

Predicciones sobre CoViD-19

Manuel Febrero-Bande

Dpt. de Estadística, Análisis Matemático y Optimización
Univ. de Santiago de Compostela

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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: 3598

Países/Regiones distintos incorporados: 167

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	0.665	0.782	0.675
H2	0.002	0.001	0.002	0.002	0.001	0.002	0.684	0.842	0.699
H3	0.003	0.002	0.003	0.003	0.002	0.003	0.743	0.861	0.752
H4	0.006	0.004	0.006	0.006	0.004	0.006	0.743	0.862	0.751
H5	0.01	0.006	0.009	0.01	0.006	0.009	0.755	0.867	0.764

Último dato: Notificación de 2020-05-22 que se publica en la tarde del 2020-05-23.

Tabla Previsión Confirmados: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	281793	282812	283780	284788	285761	286786
Andalucía	16575	16645	16713	16782	16849	16919
Aragón	7369	7403	7436	7470	7502	7537
Asturias	3361	3372	3383	3394	3405	3416
Islas.Baleares	2143	2149	2155	2161	2167	2173
Canarias	2312	2318	2323	2328	2334	2340
Cantabria	2794	2802	2809	2817	2825	2833
Castilla.La.Mancha	25376	25488	25595	25704	25810	25920
Castilla.y.León	24964	25062	25155	25251	25343	25439
Cataluña	58679	58922	59154	59390	59619	59855
Ceuta	183	184	184	185	186	186
Comunidad.Valenciana	14831	14892	14950	15010	15068	15128
Extremadura	4045	4057	4068	4080	4091	4103
Galicia	11098	11140	11180	11222	11262	11305
Madrid	72718	72914	73098	73297	73486	73695
Melilla	134	134	135	135	135	135
Murcia	2611	2628	2645	2661	2678	2694
Navarra	8357	8411	8463	8514	8565	8616
País.Vasco	18812	18886	18957	19030	19101	19174
La.Rioja	5431	5443	5454	5466	5477	5490

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.004	0.005	0.009	0.013	0.016	0.019
Andalucía	0.002	0.005	0.008	0.011	0.013	0.015
Aragón	0.005	0.007	0.013	0.019	0.024	0.029
Asturias	0.001	0.004	0.005	0.007	0.007	0.007
Islas.Baleares	0.005	0.006	0.012	0.017	0.023	0.028
Canarias	0.002	0.004	0.007	0.010	0.012	0.015
Cantabria	0.002	0.003	0.005	0.006	0.008	0.008
Castilla.La.Mancha	0.003	0.005	0.010	0.014	0.018	0.021
Castilla.y.León	0.002	0.004	0.007	0.009	0.011	0.012
Cataluña	0.007	0.007	0.013	0.018	0.024	0.029
Ceuta	0.012	0.008	0.017	0.025	0.035	0.046
Comunidad.Valenciana	0.002	0.005	0.009	0.012	0.014	0.015
Extremadura	0.003	0.005	0.009	0.014	0.019	0.022
Galicia	0.002	0.006	0.010	0.014	0.016	0.019
Madrid	0.004	0.005	0.009	0.012	0.016	0.020
Melilla	0.000	0.003	0.005	0.008	0.010	0.010
Murcia	0.002	0.007	0.010	0.013	0.015	0.017
Navarra	0.001	0.005	0.006	0.007	0.007	0.006
País.Vasco	0.001	0.005	0.007	0.009	0.010	0.011
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	0.004	0.004	0.007	0.011	0.014	0.018
Andalucía	0.002	0.004	0.008	0.012	0.017	0.021
Aragón	0.005	0.005	0.009	0.014	0.018	0.023
Asturias	0.001	0.003	0.007	0.010	0.013	0.016
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	0.002	0.003	0.005	0.008	0.011	0.014
Castilla.La.Mancha	0.003	0.004	0.009	0.013	0.017	0.021
Castilla.y.León	0.002	0.004	0.008	0.011	0.015	0.019
Cataluña	0.007	0.004	0.008	0.012	0.016	0.020
Ceuta	0.012	0.004	0.007	0.011	0.015	0.018
Comunidad.Valenciana	0.002	0.004	0.008	0.012	0.016	0.020
Extremadura	0.003	0.003	0.006	0.009	0.011	0.014
Galicia	0.002	0.004	0.007	0.011	0.015	0.019
Madrid	0.004	0.003	0.005	0.008	0.011	0.013
Melilla	0.000	0.002	0.004	0.006	0.008	0.011
Murcia	0.002	0.007	0.013	0.019	0.026	0.032
Navarra	0.001	0.006	0.013	0.019	0.025	0.031
País.Vasco	0.001	0.004	0.008	0.012	0.015	0.019
La.Rioja	0.001	0.002	0.004	0.006	0.009	0.011

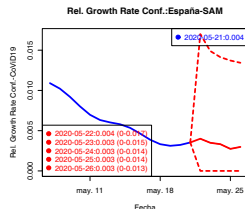
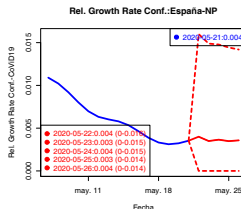
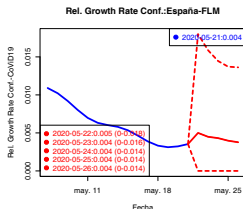
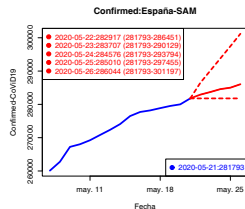
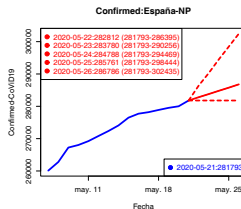
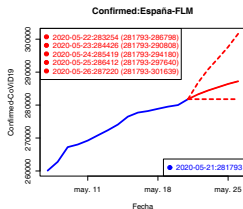
Cuadro: Previsión Ratio Incr. Confirmados: Mod. No Paramétrico - Horizonte 1
– 5 días.

Tabla Ratio Incr. Confirmados: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	0.004	0.004	0.007	0.010	0.011	0.015
Andalucía	0.002	0.004	0.007	0.008	0.008	0.009
Aragón	0.005	0.006	0.012	0.016	0.018	0.023
Asturias	0.001	0.002	0.003	0.002	0.003	0.003
Islas.Baleares	0.005	0.005	0.009	0.015	0.019	0.025
Canarias	0.002	0.002	0.003	0.006	0.009	0.011
Cantabria	0.002	0.001	0.002	0.002	0.003	0.004
Castilla.La.Mancha	0.003	0.005	0.007	0.011	0.012	0.016
Castilla.y.León	0.002	0.003	0.005	0.007	0.008	0.011
Cataluña	0.007	0.006	0.012	0.018	0.021	0.027
Ceuta	0.012	0.007	0.013	0.021	0.027	0.037
Comunidad.Valenciana	0.002	0.004	0.007	0.008	0.008	0.010
Extremadura	0.003	0.004	0.005	0.009	0.012	0.016
Galicia	0.002	0.005	0.008	0.009	0.011	0.013
Madrid	0.004	0.003	0.006	0.009	0.013	0.016
Melilla	0.000	0.002	0.003	0.004	0.007	0.008
Murcia	0.002	0.006	0.009	0.009	0.008	0.008
Navarra	0.001	0.004	0.005	0.004	0.002	0.001
País.Vasco	0.001	0.003	0.005	0.005	0.005	0.005
La.Rioja	0.001	0.001	0.000	0.001	0.003	0.004

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

Confirmados: España



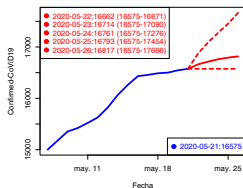
Los valores del Ratio de incremento de H2—H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

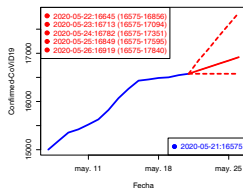
◀ Fallecidos

Confirmados: Andalucía

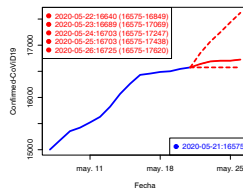
Confirmed:Andalucía-FLM



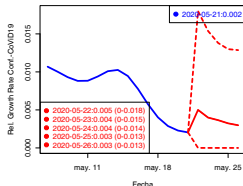
Confirmed:Andalucía-NP



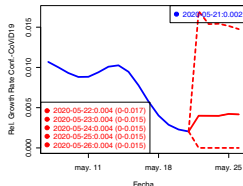
Confirmed:Andalucía-SAM



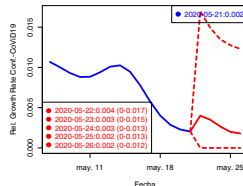
Rel. Growth Rate Conf.:Andalucia-FLM



Rel. Growth Rate Conf.:Andalucia-NP



Rel. Growth Rate Conf.:Andalucia-SAM

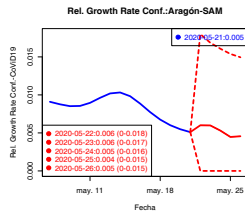
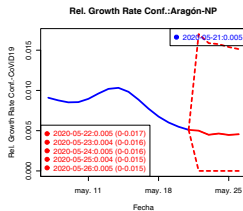
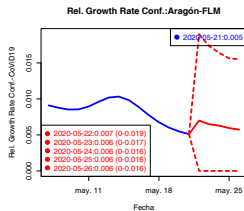
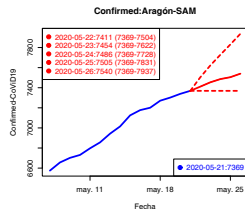
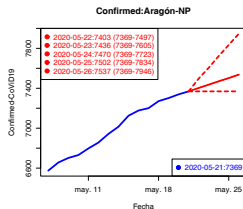
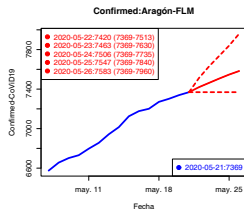


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Aragón



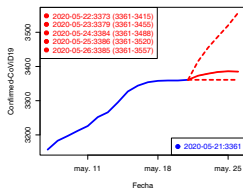
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

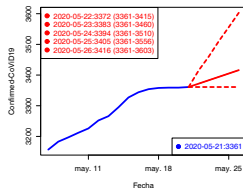
◀ Fallecidos

Confirmados: Asturias

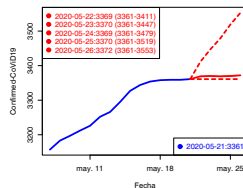
Confirmed: Asturias-FLM



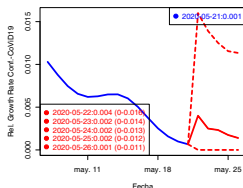
Confirmed: Asturias-NP



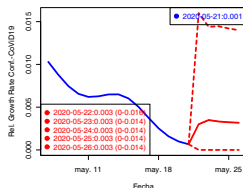
Confirmed: Asturias-SAM



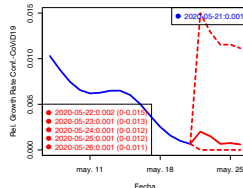
Rel. Growth Rate Conf.: Asturias-FLM



Rel. Growth Rate Conf.: Asturias-NP



Rel. Growth Rate Conf.: Asturias-SAM

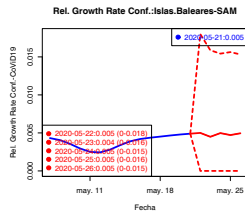
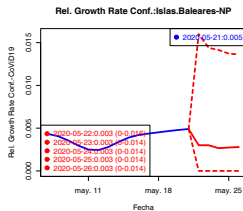
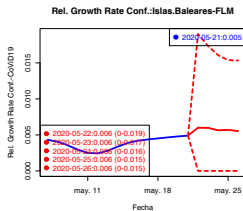
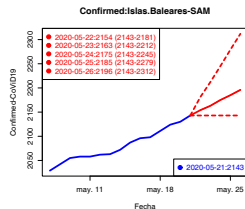
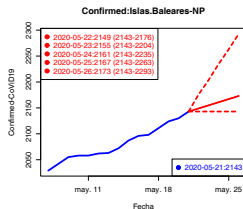
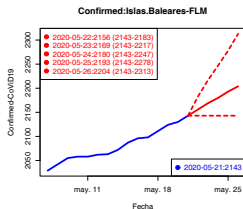


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Islas Baleares

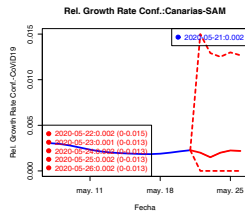
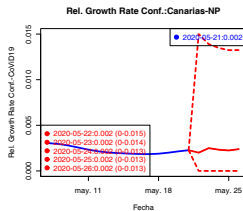
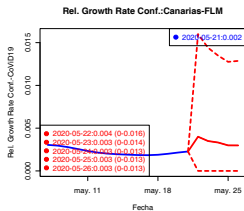
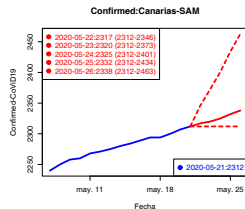
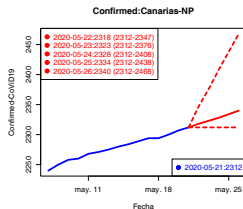
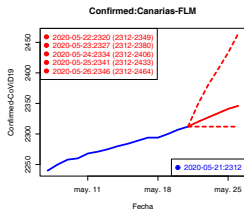


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Canarias

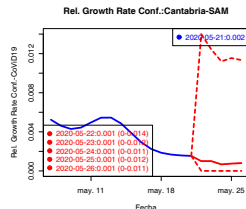
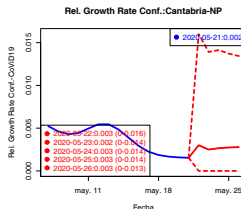
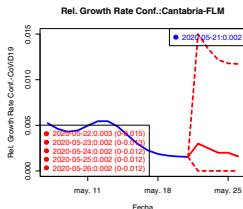
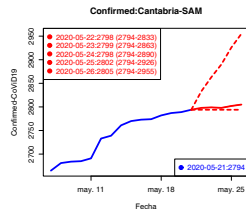
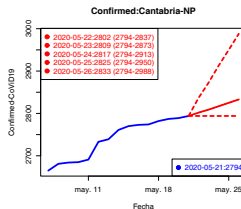
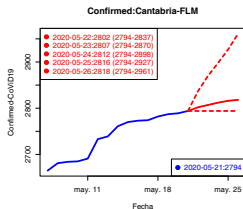


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cantabria

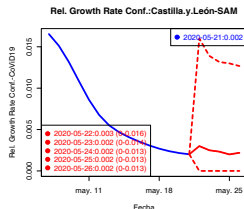
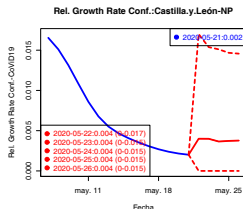
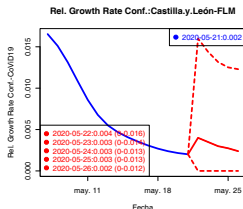
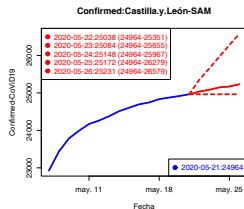
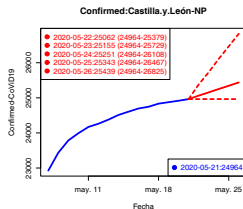
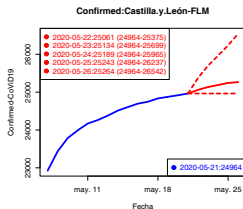


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León



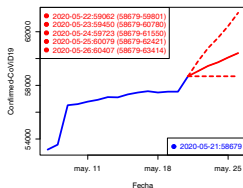
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

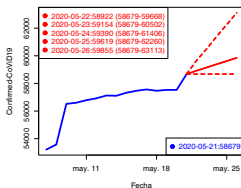
◀ Fallecidos

Confirmados: Cataluña

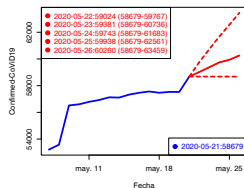
Confirmed:Cataluña-FLM



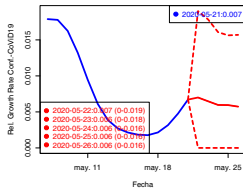
Confirmed:Cataluña-NP



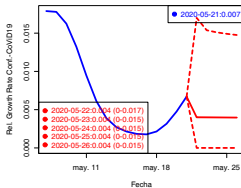
Confirmed:Cataluña-SAM



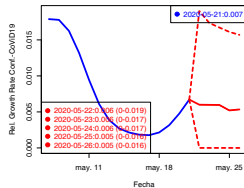
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Rel. Growth Rate Conf.:Cataluña-NP



Rel. Growth Rate Conf.:Cataluña-SAM

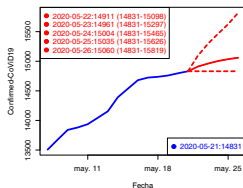


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

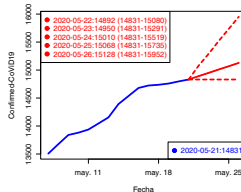
[← Confirmados](#)
[← Fallecidos](#)

Confirmados: C. Valenciana

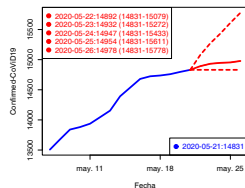
Confirmed:Comunidad.Valenciana-FLM



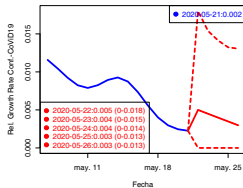
Confirmed:Comunidad.Valenciana-NP



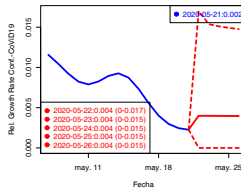
Confirmed:Comunidad.Valenciana-SAM



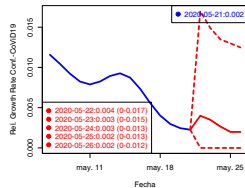
Rel. Growth Rate Conf.:Comunidad.Valenciana-FLM



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



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

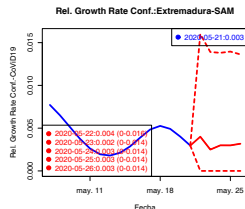
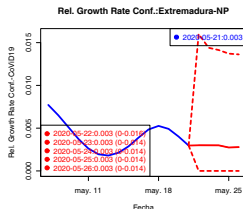
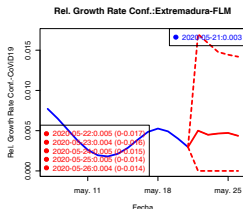
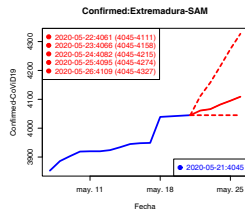
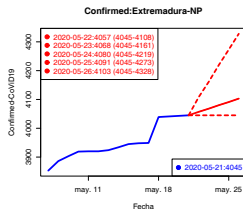
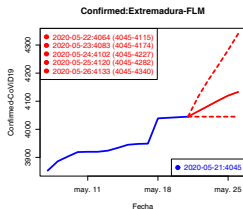


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Extremadura

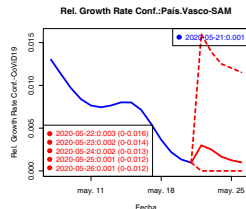
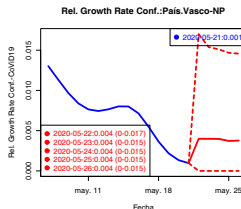
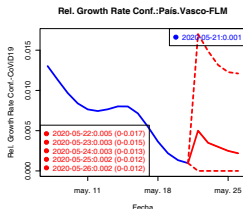
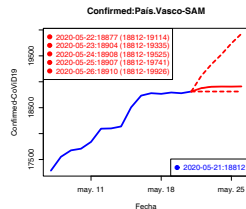
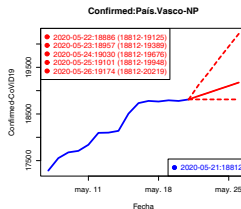
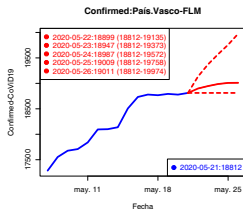


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: País Vasco



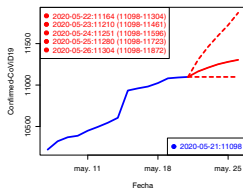
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

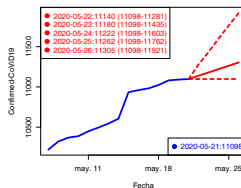
◀ Fallecidos

Confirmados: Galicia

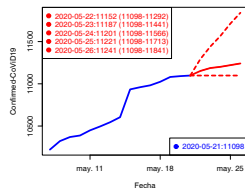
Confirmed:Galicia-FLM



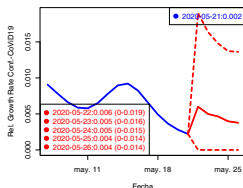
Confirmed:Galicia-NP



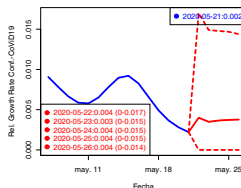
Confirmed:Galicia-SAM



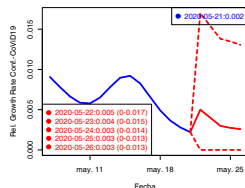
Rel. Growth Rate Conf.:Galicia-FLM



Rel. Growth Rate Conf.:Galicia-NP



Rel. Growth Rate Conf.:Galicia-SAM

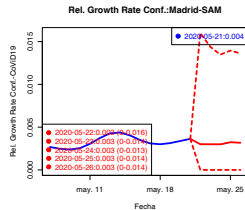
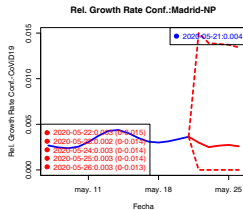
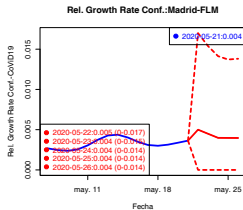
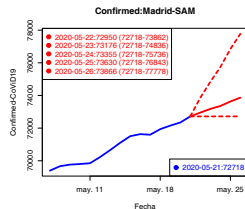
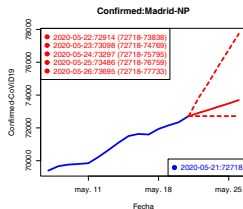
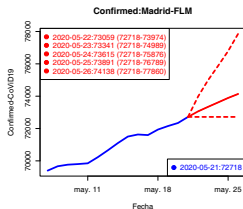


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

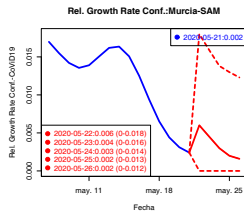
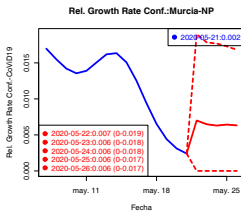
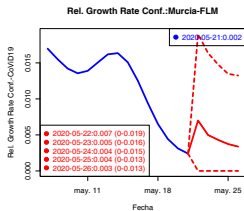
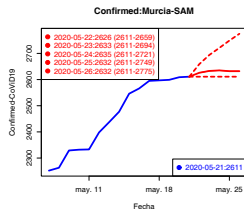
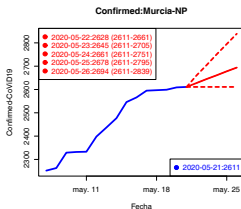
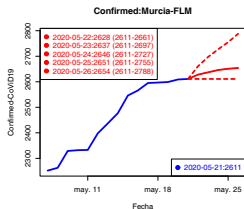


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

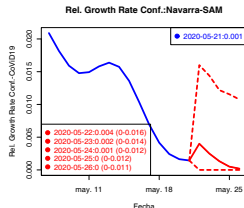
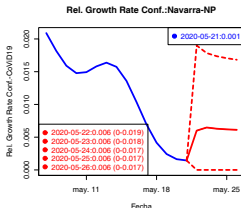
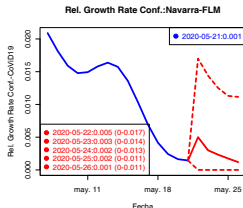
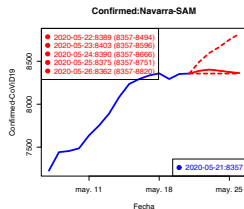
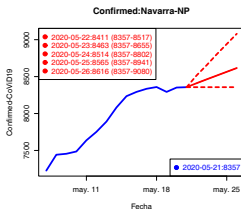
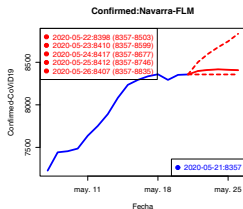


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

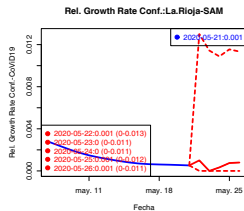
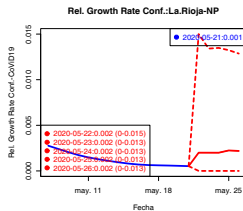
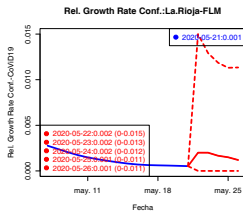
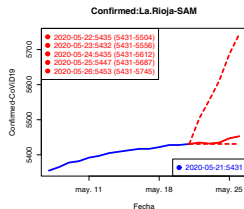
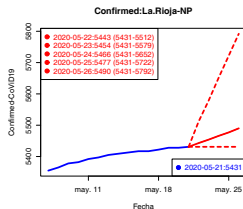
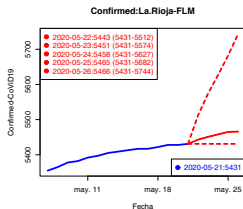


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ 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: 4088

Países/Regiones distintos incorporados: 88

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	0.001	0	0	0	0	0.616	0.595	0.678
H2	0.002	0.002	0.001	0.001	0.002	0.001	0.668	0.639	0.755
H3	0.003	0.003	0.002	0.002	0.003	0.002	0.742	0.702	0.814
H4	0.004	0.005	0.003	0.006	0.006	0.004	0.77	0.721	0.831
H5	0.006	0.008	0.004	0.008	0.009	0.005	0.799	0.74	0.855

Tabla Previsión Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	28678	28816	28956	29072	29176	29282
Andalucía	1389	1395	1401	1405	1406	1408
Aragón	858	862	866	868	870	872
Asturias	307	308	310	310	311	311
Islas Baleares	222	223	224	225	225	226
Canarias	157	158	158	159	159	160
Cantabria	209	210	210	210	210	210
Castilla La Mancha	2934	2943	2952	2956	2957	2958
Castilla y León	1961	1965	1968	1967	1965	1961
Cataluña	6663	6727	6799	6888	6985	7095
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1390	1395	1401	1403	1404	1405
Extremadura	507	509	511	512	513	514
Galicia	610	612	614	615	615	615
Madrid	8956	8987	9015	9030	9039	9044
Melilla	2	2	2	2	2	2
Murcia	149	150	151	151	152	152
Navarra	509	510	512	512	511	511
País Vasco	1494	1500	1506	1508	1509	1510
La Rioja	357	358	359	360	360	361

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

Tabla Previsión Fallecidos: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	28678	28987	29285	29581	29856	30146
Andalucía	1389	1404	1418	1432	1445	1458
Aragón	858	867	875	884	892	900
Asturias	307	310	314	317	320	323
Islas Baleares	222	224	227	229	231	234
Canarias	157	159	160	162	163	165
Cantabria	209	211	213	215	217	219
Castilla-La Mancha	2934	2966	2996	3026	3054	3084
Castilla y León	1961	1981	2001	2020	2038	2057
Cataluña	6663	6743	6824	6901	6976	7052
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1390	1405	1419	1433	1446	1459
Extremadura	507	512	518	523	528	533
Galicia	610	616	622	628	634	640
Madrid	8956	9049	9137	9227	9308	9395
Melilla	2	2	2	2	2	2
Murcia	149	151	152	154	155	157
Navarra	509	514	519	524	529	534
País Vasco	1494	1510	1525	1540	1554	1569
La Rioja	357	361	364	368	371	374

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

Tabla Previsión Fallecidos: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	28678	28897	29015	29226	29356	29591
Andalucía	1389	1400	1399	1409	1416	1426
Aragón	858	865	867	873	877	884
Asturias	307	309	309	311	312	314
Islas Baleares	222	223	224	226	226	227
Canarias	157	158	159	160	161	162
Cantabria	209	210	210	212	212	214
Castilla La Mancha	2934	2949	2953	2965	2966	2977
Castilla y León	1961	1970	1971	1978	1977	1980
Cataluña	6663	6713	6803	6872	6931	7036
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1390	1399	1397	1407	1411	1419
Extremadura	507	509	510	513	513	516
Galicia	610	613	612	617	618	621
Madrid	8956	9014	9028	9101	9115	9179
Melilla	2	2	2	2	2	2
Murcia	149	150	150	151	152	153
Navarra	509	511	510	512	513	516
País Vasco	1494	1505	1503	1513	1517	1526
La Rioja	357	360	361	364	365	367

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.009	0.005	0.010	0.014	0.017	0.021
Andalucía	0.005	0.004	0.009	0.011	0.013	0.013
Aragón	0.005	0.004	0.009	0.012	0.014	0.017
Asturias	0.003	0.004	0.009	0.011	0.013	0.014
Islas.Baleares	0.003	0.005	0.009	0.012	0.014	0.016
Canarias	0.005	0.005	0.009	0.012	0.015	0.017
Cantabria	0.001	0.003	0.005	0.006	0.007	0.006
Castilla.La.Mancha	0.003	0.003	0.006	0.007	0.008	0.008
Castilla.y.León	0.000	0.002	0.004	0.003	0.002	0.000
Cataluña	0.032	0.010	0.020	0.034	0.048	0.065
Ceuta	0.000	0.002	0.002	0.003	0.004	0.004
Comunidad.Valenciana	0.003	0.004	0.008	0.009	0.010	0.011
Extremadura	0.002	0.004	0.008	0.010	0.012	0.013
Galicia	0.001	0.003	0.007	0.008	0.008	0.008
Madrid	0.002	0.003	0.007	0.008	0.009	0.010
Melilla	0.000	0.002	0.004	0.004	0.003	0.002
Murcia	0.004	0.006	0.012	0.015	0.018	0.019
Navarra	0.003	0.003	0.006	0.006	0.005	0.003
País.Vasco	0.004	0.004	0.008	0.010	0.010	0.010
La.Rioja	0.004	0.004	0.007	0.009	0.010	0.010

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

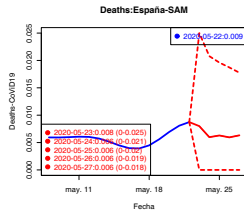
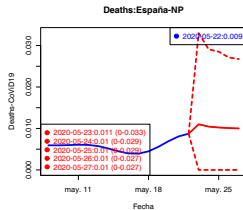
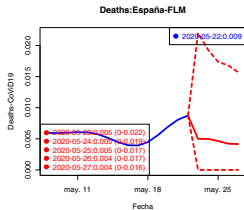
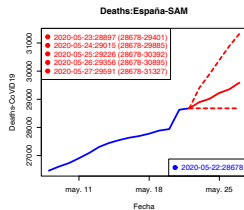
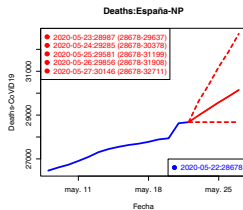
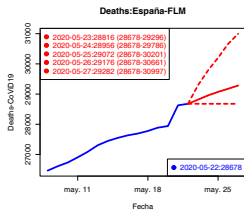
	Last	H1	H2	H3	H4	H5
España	0.009	0.011	0.021	0.031	0.041	0.051
Andalucía	0.005	0.011	0.021	0.031	0.040	0.050
Aragón	0.005	0.010	0.020	0.030	0.039	0.049
Asturias	0.003	0.011	0.022	0.032	0.042	0.052
Islas.Baleares	0.003	0.011	0.021	0.032	0.042	0.052
Canarias	0.005	0.011	0.020	0.031	0.040	0.050
Cantabria	0.001	0.010	0.020	0.030	0.039	0.049
Castilla.La.Mancha	0.003	0.011	0.021	0.031	0.041	0.051
Castilla.y.León	0.000	0.010	0.020	0.030	0.039	0.049
Cataluña	0.032	0.012	0.024	0.036	0.047	0.058
Ceuta	0.000	0.010	0.019	0.029	0.037	0.047
Comunidad.Valenciana	0.003	0.011	0.021	0.031	0.040	0.050
Extremadura	0.002	0.011	0.021	0.031	0.041	0.050
Galicia	0.001	0.010	0.020	0.030	0.039	0.049
Madrid	0.002	0.010	0.020	0.030	0.039	0.049
Melilla	0.000	0.010	0.019	0.029	0.037	0.047
Murcia	0.004	0.011	0.021	0.032	0.041	0.051
Navarra	0.003	0.010	0.020	0.030	0.039	0.049
País.Vasco	0.004	0.011	0.021	0.031	0.040	0.050
La.Rioja	0.004	0.010	0.020	0.030	0.039	0.049

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

	Last	H1	H2	H3	H4	H5
España	0.009	0.008	0.012	0.019	0.024	0.032
Andalucía	0.005	0.008	0.007	0.014	0.019	0.027
Aragón	0.005	0.008	0.010	0.018	0.022	0.030
Asturias	0.003	0.006	0.006	0.013	0.016	0.022
Islas Baleares	0.003	0.006	0.010	0.017	0.017	0.024
Canarias	0.005	0.008	0.011	0.020	0.024	0.032
Cantabria	0.001	0.005	0.006	0.013	0.015	0.022
Castilla.La.Mancha	0.003	0.005	0.007	0.011	0.011	0.015
Castilla.y.León	0.000	0.004	0.005	0.009	0.008	0.010
Cataluña	0.032	0.007	0.021	0.031	0.040	0.056
Ceuta	0.000	0.004	0.006	0.013	0.014	0.018
Comunidad.Valenciana	0.003	0.006	0.005	0.012	0.015	0.021
Extremadura	0.002	0.005	0.006	0.012	0.013	0.017
Galicia	0.001	0.006	0.003	0.011	0.013	0.018
Madrid	0.002	0.007	0.008	0.016	0.018	0.025
Melilla	0.000	0.006	0.004	0.013	0.014	0.020
Murcia	0.004	0.007	0.005	0.012	0.019	0.026
Navarra	0.003	0.005	0.001	0.005	0.008	0.013
País.Vasco	0.004	0.007	0.006	0.013	0.016	0.021
La.Rioja	0.004	0.008	0.010	0.018	0.021	0.029

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

Fallecidos: España

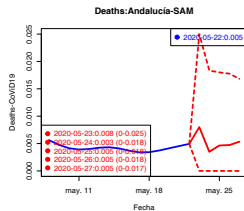
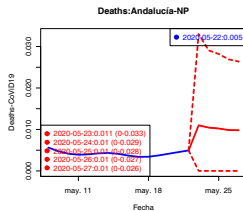
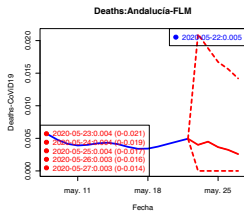
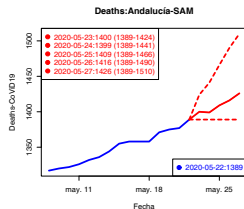
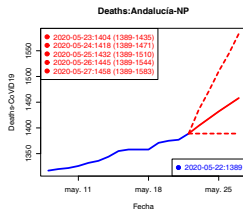
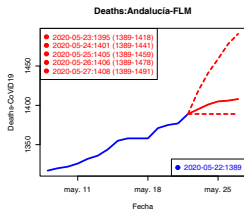


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

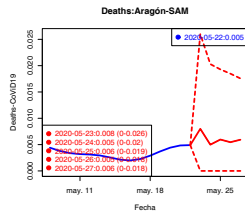
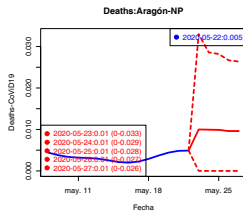
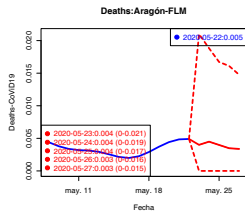
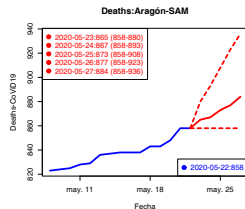
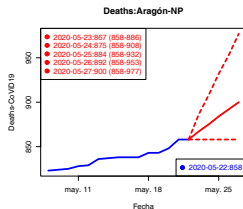
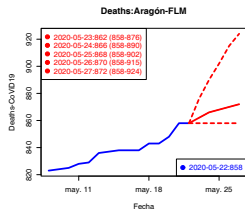
◀ Fallecidos

Fallecidos: Andalucía



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

Fallecidos: Aragón

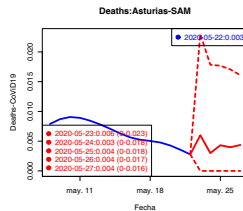
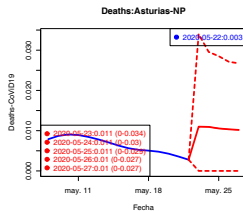
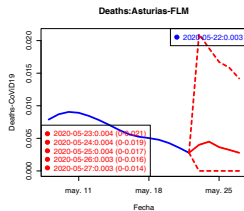
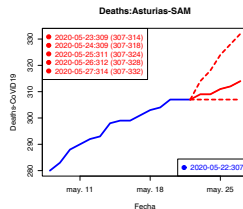
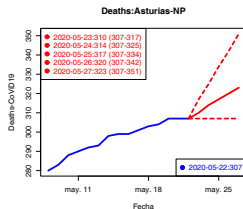
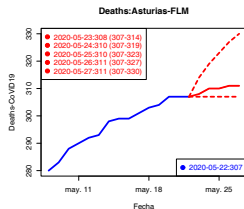


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Asturias

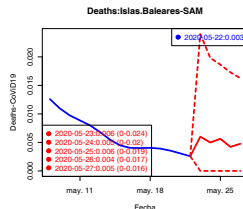
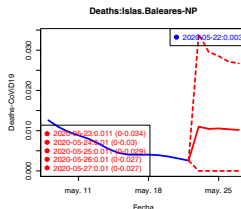
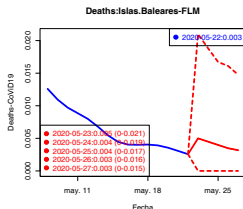
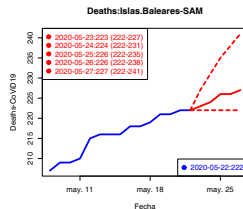
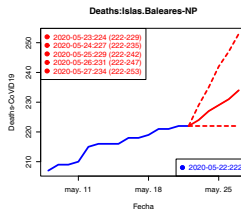
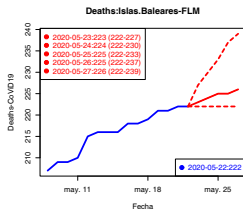


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

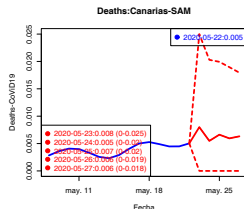
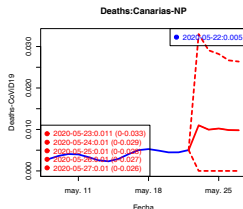
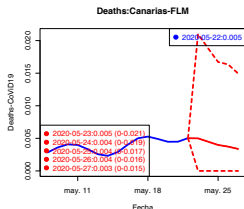
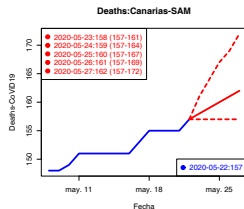
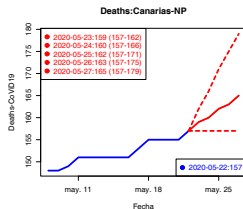
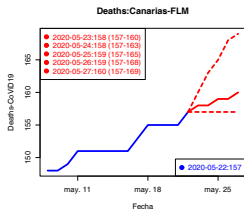
◀ Fallecidos

Fallecidos: Islas Baleares



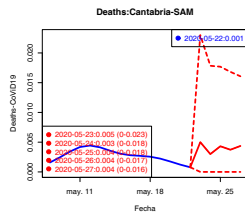
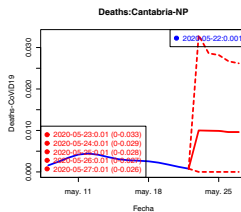
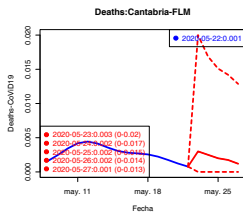
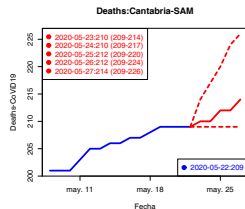
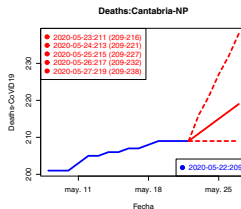
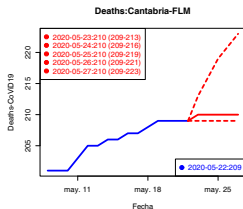
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Canarias



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

Fallecidos: Cantabria

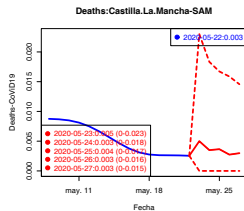
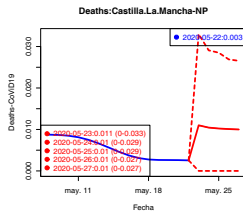
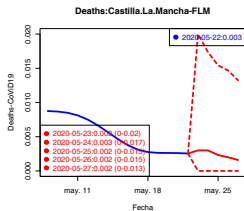
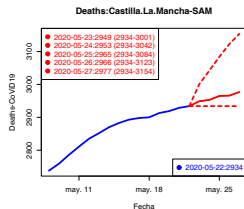
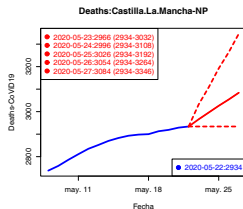
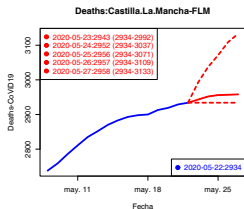


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla-La Mancha

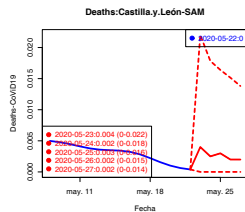
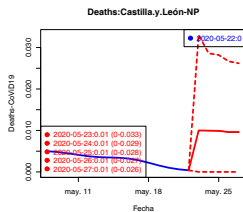
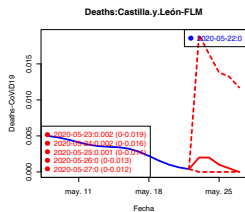
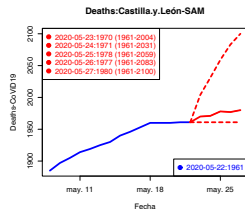
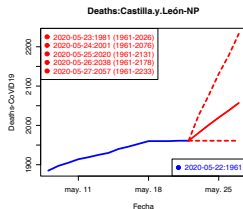
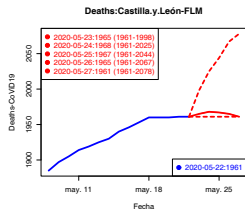


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla y León

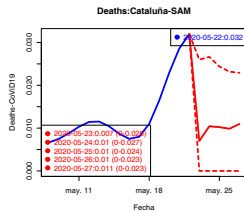
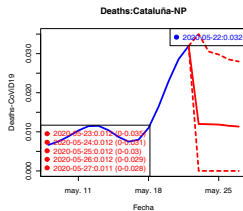
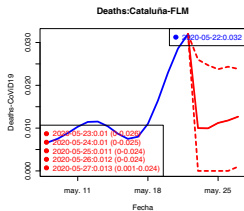
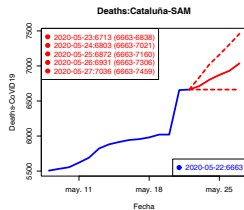
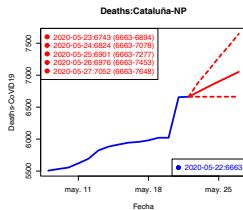
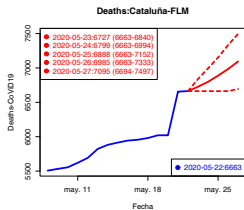


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cataluña

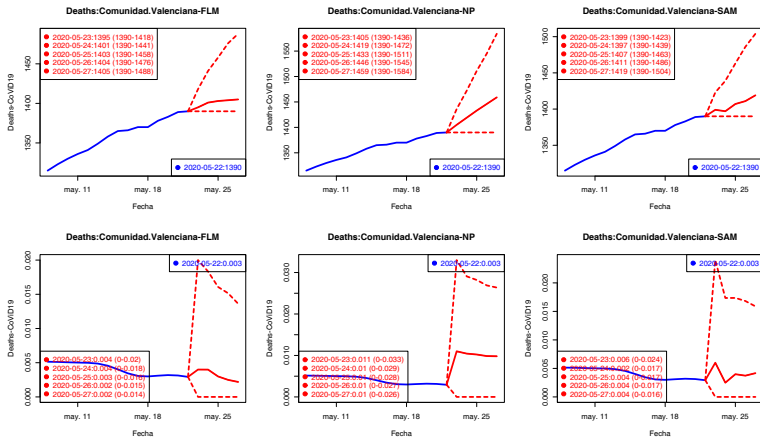


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: C. Valenciana

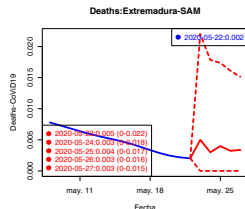
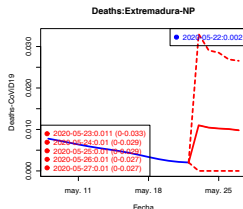
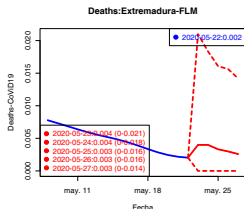
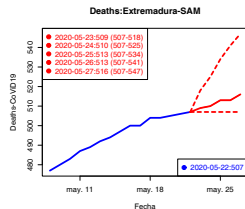
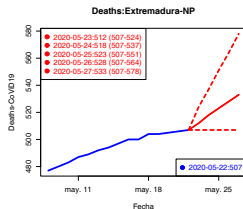
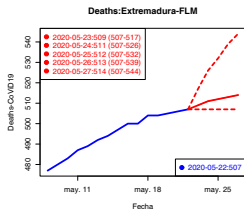


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Extremadura

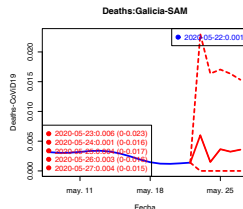
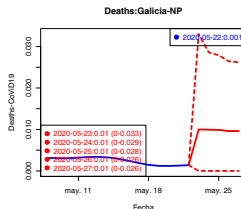
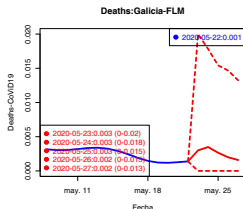
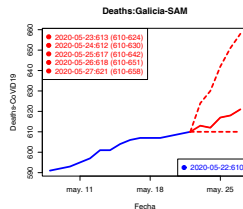
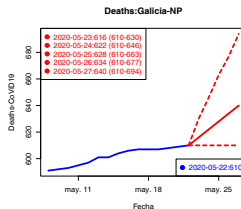
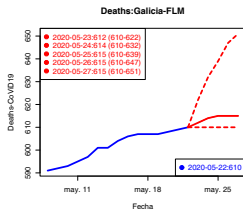


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

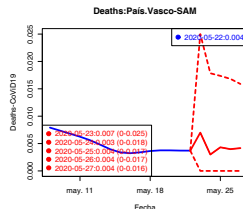
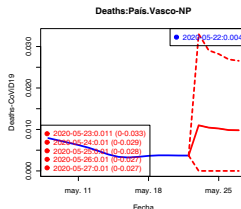
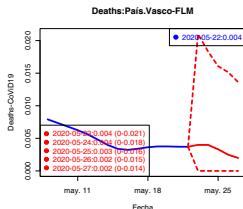
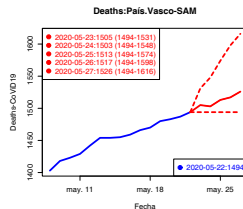
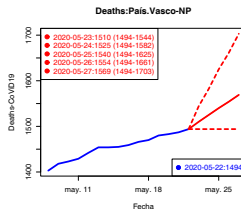
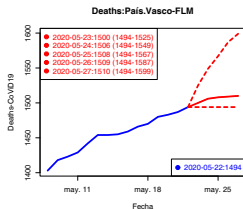
◀ Fallecidos

Fallecidos: Galicia



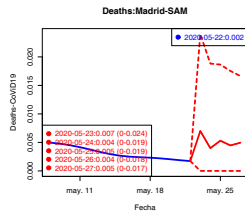
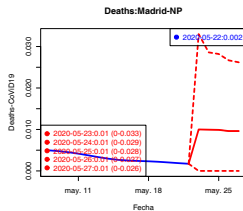
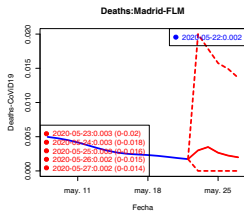
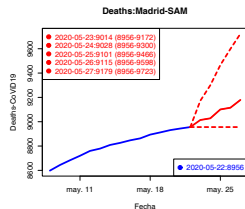
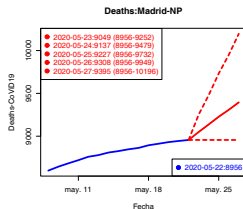
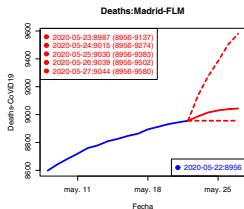
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: País Vasco



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

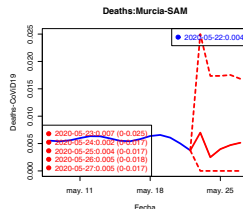
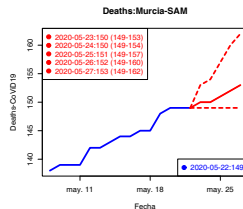
Fallecidos: Madrid



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

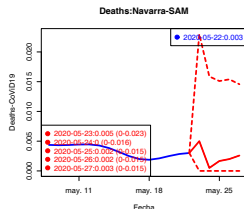
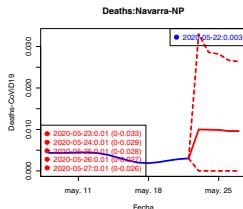
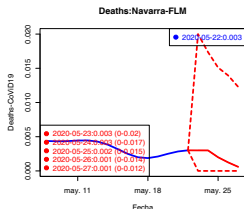
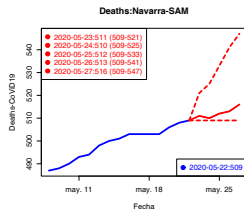
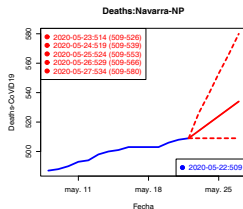
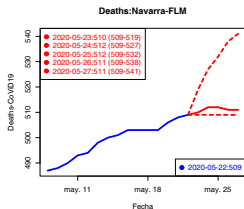
← Confirmados

← Fallecidos



◀ Confirmados ▶ Fallecidos

Fallecidos: Navarra

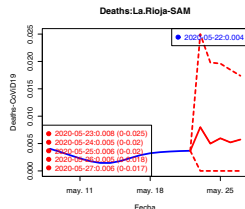
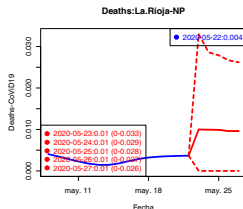
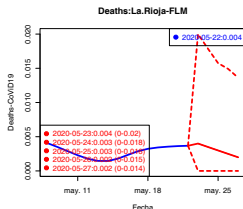
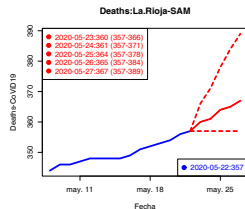
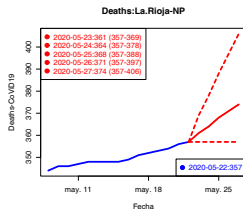
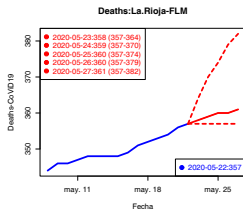


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: La Rioja

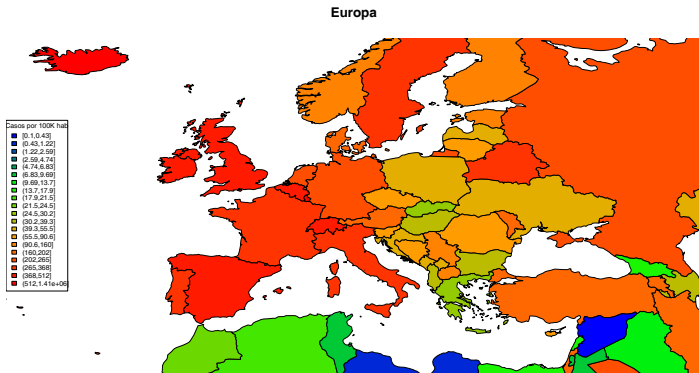


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

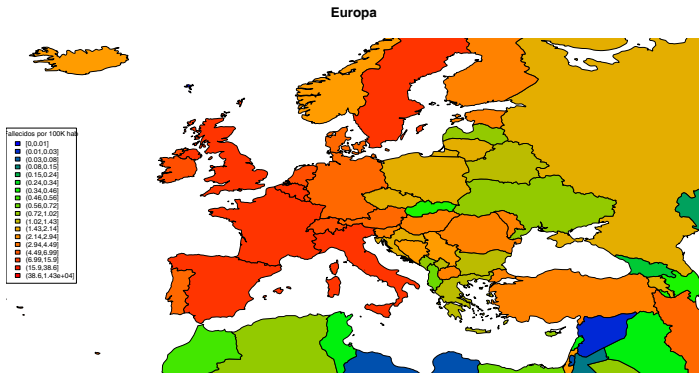
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 - Predicciones Fallecidos
- 3 Panorama internacional

Europa: Confirmados por 100K hab.

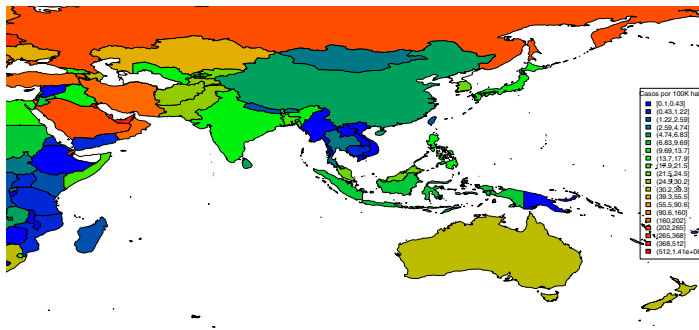


Europa: Fallecidos por 100K hab.



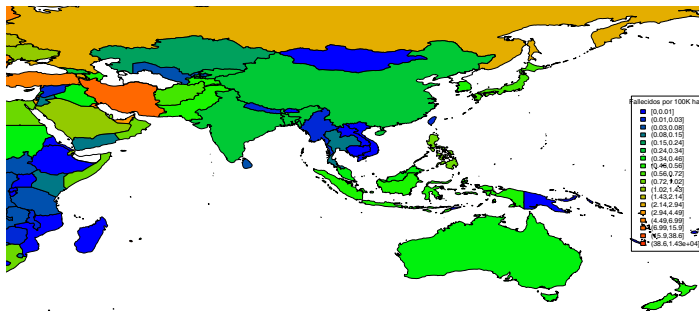
Asia y Oceanía: Casos por 100K hab.

Asia y Oceanía



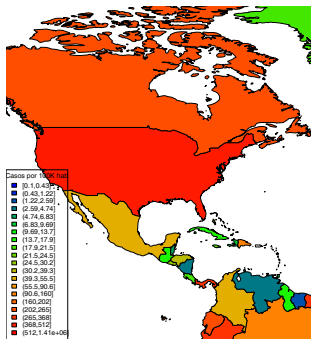
Asia y Oceanía: Fallecidos por 100K hab.

Asia y Oceanía



América: Casos por 100K hab.

América del Norte

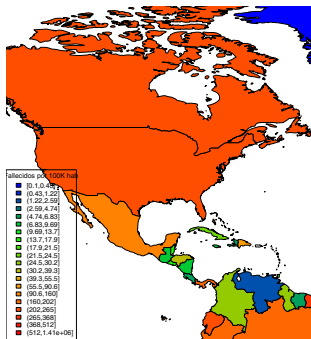


América del sur

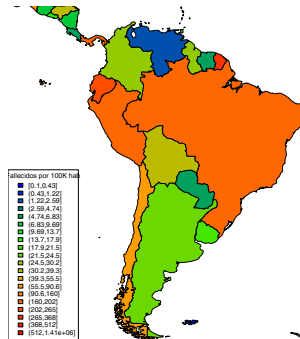


América: Fallecidos por 100K hab.

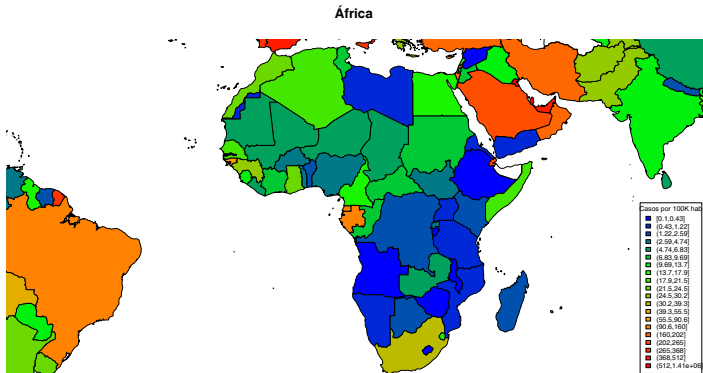
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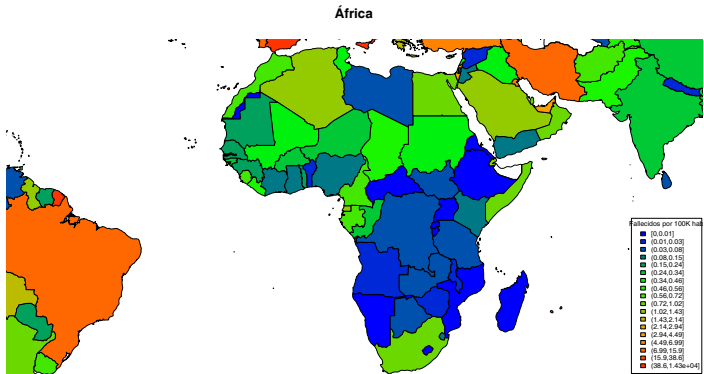
América del sur



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.