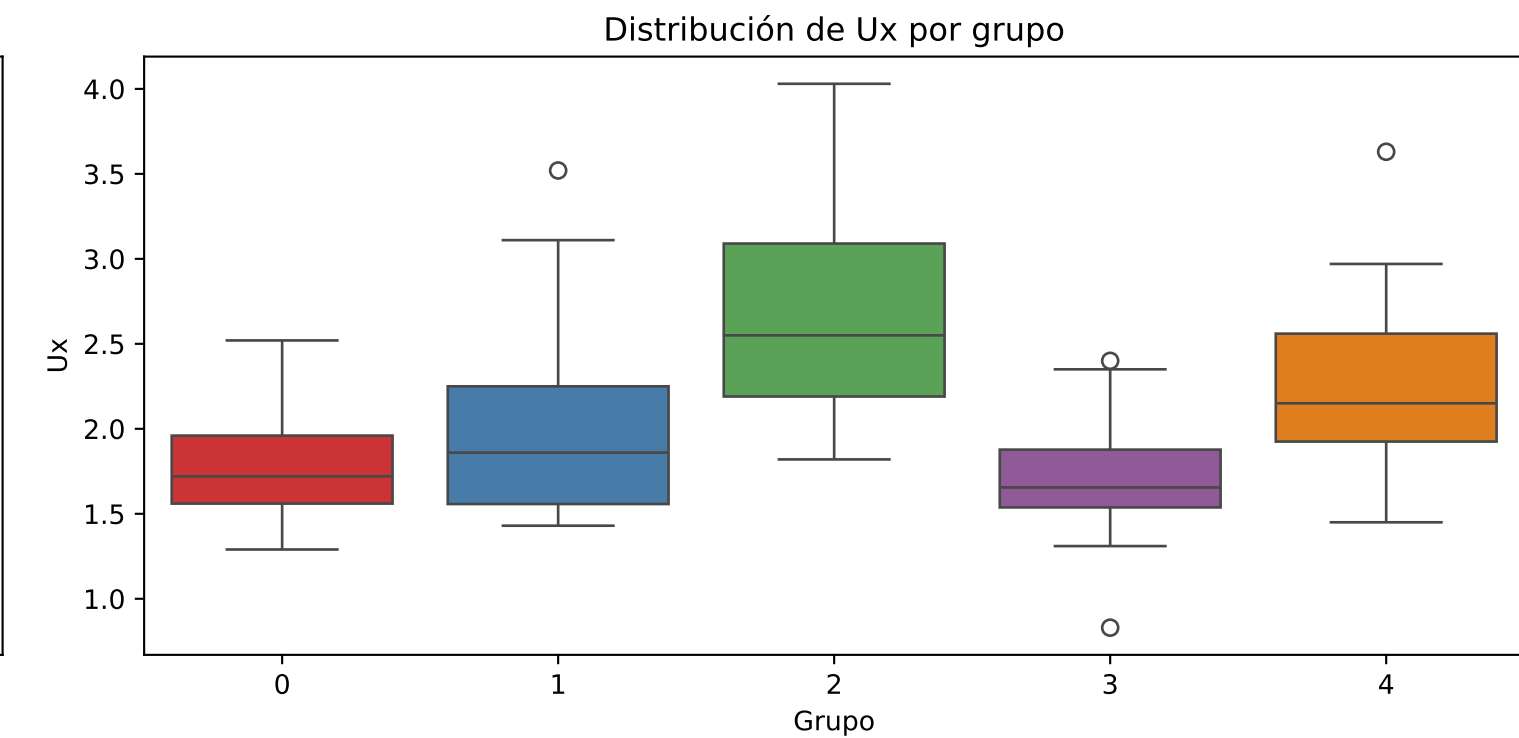
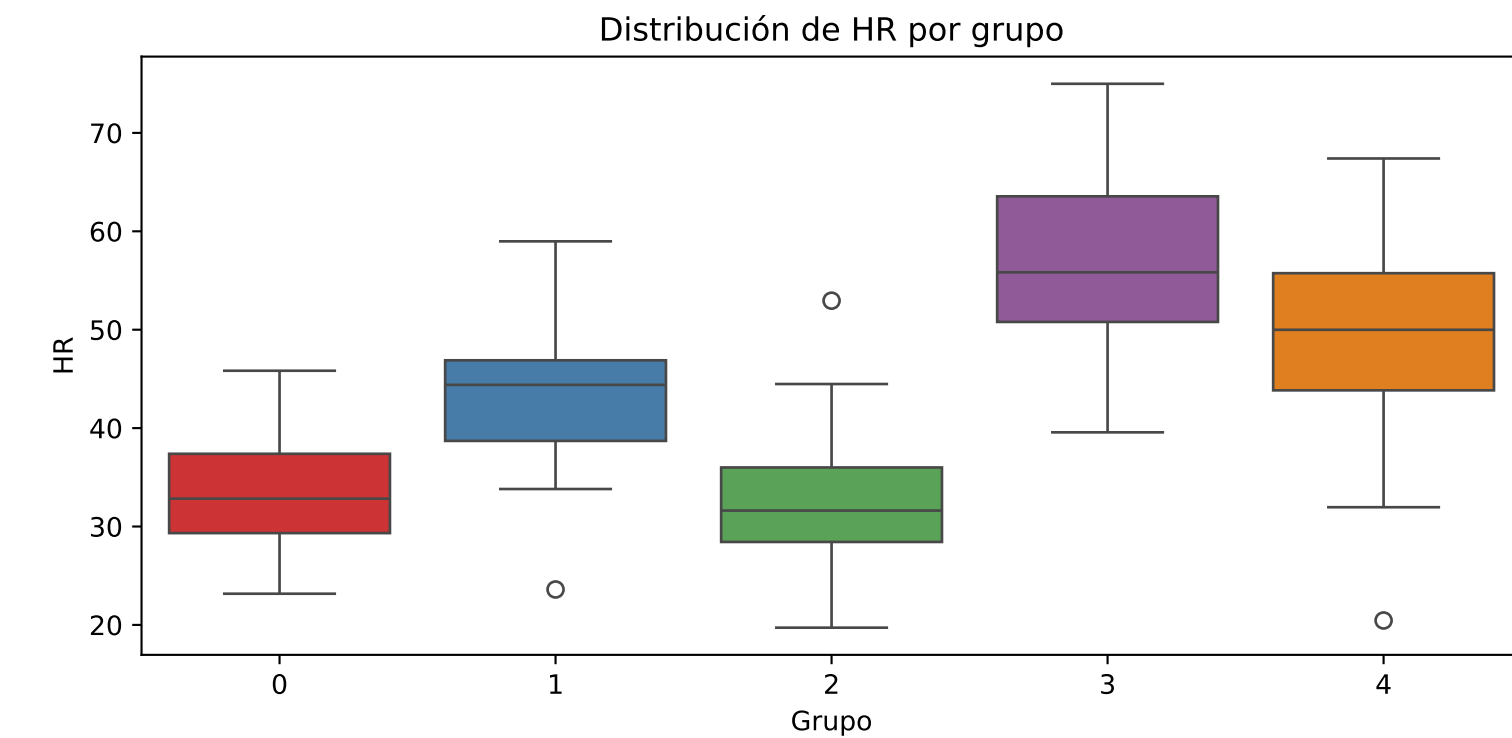
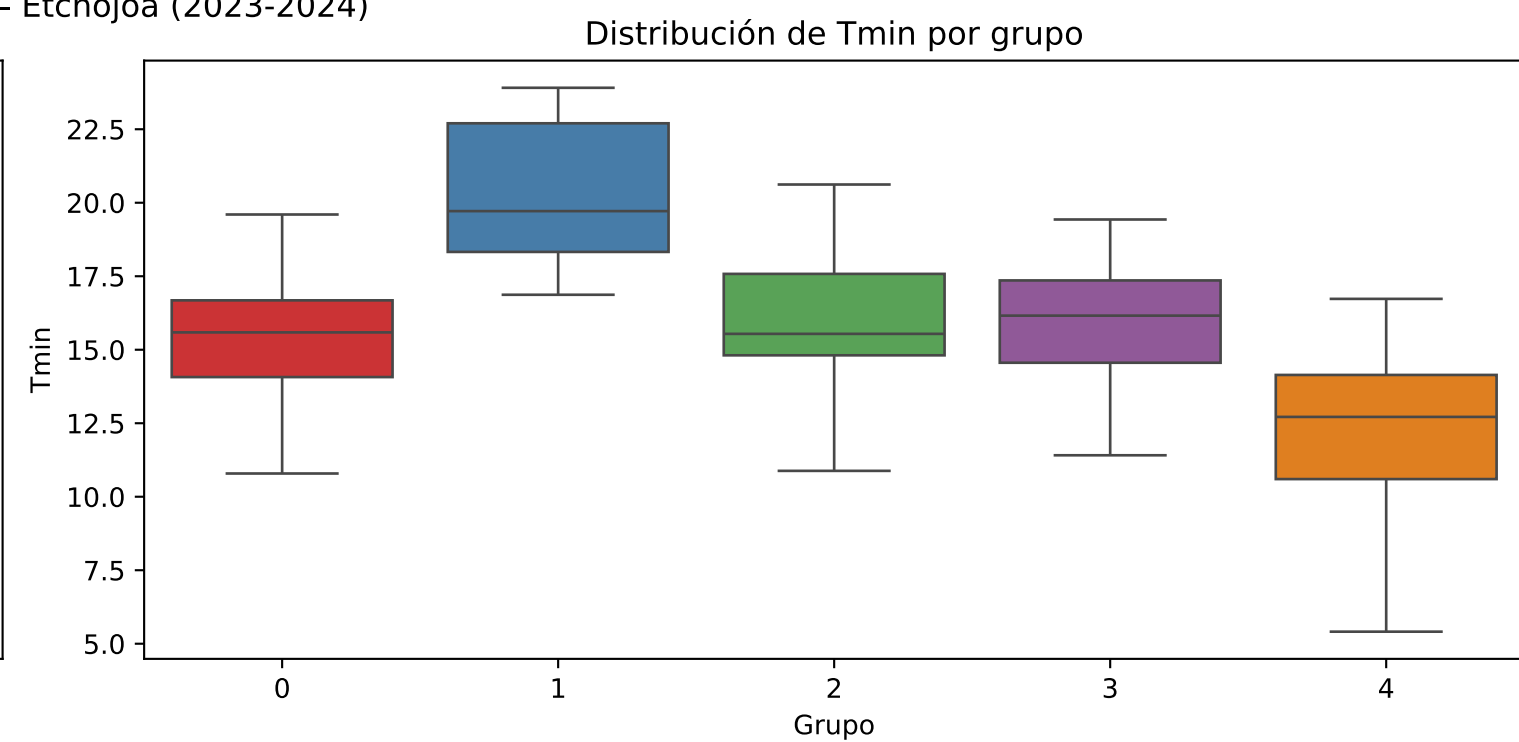
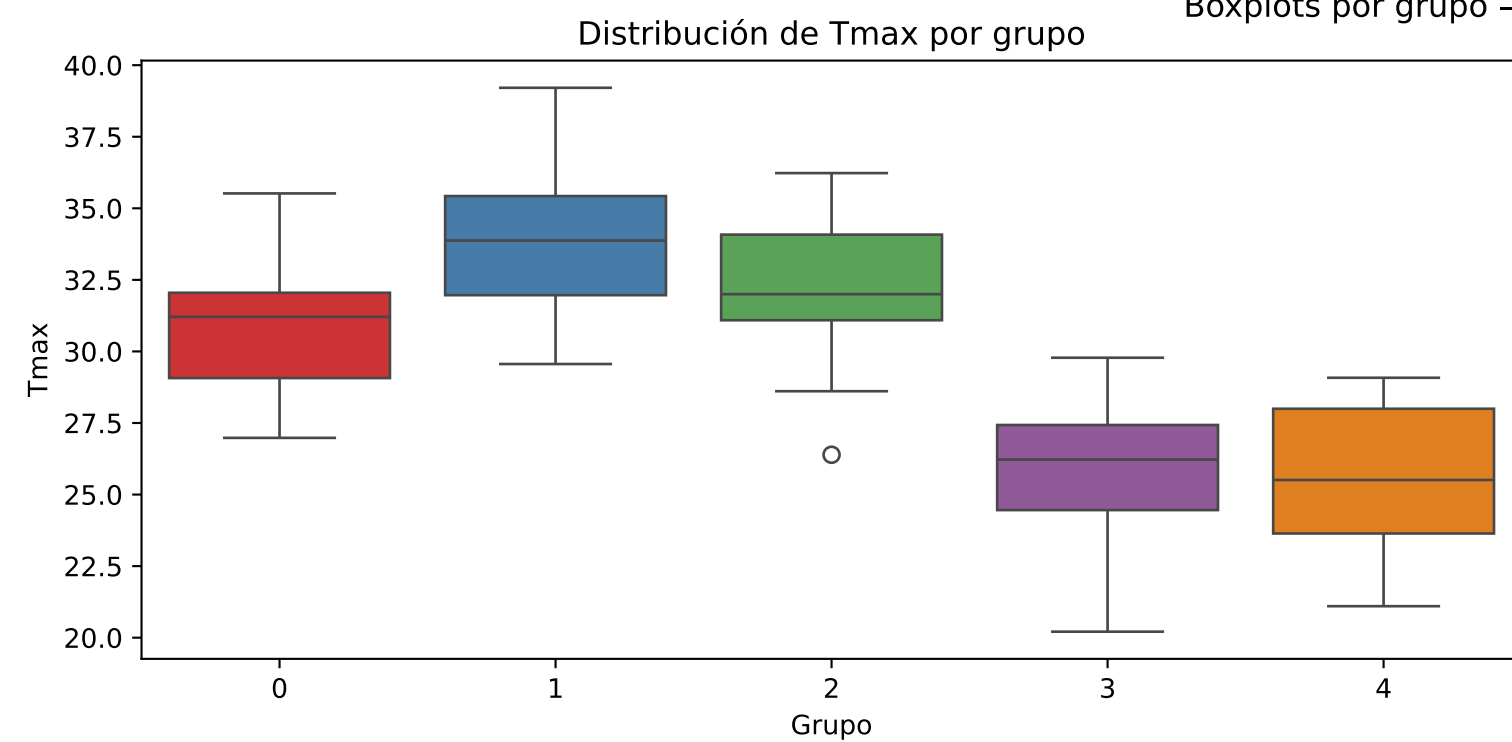
Clasificación de días climáticos — Etchojoa (2023-2024)



Distribución de días por grupo — Etchojoa (2023-2024)



Boxplots por grupo — Etchojoa (2023-2024)



Clasificación de días climáticos (ET0/ETc incluidos) — Etchojoa (2023-2024)

