

Predicciones sobre CoViD-19

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9 de febrero de 2021



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: 07/02/2021

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: 07/02/2021. Los datos del último día pueden no estar actualizados

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=07/02/2021

	Last	H1	H2	H3	H4	H5
España	0.0050	0.0040	0.0080	0.0100	0.0130	0.0150
Andalucía	0.0080	0.0060	0.0120	0.0180	0.0230	0.0270
Aragón	0.0040	0.0030	0.0070	0.0100	0.0120	0.0150
Asturias	0.0060	0.0040	0.0080	0.0110	0.0150	0.0160
Islas.Baleares	0.0030	0.0030	0.0050	0.0070	0.0090	0.0100
Canarias	0.0040	0.0040	0.0090	0.0120	0.0160	0.0190
Cantabria	0.0030	0.0030	0.0050	0.0070	0.0080	0.0090
Castilla.La.Mancha	0.0040	0.0030	0.0050	0.0070	0.0080	0.0090
Castilla.y.León	0.0050	0.0040	0.0070	0.0100	0.0120	0.0130
Cataluña	0.0030	0.0030	0.0070	0.0100	0.0120	0.0140
Ceuta	0.0060	0.0060	0.0110	0.0160	0.0200	0.0240
Comunidad.Valenciana	0.0060	0.0030	0.0050	0.0070	0.0080	0.0080
Extremadura	0.0030	0.0030	0.0050	0.0060	0.0080	0.0080
Galicia	0.0060	0.0040	0.0070	0.0090	0.0110	0.0110
Madrid	0.0050	0.0040	0.0080	0.0120	0.0150	0.0170
Melilla	0.0050	0.0040	0.0070	0.0100	0.0130	0.0150
Murcia	0.0030	0.0030	0.0050	0.0060	0.0080	0.0080
Navarra	0.0030	0.0030	0.0050	0.0070	0.0090	0.0110
País.Vasco	0.0040	0.0040	0.0080	0.0110	0.0140	0.0170
La.Rioja	0.0040	0.0030	0.0050	0.0070	0.0090	0.0090

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=07/02/2021

	Last	H1	H2	H3	H4	H5
España	0.005	0.007	0.013	0.019	0.025	0.031
Andalucía	0.008	0.008	0.016	0.024	0.032	0.040
Aragón	0.004	0.005	0.010	0.015	0.020	0.025
Asturias	0.006	0.008	0.016	0.024	0.031	0.039
Islas.Baleares	0.003	0.005	0.010	0.014	0.019	0.023
Canarias	0.004	0.006	0.011	0.016	0.022	0.027
Cantabria	0.003	0.005	0.009	0.014	0.018	0.023
Castilla.La.Mancha	0.004	0.006	0.012	0.018	0.023	0.029
Castilla.y.León	0.005	0.007	0.013	0.020	0.026	0.032
Cataluña	0.003	0.005	0.009	0.014	0.018	0.023
Ceuta	0.006	0.007	0.013	0.020	0.026	0.033
Comunidad.Valenciana	0.006	0.007	0.013	0.021	0.028	0.034
Extremadura	0.003	0.006	0.011	0.016	0.021	0.026
Galicia	0.006	0.007	0.014	0.022	0.029	0.036
Madrid	0.005	0.006	0.012	0.017	0.023	0.029
Melilla	0.005	0.006	0.013	0.019	0.025	0.031
Murcia	0.003	0.006	0.011	0.016	0.022	0.026
Navarra	0.003	0.004	0.008	0.012	0.016	0.019
País.Vasco	0.004	0.005	0.011	0.015	0.021	0.026
La.Rioja	0.004	0.006	0.012	0.017	0.023	0.029

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

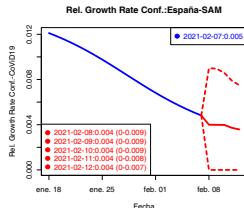
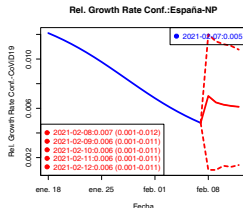
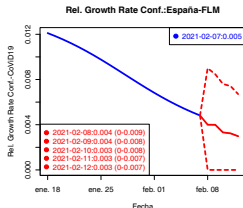
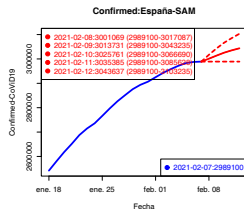
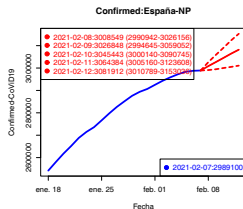
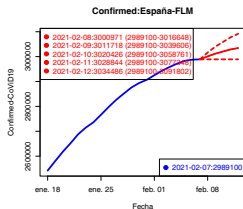
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=07/02/2021

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

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

Confirmados: España



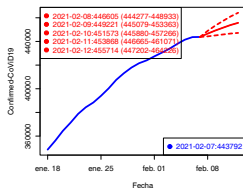
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

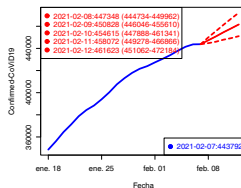
◀ Fallecidos

Confirmados: Andalucía

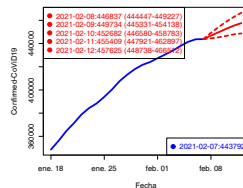
Confirmed:Andalucía-FLM



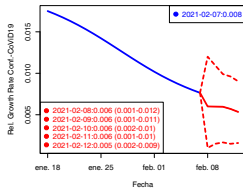
Confirmed:Andalucía-NP



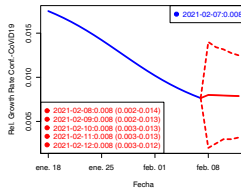
Confirmed:Andalucía-SAM



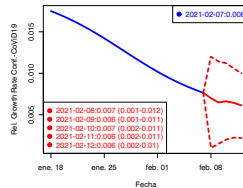
Rel. Growth Rate Conf.:Andalucía-FLM



Rel. Growth Rate Conf.:Andalucía-NP



Rel. Growth Rate Conf.:Andalucía-SAM

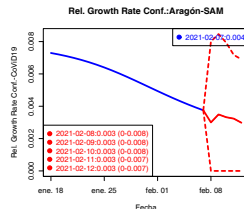
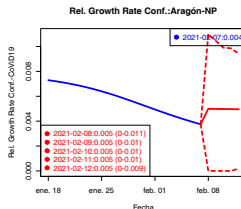
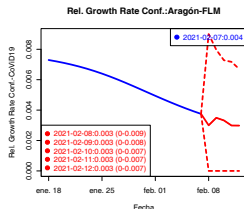
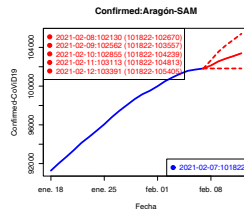
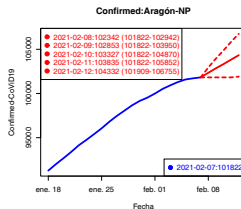
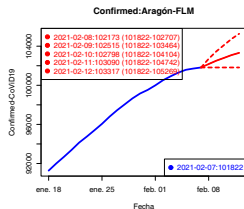


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Aragón

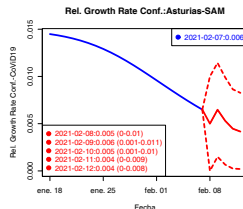
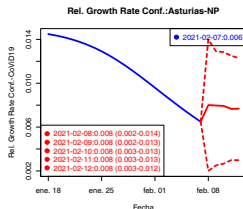
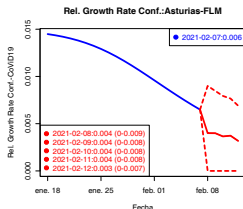
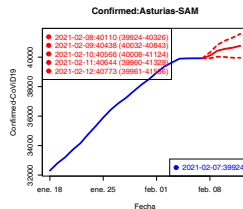
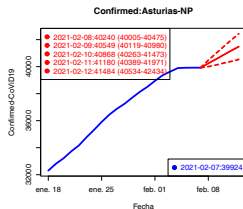
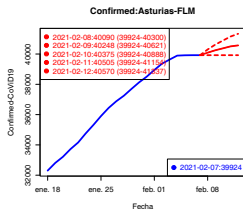


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Asturias

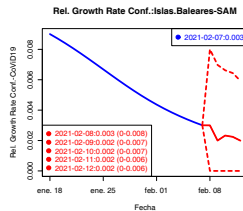
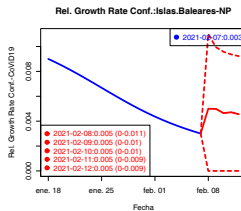
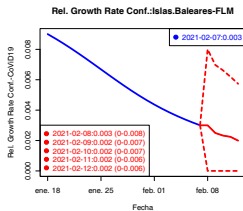
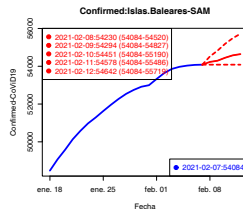
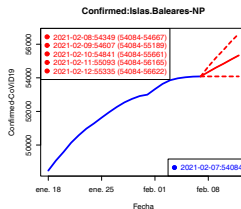
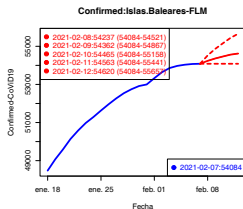


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Islas Baleares

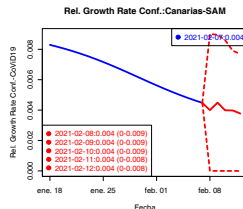
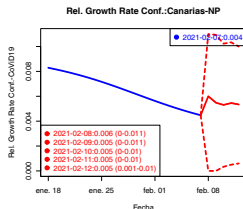
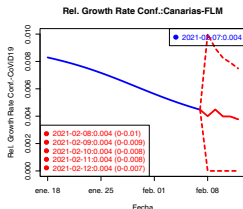
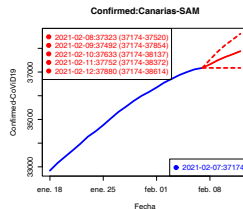
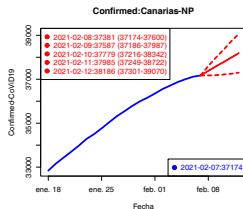
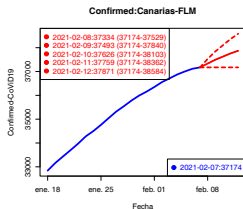


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Canarias

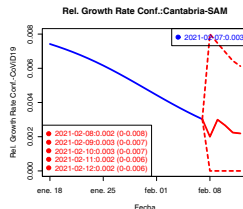
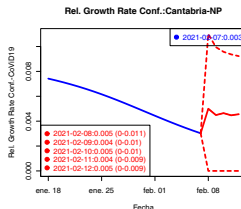
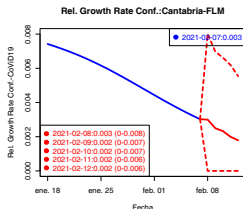
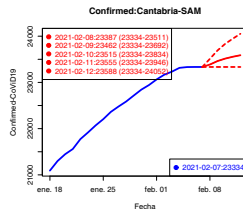
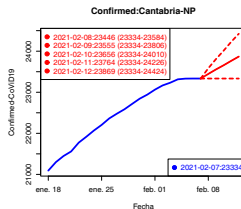
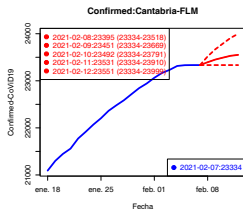


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cantabria

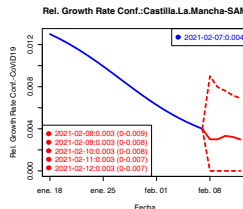
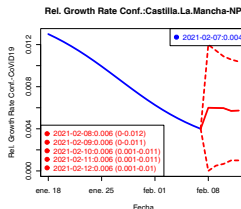
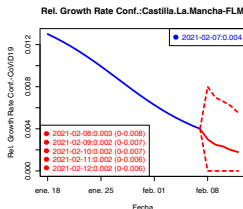
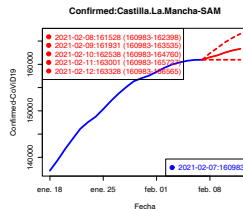
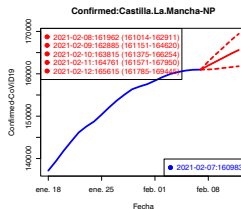
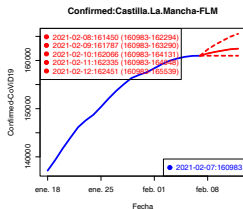


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla-La Mancha

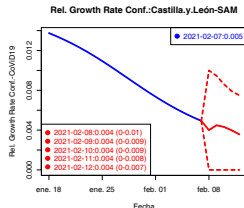
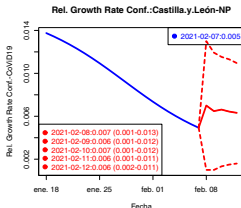
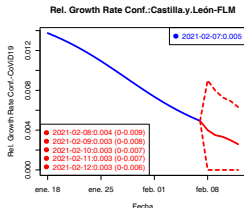
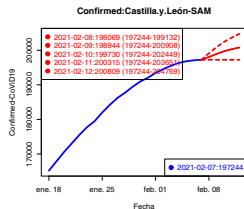
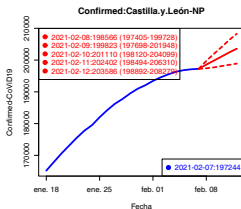
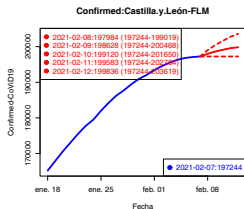


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León



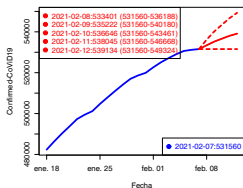
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

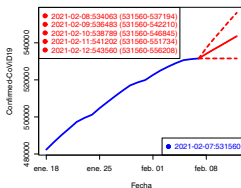
◀ Fallecidos

Confirmados: Cataluña

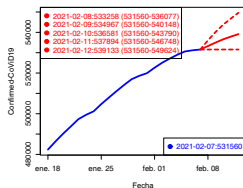
Confirmed:Cataluña-FLM



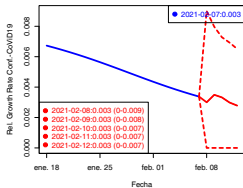
Confirmed:Cataluña-NP



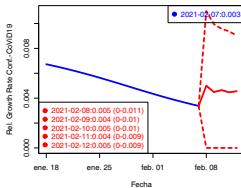
Confirmed:Cataluña-SAM



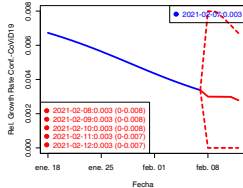
Rel. Growth Rate Conf.:Cataluña-FLM



Rel. Growth Rate Conf.:Cataluña-NP



Rel. Growth Rate Conf.:Cataluña-SAM

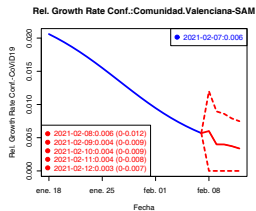
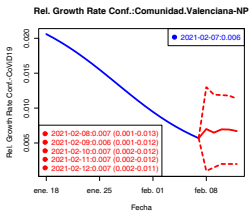
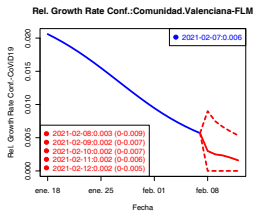
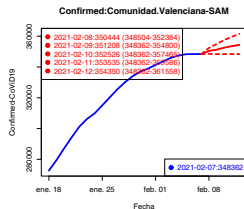
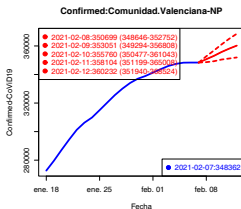
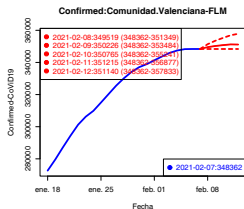


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: C. Valenciana



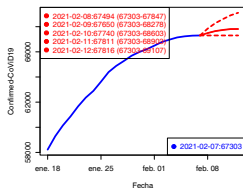
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

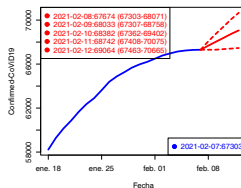
◀ Fallecidos

Confirmados: Extremadura

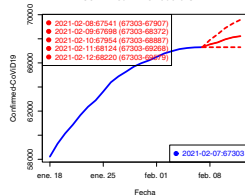
Confirmed:Extremadura-FLM



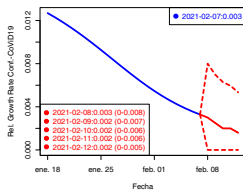
Confirmed:Extremadura-NP



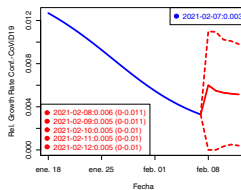
Confirmed:Extremadura-SAM



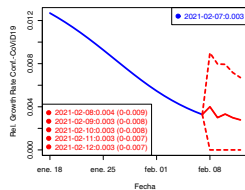
Rel. Growth Rate Conf.:Extremadura-FLM



Rel. Growth Rate Conf.:Extremadura-NP



Rel. Growth Rate Conf.:Extremadura-SAM



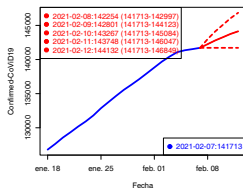
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

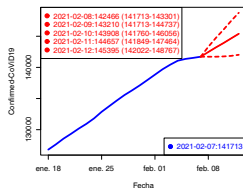
◀ Fallecidos

Confirmados: País Vasco

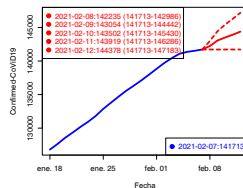
Confirmed:País.Vasco-FLM



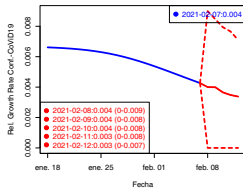
Confirmed:País.Vasco-NP



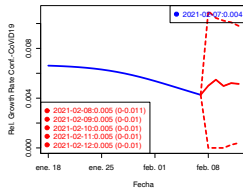
Confirmed:País.Vasco-SAM



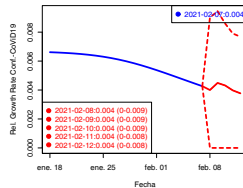
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



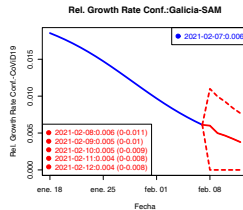
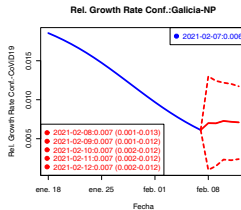
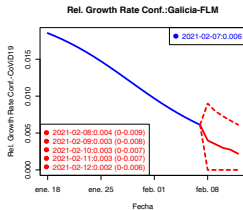
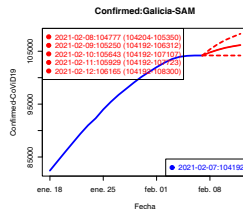
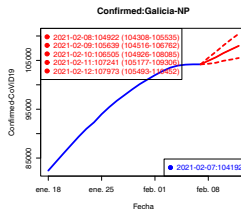
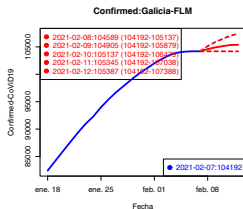
Rel. Growth Rate Conf.:País.Vasco-SAM



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

[◀ Confirmados](#)
[◀ Fallecidos](#)

Confirmados: Galicia

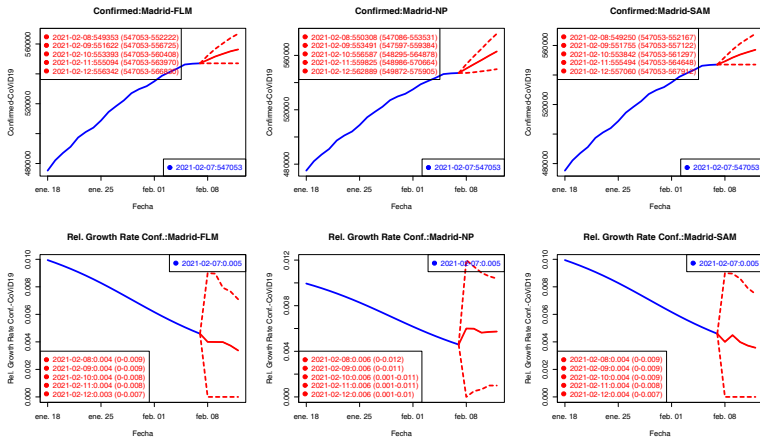


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

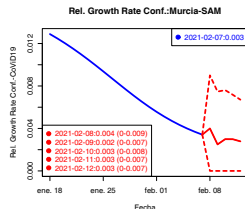
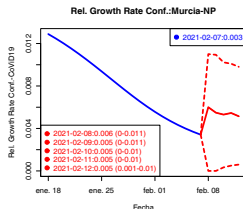
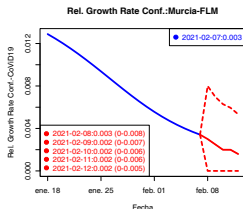
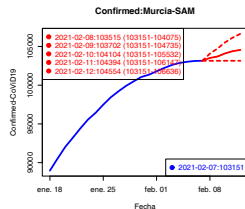
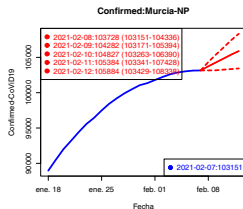
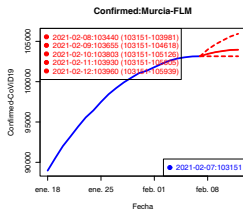


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

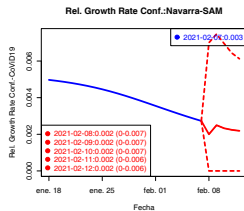
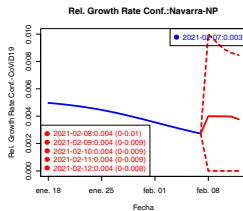
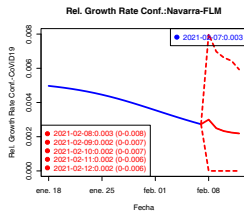
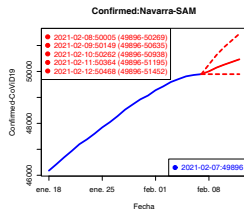
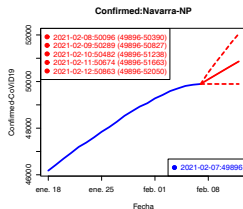
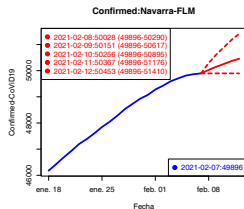


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

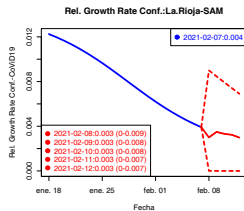
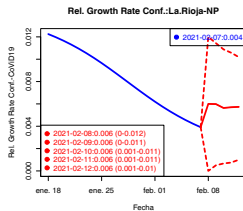
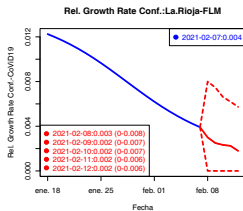
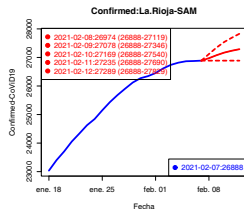
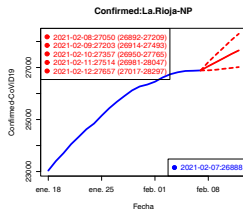
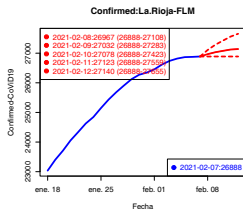


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ 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: 07/02/2021 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=07/02/2021

	Last	H1	H2	H3	H4	H5
España	61928	62170	62387	62660	62838	62976
Andalucía	6862	6900	6934	6977	7007	7030
Aragón	3038	3052	3065	3080	3091	3102
Asturias	1607	1616	1625	1634	1641	1648
Islas Baleares	631	633	635	638	640	641
Canarias	539	541	543	545	546	547
Cantabria	473	475	477	479	480	482
Castilla-La Mancha	5062	5082	5100	5125	5141	5153
Castilla y León	5825	5847	5866	5892	5907	5918
Cataluña	9446	9461	9472	9484	9489	9490
Ceuta	75	75	76	76	77	77
Comunidad Valenciana	5394	5435	5471	5522	5555	5581
Extremadura	1575	1586	1597	1610	1620	1630
Galicia	1948	1969	1991	2017	2037	2056
Madrid	12958	12982	12999	13017	13023	13019
Melilla	58	59	60	60	61	62
Murcia	1243	1254	1265	1279	1289	1298
Navarra	1061	1063	1065	1069	1071	1074
País Vasco	3454	3459	3461	3467	3470	3471
La Rioja	679	683	686	690	694	697

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=07/02/2021

	Last	H1	H2	H3	H4	H5
España	61928	62127	62285	62902	62815	62945
Andalucía	6862	6893	6929	6970	6997	7018
Aragón	3038	3050	3060	3083	3089	3101
Asturias	1607	1615	1624	1637	1640	1645
Islas Baleares	631	633	635	641	640	642
Canarias	539	541	542	545	546	548
Cantabria	473	475	476	480	480	482
Castilla-La Mancha	5062	5079	5093	5147	5138	5149
Castilla y León	5825	5839	5856	5904	5895	5906
Cataluña	9446	9455	9455	9486	9481	9479
Ceuta	75	75	76	77	77	77
Comunidad Valenciana	5394	5446	5491	5564	5571	5593
Extremadura	1575	1584	1597	1607	1619	1629
Galicia	1948	1965	1990	2007	2028	2042
Madrid	12958	12965	12965	13024	13004	12991
Melilla	58	59	59	60	61	62
Murcia	1243	1256	1266	1288	1293	1303
Navarra	1061	1063	1065	1071	1073	1075
País Vasco	3454	3458	3460	3478	3473	3476
La Rioja	679	681	684	691	691	693

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=07/02/2021

	Last	H1	H2	H3	H4	H5
España	0.004	0.004	0.007	0.012	0.015	0.017
Andalucía	0.006	0.006	0.010	0.017	0.021	0.024
Aragón	0.004	0.004	0.009	0.014	0.018	0.021
Asturias	0.005	0.006	0.011	0.017	0.021	0.025
Islas Baleares	0.004	0.003	0.007	0.011	0.014	0.015
Canarias	0.004	0.004	0.007	0.011	0.013	0.016
Cantabria	0.004	0.004	0.008	0.012	0.015	0.018
Castilla.La.Mancha	0.005	0.004	0.007	0.012	0.016	0.018
Castilla.y.León	0.003	0.004	0.007	0.011	0.014	0.016
Cataluña	0.001	0.002	0.003	0.004	0.005	0.005
Ceuta	0.006	0.005	0.010	0.019	0.025	0.031
Comunidad.Valenciana	0.010	0.008	0.014	0.024	0.030	0.035
Extremadura	0.009	0.007	0.014	0.022	0.029	0.035
Galicia	0.012	0.011	0.022	0.036	0.045	0.055
Madrid	0.001	0.002	0.003	0.005	0.005	0.005
Melilla	0.014	0.013	0.026	0.041	0.055	0.073
Murcia	0.013	0.009	0.017	0.029	0.037	0.044
Navarra	0.003	0.002	0.004	0.007	0.010	0.013
País.Vasco	0.002	0.001	0.002	0.004	0.005	0.005
La.Rioja	0.005	0.005	0.010	0.017	0.021	0.026

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=07/02/2021

	Last	H1	H2	H3	H4	H5
España	0.004	0.005	0.010	0.016	0.021	0.026
Andalucía	0.006	0.007	0.015	0.022	0.029	0.036
Aragón	0.004	0.004	0.009	0.014	0.018	0.023
Asturias	0.005	0.005	0.010	0.016	0.021	0.026
Islas.Baleares	0.004	0.005	0.011	0.016	0.022	0.027
Canarias	0.004	0.005	0.011	0.017	0.022	0.027
Cantabria	0.004	0.005	0.009	0.014	0.019	0.023
Castilla.La.Mancha	0.005	0.006	0.011	0.017	0.022	0.028
Castilla.y.León	0.003	0.004	0.008	0.012	0.016	0.020
Cataluña	0.001	0.003	0.005	0.008	0.010	0.013
Ceuta	0.006	0.005	0.011	0.017	0.022	0.027
Comunidad.Valenciana	0.010	0.013	0.026	0.039	0.050	0.062
Extremadura	0.009	0.009	0.018	0.028	0.037	0.046
Galicia	0.012	0.010	0.021	0.031	0.042	0.052
Madrid	0.001	0.003	0.006	0.009	0.012	0.015
Melilla	0.014	0.007	0.014	0.022	0.029	0.037
Murcia	0.013	0.015	0.030	0.043	0.057	0.070
Navarra	0.003	0.003	0.006	0.010	0.013	0.017
País.Vasco	0.002	0.004	0.007	0.011	0.015	0.019
La.Rioja	0.005	0.005	0.010	0.015	0.020	0.024

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

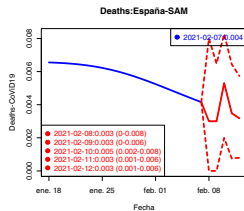
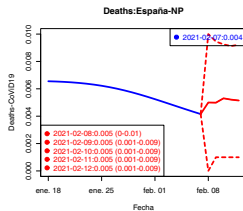
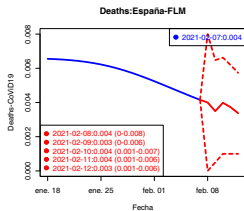
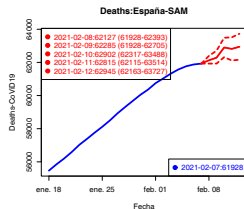
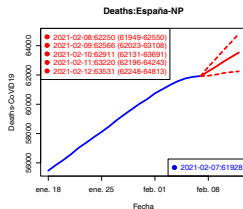
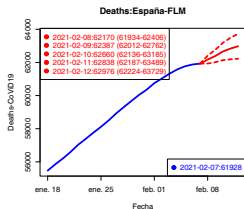
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=07/02/2021

	Last	H1	H2	H3	H4	H5
España	0.004	0.003	0.006	0.016	0.014	0.016
Andalucía	0.006	0.004	0.010	0.016	0.020	0.023
Aragón	0.004	0.004	0.007	0.015	0.017	0.021
Asturias	0.005	0.005	0.010	0.019	0.020	0.024
Islas Baleares	0.004	0.003	0.006	0.017	0.015	0.017
Canarias	0.004	0.004	0.006	0.012	0.013	0.016
Cantabria	0.004	0.004	0.007	0.014	0.016	0.018
Castilla.La.Mancha	0.005	0.003	0.006	0.017	0.015	0.017
Castilla.y.León	0.003	0.002	0.005	0.013	0.012	0.014
Cataluña	0.001	0.001	0.001	0.004	0.004	0.003
Ceuta	0.006	0.005	0.009	0.022	0.025	0.029
Comunidad.Valenciana	0.010	0.010	0.018	0.032	0.033	0.037
Extremadura	0.009	0.006	0.014	0.020	0.028	0.034
Galicia	0.012	0.009	0.021	0.030	0.041	0.048
Madrid	0.001	0.001	0.001	0.005	0.004	0.003
Melilla	0.014	0.012	0.021	0.039	0.053	0.068
Murcia	0.013	0.010	0.019	0.036	0.040	0.048
Navarra	0.003	0.002	0.004	0.009	0.011	0.013
País.Vasco	0.002	0.001	0.002	0.007	0.005	0.006
La.Rioja	0.005	0.003	0.007	0.017	0.017	0.021

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

Fallecidos: España

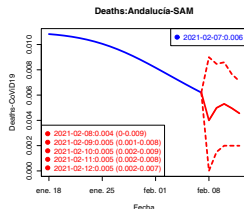
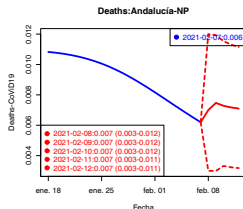
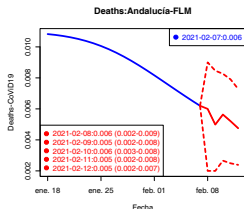
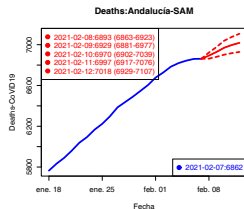
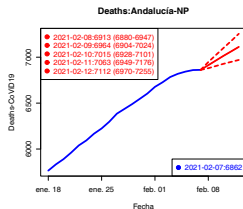
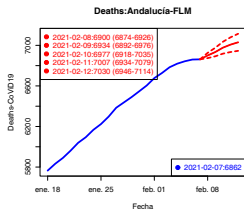


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Andalucía

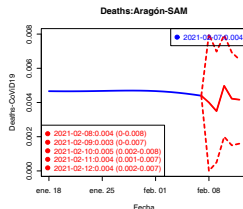
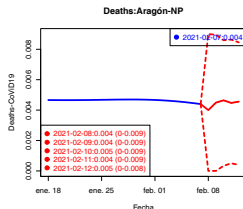
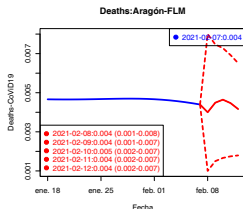
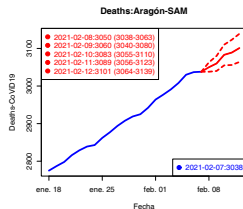
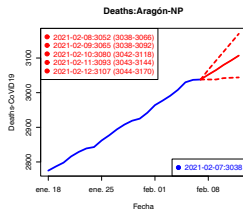
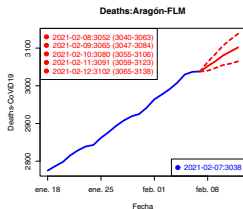


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

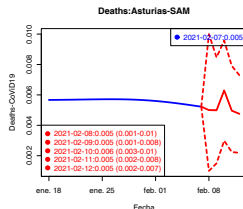
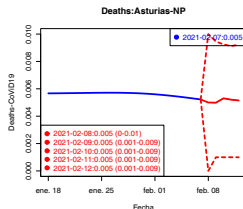
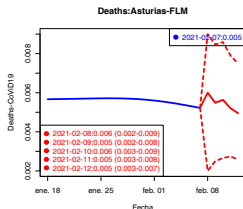
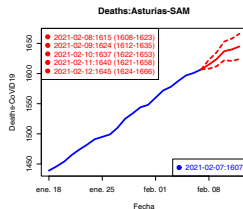
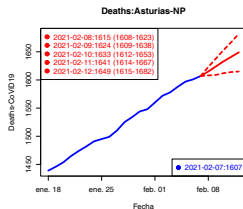
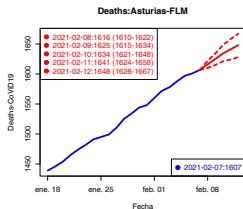
◀ Fallecidos

Fallecidos: Aragón



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

Fallecidos: Asturias

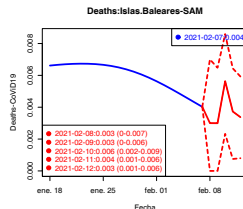
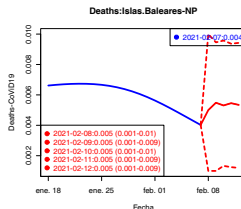
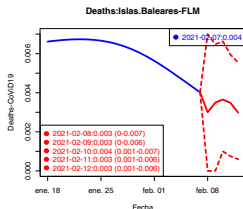
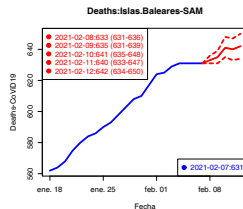
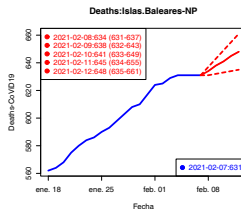
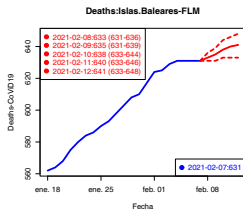


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Islas Baleares

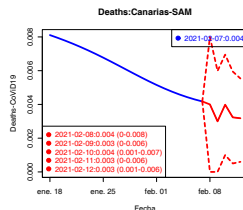
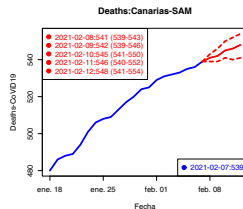


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

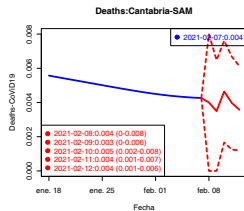
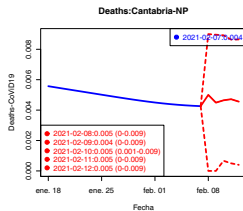
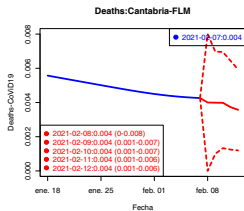
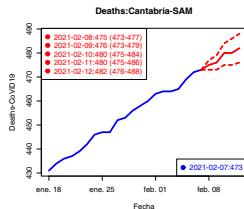
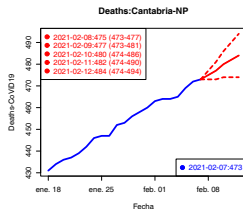
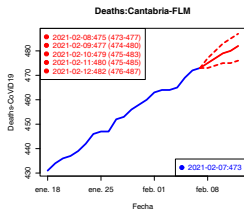
◀ Fallecidos

◀ Confirmados



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

Fallecidos: Cantabria

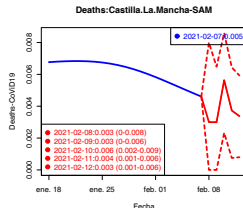
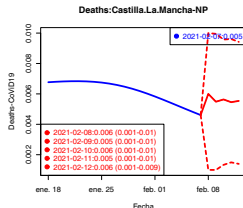
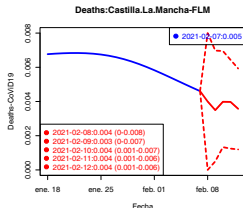
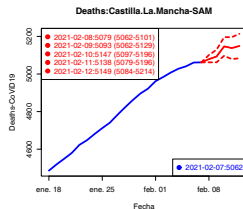
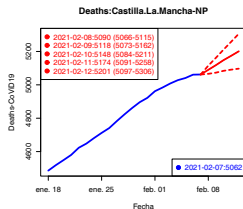
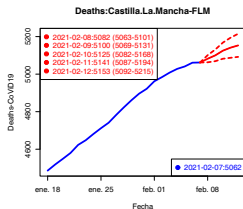


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla-La Mancha

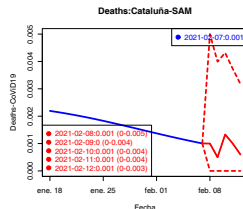
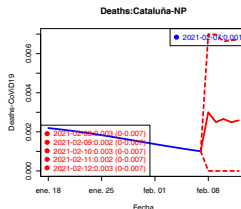
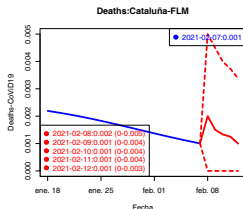
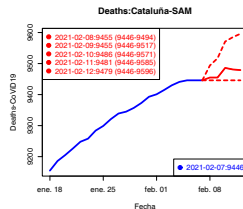
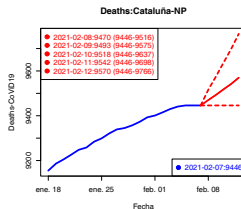
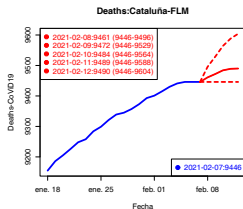


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

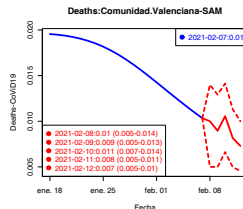
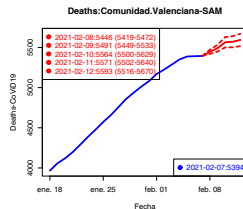
Fallecidos: Cataluña



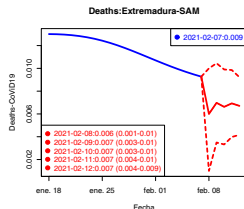
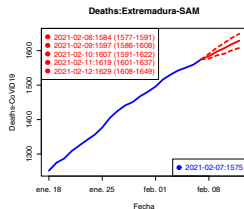
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

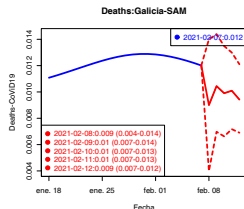
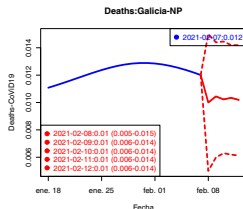
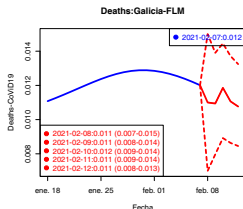
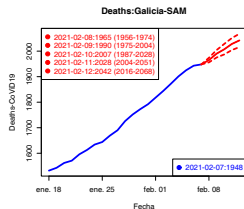
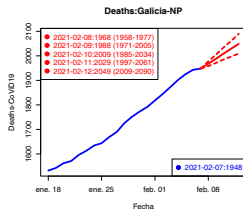
◀ Fallecidos



◀ Confirmados ▶ Fallecidos

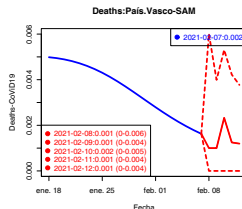
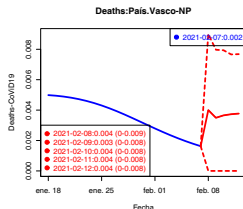
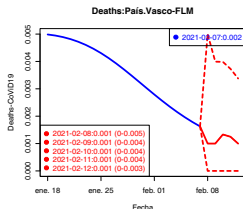
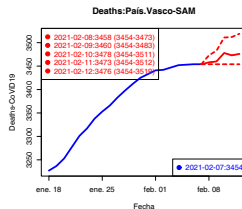
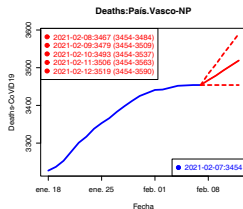
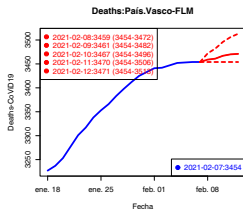


◀ Confirmados ▶ Fallecidos



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

Fallecidos: País Vasco

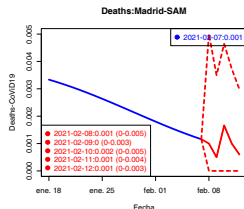
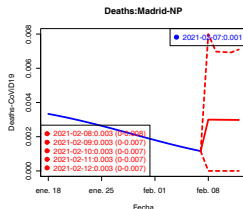
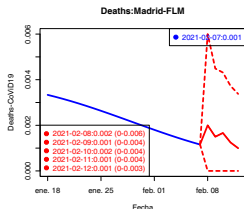
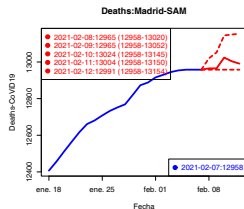
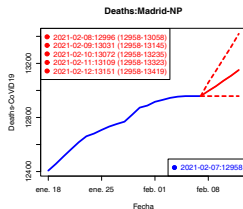
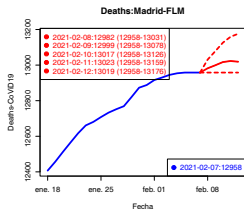


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Madrid



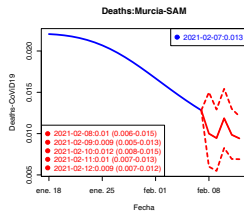
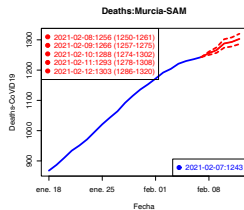
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

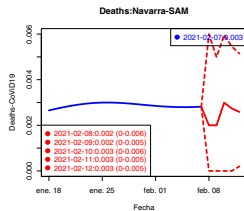
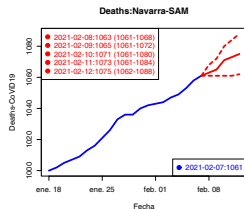
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Fallecidos

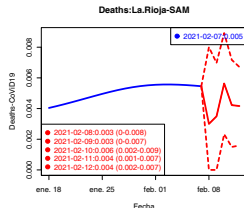
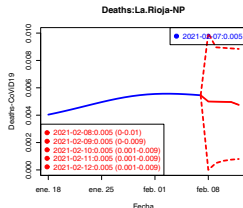
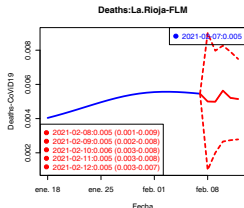
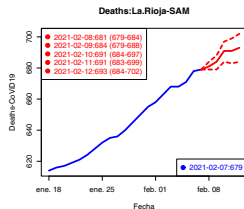
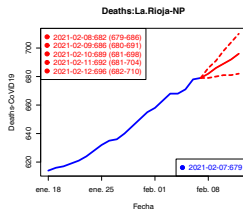
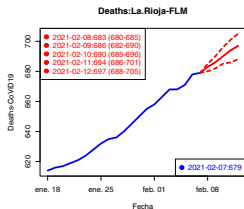


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Fallecidos



Fallecidos: La Rioja



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

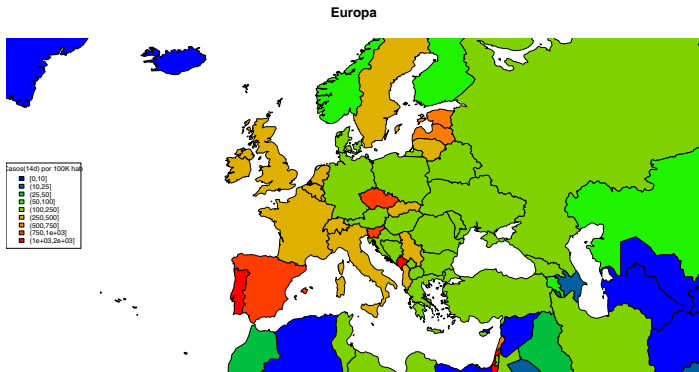
◀ Confirmados

◀ Fallecidos

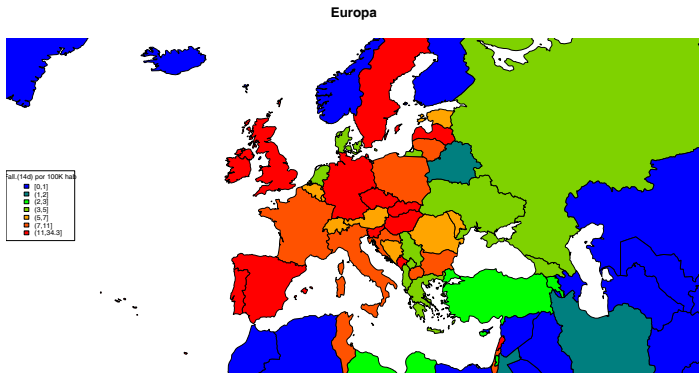
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 - Predicciones
- 2 Fallecidos
 - Predicciones Fallecidos
- 3 Panorama internacional

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

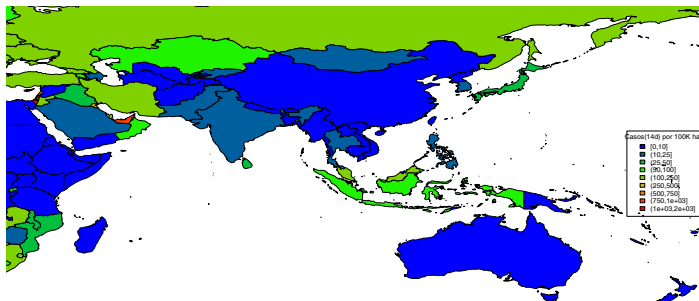


Europa: Fallecidos (14d) por 100K hab.



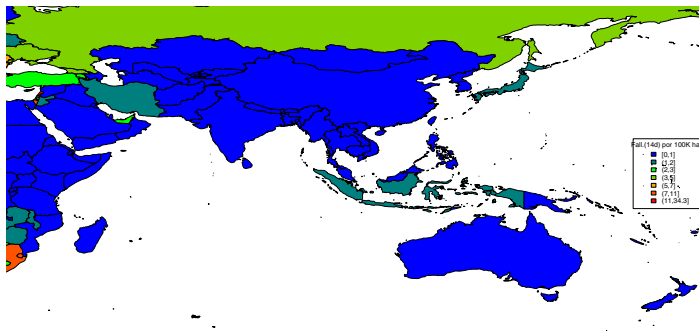
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



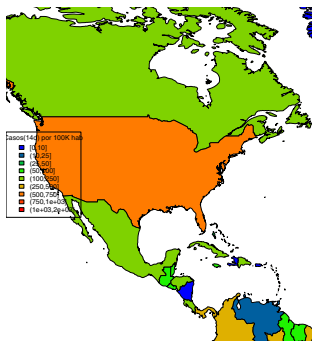
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

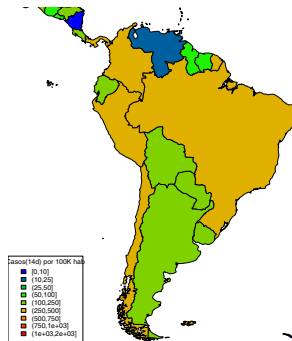


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

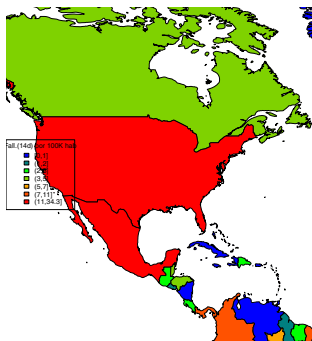


América del sur

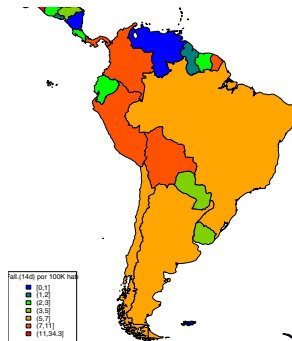


América: Fallecidos (14d) por 100K hab.

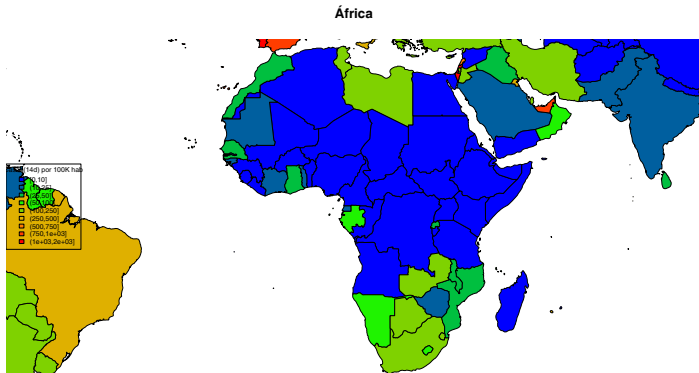
América del Norte



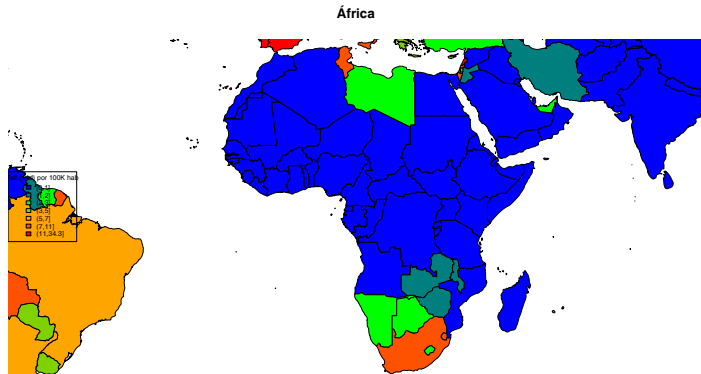
América del sur



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.