

Predicciones sobre CoViD-19

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DEPARTAMENTO DE ESTATÍSTICA,
ANÁLISE MATEMÁTICA E OPTIMIZACIÓN



- Predicciones

- Predicciones Fallecidos

3 Panorama internacional

Datos

Aplicación Shiny disponible en

<http://modestya.securized.net/covid19prediction/>

Número de datos funcionales: 3435

Países/Regiones distintos incorporados: 165

Predicciones:

- ▶ España
- ▶ Andalucía
- ▶ Aragón
- ▶ Asturias
- ▶ I. Baleares
- ▶ Canarias
- ▶ Cantabria
- ▶ Cataluña
- ▶ Castilla-La Mancha
- ▶ Castilla y León
- ▶ C. Valenciana
- ▶ Extremadura
- ▶ País Vasco
- ▶ Galicia
- ▶ Madrid
- ▶ Murcia
- ▶ Navarra
- ▶ La Rioja
- ▶ Mod Lineal
- ▶ Mod NP
- ▶ Mod Aditivo

	σ_R^2			$\sigma_R^2(rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0	0	0	0	0	0	0.669	0.791	0.68
H2	0.002	0.001	0.002	0.002	0.001	0.002	0.685	0.848	0.701
H3	0.003	0.002	0.003	0.003	0.002	0.003	0.746	0.868	0.755
H4	0.006	0.004	0.006	0.006	0.004	0.006	0.746	0.868	0.753
H5	0.01	0.005	0.009	0.01	0.006	0.009	0.758	0.873	0.767

Último dato: Notificación de 2020-05-20 que se publica en la tarde del 2020-05-21.

Tabla Previsión Confirmados: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	280117	281297	282117	282921	283641	283912
Andalucía	16546	16651	16725	16793	16845	16873
Aragón	7339	7398	7449	7496	7540	7579
Asturias	3359	3374	3384	3393	3399	3401
Islas.Baleares	2131	2144	2156	2168	2180	2190
Canarias	2307	2315	2322	2328	2334	2337
Cantabria	2798	2810	2818	2826	2832	2836
Castilla.La.Mancha	25423	25595	25752	25893	26041	26156
Castilla.y.León	24918	25019	25098	25164	25232	25252
Cataluña	57531	57592	57577	57631	57690	57588
Ceuta	178	179	179	180	181	181
Comunidad.Valenciana	14797	14885	14947	14999	15038	15058
Extremadura	4043	4065	4088	4109	4132	4150
Galicia	11103	11185	11254	11318	11374	11415
Madrid	72342	72601	72766	72918	73048	73103
Melilla	134	134	135	135	135	135
Murcia	2609	2632	2649	2664	2675	2683
Navarra	8352	8412	8447	8471	8480	8482
País.Vasco	18779	18870	18932	18988	19029	19037
La.Rioja	5428	5441	5448	5456	5462	5461

Cuadro: Previsión Confirmados: Mod. Lineal - Horizonte 1 – 5 días.

Tabla Ratio Incr. Confirmados: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.002	0.004	0.007	0.010	0.013	0.014
Andalucía	0.002	0.006	0.011	0.015	0.018	0.020
Aragón	0.006	0.008	0.015	0.021	0.027	0.033
Asturias	0.001	0.004	0.007	0.010	0.012	0.012
Islas.Baleares	0.005	0.006	0.012	0.017	0.023	0.028
Canarias	0.002	0.004	0.006	0.009	0.012	0.013
Cantabria	0.003	0.004	0.007	0.010	0.012	0.014
Castilla.La.Mancha	0.006	0.007	0.013	0.018	0.024	0.029
Castilla.y.León	0.002	0.004	0.007	0.010	0.013	0.013
Cataluña	0.000	0.001	0.001	0.002	0.003	0.001
Ceuta	0.004	0.004	0.008	0.011	0.015	0.018
Comunidad.Valenciana	0.002	0.006	0.010	0.014	0.016	0.018
Extremadura	0.005	0.005	0.011	0.016	0.022	0.026
Galicia	0.004	0.007	0.014	0.019	0.024	0.028
Madrid	0.001	0.004	0.006	0.008	0.010	0.011
Melilla	0.001	0.003	0.005	0.008	0.010	0.010
Murcia	0.004	0.009	0.015	0.021	0.025	0.028
Navarra	0.002	0.007	0.011	0.014	0.015	0.016
País.Vasco	0.002	0.005	0.008	0.011	0.013	0.014
La.Rioja	0.001	0.002	0.004	0.005	0.006	0.006

Cuadro: Previsión Ratio Incr. Confirmados: Mod. lineal - Horizonte 1 – 5 días.

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	0.002	0.004	0.007	0.011	0.014	0.018
Andalucía	0.002	0.005	0.009	0.014	0.018	0.022
Aragón	0.006	0.005	0.010	0.015	0.020	0.024
Asturias	0.001	0.003	0.007	0.010	0.013	0.017
Islas.Baleares	0.005	0.003	0.006	0.008	0.011	0.014
Canarias	0.002	0.002	0.005	0.007	0.009	0.012
Cantabria	0.003	0.003	0.006	0.009	0.011	0.014
Castilla.La.Mancha	0.006	0.005	0.010	0.015	0.019	0.024
Castilla.y.León	0.002	0.004	0.009	0.013	0.017	0.021
Cataluña	0.000	0.004	0.008	0.012	0.015	0.019
Ceuta	0.004	0.003	0.007	0.010	0.013	0.016
Comunidad.Valenciana	0.002	0.004	0.008	0.013	0.016	0.021
Extremadura	0.005	0.003	0.006	0.009	0.012	0.016
Galicia	0.004	0.004	0.008	0.012	0.016	0.020
Madrid	0.001	0.003	0.005	0.007	0.010	0.012
Melilla	0.001	0.002	0.004	0.007	0.009	0.011
Murcia	0.004	0.008	0.015	0.022	0.029	0.037
Navarra	0.002	0.008	0.015	0.023	0.030	0.037
País.Vasco	0.002	0.004	0.009	0.013	0.017	0.021
La.Rioja	0.001	0.002	0.004	0.006	0.008	0.011

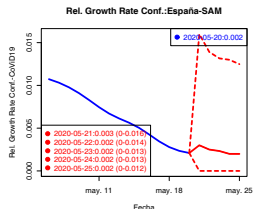
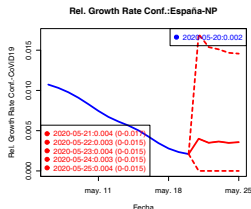
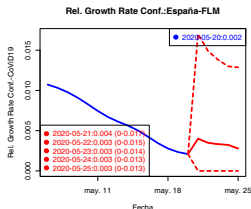
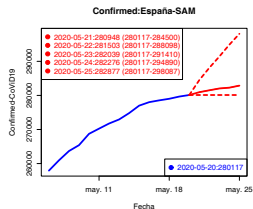
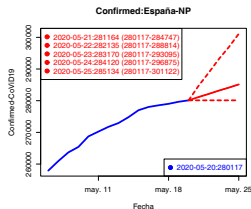
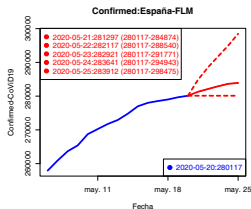
Cuadro: Previsión Ratio Incr. Confirmados: Mod. No Paramétrico - Horizonte 1
– 5 días.

Tabla Ratio Incr. Confirmados: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	0.002	0.003	0.005	0.007	0.008	0.010
Andalucía	0.002	0.005	0.009	0.011	0.012	0.013
Aragón	0.006	0.007	0.013	0.018	0.021	0.026
Asturias	0.001	0.003	0.005	0.006	0.007	0.008
Islas.Baleares	0.005	0.005	0.009	0.015	0.019	0.025
Canarias	0.002	0.002	0.003	0.005	0.008	0.011
Cantabria	0.003	0.003	0.005	0.006	0.008	0.010
Castilla.La.Mancha	0.006	0.006	0.011	0.016	0.019	0.024
Castilla.y.León	0.002	0.003	0.006	0.009	0.011	0.013
Cataluña	0.000	0.000	0.000	0.000	0.000	0.000
Ceuta	0.004	0.003	0.004	0.006	0.008	0.012
Comunidad.Valenciana	0.002	0.005	0.008	0.009	0.010	0.011
Extremadura	0.005	0.005	0.007	0.013	0.016	0.022
Galicia	0.004	0.007	0.012	0.016	0.019	0.023
Madrid	0.001	0.002	0.003	0.004	0.006	0.008
Melilla	0.001	0.002	0.002	0.003	0.007	0.008
Murcia	0.004	0.008	0.013	0.015	0.016	0.016
Navarra	0.002	0.006	0.010	0.009	0.008	0.004
País.Vasco	0.002	0.004	0.006	0.008	0.008	0.009
La.Rioja	0.001	0.001	0.001	0.001	0.003	0.005

Cuadro: Previsión Ratio Incr. Confirmados: Mod. Aditivo - Horizonte 1 – 5 días.

Confirmados: España

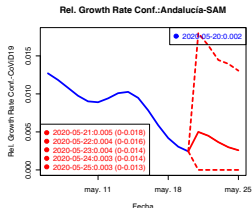
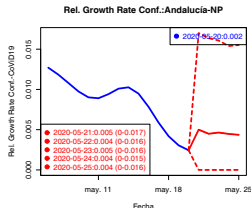
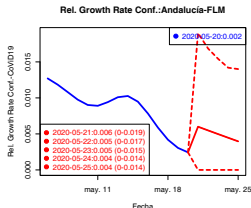
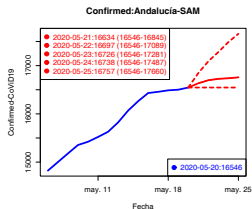
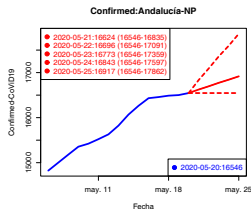
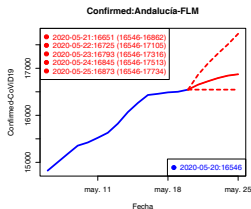


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

← Confirmados

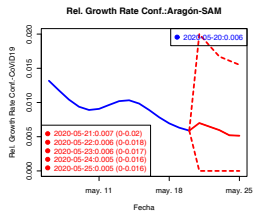
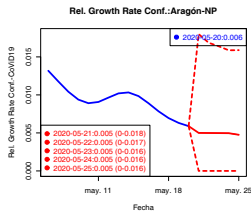
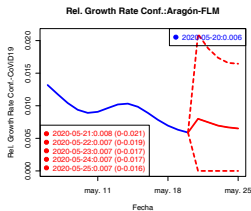
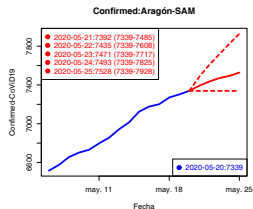
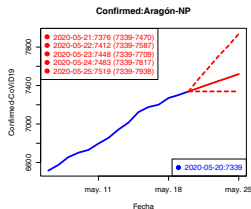
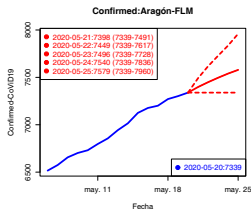
← Fallecidos

Confirmados: Andalucía



Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

Confirmados: Aragón



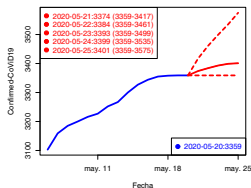
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

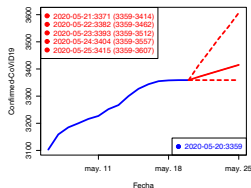
◀ Fallecidos

Confirmados: Asturias

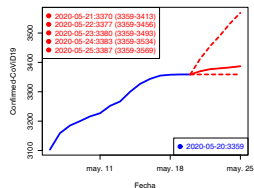
Confirmed: Asturias-FLM



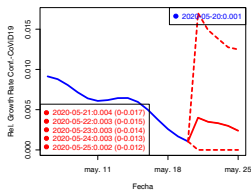
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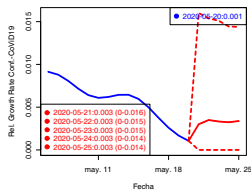
Confirmed: Asturias-SAM



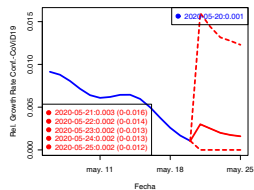
Rel. Growth Rate Conf.: Asturias-FLM



Rel. Growth Rate Conf.: Asturias-NP



Rel. Growth Rate Conf.: Asturias-SAM

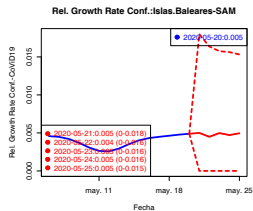
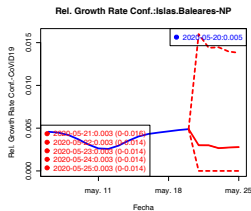
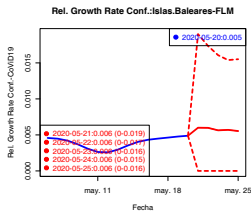
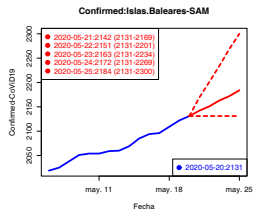
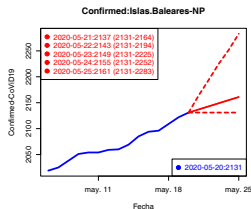
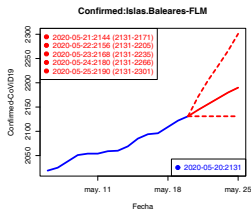


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Islas Baleares

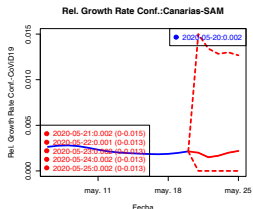
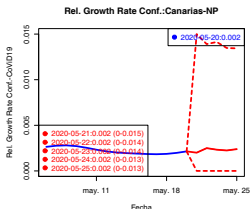
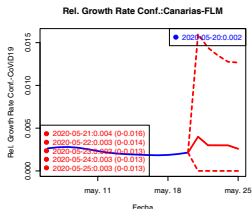
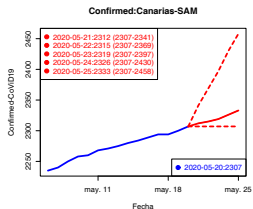
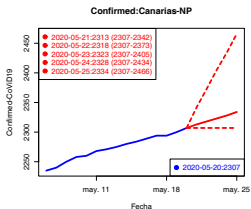
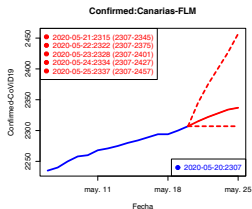


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Canarias

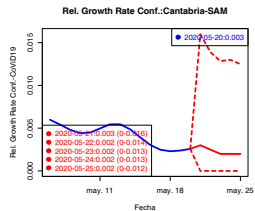
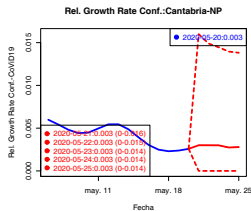
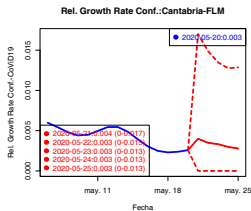
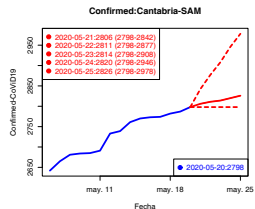
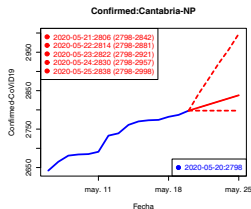
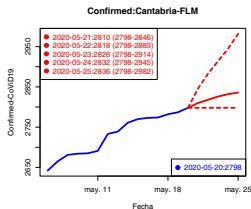


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cantabria



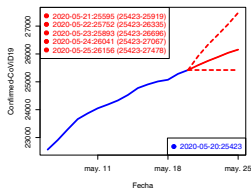
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◀ Confirmados

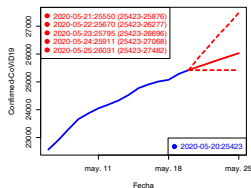
◀ Fallecidos

Confirmados: Castilla-La Mancha

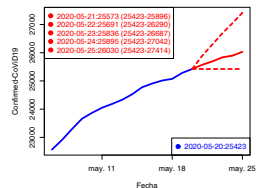
Confirmed:Castilla.La.Mancha-FLM



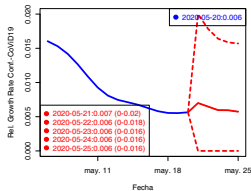
Confirmed:Castilla.La.Mancha-NP



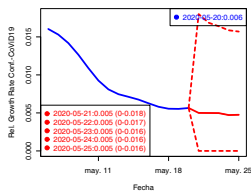
Confirmed:Castilla.La.Mancha-SAM



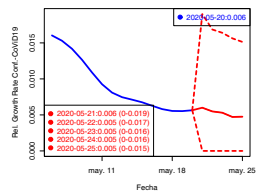
Rel. Growth Rate Conf.:Castilla.La.Mancha-FLM



Rel. Growth Rate Conf.:Castilla.La.Mancha-NP



Rel. Growth Rate Conf.:Castilla.La.Mancha-SAM

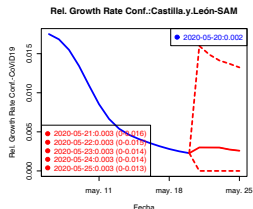
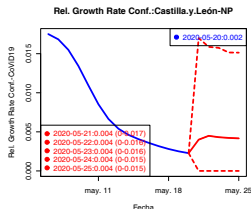
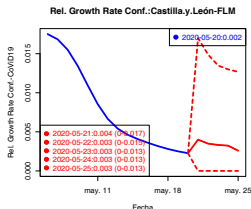
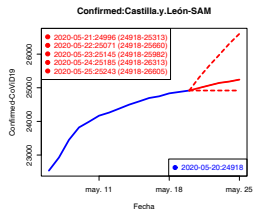
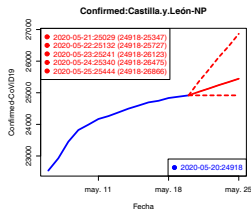
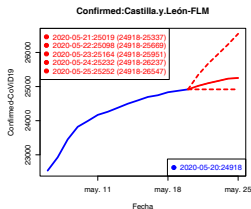


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

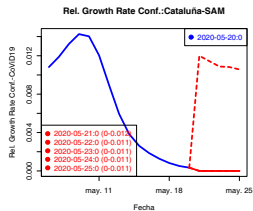
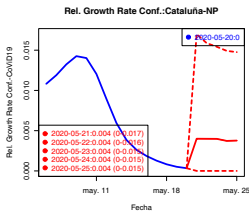
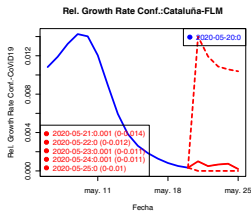
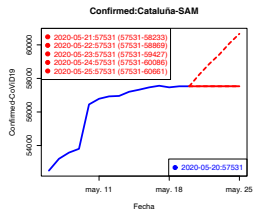
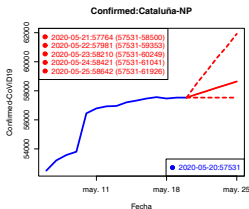
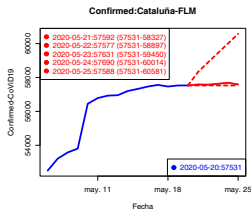


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cataluña



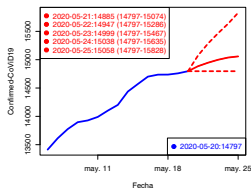
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

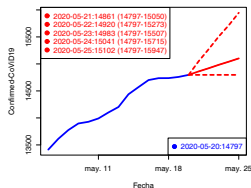
◀ Fallecidos

Confirmados: C. Valenciana

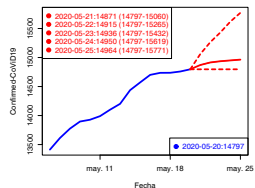
Confirmed:Comunidad.Valenciana-FLM



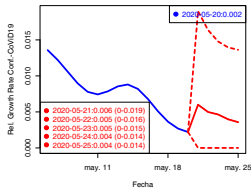
Confirmed:Comunidad.Valenciana-NP



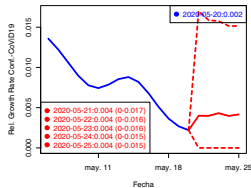
Confirmed:Comunidad.Valenciana-SAM



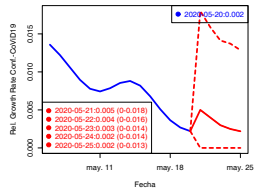
Rel. Growth Rate Conf.:Comunidad.Valenciana-FLM



Rel. Growth Rate Conf.:Comunidad.Valenciana-NP



Rel. Growth Rate Conf.:Comunidad.Valenciana-SAM



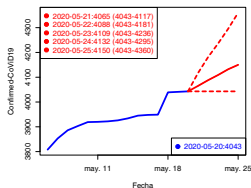
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

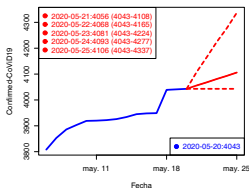
◀ Fallecidos

Confirmados: Extremadura

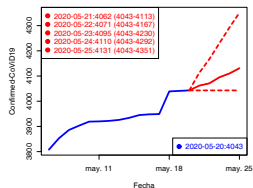
Confirmed:Extremadura-FLM



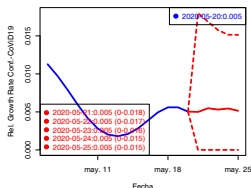
Confirmed:Extremadura-NP



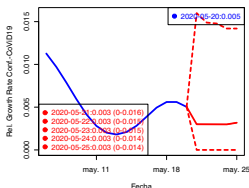
Confirmed:Extremadura-SAM



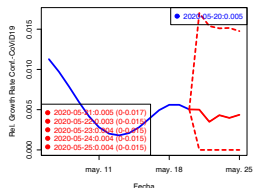
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Rel. Growth Rate Conf.:Extremadura-NP



Rel. Growth Rate Conf.:Extremadura-SAM

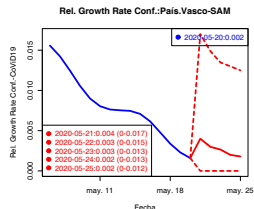
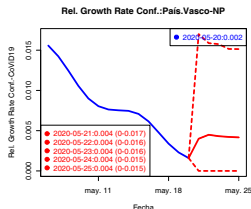
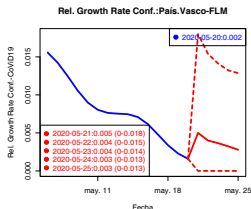
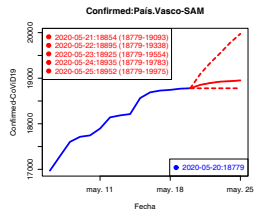
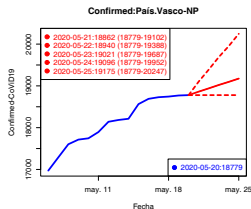
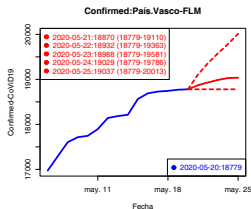


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: País Vasco

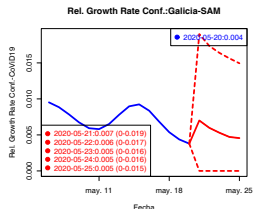
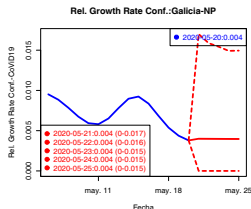
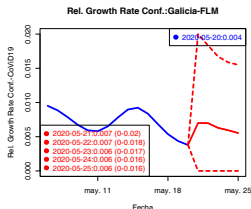
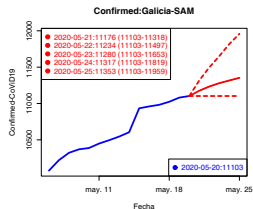
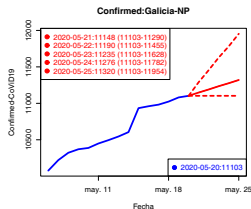
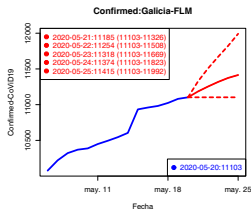


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Galicia

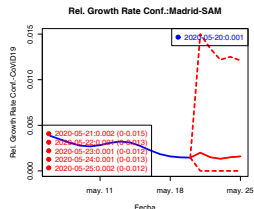
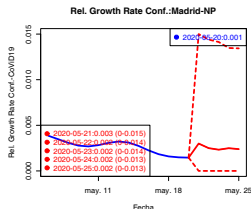
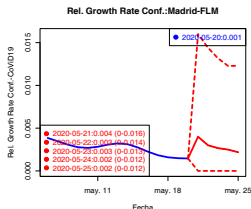
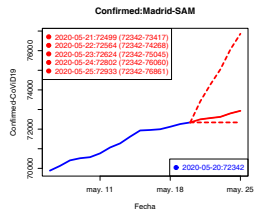
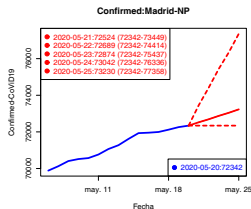
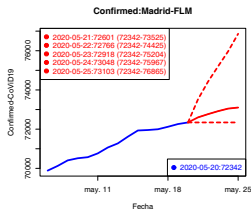


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

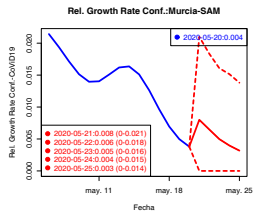
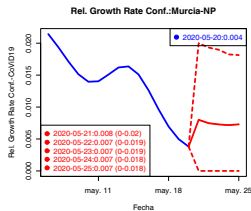
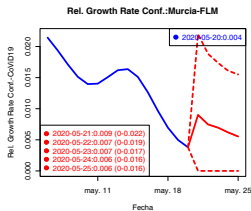
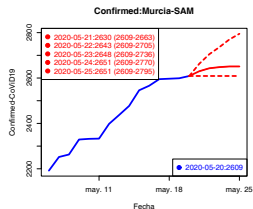
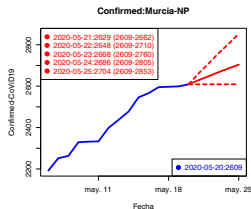
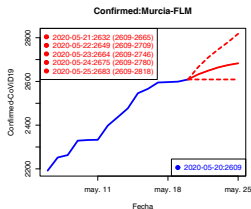


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

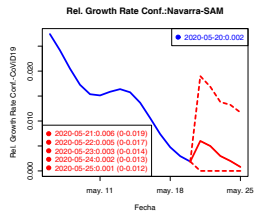
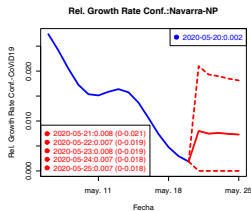
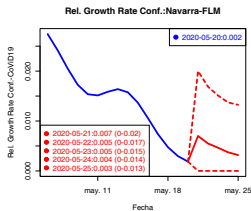
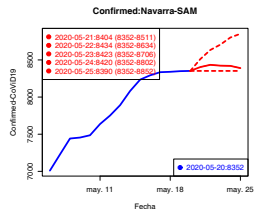
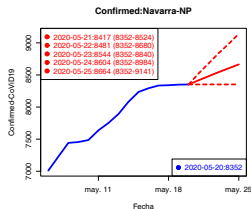
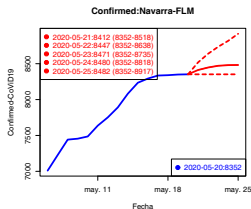


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

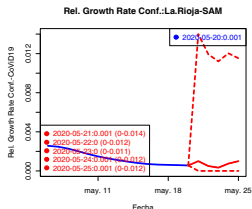
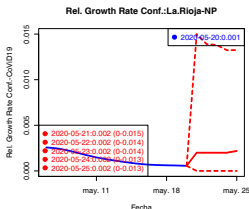
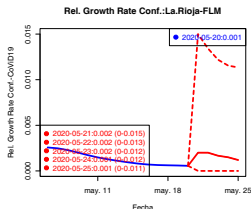
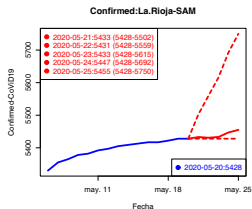
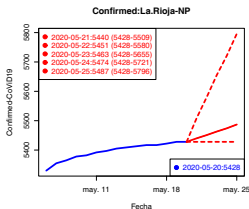
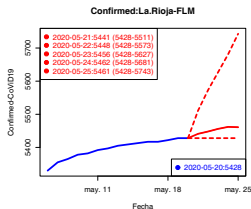


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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- 1 Casos Confirmados
 - Predicciones
- 2 Fallecidos
 - Predicciones Fallecidos
- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Número de datos funcionales: 3989

Países/Regiones distintos incorporados: 87

Predicciones:

▶ España

▶ Andalucía

▶ Aragón

▶ Asturias

▶ I. Baleares

▶ Canarias

▶ Cantabria

▶ Castilla-La Mancha

▶ Castilla y León

▶ Cataluña

▶ C. Valenciana

▶ Extremadura

▶ País Vasco

▶ Galicia

▶ Madrid

▶ Murcia

▶ Navarra

▶ La Rioja

▶ Mod Lineal

▶ Mod NP

▶ Mod Aditivo

	σ_R^2			$\sigma_R^2(rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0.001	0.001	0	0	0	0	0.609	0.587	0.675
H2	0.002	0.002	0.001	0.002	0.002	0.001	0.66	0.631	0.757
H3	0.003	0.003	0.002	0.003	0.003	0.002	0.736	0.697	0.812
H4	0.005	0.006	0.003	0.006	0.006	0.004	0.767	0.718	0.829
H5	0.006	0.008	0.004	0.008	0.009	0.005	0.799	0.739	0.856

Tabla Previsión Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	27940	28043	28140	28172	28180	28155
Andalucía	1375	1381	1388	1390	1391	1390
Aragón	848	852	855	856	856	856
Asturias	307	308	310	311	312	313
Islas.Baleares	221	222	223	224	224	225
Canarias	155	156	156	157	157	157
Cantabria	209	210	210	211	211	211
Castilla.La.Mancha	2919	2930	2940	2943	2946	2945
Castilla.y.León	1960	1965	1968	1967	1965	1960
Cataluña	6021	6051	6074	6082	6087	6080
Ceuta	4	4	4	4	4	4
Comunidad.Valenciana	1383	1388	1394	1396	1397	1396
Extremadura	505	507	509	510	511	511
Galicia	608	610	612	613	613	612
Madrid	8931	8958	8984	8993	8993	8987
Melilla	2	2	2	2	2	2
Murcia	149	150	151	152	152	153
Navarra	506	507	509	509	508	507
País.Vasco	1483	1488	1493	1495	1495	1494
La.Rioja	354	355	356	356	356	356

Cuadro: Previsión fallecidos: Mod. lineal - Horizonte 1 – 5 días.

Tabla Previsión Fallecidos: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	27940	28255	28555	28851	29126	29407
Andalucía	1375	1390	1405	1419	1433	1447
Aragón	848	858	867	875	884	892
Asturias	307	311	314	317	320	324
Islas Baleares	221	224	226	228	231	233
Canarias	155	157	158	160	162	163
Cantabria	209	211	213	216	218	220
Castilla La Mancha	2919	2953	2985	3016	3046	3076
Castilla y León	1960	1982	2002	2023	2042	2061
Cataluña	6021	6092	6160	6227	6290	6353
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1383	1398	1413	1428	1441	1455
Extremadura	505	511	516	522	527	532
Galicia	608	615	621	627	633	638
Madrid	8931	9030	9122	9215	9300	9388
Melilla	2	2	2	2	2	2
Murcia	149	151	152	154	155	157
Navarra	506	512	517	522	527	532
País Vasco	1483	1500	1516	1532	1546	1561
La Rioja	354	358	362	365	369	372

Cuadro: Previsión fallecidos: Mod. No Paramétrico - Horizonte 1 – 5 días.

Tabla Previsión Fallecidos: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	27940	28135	28237	28444	28447	28609
Andalucía	1375	1385	1391	1400	1402	1409
Aragón	848	855	859	864	863	867
Asturias	307	309	310	313	313	316
Islas Baleares	221	222	222	224	225	226
Canarias	155	156	157	158	159	160
Cantabria	209	210	211	213	213	215
Castilla-La Mancha	2919	2938	2951	2967	2961	2971
Castilla y León	1960	1973	1980	1992	1988	1995
Cataluña	6021	6059	6087	6144	6170	6198
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1383	1392	1396	1405	1404	1411
Extremadura	505	507	506	509	511	514
Galicia	608	612	612	616	616	619
Madrid	8931	8989	9003	9075	9084	9151
Melilla	2	2	2	2	2	2
Murcia	149	150	151	152	152	153
Navarra	506	509	510	512	510	511
País Vasco	1483	1493	1499	1507	1504	1511
La Rioja	354	357	357	360	361	364

Cuadro: Previsión fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.003	0.004	0.007	0.008	0.009	0.008
Andalucía	0.003	0.005	0.009	0.011	0.011	0.011
Aragón	0.003	0.004	0.008	0.010	0.010	0.010
Asturias	0.006	0.005	0.011	0.014	0.017	0.018
Islas.Baleares	0.004	0.004	0.009	0.012	0.015	0.017
Canarias	0.004	0.004	0.008	0.010	0.011	0.012
Cantabria	0.003	0.003	0.007	0.008	0.009	0.008
Castilla.La.Mancha	0.003	0.004	0.007	0.008	0.009	0.009
Castilla.y.León	0.001	0.002	0.004	0.004	0.003	0.000
Cataluña	0.003	0.005	0.009	0.010	0.011	0.010
Ceuta	0.000	0.001	0.002	0.001	0.000	0.000
Comunidad.Valenciana	0.003	0.004	0.008	0.010	0.010	0.009
Extremadura	0.003	0.004	0.008	0.009	0.012	0.012
Galicia	0.001	0.003	0.007	0.008	0.008	0.007
Madrid	0.002	0.003	0.006	0.007	0.007	0.006
Melilla	0.000	0.002	0.003	0.003	0.001	0.000
Murcia	0.009	0.006	0.013	0.018	0.021	0.023
Navarra	0.002	0.003	0.007	0.007	0.005	0.001
País.Vasco	0.004	0.003	0.007	0.008	0.008	0.007
La.Rioja	0.003	0.003	0.005	0.006	0.005	0.004

Cuadro: Previsión Ratio Incr. Fallecidos: Mod. lineal - Horizonte 1 – 5 días.

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	0.003	0.011	0.022	0.033	0.042	0.053
Andalucía	0.003	0.011	0.022	0.032	0.042	0.052
Aragón	0.003	0.011	0.022	0.032	0.042	0.052
Asturias	0.006	0.011	0.023	0.033	0.043	0.054
Islas.Baleares	0.004	0.012	0.023	0.034	0.044	0.054
Canarias	0.004	0.011	0.022	0.033	0.043	0.053
Cantabria	0.003	0.011	0.021	0.032	0.041	0.051
Castilla.La.Mancha	0.003	0.011	0.023	0.033	0.044	0.054
Castilla.y.León	0.001	0.011	0.022	0.032	0.042	0.051
Cataluña	0.003	0.012	0.023	0.034	0.045	0.055
Ceuta	0.000	0.011	0.020	0.030	0.039	0.048
Comunidad.Valenciana	0.003	0.011	0.022	0.032	0.042	0.052
Extremadura	0.003	0.011	0.022	0.033	0.043	0.053
Galicia	0.001	0.011	0.021	0.031	0.040	0.050
Madrid	0.002	0.011	0.021	0.032	0.041	0.051
Melilla	0.000	0.011	0.020	0.030	0.039	0.048
Murcia	0.009	0.011	0.022	0.033	0.043	0.053
Navarra	0.002	0.011	0.022	0.032	0.042	0.051
País.Vasco	0.004	0.011	0.022	0.033	0.043	0.053
La.Rioja	0.003	0.011	0.021	0.032	0.041	0.051

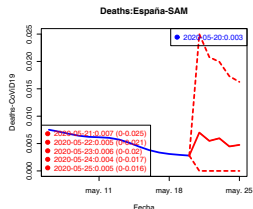
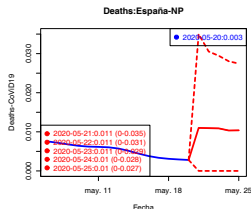
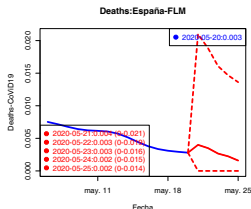
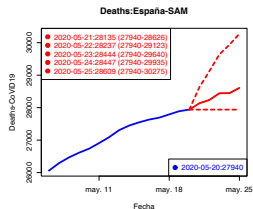
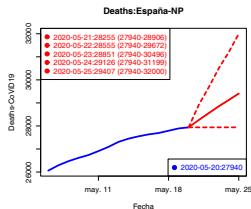
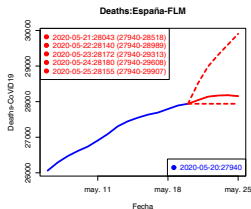
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. No Paramétrico - Horizonte 1 – 5 días.

Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	0.003	0.007	0.011	0.018	0.018	0.024
Andalucía	0.003	0.008	0.012	0.018	0.019	0.025
Aragón	0.003	0.008	0.013	0.019	0.018	0.023
Asturias	0.006	0.006	0.011	0.018	0.020	0.028
Islas.Baleares	0.004	0.006	0.006	0.014	0.016	0.023
Canarias	0.004	0.008	0.012	0.020	0.023	0.032
Cantabria	0.003	0.007	0.009	0.017	0.019	0.027
Castilla.La.Mancha	0.003	0.006	0.011	0.016	0.014	0.018
Castilla.y.León	0.001	0.007	0.010	0.017	0.014	0.018
Cataluña	0.003	0.006	0.011	0.020	0.025	0.029
Ceuta	0.000	0.007	0.009	0.017	0.016	0.022
Comunidad.Valenciana	0.003	0.006	0.010	0.016	0.015	0.020
Extremadura	0.003	0.004	0.001	0.008	0.012	0.017
Galicia	0.001	0.006	0.007	0.014	0.013	0.018
Madrid	0.002	0.007	0.008	0.016	0.017	0.025
Melilla	0.000	0.005	0.002	0.010	0.011	0.018
Murcia	0.009	0.007	0.014	0.020	0.023	0.029
Navarra	0.002	0.005	0.008	0.012	0.009	0.009
País.Vasco	0.004	0.007	0.010	0.016	0.014	0.019
La.Rioja	0.003	0.007	0.009	0.017	0.019	0.027

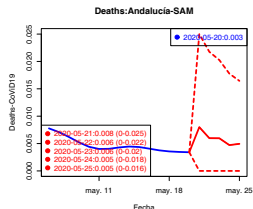
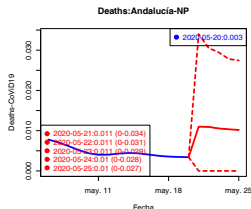
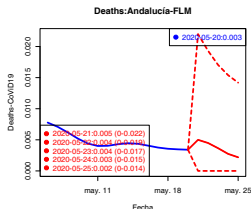
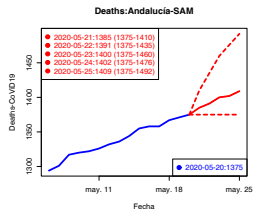
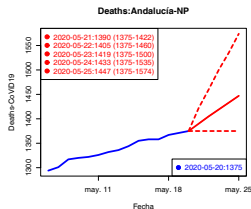
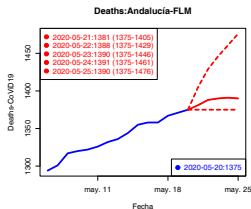
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Fallecidos: España



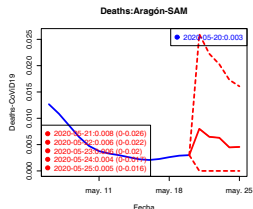
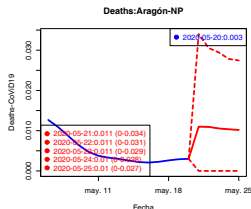
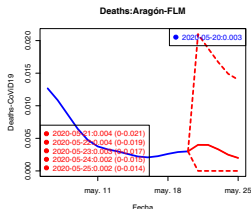
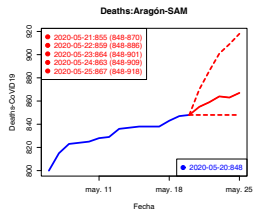
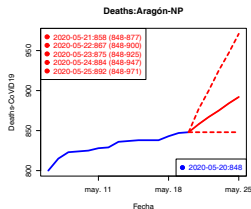
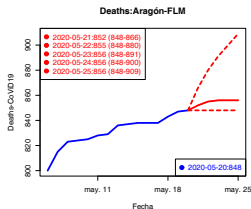
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Andalucía



Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Aragón

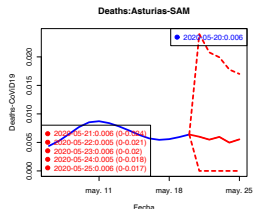
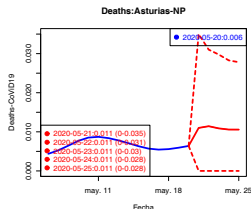
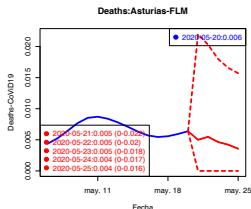
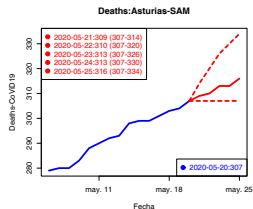
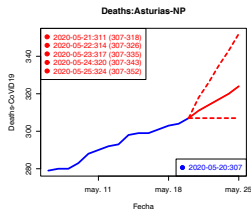
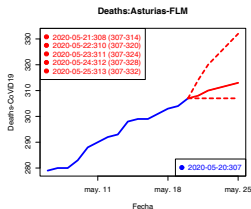


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Asturias

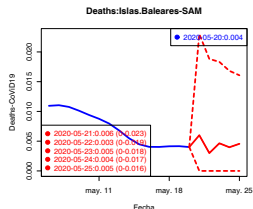
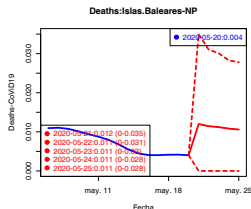
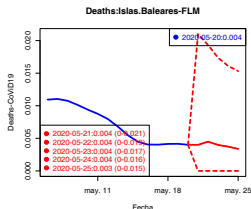
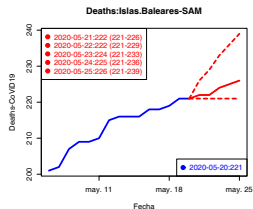
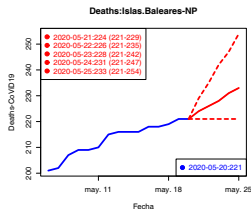
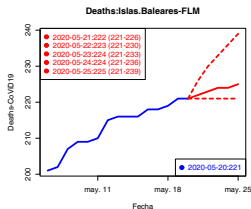


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

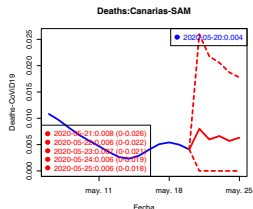
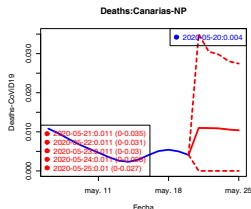
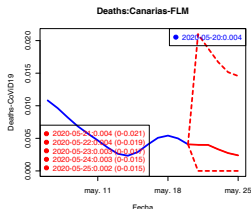
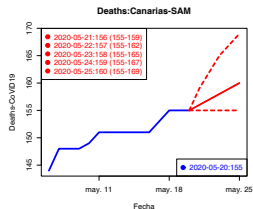
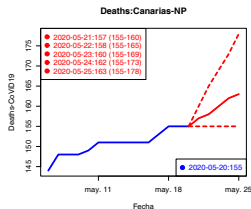
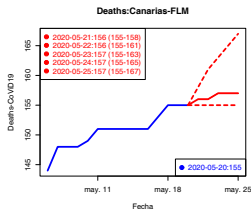
◀ Fallecidos

Fallecidos: Islas Baleares



Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Canarias

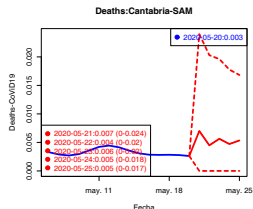
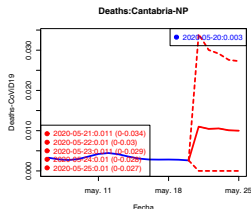
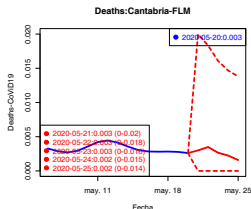
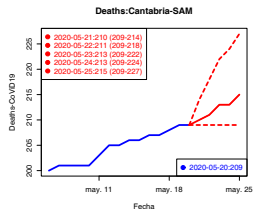
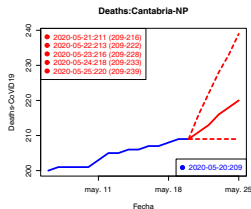
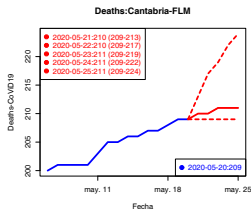


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cantabria

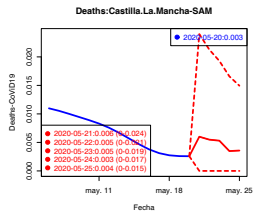
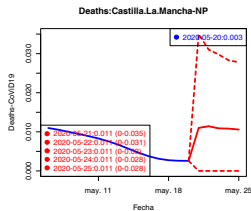
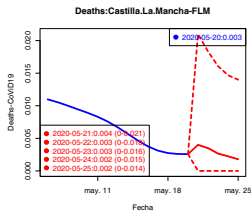
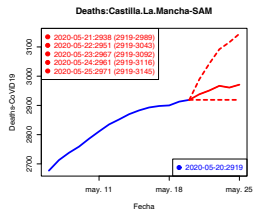
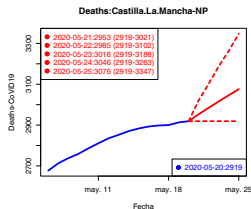
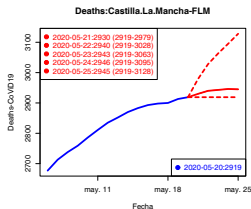


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla-La Mancha

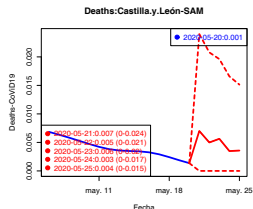
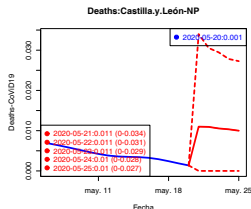
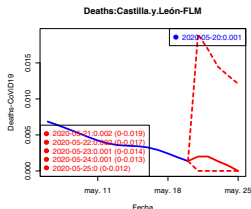
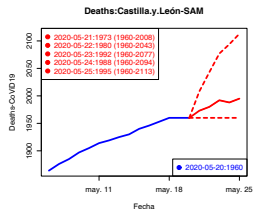
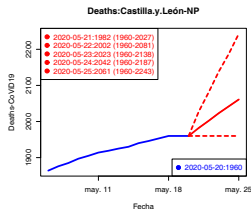
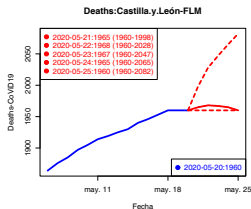


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla y León

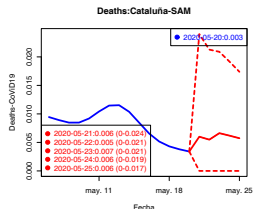
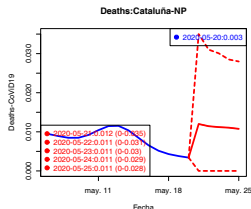
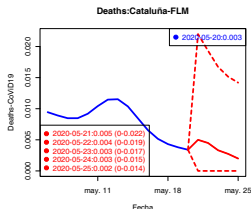
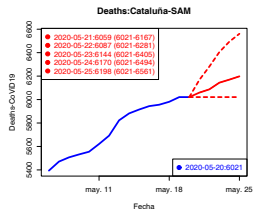
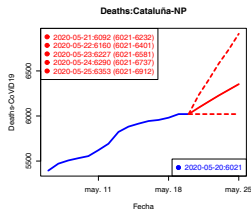
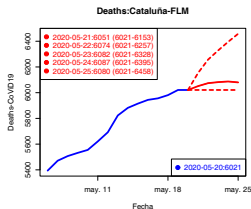


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

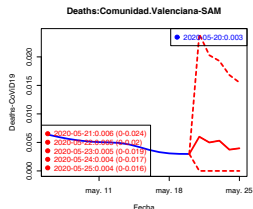
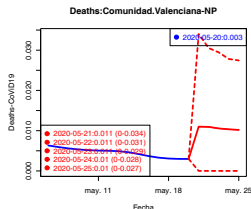
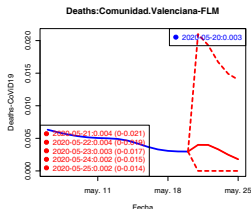
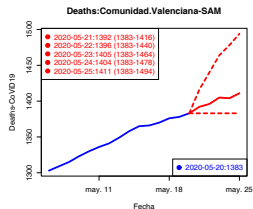
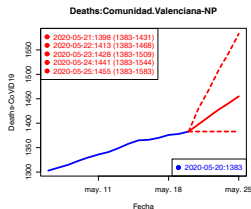
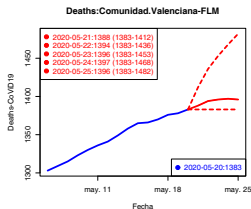
◀ Fallecidos

Fallecidos: Cataluña



Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: C. Valenciana

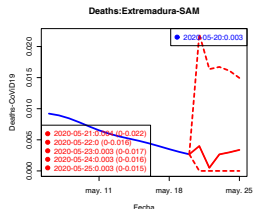
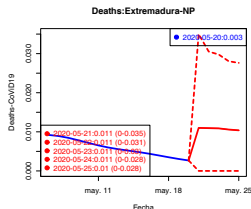
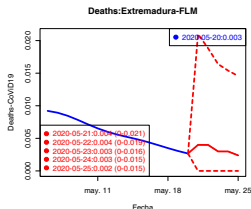
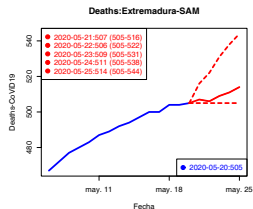
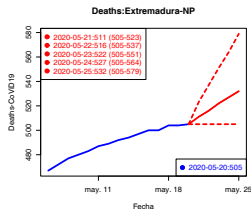
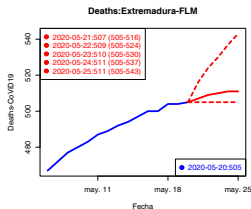


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Extremadura

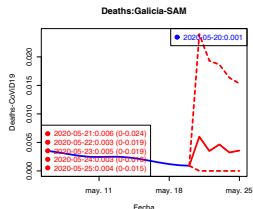
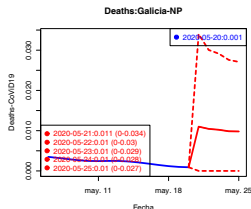
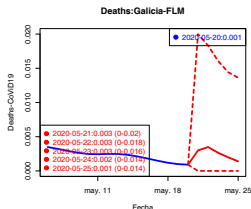
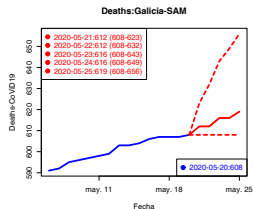
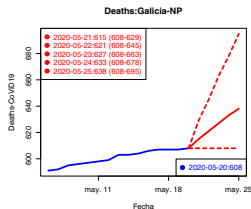
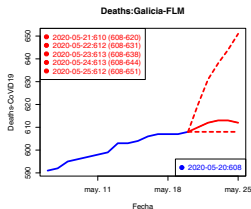


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Galicia

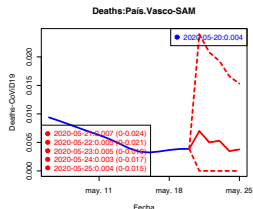
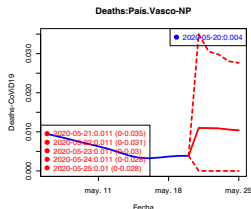
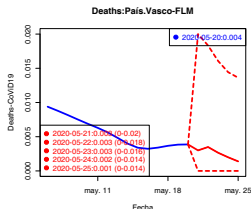
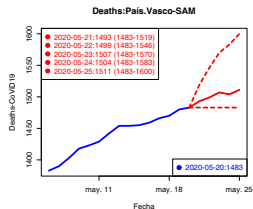
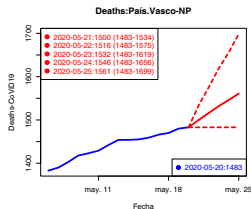
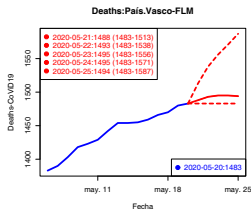


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: País Vasco

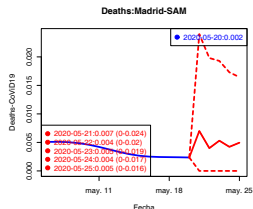
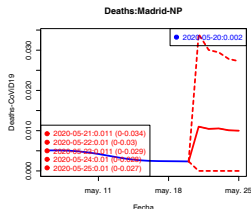
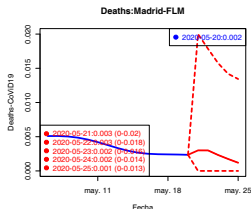
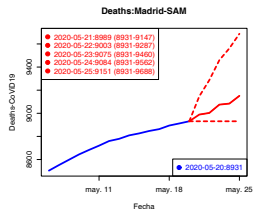
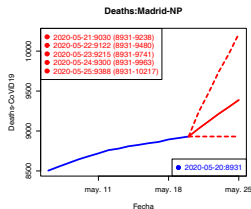
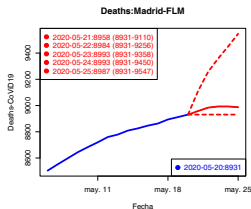


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Madrid

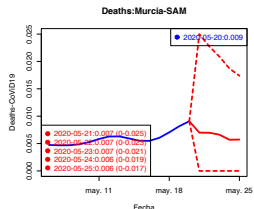
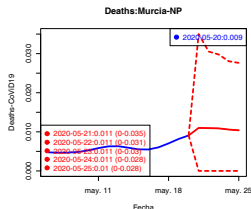
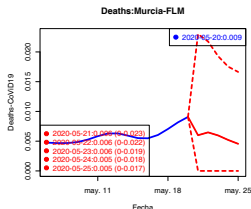
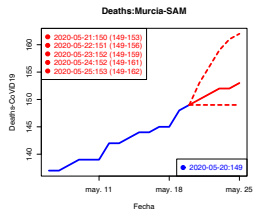
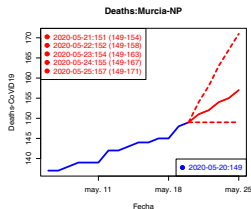
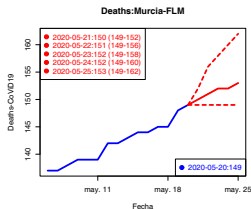


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

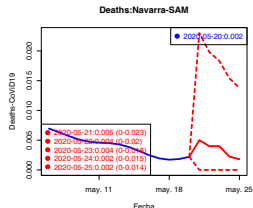
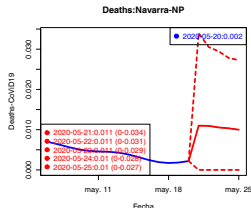
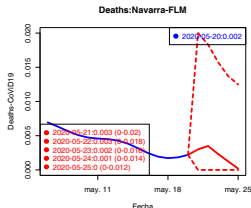
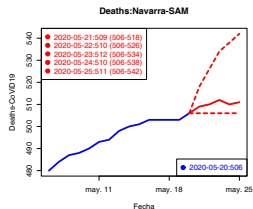
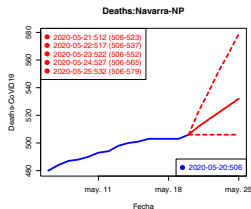
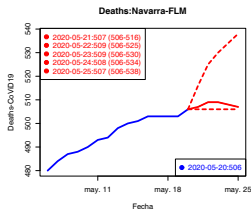
◀ Fallecidos

Fallecidos: Murcia



Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Navarra

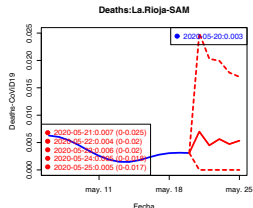
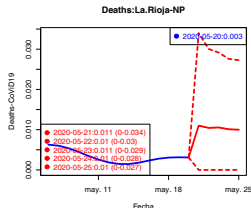
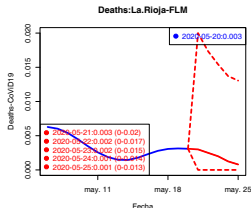
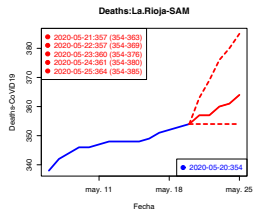
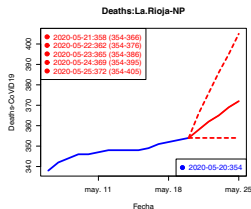
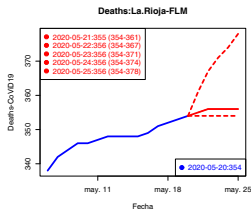


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: La Rioja



Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

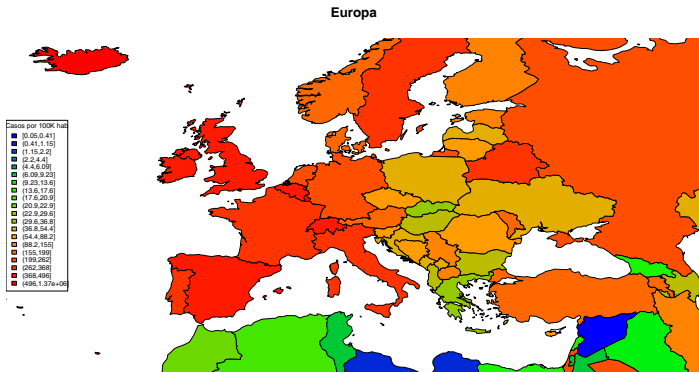
◀ Confirmados

◀ Fallecidos

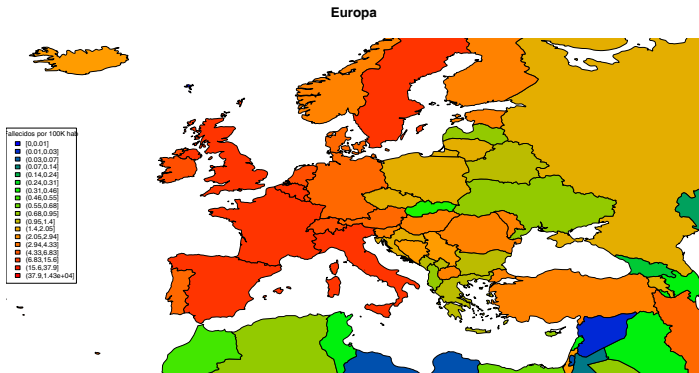
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 - Predicciones Fallecidos
- 3 Panorama internacional

Europa: Confirmados por 100K hab.

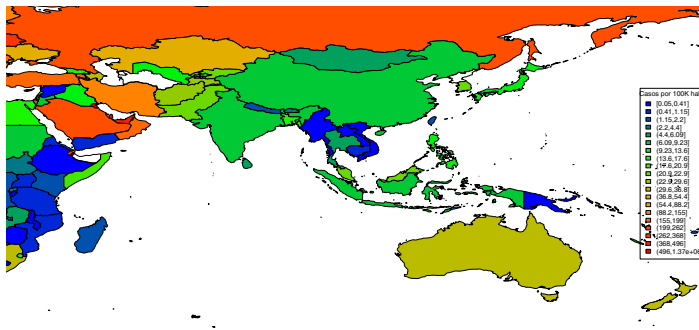


Europa: Fallecidos por 100K hab.



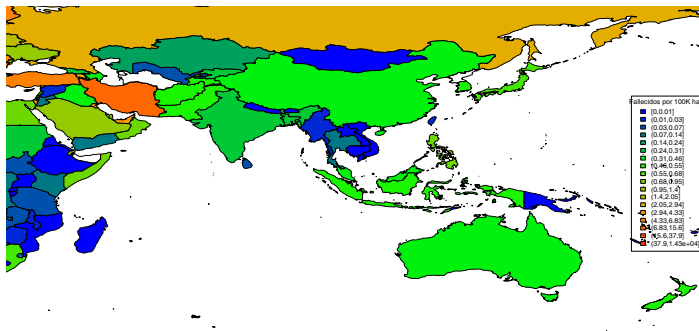
Asia y Oceanía: Casos por 100K hab.

Asia y Oceanía



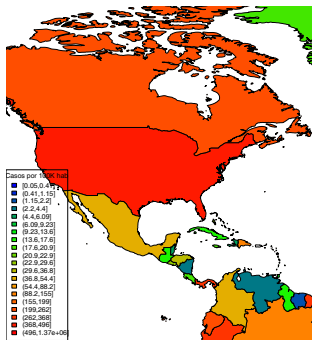
Asia y Oceanía: Fallecidos por 100K hab.

Asia y Oceanía

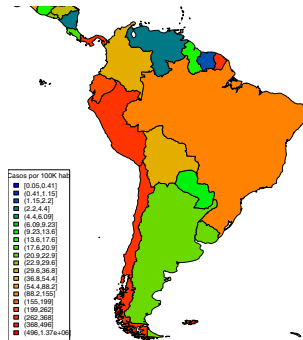


América: Casos por 100K hab.

América del Norte

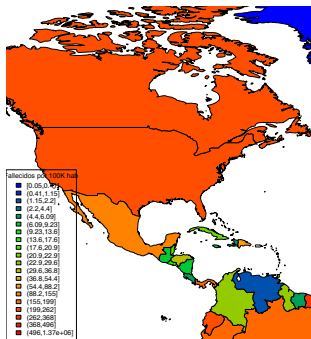


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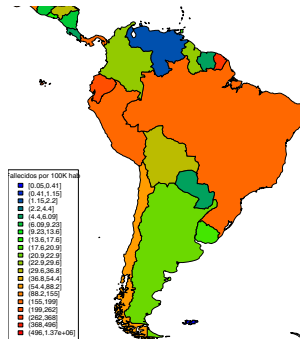


América: Fallecidos por 100K hab.

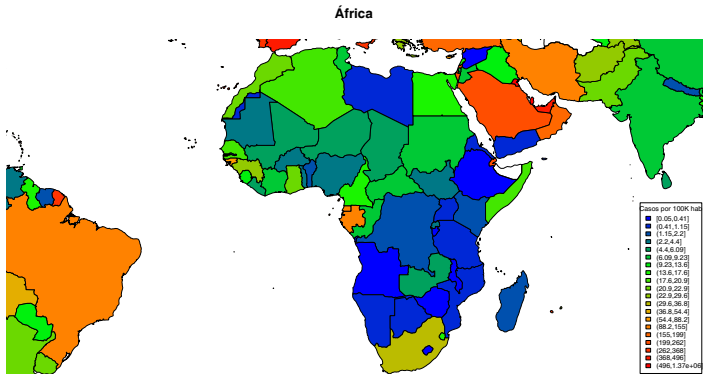
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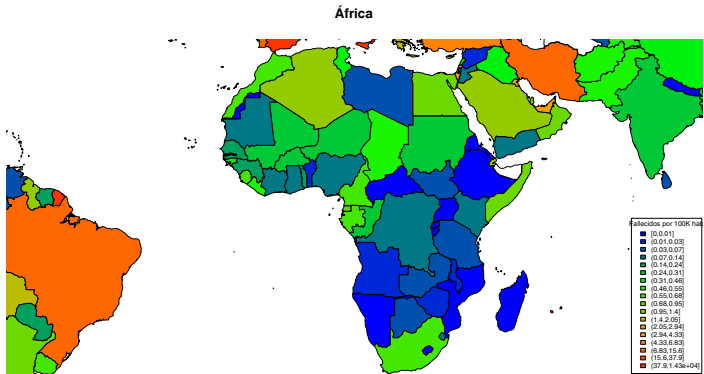
América del sur



África: Casos por 100K hab.



África: Fallecidos por 100K hab.



Breve descripción del Modelo de predicción

Objetivo: Predecir ratio de incremento de casos confirmados a 1, 2, o 3 días: $r^{(k)}(t) = \frac{x_{t+k} - x_t}{x_t + 1}$

Información usada: Pasado de esta variable suavizado (retardo 1) durante los últimos 15 días: $R^{(1)} = \{r^{(1)}(-14), \dots, r^{(1)}(0)\}$.

Datos para alimentar el modelo: https://github.com/CSSEGISandData/COVID-19/tree/master/csse_covid_19_data/csse_covid_19_time_series/. Algunas series de tiempo (como el Diamond Princess) son filtrados por inconsistencia, presunta falta de veracidad o por anormalmente valores bajos. En la predicción final se reconstruye el número de casos esperado. Se construyen tres modelos funcionales de la regresión general: $r^{(k)}(0) = f(R^{(1)}) + \epsilon$ donde la diferencia radica en la forma de la función f

- Lineal: $f(R^{(1)}) = \int_{-14}^0 R^{(1)}(t)\beta(t)dt$
- NP: f es una estimación no paramétrica tipo núcleo.
- SAM: f es una combinación aditiva de funciones suaves de las componentes principales funcionales.

Para el objetivo de predecir el ratio de incremento de fallecidos, se usa además del pasado de la propia variable, el ratio de incremento pasado de casos confirmados.