

Predicciones sobre CoViD-19

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DEPARTAMENTO DE ESTATÍSTICA,
ANÁLISE MATEMÁTICA E OPTIMIZACIÓN



- Predicciones

- Predicciones Fallecidos

Datos

Aplicación Shiny disponible en

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

Número de datos funcionales: 5674

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	0.001	0.001	0.001	0.001	0.001	0.001	0.511	0.728	0.519
H2	0.003	0.002	0.003	0.003	0.002	0.003	0.638	0.806	0.65
H3	0.006	0.004	0.006	0.006	0.004	0.006	0.684	0.827	0.695
H4	0.011	0.006	0.01	0.011	0.007	0.011	0.703	0.837	0.711
H5	0.017	0.01	0.017	0.02	0.012	0.019	0.711	0.84	0.72

Último dato: 2020-05-06 21:00 que se publica 2020-05-07 12:00.

Tabla Previsión Confirmados: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	256855	258702	260190	261237	262230	263137
Andalucía	14870	15050	15222	15384	15545	15716
Aragón	6516	6606	6688	6765	6846	6933
Asturias	3099	3139	3182	3227	3274	3323
Islas.Baleares	2023	2036	2047	2058	2068	2078
Canarias	2235	2243	2250	2256	2260	2264
Cantabria	2642	2663	2680	2695	2708	2722
Castilla.La.Mancha	22567	22922	23285	23637	23988	24364
Castilla.y.León	22537	22866	23193	23518	23858	24218
Cataluña	52505	52878	53218	53532	53827	54124
Ceuta	165	168	171	175	178	183
Comunidad.Valenciana	13311	13493	13674	13849	14024	14210
Extremadura	3808	3846	3879	3909	3937	3966
Galicia	10292	10414	10536	10659	10789	10927
Madrid	68662	68929	69119	69261	69385	69502
Melilla	132	133	134	135	136	136
Murcia	2192	2242	2296	2352	2415	2484
Navarra	7010	7149	7290	7429	7586	7760
País.Vasco	16959	17168	17363	17547	17740	17946
La.Rioja	5330	5357	5377	5396	5415	5432

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

Tabla Previsión Confirmados: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	256855	258375	259842	261265	262683	264092
Andalucía	14870	14987	15099	15208	15317	15424
Aragón	6516	6578	6638	6696	6754	6812
Asturias	3099	3130	3159	3188	3218	3246
Islas.Baleares	2023	2029	2034	2040	2046	2051
Canarias	2235	2240	2245	2250	2255	2260
Cantabria	2642	2660	2678	2695	2711	2728
Castilla.La.Mancha	22567	22803	23033	23257	23482	23705
Castilla.y.León	22537	22793	23043	23286	23530	23772
Cataluña	52505	52756	52999	53234	53469	53702
Ceuta	165	167	169	171	173	175
Comunidad.Valenciana	13311	13426	13537	13645	13754	13862
Extremadura	3808	3826	3843	3859	3875	3892
Galicia	10292	10349	10404	10458	10511	10565
Madrid	68662	68856	69047	69236	69427	69623
Melilla	132	133	133	134	135	136
Murcia	2192	2215	2238	2261	2284	2308
Navarra	7010	7111	7209	7307	7407	7507
País.Vasco	16959	17125	17286	17441	17597	17751
La.Rioja	5330	5353	5376	5398	5419	5441

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

Tabla Previsión Confirmados: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	256855	258945	260660	262107	263657	265087
Andalucía	14870	15036	15184	15312	15423	15531
Aragón	6516	6595	6648	6684	6728	6743
Asturias	3099	3134	3175	3217	3260	3315
Islas.Baleares	2023	2032	2039	2046	2052	2058
Canarias	2235	2239	2241	2243	2246	2248
Cantabria	2642	2657	2665	2667	2666	2660
Castilla.La.Mancha	22567	22908	23255	23583	23885	24205
Castilla.y.León	22537	22851	23130	23388	23659	23942
Cataluña	52505	52811	53072	53308	53542	53800
Ceuta	165	168	171	173	176	178
Comunidad.Valenciana	13311	13473	13623	13759	13888	14018
Extremadura	3808	3841	3865	3886	3904	3913
Galicia	10292	10404	10505	10603	10713	10821
Madrid	68662	68838	68920	68954	69064	69106
Melilla	132	133	133	134	135	136
Murcia	2192	2241	2293	2343	2398	2455
Navarra	7010	7146	7257	7352	7467	7565
País.Vasco	16959	17146	17284	17387	17496	17575
La.Rioja	5330	5349	5359	5366	5373	5378

Cuadro: Previsión número de casos confirmados: Mod. Aditivo - Horizonte 1 – 5 días.

Tabla Ratio Incr. Confirmados: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.010	0.007	0.013	0.017	0.021	0.024
Andalucía	0.012	0.012	0.024	0.035	0.045	0.057
Aragón	0.014	0.014	0.026	0.038	0.051	0.064
Asturias	0.014	0.013	0.027	0.041	0.057	0.072
Islas.Baleares	0.005	0.006	0.012	0.017	0.022	0.027
Canarias	0.002	0.004	0.007	0.009	0.011	0.013
Cantabria	0.006	0.008	0.014	0.020	0.025	0.030
Castilla.La.Mancha	0.016	0.016	0.032	0.047	0.063	0.080
Castilla.y.León	0.016	0.015	0.029	0.044	0.059	0.075
Cataluña	0.007	0.007	0.014	0.020	0.025	0.031
Ceuta	0.023	0.019	0.039	0.059	0.081	0.106
Comunidad.Valenciana	0.014	0.014	0.027	0.040	0.054	0.067
Extremadura	0.008	0.010	0.019	0.027	0.034	0.041
Galicia	0.013	0.012	0.024	0.036	0.048	0.062
Madrid	0.003	0.004	0.007	0.009	0.011	0.012
Melilla	0.005	0.007	0.014	0.021	0.027	0.033
Murcia	0.029	0.023	0.048	0.073	0.102	0.133
Navarra	0.025	0.020	0.040	0.060	0.082	0.107
País.Vasco	0.013	0.012	0.024	0.035	0.046	0.058
La.Rioja	0.004	0.005	0.009	0.012	0.016	0.019

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	0.010	0.006	0.012	0.017	0.023	0.028
Andalucía	0.012	0.008	0.015	0.023	0.030	0.037
Aragón	0.014	0.010	0.019	0.028	0.037	0.045
Asturias	0.014	0.010	0.019	0.029	0.038	0.048
Islas.Baleares	0.005	0.003	0.006	0.008	0.011	0.014
Canarias	0.002	0.002	0.004	0.007	0.009	0.011
Cantabria	0.006	0.007	0.014	0.020	0.026	0.033
Castilla.La.Mancha	0.016	0.010	0.021	0.031	0.041	0.050
Castilla.y.León	0.016	0.011	0.022	0.033	0.044	0.055
Cataluña	0.007	0.005	0.009	0.014	0.018	0.023
Ceuta	0.023	0.012	0.025	0.037	0.049	0.062
Comunidad.Valenciana	0.014	0.009	0.017	0.025	0.033	0.041
Extremadura	0.008	0.005	0.009	0.013	0.018	0.022
Galicia	0.013	0.006	0.011	0.016	0.021	0.027
Madrid	0.003	0.003	0.006	0.008	0.011	0.014
Melilla	0.005	0.006	0.011	0.016	0.021	0.026
Murcia	0.029	0.011	0.021	0.031	0.042	0.053
Navarra	0.025	0.014	0.028	0.042	0.057	0.071
País.Vasco	0.013	0.010	0.019	0.028	0.038	0.047
La.Rioja	0.004	0.004	0.009	0.013	0.017	0.021

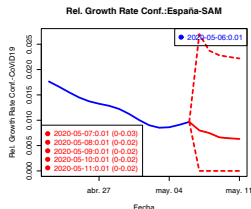
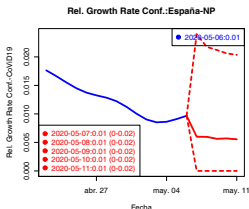
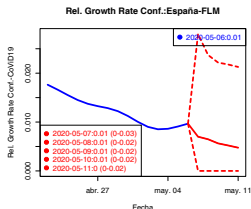
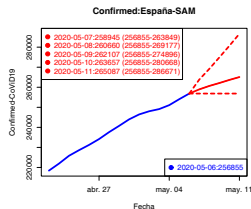
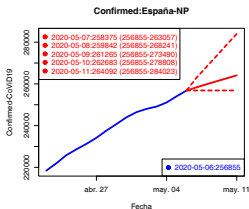
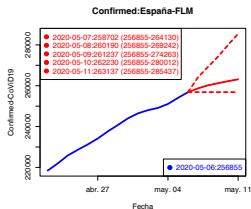
Cuadro: Previsión Ratio Incr. Confirmados: Mod. No Paramétrico - Horizonte 1
– 5 días.

Tabla Ratio Incr. Confirmados: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	0.010	0.008	0.015	0.020	0.026	0.032
Andalucía	0.012	0.011	0.021	0.030	0.037	0.044
Aragón	0.014	0.012	0.020	0.026	0.033	0.035
Asturias	0.014	0.011	0.024	0.038	0.052	0.070
Islas.Baleares	0.005	0.004	0.008	0.011	0.014	0.017
Canarias	0.002	0.002	0.003	0.004	0.005	0.006
Cantabria	0.006	0.006	0.009	0.009	0.009	0.007
Castilla.La.Mancha	0.016	0.015	0.030	0.045	0.058	0.073
Castilla.y.León	0.016	0.014	0.026	0.038	0.050	0.062
Cataluña	0.007	0.006	0.011	0.015	0.020	0.025
Ceuta	0.023	0.018	0.034	0.047	0.063	0.078
Comunidad.Valenciana	0.014	0.012	0.023	0.034	0.043	0.053
Extremadura	0.008	0.009	0.015	0.021	0.025	0.028
Galicia	0.013	0.011	0.021	0.030	0.041	0.051
Madrid	0.003	0.003	0.004	0.004	0.006	0.006
Melilla	0.005	0.005	0.011	0.017	0.023	0.029
Murcia	0.029	0.022	0.046	0.069	0.094	0.120
Navarra	0.025	0.019	0.035	0.049	0.065	0.079
País.Vasco	0.013	0.011	0.019	0.025	0.032	0.036
La.Rioja	0.004	0.004	0.005	0.007	0.008	0.009

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

Confirmados: España

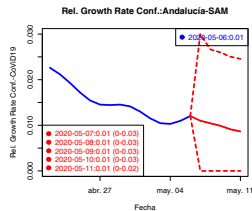
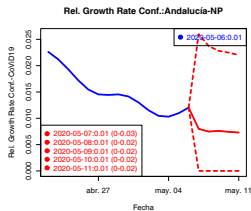
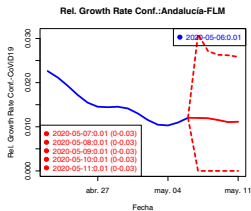
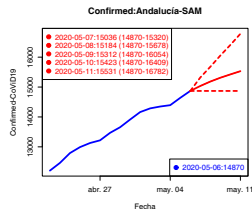
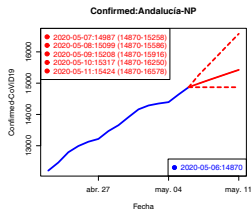
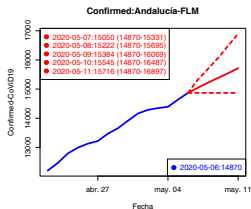


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Andalucía

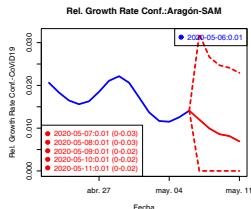
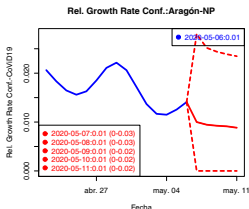
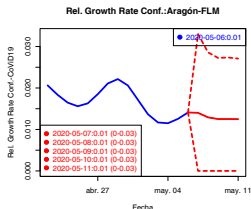
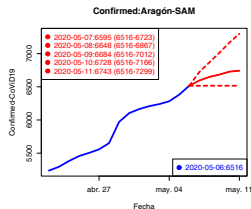
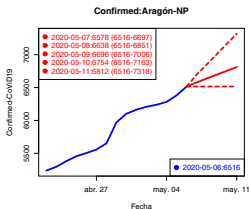
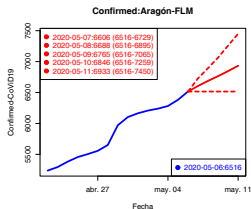


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Aragón



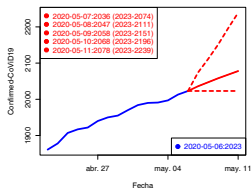
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

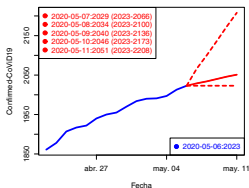
◀ Fallecidos

Confirmados: Islas Baleares

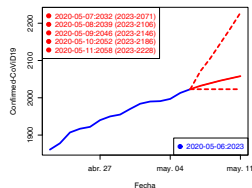
Confirmed:Islas.Baleares-FLM



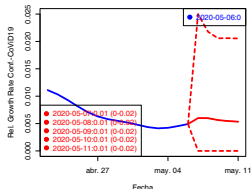
Confirmed:Islas.Baleares-NP



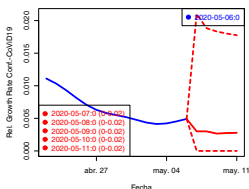
Confirmed:Islas.Baleares-SAM



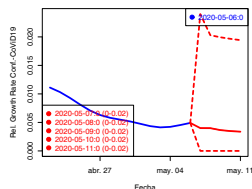
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Rel. Growth Rate Conf.:Islas.Baleares-NP



Rel. Growth Rate Conf.:Islas.Baleares-SAM

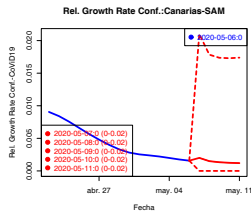
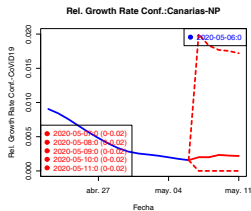
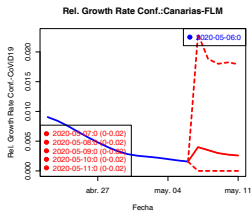
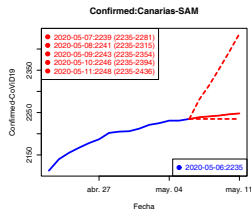
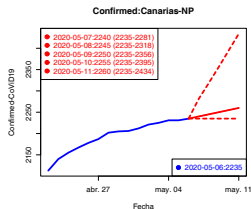
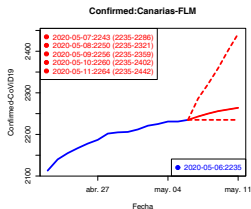


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Canarias

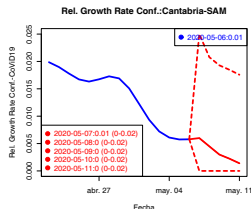
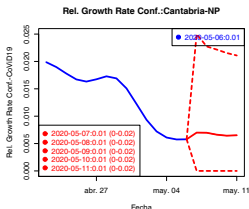
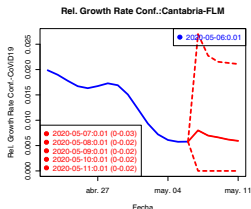
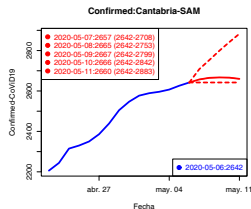
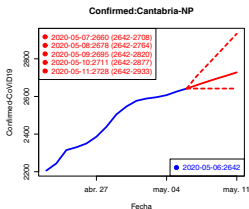
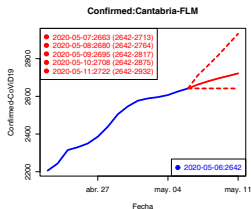


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cantabria

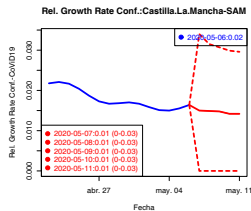
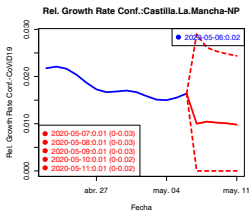
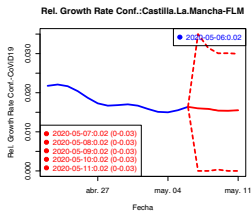
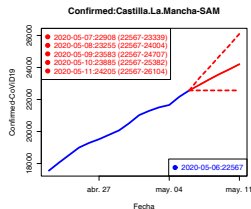
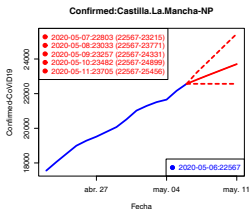
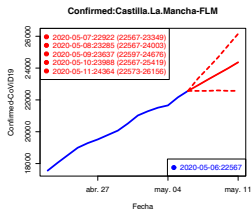


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla-La Mancha

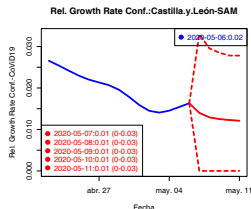
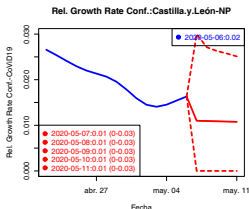
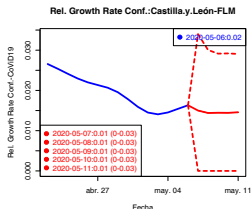
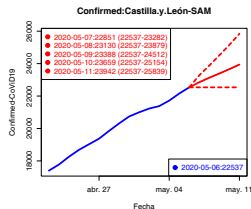
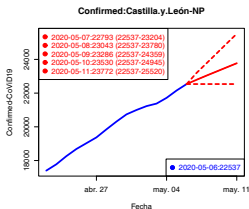
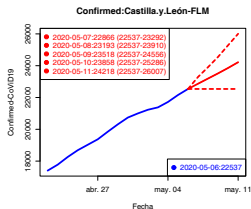


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

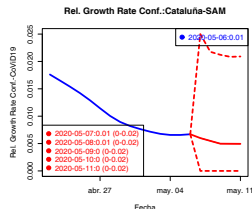
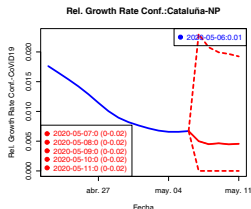
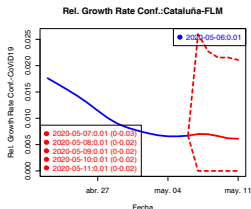
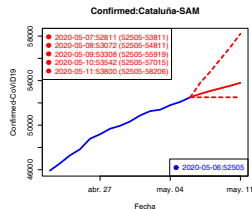
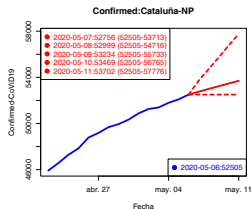
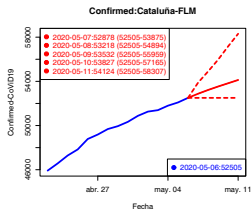


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cataluña

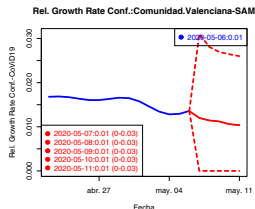
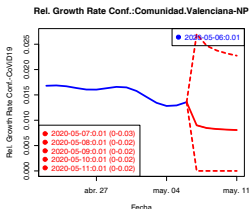
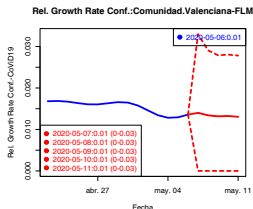
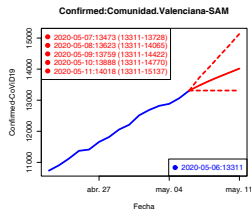
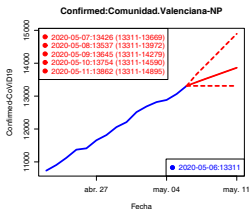
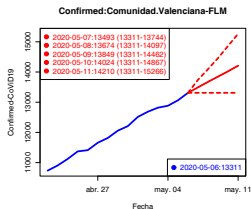


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: C. Valenciana

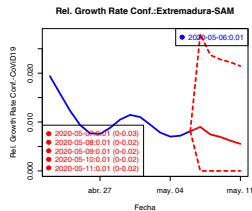
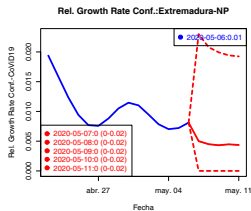
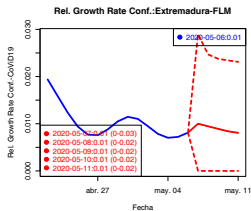
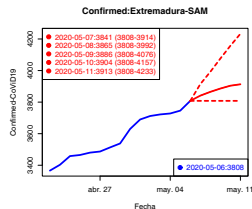
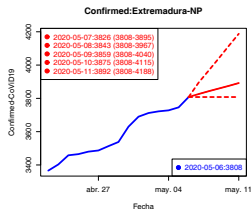
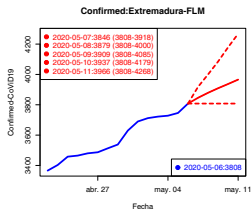


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Extremadura



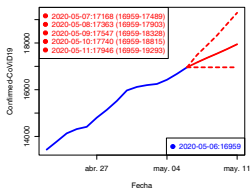
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

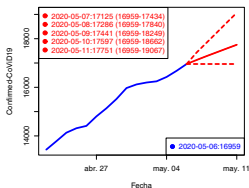
◀ Fallecidos

Confirmados: País Vasco

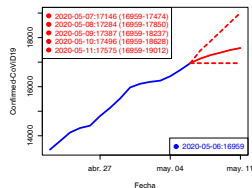
Confirmed:País.Vasco-FLM



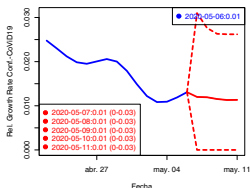
Confirmed:País.Vasco-NP



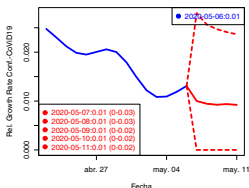
Confirmed:País.Vasco-SAM



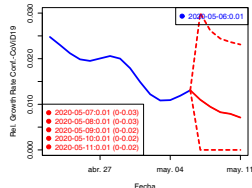
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



Rel. Growth Rate Conf.:País.Vasco-SAM



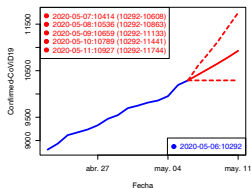
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

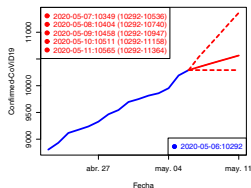
◀ Fallecidos

Confirmados: Galicia

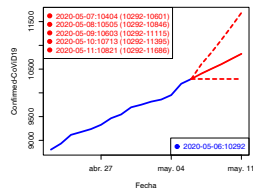
Confirmed:Galicia-FLM



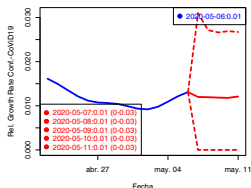
Confirmed:Galicia-NP



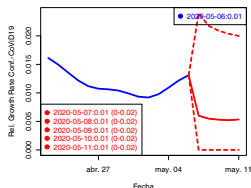
Confirmed:Galicia-SAM



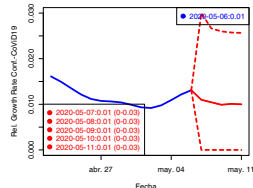
Rel. Growth Rate Conf.:Galicia-FLM



Rel. Growth Rate Conf.:Galicia-NP



Rel. Growth Rate Conf.:Galicia-SAM

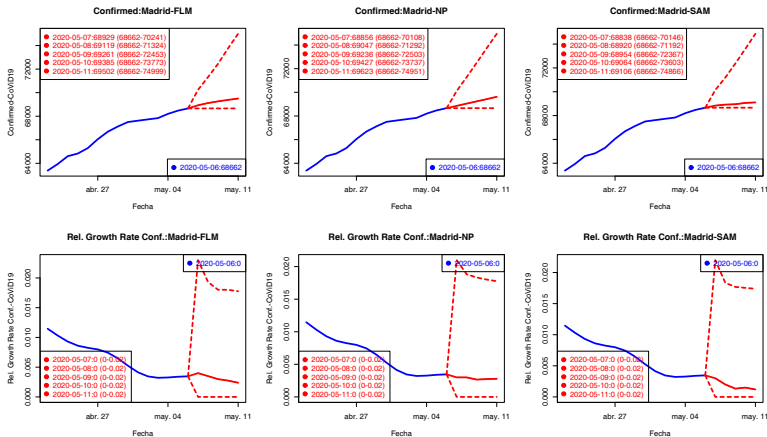


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

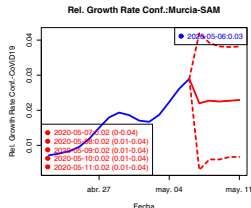
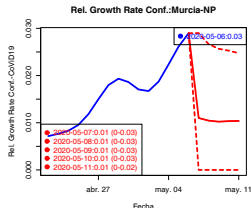
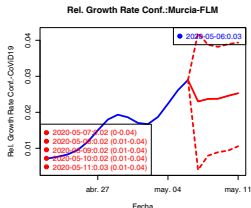
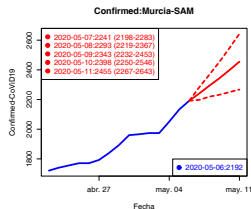
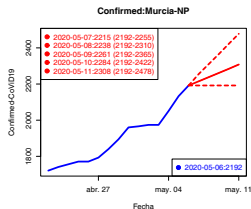
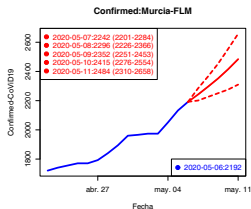


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

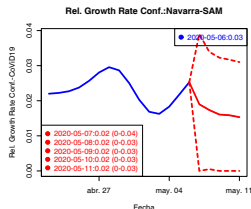
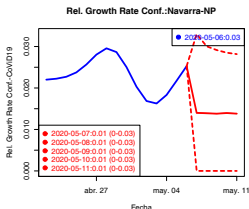
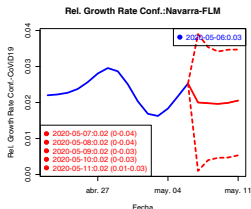
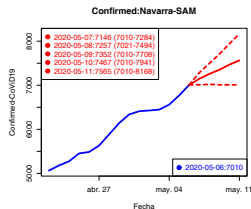
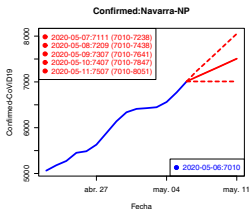
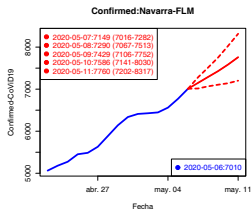


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

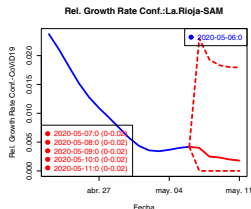
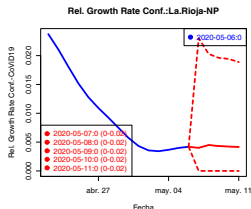
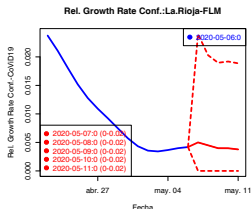
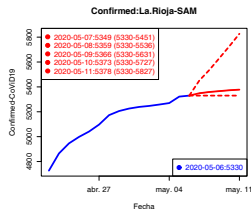
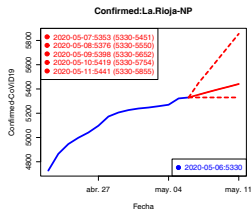
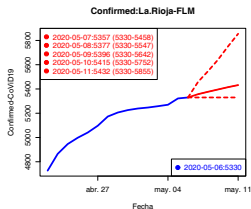


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ 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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- Predicciones

2 Fallecidos

- Predicciones Fallecidos

Modelos para fallecidos por CoViD-19

Número de datos funcionales: 8156

Países/Regiones distintos incorporados: 105

Predicciones:

▶ España

► Andalucía

▶ Aragón

► Asturias

▶ I. Balears

► **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	0.001	0.001	0.001	0.001	0.494	0.485	0.525
H2	0.002	0.002	0.002	0.002	0.002	0.002	0.608	0.593	0.66
H3	0.004	0.005	0.004	0.005	0.005	0.004	0.666	0.648	0.723
H4	0.007	0.007	0.006	0.01	0.009	0.007	0.704	0.681	0.76
H5	0.01	0.011	0.008	0.016	0.014	0.011	0.72	0.694	0.777

Tabla Previsión Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	26070	26329	26549	26737	26898	27057
Andalucía	1294	1308	1320	1330	1337	1345
Aragón	800	809	817	824	830	835
Asturias	292	295	298	301	303	305
Islas.Baleares	201	203	205	206	207	208
Canarias	144	146	147	148	149	149
Cantabria	200	202	203	204	205	205
Castilla.La.Mancha	2677	2709	2739	2766	2790	2814
Castilla.y.León	1864	1882	1898	1912	1925	1937
Cataluña	5394	5456	5511	5560	5606	5652
Ceuta	4	4	4	4	4	4
Comunidad.Valenciana	1303	1315	1326	1335	1342	1350
Extremadura	467	471	474	476	478	480
Galicia	586	595	602	608	616	624
Madrid	8504	8571	8625	8666	8697	8727
Melilla	2	2	2	2	2	2
Murcia	137	138	139	140	141	142
Navarra	480	485	489	493	496	500
País.Vasco	1383	1398	1411	1422	1430	1439
La.Rioja	338	340	341	342	342	343

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

Tabla Previsión Fallecidos: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	26070	26481	26867	27238	27592	27945
Andalucía	1294	1315	1334	1353	1371	1389
Aragón	800	813	825	836	847	858
Asturias	292	297	302	307	312	316
Islas Baleares	201	204	207	210	213	216
Canarias	144	146	148	150	152	154
Cantabria	200	203	206	209	212	214
Castilla La Mancha	2677	2721	2762	2801	2839	2876
Castilla y León	1864	1893	1921	1947	1973	1998
Cataluña	5394	5484	5568	5649	5727	5804
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1303	1323	1342	1360	1378	1395
Extremadura	467	474	481	487	494	500
Galicia	586	599	612	624	636	648
Madrid	8504	8631	8750	8865	8974	9083
Melilla	2	2	2	2	2	2
Murcia	137	139	141	143	145	146
Navarra	480	488	495	501	508	514
País Vasco	1383	1405	1426	1446	1465	1484
La Rioja	338	343	348	353	357	361

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

Tabla Previsión Fallecidos: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	26070	26281	26505	26811	27036	27277
Andalucía	1294	1305	1315	1330	1339	1350
Aragón	800	806	813	823	833	845
Asturias	292	296	300	300	302	304
Islas.Baleares	201	203	204	206	208	209
Canarias	144	145	146	148	149	150
Cantabria	200	201	203	204	206	208
Castilla.La.Mancha	2677	2705	2733	2766	2794	2825
Castilla.y.León	1864	1881	1897	1922	1938	1958
Cataluña	5394	5446	5500	5541	5583	5623
Ceuta	4	4	4	4	4	4
Comunidad.Valenciana	1303	1313	1325	1344	1357	1372
Extremadura	467	470	473	479	484	488
Galicia	586	593	596	595	598	600
Madrid	8504	8553	8616	8737	8815	8894
Melilla	2	2	2	2	2	2
Murcia	137	138	140	143	145	147
Navarra	480	485	489	498	503	509
País.Vasco	1383	1394	1405	1422	1434	1449
La.Rioja	338	340	342	345	346	347

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.008	0.010	0.018	0.026	0.032	0.038
Andalucía	0.008	0.011	0.020	0.027	0.034	0.039
Aragón	0.014	0.011	0.021	0.030	0.037	0.044
Asturias	0.011	0.012	0.022	0.031	0.039	0.046
Islas.Baleares	0.006	0.010	0.019	0.026	0.031	0.036
Canarias	0.007	0.011	0.019	0.027	0.032	0.037
Cantabria	0.006	0.009	0.016	0.021	0.024	0.027
Castilla.La.Mancha	0.011	0.012	0.023	0.033	0.042	0.051
Castilla.y.León	0.009	0.010	0.018	0.026	0.032	0.039
Cataluña	0.011	0.012	0.022	0.031	0.039	0.048
Ceuta	0.000	0.003	0.006	0.007	0.007	0.006
Comunidad.Valenciana	0.008	0.009	0.018	0.024	0.030	0.036
Extremadura	0.005	0.008	0.015	0.020	0.023	0.027
Galicia	0.010	0.015	0.027	0.038	0.051	0.064
Madrid	0.005	0.008	0.014	0.019	0.023	0.026
Melilla	0.000	0.004	0.006	0.006	0.006	0.005
Murcia	0.006	0.008	0.016	0.023	0.029	0.036
Navarra	0.009	0.010	0.019	0.027	0.034	0.041
País.Vasco	0.010	0.011	0.020	0.028	0.034	0.040
La.Rioja	0.003	0.006	0.010	0.012	0.013	0.014

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

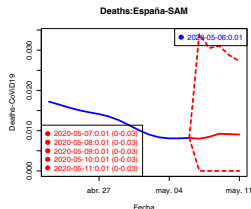
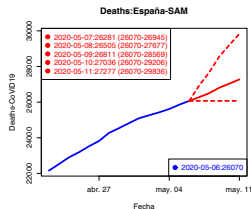
	Last	H1	H2	H3	H4	H5
España	0.008	0.016	0.031	0.045	0.058	0.072
Andalucía	0.008	0.016	0.031	0.046	0.060	0.074
Aragón	0.014	0.016	0.031	0.045	0.059	0.072
Asturias	0.011	0.018	0.035	0.051	0.067	0.083
Islas.Baleares	0.006	0.016	0.031	0.046	0.059	0.073
Canarias	0.007	0.016	0.030	0.044	0.058	0.071
Cantabria	0.006	0.016	0.030	0.045	0.058	0.072
Castilla.La.Mancha	0.011	0.016	0.032	0.046	0.060	0.074
Castilla.y.León	0.009	0.016	0.031	0.045	0.058	0.072
Cataluña	0.011	0.017	0.032	0.047	0.062	0.076
Ceuta	0.000	0.014	0.027	0.039	0.051	0.063
Comunidad.Valenciana	0.008	0.015	0.030	0.044	0.057	0.071
Extremadura	0.005	0.015	0.030	0.044	0.057	0.070
Galicia	0.010	0.022	0.044	0.065	0.085	0.106
Madrid	0.005	0.015	0.029	0.042	0.055	0.068
Melilla	0.000	0.014	0.027	0.039	0.051	0.063
Murcia	0.006	0.015	0.029	0.042	0.055	0.068
Navarra	0.009	0.016	0.030	0.045	0.058	0.072
País.Vasco	0.010	0.016	0.031	0.045	0.059	0.073
La.Rioja	0.003	0.015	0.029	0.043	0.056	0.069

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

Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

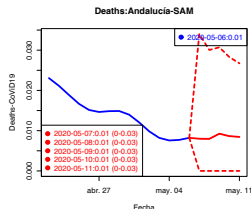
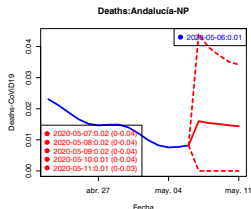
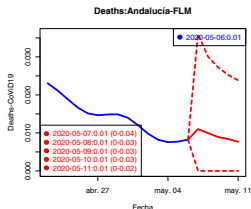
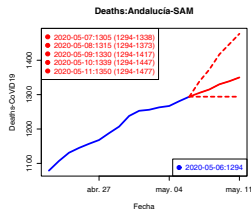
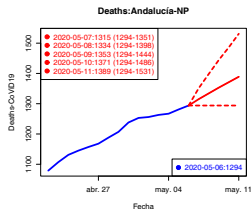
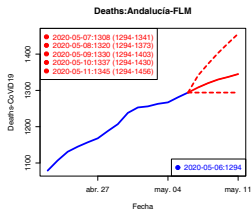
	Last	H1	H2	H3	H4	H5
España	0.008	0.008	0.017	0.028	0.037	0.046
Andalucía	0.008	0.008	0.016	0.028	0.035	0.043
Aragón	0.014	0.008	0.016	0.028	0.042	0.056
Asturias	0.011	0.014	0.026	0.028	0.035	0.041
Islas.Baleares	0.006	0.008	0.016	0.026	0.033	0.038
Canarias	0.007	0.007	0.015	0.025	0.034	0.041
Cantabria	0.006	0.007	0.013	0.022	0.030	0.039
Castilla.La.Mancha	0.011	0.011	0.021	0.033	0.044	0.055
Castilla.y.León	0.009	0.009	0.018	0.031	0.040	0.051
Cataluña	0.011	0.010	0.020	0.027	0.035	0.043
Ceuta	0.000	0.005	0.012	0.042	0.055	0.071
Comunidad.Valenciana	0.008	0.008	0.017	0.031	0.042	0.053
Extremadura	0.005	0.006	0.013	0.026	0.035	0.044
Galicia	0.010	0.012	0.017	0.016	0.020	0.024
Madrid	0.005	0.006	0.013	0.027	0.037	0.046
Melilla	0.000	0.004	0.009	0.032	0.041	0.052
Murcia	0.006	0.010	0.022	0.043	0.059	0.075
Navarra	0.009	0.010	0.018	0.037	0.047	0.061
País.Vasco	0.010	0.008	0.016	0.028	0.037	0.047
La.Rioja	0.003	0.005	0.011	0.020	0.023	0.027

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



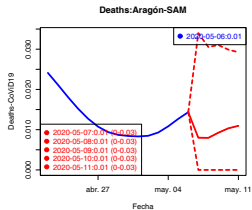
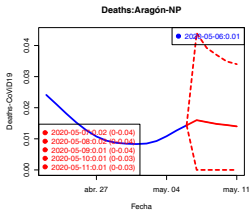
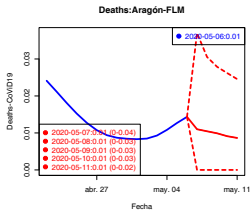
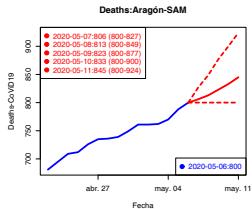
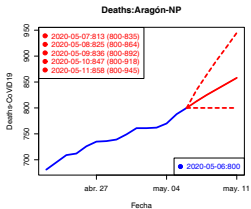
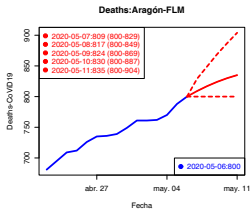
◀ Confirmados ▶ Fallecidos

Fallecidos: Andalucía



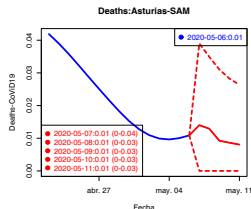
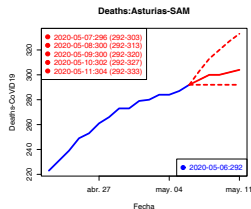
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Aragón

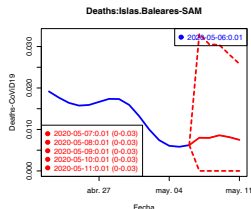
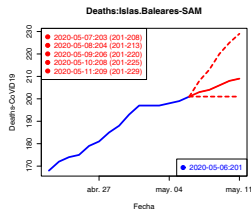


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

○○

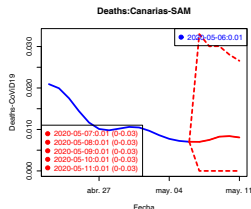
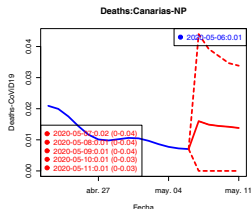
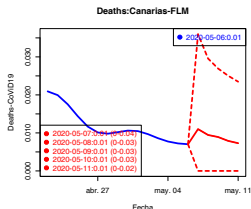
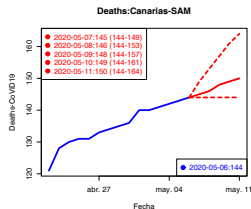
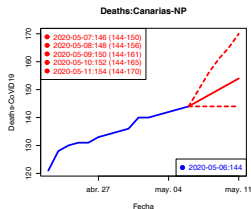
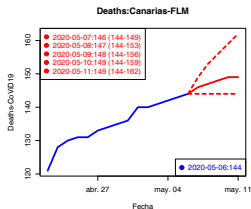


◀ Confirmados

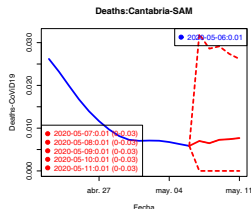
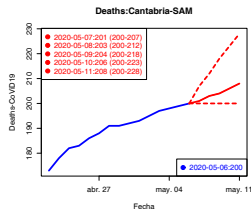


◀ Confirmados ◀ Fallecidos

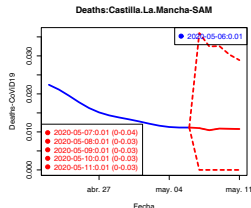
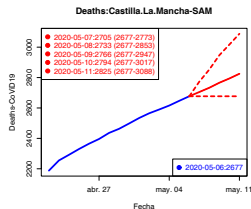
Fallecidos: Canarias



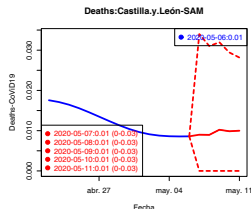
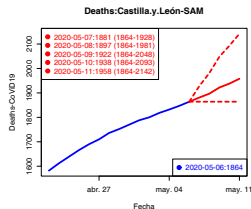
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.



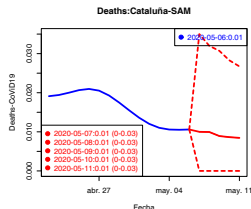
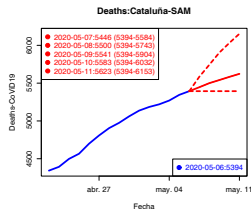
◀ Confirmados ▶ Fallecidos



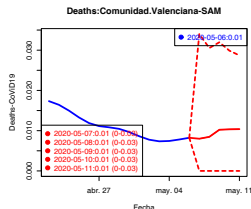
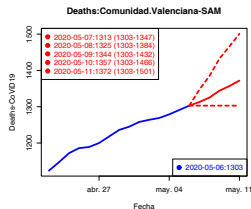
◀ Confirmados ▶ Fallecidos



◀ Confirmados ◀ Fallecidos

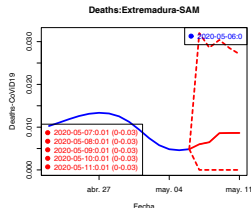
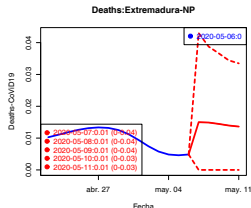
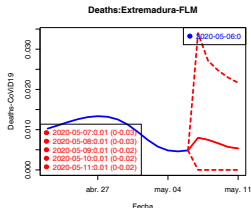
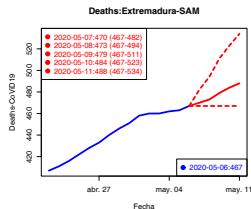
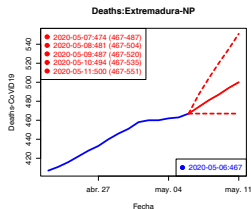
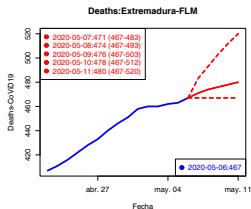


◀ Confirmados ▶ Fallecidos



◀ Confirmados ▶ Fallecidos

Fallecidos: Extremadura

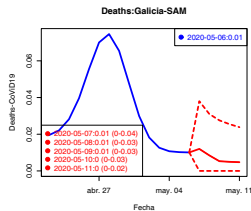
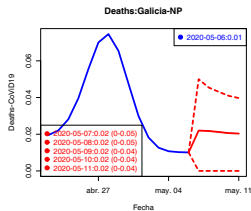
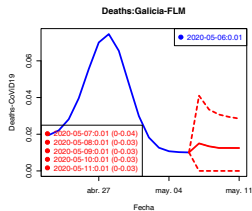
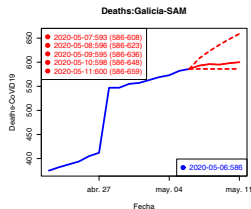
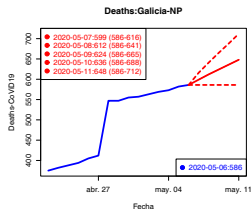
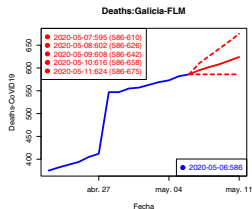


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

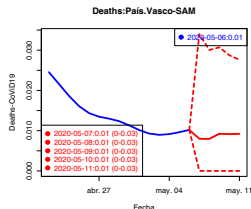
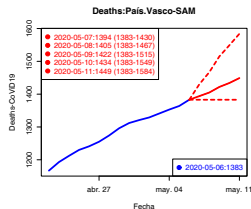
Fallecidos: Galicia



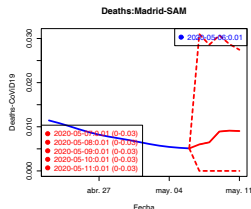
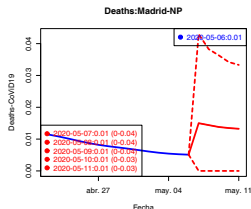
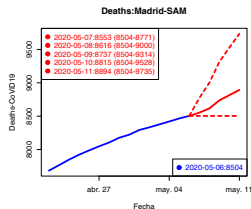
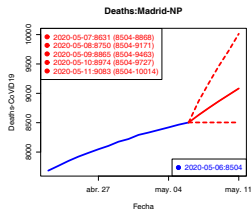
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

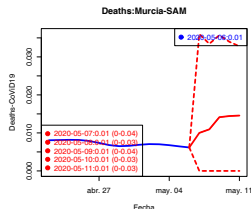
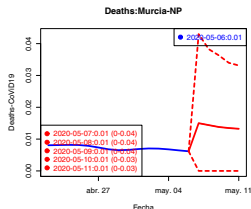
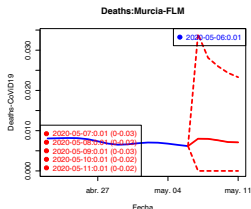
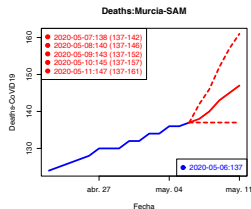
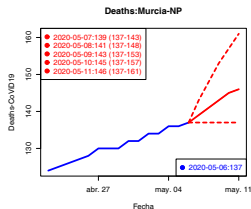
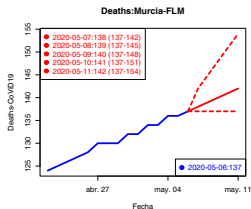


◀ Confirmados ◀ Fallecidos

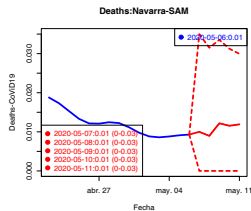
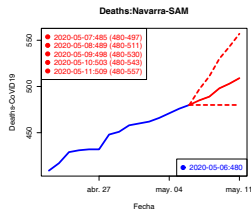


◀ Confirmados ▶ Fallecidos

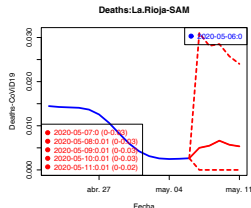
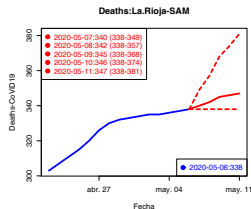
Fallecidos: Murcia



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



◀ Confirmados ◀ Fallecidos



◀ Confirmados ▶ Fallecidos

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.