

Predicciones sobre CoViD-19

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DEPARTAMENTO DE ESTATÍSTICA,
ANÁLISE MATEMÁTICA E OPTIMIZACIÓN



- Predicciones

- Predicciones Fallecidos

3 Panorama internacional

Datos

Aplicación Shiny disponible en

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

Último dato Confirmados CCAA: 03/02/2021

Fuente: https://cnecovid.isciii.es/covid19/resources/casos_tecnica_ccaa.csv

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

	$10^2 \sigma_R^2$			$10^2 \sigma_R^2(rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0.009	0	0	0	0	0	0.67	0.739	0.68
H2	0	0	0	0	0	0	0.678	0.824	0.698
H3	0.1	0	0	0	0	0	0.77	0.851	0.783
H4	0.1	0.1	0.1	0.1	0.1	0.1	0.81	0.865	0.82
H5	0.1	0.1	0.1	0.1	0.1	0.095	0.812	0.854	0.82

Último dato fichero: 03/02/2021. Los datos del último día pueden no estar actualizados

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	0.0070	0.0050	0.0100	0.0150	0.0190	0.0230
Andalucía	0.0100	0.0080	0.0170	0.0250	0.0330	0.0400
Aragón	0.0050	0.0040	0.0080	0.0120	0.0150	0.0190
Asturias	0.0080	0.0050	0.0100	0.0150	0.0190	0.0230
Islas Baleares	0.0040	0.0040	0.0060	0.0090	0.0120	0.0140
Canarias	0.0050	0.0040	0.0090	0.0130	0.0170	0.0200
Cantabria	0.0040	0.0030	0.0060	0.0080	0.0110	0.0130
Castilla.La.Mancha	0.0060	0.0040	0.0070	0.0100	0.0120	0.0130
Castilla.y.León	0.0070	0.0050	0.0090	0.0140	0.0180	0.0210
Cataluña	0.0040	0.0040	0.0080	0.0110	0.0150	0.0180
Ceuta	0.0070	0.0060	0.0120	0.0190	0.0260	0.0330
Comunidad.Valenciana	0.0090	0.0060	0.0120	0.0160	0.0200	0.0220
Extremadura	0.0050	0.0040	0.0060	0.0080	0.0100	0.0110
Galicia	0.0080	0.0050	0.0090	0.0130	0.0170	0.0190
Madrid	0.0060	0.0050	0.0100	0.0150	0.0200	0.0250
Melilla	0.0060	0.0050	0.0090	0.0140	0.0180	0.0220
Murcia	0.0050	0.0040	0.0060	0.0080	0.0100	0.0110
Navarra	0.0030	0.0030	0.0070	0.0100	0.0130	0.0150
País.Vasco	0.0050	0.0040	0.0090	0.0130	0.0180	0.0220
La.Rioja	0.0060	0.0040	0.0070	0.0100	0.0130	0.0160

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	0.007	0.008	0.015	0.023	0.030	0.038
Andalucía	0.010	0.010	0.020	0.031	0.041	0.052
Aragón	0.005	0.006	0.011	0.016	0.022	0.028
Asturias	0.008	0.010	0.019	0.028	0.038	0.047
Islas.Baleares	0.004	0.006	0.012	0.017	0.023	0.028
Canarias	0.005	0.006	0.012	0.018	0.024	0.030
Cantabria	0.004	0.005	0.011	0.016	0.021	0.026
Castilla.La.Mancha	0.006	0.007	0.014	0.021	0.028	0.035
Castilla.y.León	0.007	0.008	0.016	0.024	0.033	0.040
Cataluña	0.004	0.005	0.010	0.015	0.020	0.025
Ceuta	0.007	0.008	0.015	0.022	0.030	0.038
Comunidad.Valenciana	0.009	0.011	0.022	0.031	0.039	0.047
Extremadura	0.005	0.007	0.013	0.020	0.027	0.034
Galicia	0.008	0.010	0.019	0.029	0.038	0.049
Madrid	0.006	0.007	0.014	0.021	0.028	0.034
Melilla	0.006	0.008	0.015	0.022	0.030	0.037
Murcia	0.005	0.007	0.013	0.020	0.027	0.033
Navarra	0.003	0.004	0.009	0.013	0.017	0.021
País.Vasco	0.005	0.006	0.011	0.016	0.022	0.028
La.Rioja	0.006	0.008	0.015	0.022	0.030	0.037

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

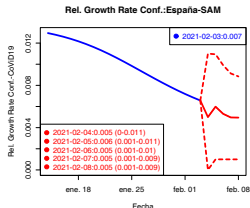
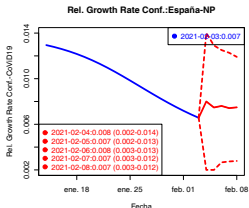
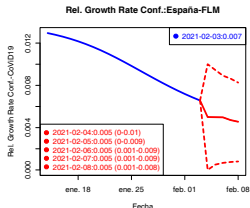
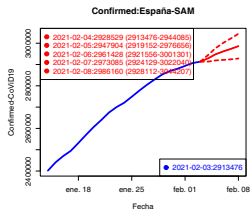
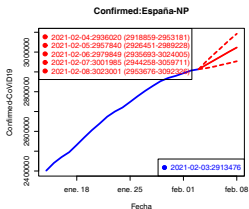
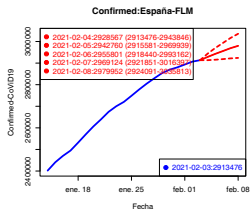
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	0.007	0.005	0.012	0.016	0.020	0.025
Andalucía	0.010	0.009	0.018	0.026	0.033	0.040
Aragón	0.005	0.004	0.010	0.013	0.016	0.020
Asturias	0.008	0.006	0.017	0.021	0.023	0.028
Islas.Baleares	0.004	0.004	0.006	0.011	0.014	0.018
Canarias	0.005	0.004	0.010	0.013	0.017	0.021
Cantabria	0.004	0.003	0.007	0.010	0.012	0.015
Castilla.La.Mancha	0.006	0.005	0.011	0.014	0.017	0.020
Castilla.y.León	0.007	0.005	0.012	0.017	0.021	0.025
Cataluña	0.004	0.004	0.008	0.011	0.014	0.018
Ceuta	0.007	0.006	0.012	0.018	0.024	0.031
Comunidad.Valenciana	0.009	0.009	0.014	0.020	0.025	0.030
Extremadura	0.005	0.005	0.008	0.012	0.016	0.018
Galicia	0.008	0.006	0.012	0.017	0.021	0.025
Madrid	0.006	0.005	0.011	0.016	0.020	0.025
Melilla	0.006	0.005	0.013	0.017	0.020	0.025
Murcia	0.005	0.005	0.008	0.012	0.016	0.018
Navarra	0.003	0.003	0.007	0.010	0.012	0.015
País.Vasco	0.005	0.004	0.011	0.015	0.019	0.023
La.Rioja	0.006	0.004	0.011	0.014	0.017	0.020

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

Confirmados: España

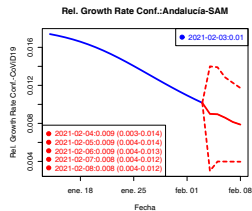
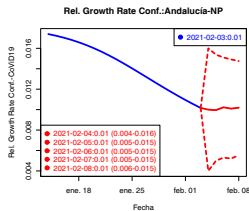
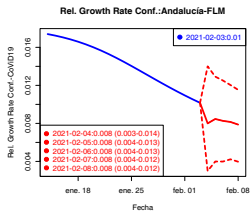
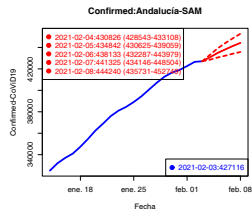
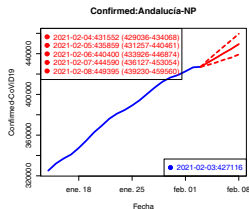
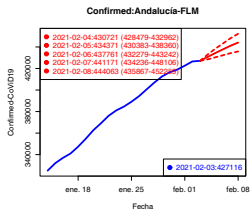


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Andalucía

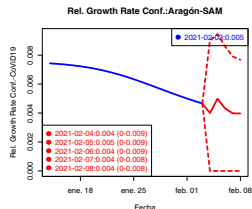
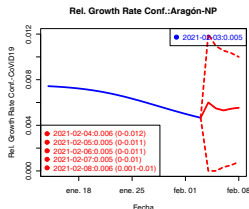
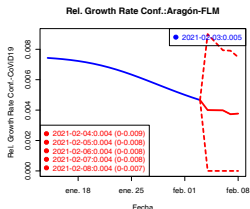
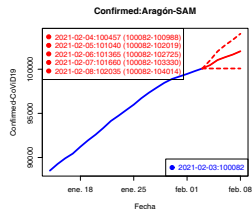
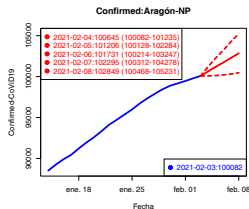
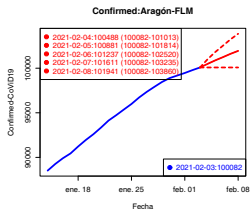


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Aragón

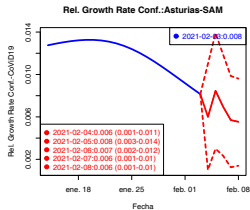
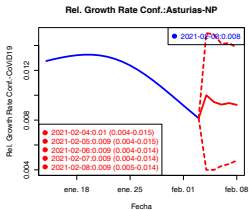
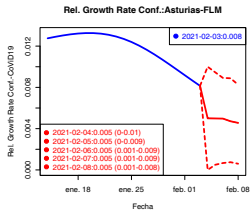
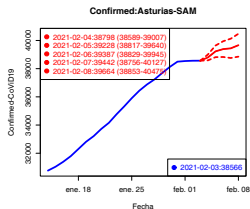
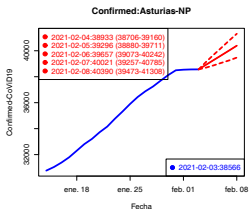
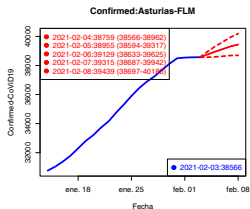


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Asturias

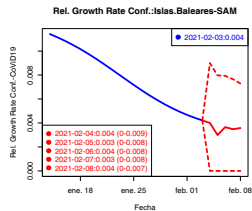
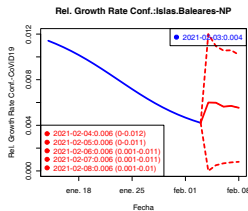
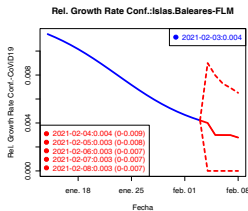
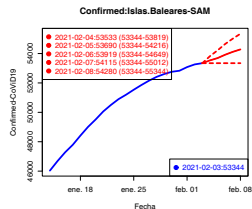
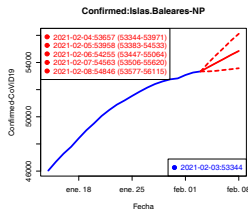
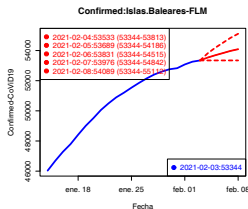


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Islas Baleares

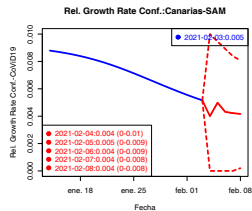
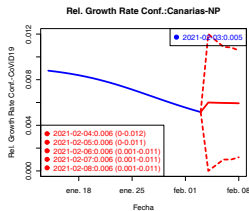
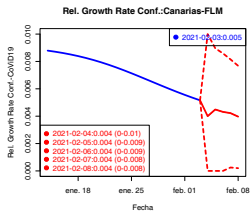
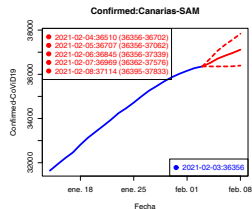
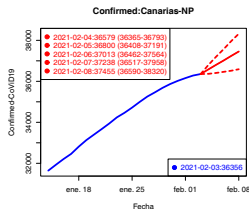
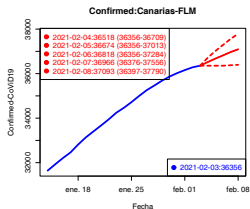


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Canarias

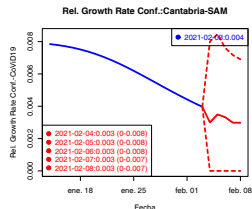
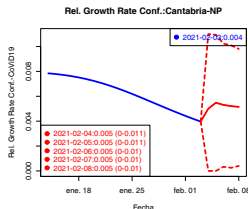
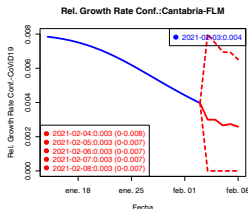
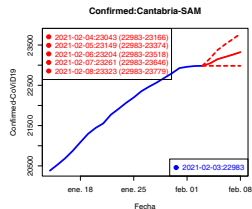
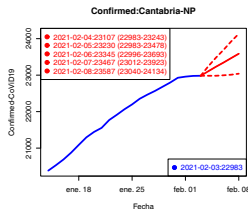
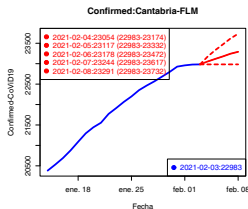


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cantabria

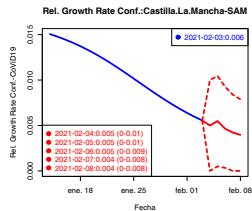
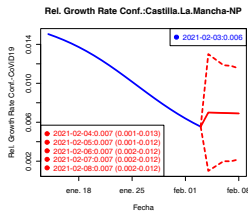
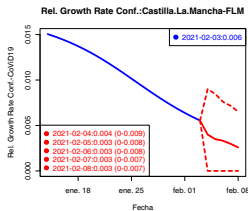
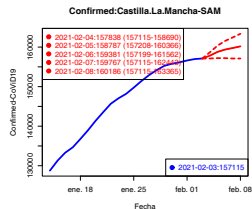
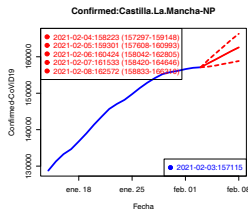
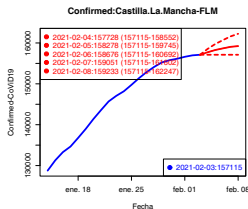


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla-La Mancha

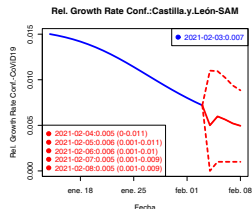
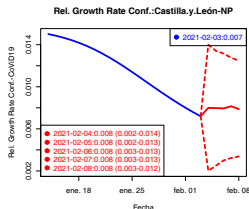
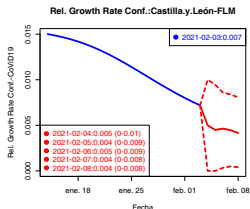
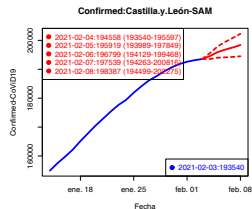
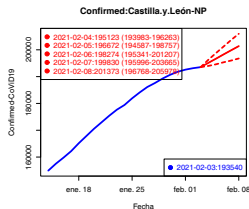
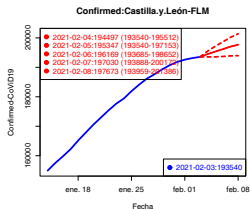


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

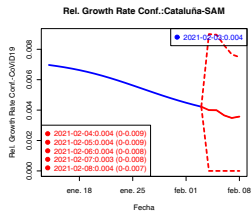
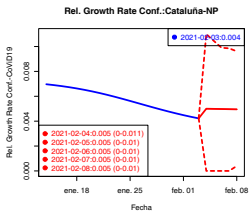
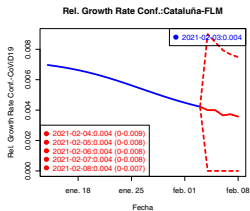
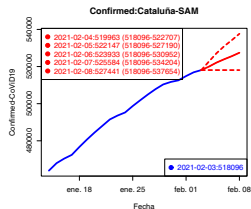
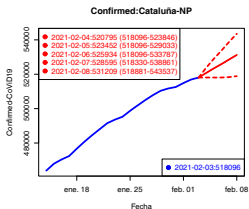
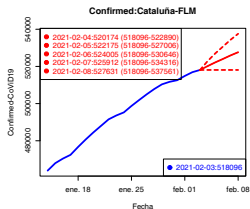
◀ Fallecidos

Confirmados: Castilla y León



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

Confirmados: Cataluña



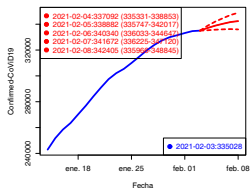
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

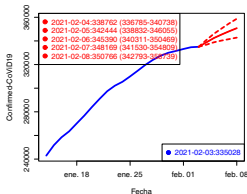
◀ Fallecidos

Confirmados: C. Valenciana

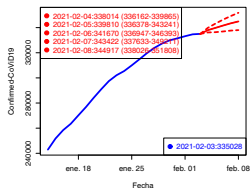
Confirmed:Comunidad.Valenciana-FLM



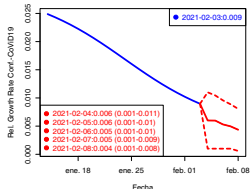
Confirmed:Comunidad.Valenciana-NP



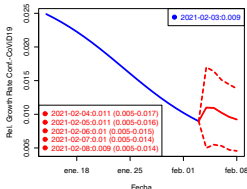
Confirmed:Comunidad.Valenciana-SAM



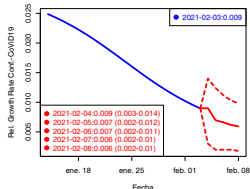
Rel. Growth Rate Conf.:Comunidad.Valenciana-FLM



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



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

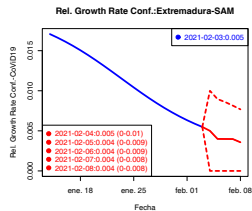
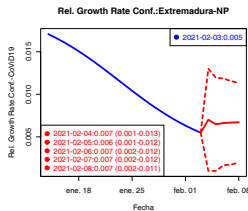
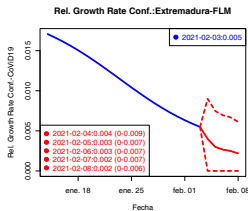
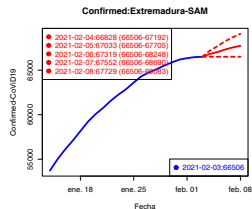
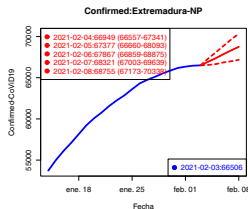
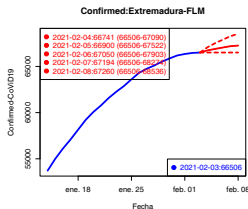


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Extremadura

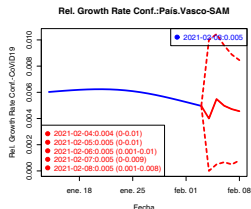
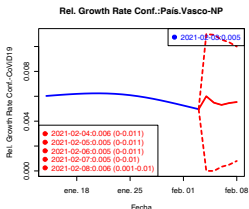
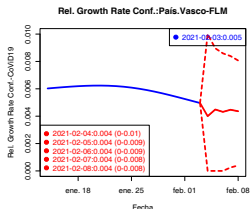
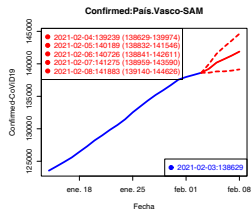
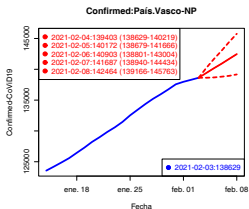
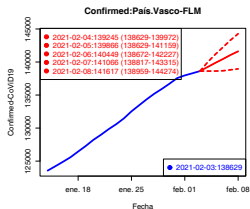


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: País Vasco

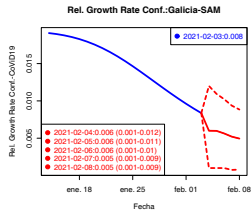
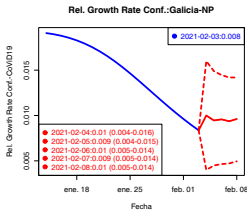
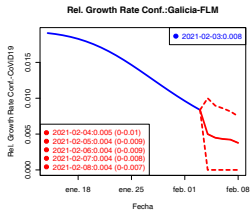
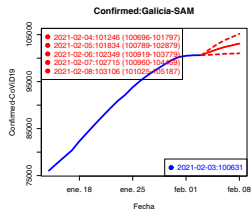
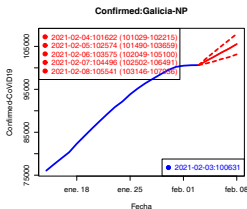
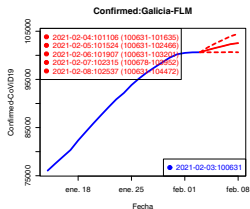


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Galicia

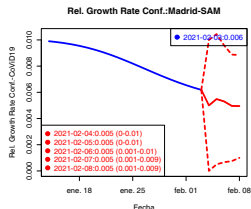
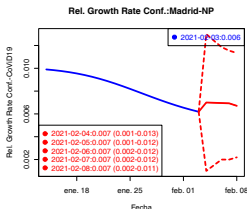
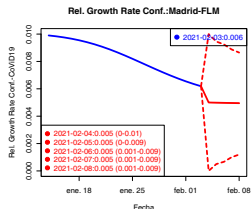
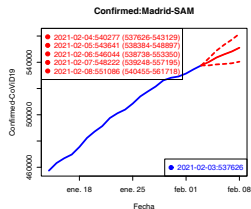
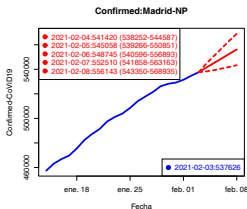
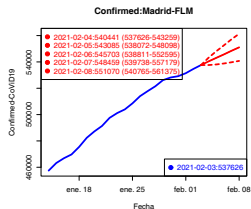


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

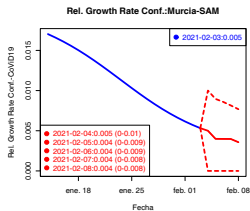
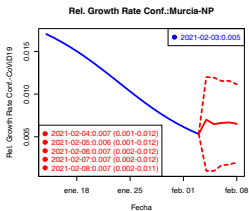
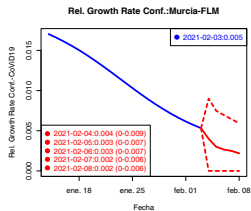
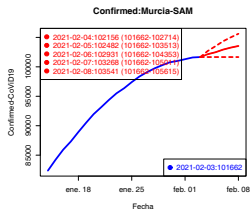
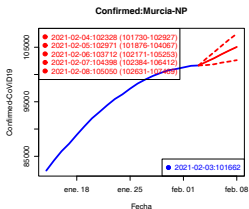
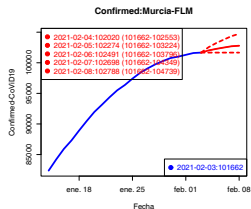


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

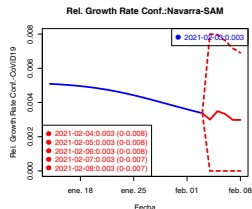
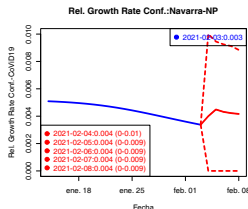
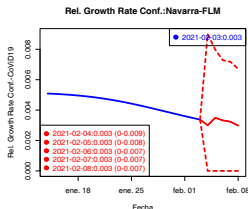
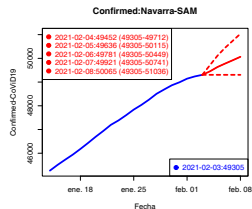
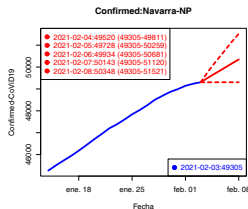
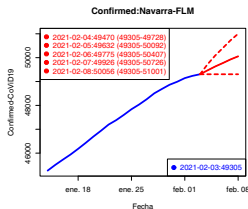


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Navarra

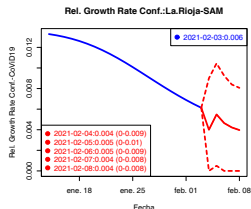
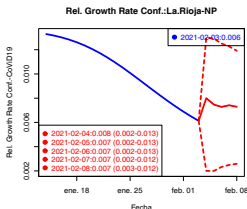
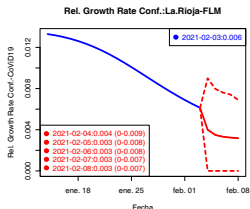
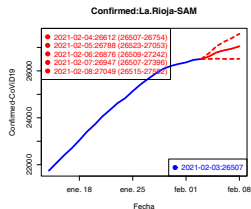
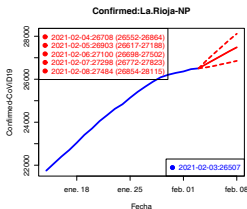
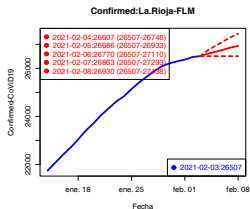


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



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

← Confirmados

← Fallecidos

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

Modelos para fallecidos por CoViD-19

Último dato: **03/02/2021** Fuente: https://cnecovid.isciii.es/covid19/resources/casos_hosp_uci_def_sexo_edad_provres.csv

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

	$10^2 \sigma_R^2$			$10^2 \sigma_R^2(rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0	0.004	0	0	0	0	0.657	0.632	0.676
H2	0	0	0	0	0	0	0.708	0.675	0.722
H3	0	0.034	0.03	0	0.014	0	0.667	0.638	0.676
H4	0.035	0.04	0	0	0	0	0.762	0.725	0.768
H5	0	0.1	0	0	0	0	0.797	0.756	0.803

Tabla Previsión Fallecidos: Mod. Lineal.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	60438	60720	60983	61321	61571	61805
Andalucía	6581	6626	6668	6721	6764	6806
Aragón	2987	3001	3014	3030	3043	3056
Asturias	1558	1568	1577	1588	1598	1607
Islas Baleares	617	620	624	627	630	632
Canarias	530	533	535	537	539	541
Cantabria	464	466	467	470	471	473
Castilla-La Mancha	4834	4850	4864	4886	4900	4910
Castilla y León	5739	5764	5788	5817	5838	5858
Cataluña	9316	9329	9338	9352	9360	9366
Ceuta	74	75	76	76	77	77
Comunidad Valenciana	5152	5215	5277	5354	5409	5457
Extremadura	1511	1525	1538	1556	1569	1583
Galicia	1860	1883	1907	1934	1956	1980
Madrid	12838	12859	12872	12894	12911	12924
Melilla	54	55	55	56	56	57
Murcia	1190	1206	1223	1245	1261	1278
Navarra	1041	1044	1046	1050	1052	1054
País Vasco	3427	3436	3443	3456	3463	3469
La Rioja	665	669	674	678	682	686

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

Tabla Previsión Fallecidos: Mod. No Paramétrico.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	60438	60750	61057	61394	61696	61999
Andalucía	6581	6629	6676	6724	6769	6816
Aragón	2987	3000	3012	3027	3039	3052
Asturias	1558	1566	1574	1582	1590	1598
Islas Baleares	617	621	624	628	632	635
Canarias	530	533	537	540	543	546
Cantabria	464	466	468	470	473	475
Castilla-La Mancha	4834	4857	4880	4905	4928	4951
Castilla y León	5739	5761	5782	5807	5829	5851
Cataluña	9316	9340	9362	9387	9411	9438
Ceuta	74	75	75	76	76	77
Comunidad Valenciana	5152	5227	5306	5382	5451	5523
Extremadura	1511	1525	1540	1555	1569	1584
Galicia	1860	1878	1897	1916	1934	1953
Madrid	12838	12876	12913	12955	12993	13035
Melilla	54	54	55	55	55	55
Murcia	1190	1210	1230	1249	1268	1287
Navarra	1041	1044	1047	1051	1054	1057
País Vasco	3427	3441	3455	3470	3484	3498
La Rioja	665	668	671	674	677	680

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	60438	60695	60913	61535	61576	61794
Andalucía	6581	6626	6673	6731	6769	6806
Aragón	2987	2999	3009	3031	3040	3052
Asturias	1558	1570	1579	1590	1596	1603
Islas Baleares	617	620	622	628	629	631
Canarias	530	533	534	538	540	542
Cantabria	464	466	467	471	472	473
Castilla-La Mancha	4834	4847	4860	4911	4897	4905
Castilla y León	5739	5756	5774	5815	5818	5834
Cataluña	9316	9321	9319	9353	9352	9355
Ceuta	74	75	75	75	76	77
Comunidad Valenciana	5152	5224	5294	5394	5408	5448
Extremadura	1511	1523	1539	1552	1568	1577
Galicia	1860	1881	1906	1927	1948	1965
Madrid	12838	12842	12840	12901	12895	12902
Melilla	54	54	55	56	56	56
Murcia	1190	1206	1222	1250	1261	1274
Navarra	1041	1043	1045	1051	1052	1055
País Vasco	3427	3436	3445	3473	3470	3479
La Rioja	665	668	670	676	678	680

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	0.005	0.005	0.009	0.015	0.019	0.023
Andalucía	0.007	0.007	0.013	0.021	0.028	0.034
Aragón	0.005	0.005	0.009	0.015	0.019	0.023
Asturias	0.006	0.006	0.012	0.020	0.025	0.032
Islas Baleares	0.006	0.005	0.011	0.016	0.021	0.024
Canarias	0.005	0.005	0.009	0.014	0.018	0.021
Cantabria	0.004	0.004	0.007	0.012	0.016	0.019
Castilla.La.Mancha	0.004	0.003	0.006	0.011	0.014	0.016
Castilla.y.León	0.004	0.004	0.009	0.014	0.017	0.021
Cataluña	0.001	0.001	0.002	0.004	0.005	0.005
Ceuta	0.008	0.010	0.020	0.028	0.035	0.041
Comunidad.Valenciana	0.014	0.012	0.024	0.039	0.050	0.059
Extremadura	0.011	0.009	0.018	0.030	0.038	0.047
Galicia	0.013	0.012	0.025	0.040	0.052	0.064
Madrid	0.001	0.002	0.003	0.004	0.006	0.007
Melilla	0.009	0.011	0.023	0.033	0.042	0.051
Murcia	0.017	0.013	0.028	0.046	0.060	0.074
Navarra	0.002	0.002	0.005	0.009	0.011	0.013
País.Vasco	0.003	0.002	0.005	0.008	0.011	0.012
La.Rioja	0.006	0.006	0.013	0.020	0.025	0.031

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	0.005	0.005	0.010	0.016	0.021	0.026
Andalucía	0.007	0.007	0.014	0.022	0.029	0.036
Aragón	0.005	0.004	0.008	0.013	0.018	0.022
Asturias	0.006	0.005	0.010	0.016	0.021	0.026
Islas.Baleares	0.006	0.006	0.012	0.018	0.024	0.030
Canarias	0.005	0.006	0.012	0.019	0.024	0.030
Cantabria	0.004	0.005	0.009	0.014	0.018	0.023
Castilla.La.Mancha	0.004	0.005	0.010	0.015	0.019	0.024
Castilla.y.León	0.004	0.004	0.008	0.012	0.016	0.020
Cataluña	0.001	0.003	0.005	0.008	0.010	0.013
Ceuta	0.008	0.007	0.014	0.021	0.027	0.034
Comunidad.Valenciana	0.014	0.015	0.030	0.045	0.058	0.072
Extremadura	0.011	0.010	0.019	0.029	0.039	0.048
Galicia	0.013	0.010	0.020	0.030	0.040	0.050
Madrid	0.001	0.003	0.006	0.009	0.012	0.015
Melilla	0.009	0.005	0.010	0.016	0.021	0.026
Murcia	0.017	0.017	0.034	0.050	0.065	0.081
Navarra	0.002	0.003	0.006	0.009	0.012	0.016
País.Vasco	0.003	0.004	0.008	0.013	0.017	0.021
La.Rioja	0.006	0.005	0.009	0.014	0.018	0.023

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

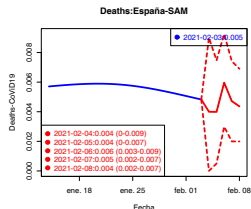
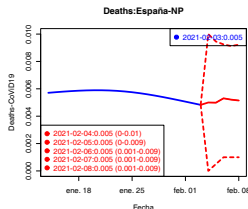
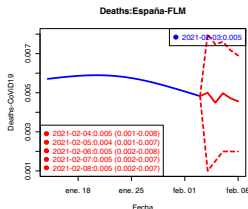
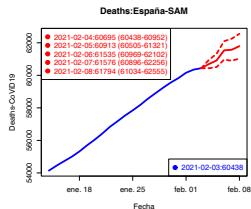
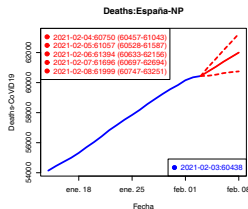
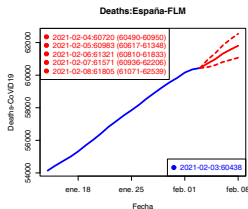
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=03/02/2021

	Last	H1	H2	H3	H4	H5
España	0.005	0.004	0.008	0.018	0.019	0.022
Andalucía	0.007	0.007	0.014	0.023	0.029	0.034
Aragón	0.005	0.004	0.007	0.015	0.018	0.022
Asturias	0.006	0.007	0.013	0.021	0.024	0.029
Islas Baleares	0.006	0.005	0.008	0.017	0.019	0.023
Canarias	0.005	0.005	0.008	0.016	0.018	0.022
Cantabria	0.004	0.003	0.006	0.016	0.017	0.020
Castilla.La.Mancha	0.004	0.003	0.005	0.016	0.013	0.015
Castilla.y.León	0.004	0.003	0.006	0.013	0.014	0.016
Cataluña	0.001	0.001	0.000	0.004	0.004	0.004
Ceuta	0.008	0.009	0.017	0.018	0.029	0.036
Comunidad.Valenciana	0.014	0.014	0.028	0.047	0.050	0.057
Extremadura	0.011	0.008	0.018	0.027	0.038	0.044
Galicia	0.013	0.011	0.025	0.036	0.047	0.057
Madrid	0.001	0.000	0.000	0.005	0.004	0.005
Melilla	0.009	0.008	0.016	0.029	0.043	0.041
Murcia	0.017	0.014	0.027	0.050	0.059	0.070
Navarra	0.002	0.002	0.004	0.010	0.010	0.013
País.Vasco	0.003	0.003	0.005	0.014	0.013	0.015
La.Rioja	0.006	0.004	0.008	0.017	0.020	0.022

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

Fallecidos: España

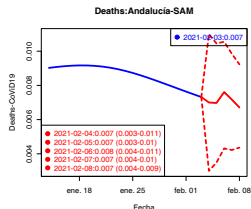
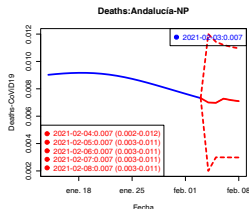
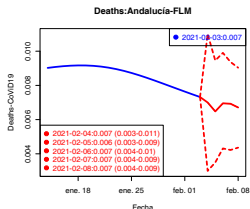
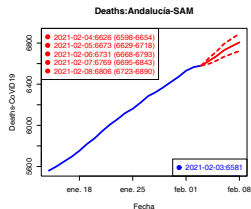
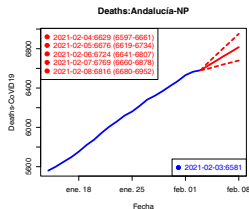
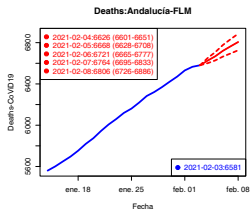


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Andalucía

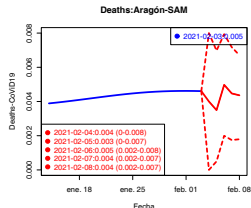
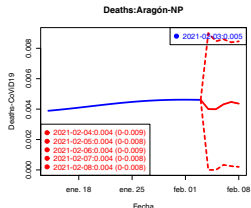
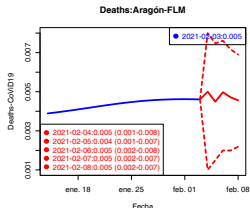
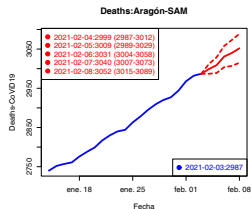
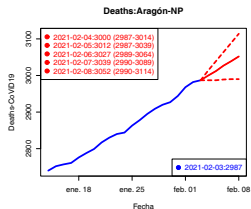
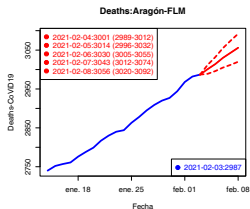


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

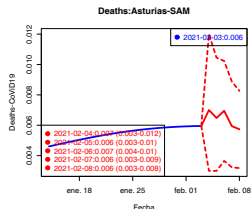
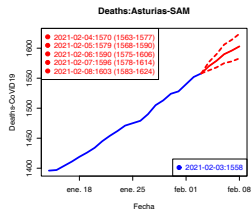
Fallecidos: Aragón



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

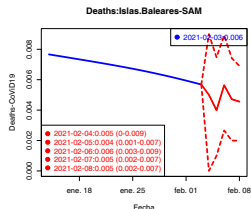
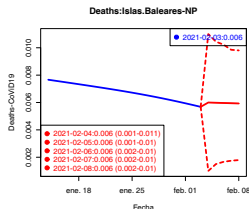
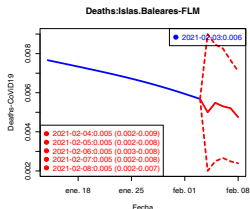
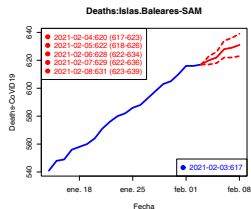
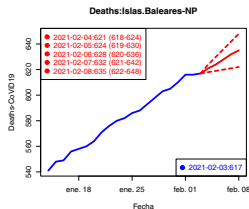
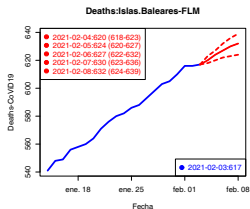
◀ Confirmados

◀ Fallecidos



◀ Confirmados ▶ Fallecidos

Fallecidos: Islas Baleares

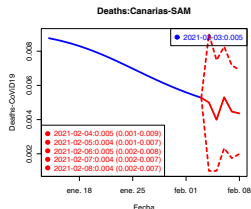
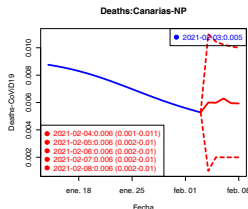
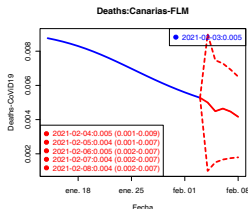
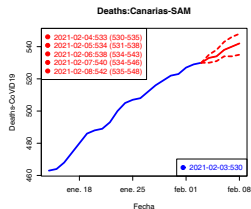
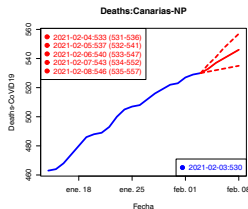
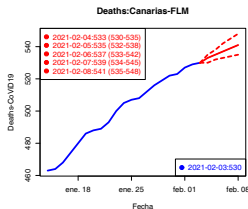


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Canarias

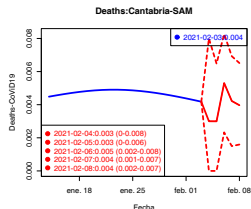
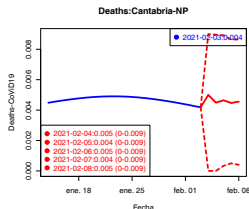
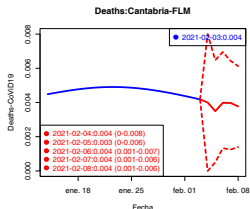
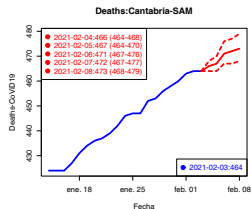
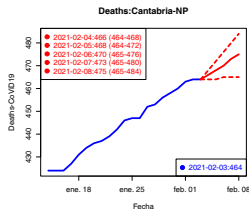
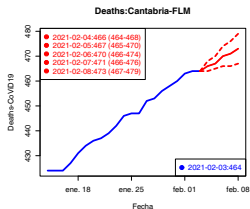


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cantabria

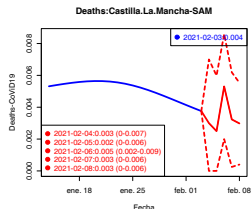
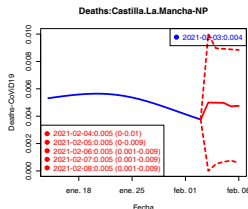
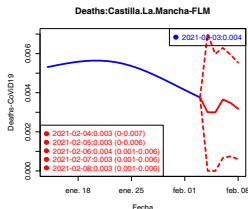
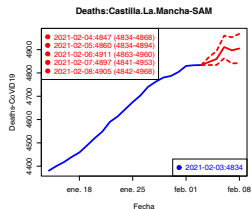
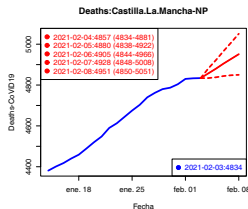
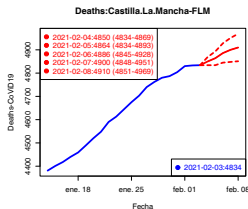


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla-La Mancha

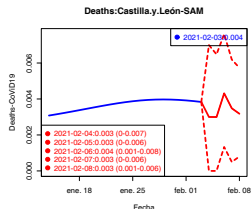
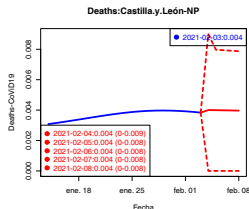
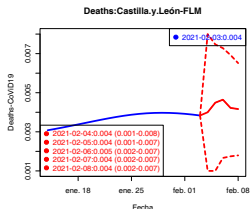
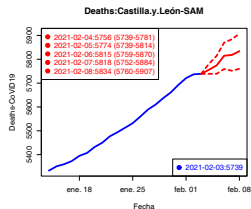
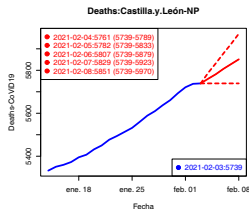
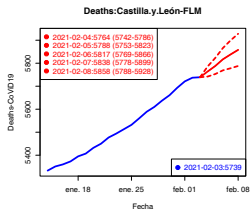


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla y León

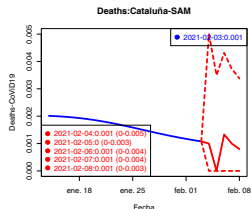
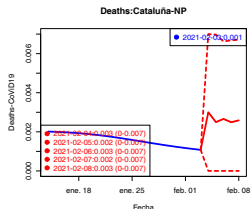
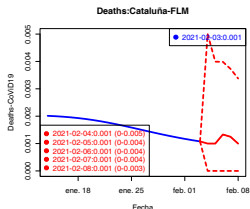
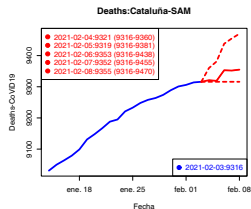
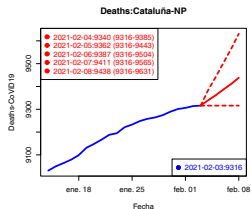
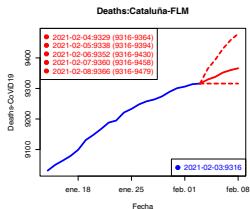


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cataluña

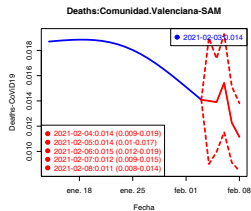
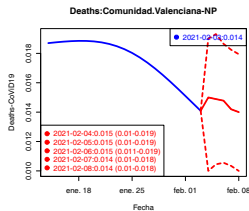
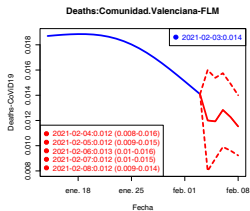
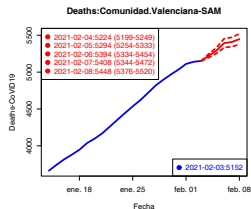
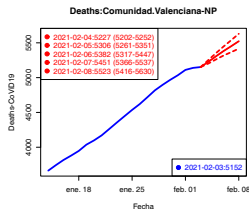
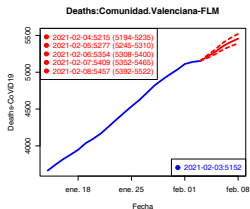


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: C. Valenciana

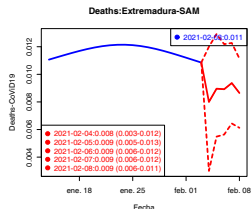
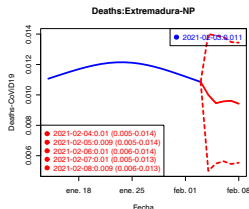
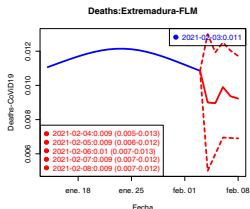
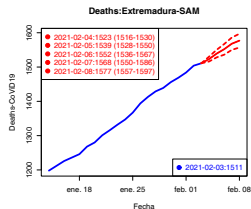
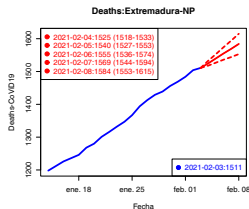
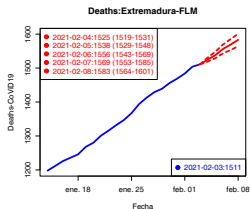


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

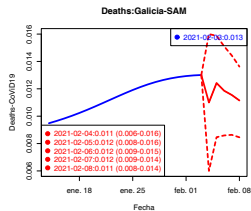
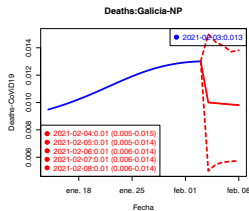
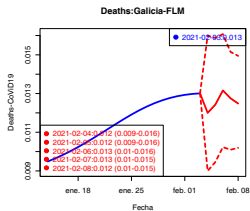
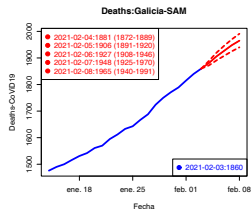
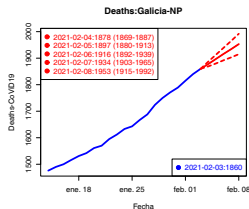
◀ Confirmados

◀ Fallecidos

Fallecidos: Extremadura

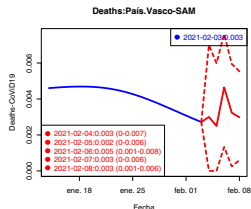
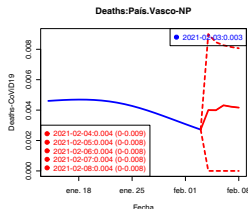
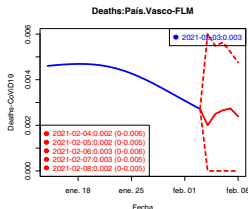
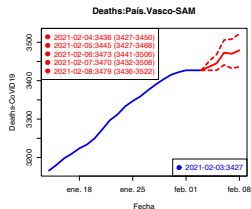
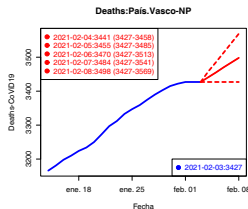
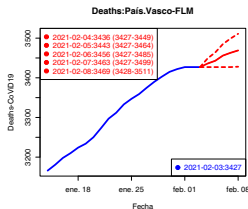


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.



◀ Confirmados ▶ Fallecidos

Fallecidos: País Vasco

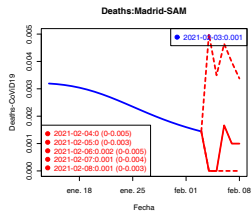
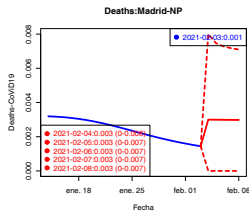
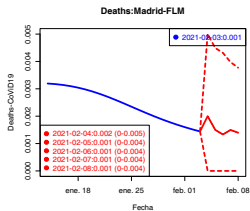
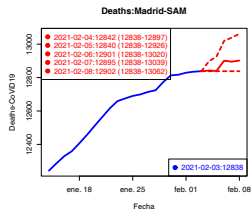
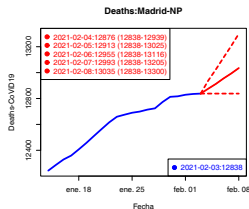
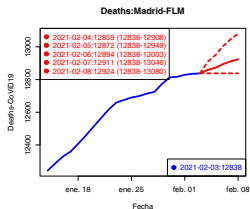


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Madrid

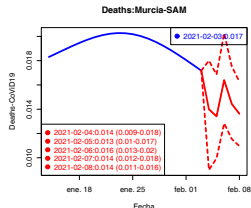
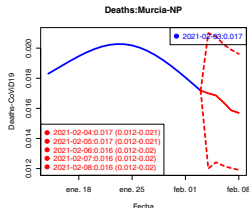
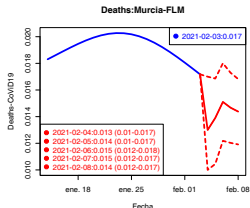
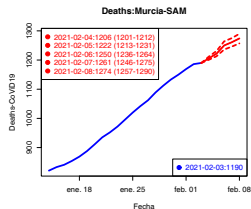
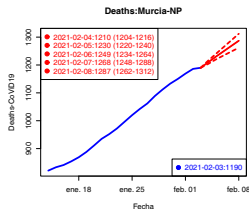
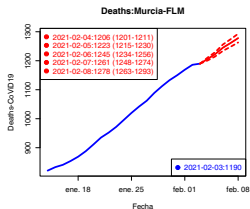


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

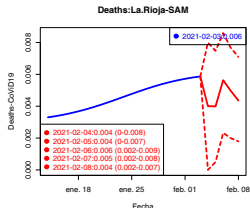
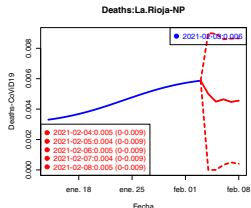
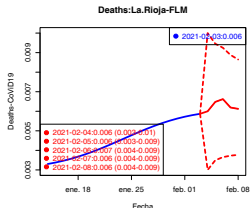
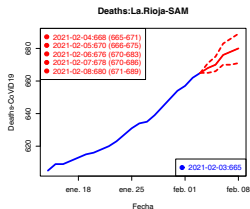
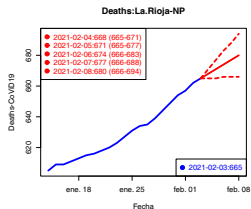
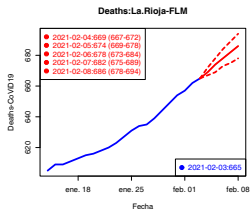
◀ Fallecidos

Fallecidos: Murcia



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

Fallecidos: La Rioja



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

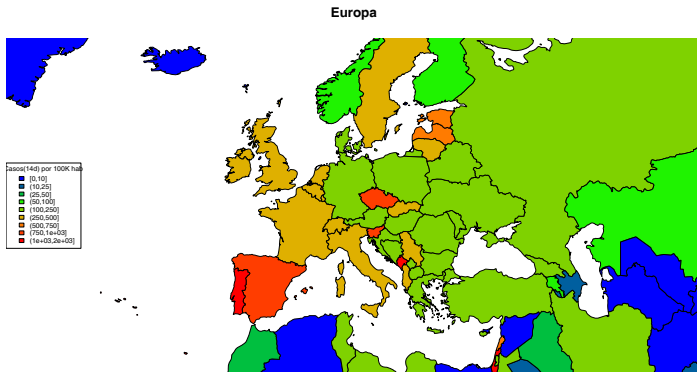
◀ Confirmados

◀ Fallecidos

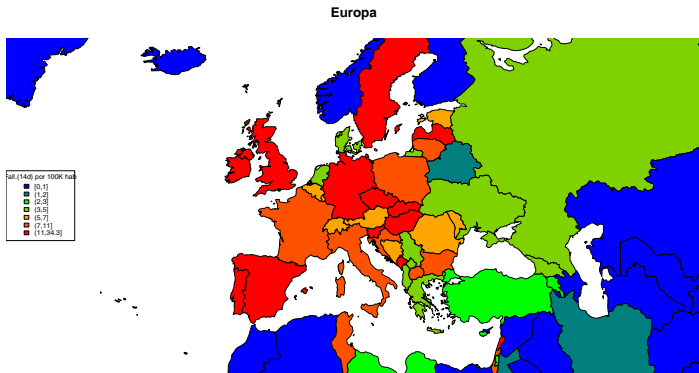
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Europa: Incidencia Acumulada (14d) por 100K hab.

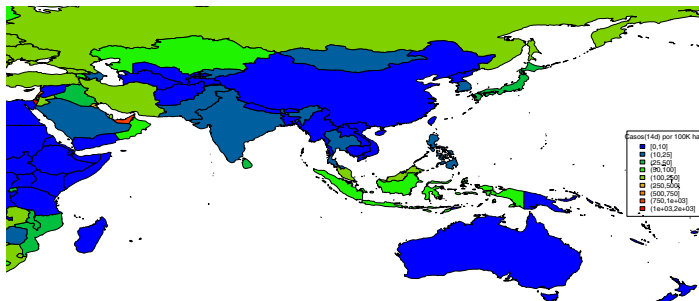


Europa: Fallecidos (14d) por 100K hab.



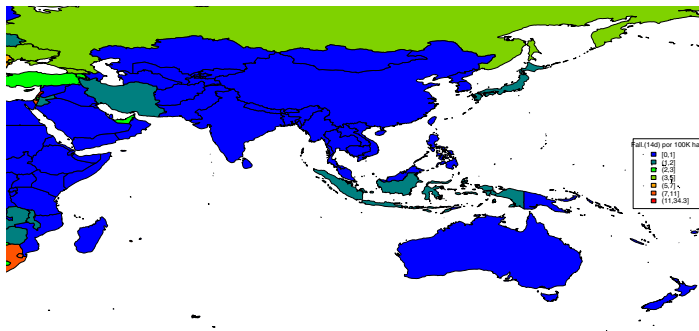
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



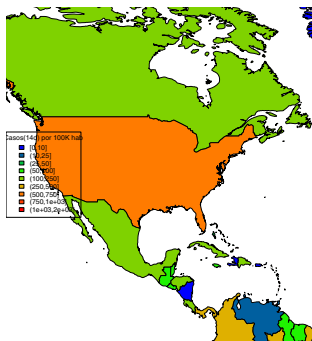
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

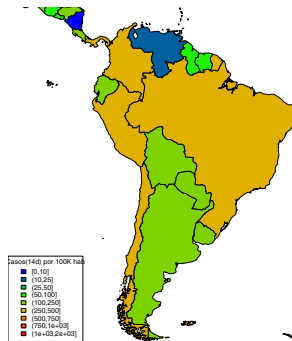


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

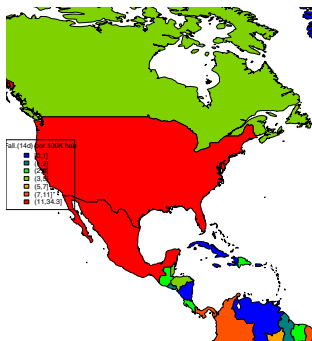


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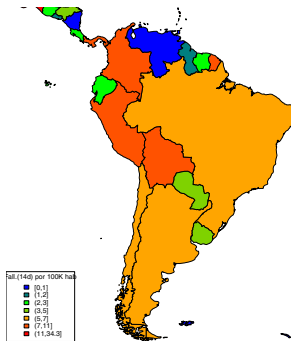


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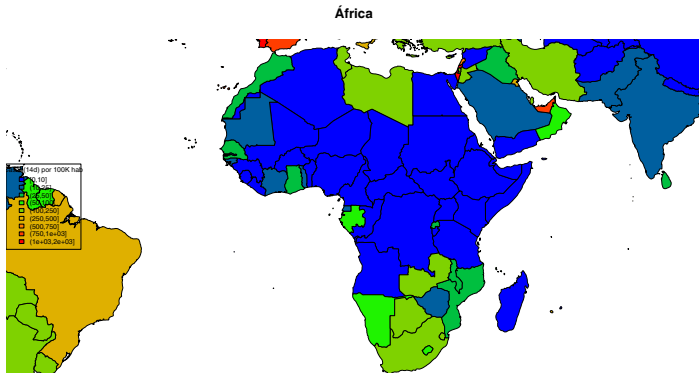
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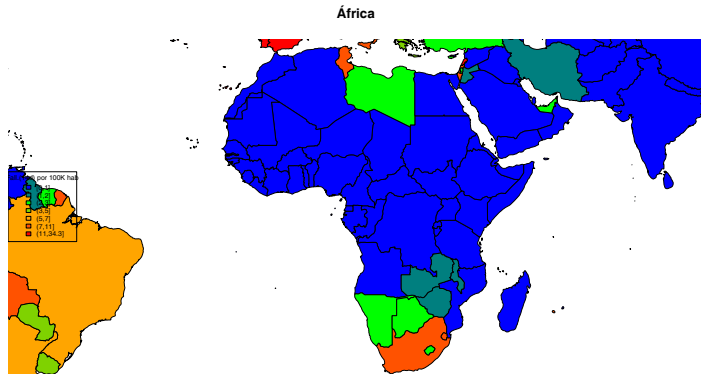
América del sur



África: Incidencia acumulada (14d) por 100K hab.



África: Fallecidos (14d) por 100K hab.



Breve descripción del Modelo de predicción

Objetivo: Predecir ratio de incremento de casos confirmados a 1–5 días: $r^{(k)}(t) = \frac{x_{t+k} - x_t}{x_t + 1}$

Información usada: Pasado de esta variable suavizada (retardo 1) durante los últimos 21 días: $R^{(1)} = \{r^{(1)}(-21), \dots, r^{(1)}(0)\}$.

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 valores anormalmente 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: $f(R^{(1)}) = \int_{-21}^0 R^{(1)}(t)\beta(t)dt$
- 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.