

Predicciones sobre CoViD-19

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DEPARTAMENTO DE ESTATÍSTICA,
ANÁLISE MATEMÁTICA E OPTIMIZACIÓN



- Predicciones

- Predicciones Fallecidos

3 Panorama internacional

Datos

Aplicación Shiny:

<http://modestya.usc.es:3838/covid19prediction/>

Último dato fichero CCAA: 07/03/2021

Fuente: [https:](https://)

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//cnecovid.isciii.es/covid19/resources/casos_tecnica_ccaa.csv
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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	0.008	0.005	0.008	0.006	0.003	0.006	0.669	0.834	0.693
H2	0.042	0.021	0.04	0.017	0.009	0.019	0.628	0.827	0.647
H3	0.058	0.031	0.055	0.034	0.017	0.036	0.734	0.87	0.748
H4	0.082	0.046	0.077	0.053	0.026	0.055	0.782	0.888	0.795
H5	0.109	0.064	0.101	0.082	0.04	0.084	0.814	0.901	0.826

Tabla Previsión Confirmados: Mod. Aditivo.

Last=07/03/2021

	Last	IA14	IA7	H1	H2	H3	H4	H5
España	3160980	115	43	3163640	3166776	3170575	3172305	3174714
Andalucía	485213	110	45	485759	486347	487051	487555	488086
Aragón	107824	138	50	107916	108020	108148	108203	108290
Asturias	44561	151	58	44649	44750	44848	44875	44915
Canarias	42037	90	37	42157	42266	42389	42466	42569
Cantabria	24978	81	28	25000	25027	25059	25066	25081
Castilla.y.León	207582	106	41	207694	207843	208034	208131	208246
Castilla.La.Mancha	170235	65	20	170282	170371	170478	170532	170590
Cataluña	509639	154	56	510179	510776	511500	511710	512140
Ceuta	4753	265	139	4770	4792	4808	4816	4820
Comunidad.Valenciana	381558	51	16	381639	381778	381996	382174	382323
Extremadura	69276	37	16	69298	69336	69380	69420	69450
Galicia	113142	80	27	113227	113321	113452	113493	113574
Islas.Baleares	56440	42	19	56465	56502	56547	56582	56609
La.Rioja	27596	63	27	27608	27629	27650	27664	27674
Madrid	596485	181	66	597072	597760	598567	598876	599350
Melilla	7185	326	147	7203	7222	7242	7252	7266
Murcia	107064	65	25	107109	107176	107259	107314	107368
Navarra	51800	108	47	51844	51895	51954	51997	52048
País.Vasco	153612	153	60	153782	153971	154196	154283	154424

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=07/03/2021

	Last	H1	H2	H3	H4	H5
España	0.0009	0.0014	0.0028	0.0041	0.0051	0.0059
Andalucía	0.0011	0.0018	0.0035	0.0051	0.0064	0.0075
Aragón	0.0009	0.0014	0.0028	0.0041	0.0051	0.0058
Asturias	0.0018	0.0019	0.0042	0.0063	0.0077	0.0088
Canarias	0.0028	0.0028	0.0060	0.0090	0.0117	0.0141
Cantabria	0.0009	0.0014	0.0028	0.0041	0.0050	0.0056
Castilla.y.León	0.0006	0.0011	0.0023	0.0034	0.0041	0.0047
Castilla.La.Mancha	0.0003	0.0009	0.0018	0.0026	0.0030	0.0034
Cataluña	0.0012	0.0015	0.0031	0.0046	0.0057	0.0065
Ceuta	0.0028	0.0027	0.0062	0.0091	0.0112	0.0132
Comunidad.Valenciana	0.0003	0.0009	0.0018	0.0025	0.0031	0.0034
Extremadura	0.0003	0.0010	0.0019	0.0028	0.0034	0.0038
Galicia	0.0009	0.0013	0.0027	0.0040	0.0049	0.0056
Islas.Baleares	0.0005	0.0011	0.0022	0.0032	0.0039	0.0044
La.Rioja	0.0004	0.0010	0.0020	0.0029	0.0035	0.0039
Madrid	0.0011	0.0015	0.0030	0.0044	0.0055	0.0063
Melilla	0.0024	0.0027	0.0055	0.0084	0.0107	0.0128
Murcia	0.0005	0.0010	0.0021	0.0030	0.0037	0.0043
Navarra	0.0008	0.0014	0.0028	0.0042	0.0053	0.0063
País.Vasco	0.0012	0.0015	0.0032	0.0047	0.0059	0.0069

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=07/03/2021

	Last	H1	H2	H3	H4	H5
España	0.0009	0.0016	0.0033	0.0051	0.0069	0.0087
Andalucía	0.0011	0.0017	0.0035	0.0055	0.0074	0.0094
Aragón	0.0009	0.0016	0.0032	0.0049	0.0067	0.0085
Asturias	0.0018	0.0028	0.0057	0.0089	0.0118	0.0148
Canarias	0.0028	0.0034	0.0070	0.0107	0.0141	0.0179
Cantabria	0.0009	0.0017	0.0036	0.0056	0.0075	0.0095
Castilla y León	0.0006	0.0013	0.0027	0.0042	0.0057	0.0072
Castilla-La Mancha	0.0003	0.0011	0.0023	0.0035	0.0048	0.0061
Cataluña	0.0012	0.0020	0.0041	0.0064	0.0086	0.0109
Ceuta	0.0028	0.0034	0.0070	0.0107	0.0142	0.0181
Comunidad Valenciana	0.0003	0.0011	0.0022	0.0035	0.0047	0.0060
Extremadura	0.0003	0.0010	0.0021	0.0032	0.0044	0.0056
Galicia	0.0009	0.0018	0.0037	0.0057	0.0077	0.0097
Islas Baleares	0.0005	0.0012	0.0024	0.0037	0.0050	0.0063
La Rioja	0.0004	0.0010	0.0021	0.0033	0.0045	0.0057
Madrid	0.0011	0.0018	0.0038	0.0058	0.0079	0.0100
Melilla	0.0024	0.0030	0.0063	0.0097	0.0128	0.0162
Murcia	0.0005	0.0012	0.0024	0.0037	0.0050	0.0063
Navarra	0.0008	0.0013	0.0027	0.0042	0.0057	0.0073
País Vasco	0.0012	0.0019	0.0040	0.0062	0.0083	0.0105

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

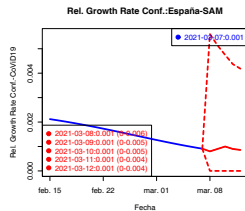
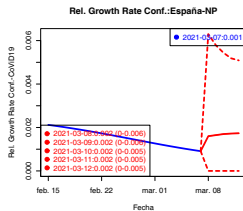
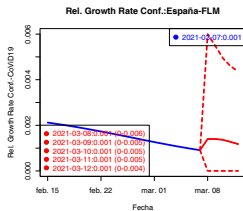
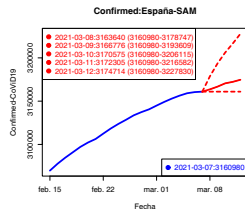
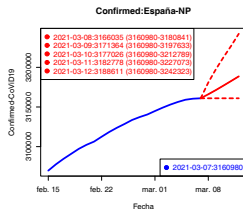
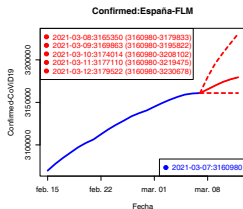
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=07/03/2021

	Last	H1	H2	H3	H4	H5
España	0.0009	0.0008	0.0018	0.0030	0.0036	0.0043
Andalucía	0.0011	0.0011	0.0023	0.0038	0.0048	0.0059
Aragón	0.0009	0.0008	0.0018	0.0030	0.0035	0.0043
Asturias	0.0018	0.0020	0.0042	0.0064	0.0070	0.0079
Canarias	0.0028	0.0029	0.0054	0.0084	0.0102	0.0127
Cantabria	0.0009	0.0009	0.0020	0.0032	0.0035	0.0041
Castilla.y.León	0.0006	0.0005	0.0013	0.0022	0.0026	0.0032
Castilla.La.Mancha	0.0003	0.0003	0.0008	0.0014	0.0017	0.0021
Cataluña	0.0012	0.0011	0.0022	0.0037	0.0041	0.0049
Ceuta	0.0028	0.0036	0.0082	0.0115	0.0132	0.0141
Comunidad.Valenciana	0.0003	0.0002	0.0006	0.0011	0.0016	0.0020
Extremadura	0.0003	0.0003	0.0009	0.0015	0.0021	0.0025
Galicia	0.0009	0.0007	0.0016	0.0027	0.0031	0.0038
Islas.Baleares	0.0005	0.0004	0.0011	0.0019	0.0025	0.0030
La.Rioja	0.0004	0.0004	0.0012	0.0020	0.0025	0.0028
Madrid	0.0011	0.0010	0.0021	0.0035	0.0040	0.0048
Melilla	0.0024	0.0025	0.0051	0.0079	0.0094	0.0112
Murcia	0.0005	0.0004	0.0010	0.0018	0.0023	0.0028
Navarra	0.0008	0.0008	0.0018	0.0030	0.0038	0.0048
País.Vasco	0.0012	0.0011	0.0023	0.0038	0.0044	0.0053

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

Confirmados: España

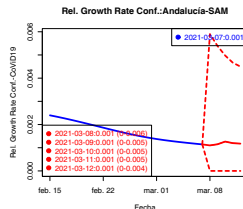
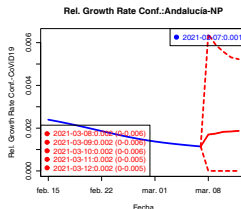
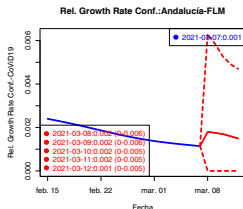
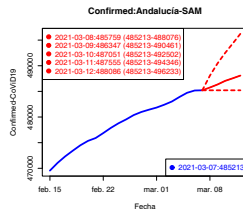
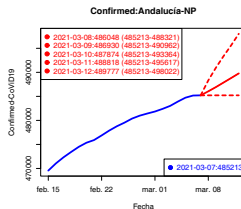
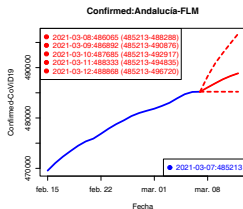


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Andalucía

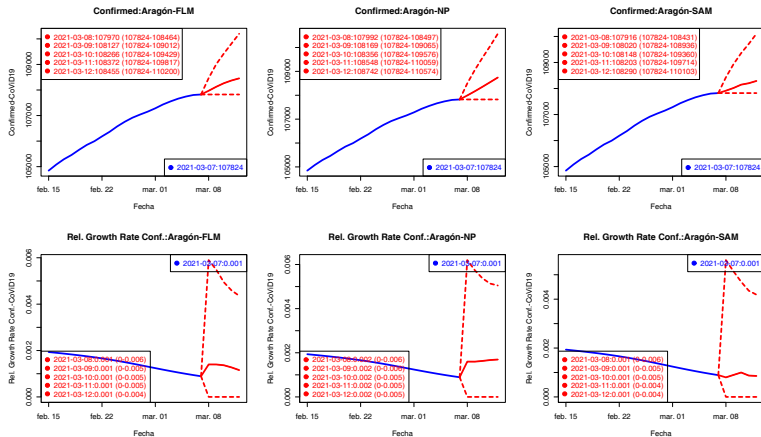


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Aragón

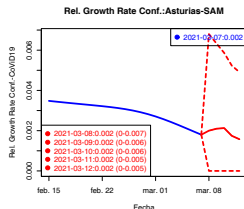
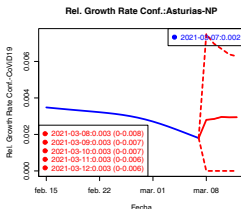
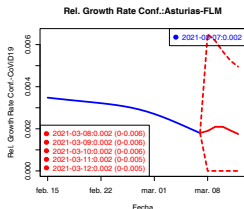
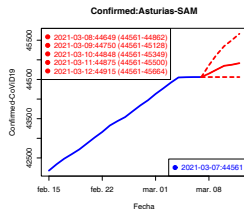
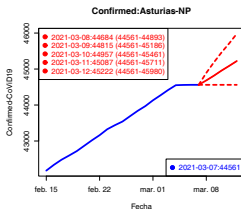
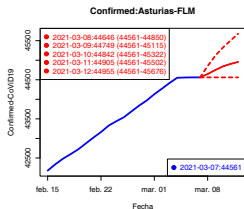


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Asturias

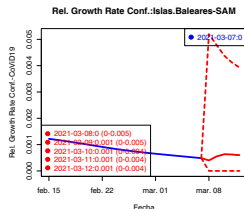
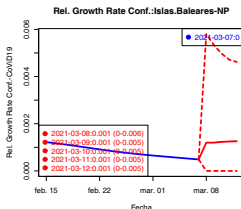
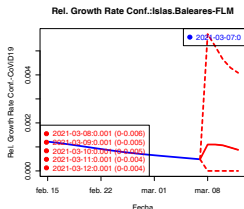
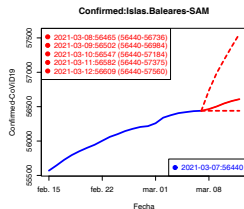
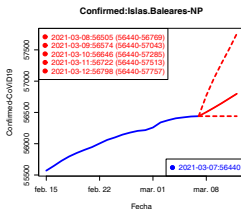
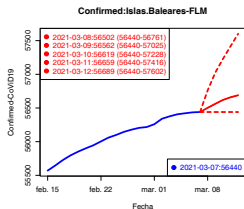


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Islas Baleares

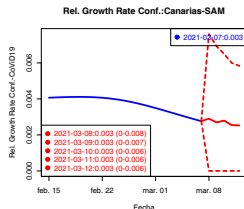
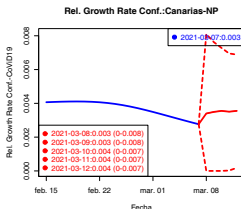
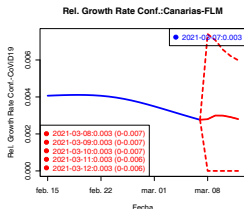
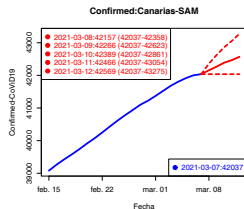
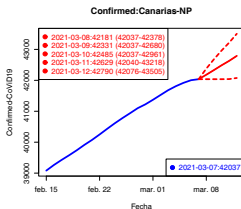
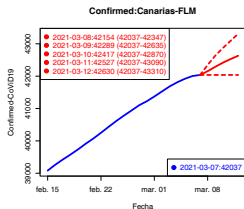


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Canarias



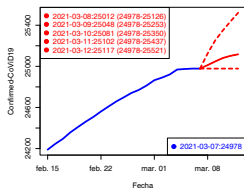
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

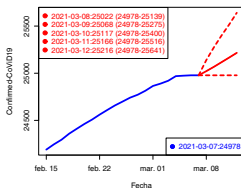
◀ Fallecidos

Confirmados: Cantabria

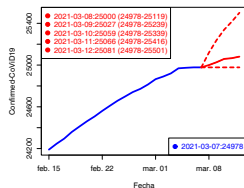
Confirmed:Cantabria-FLM



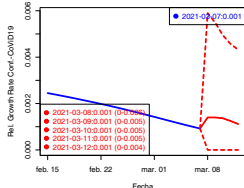
Confirmed:Cantabria-NP



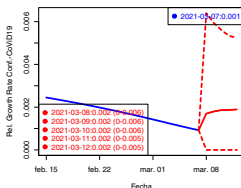
Confirmed:Cantabria-SAM



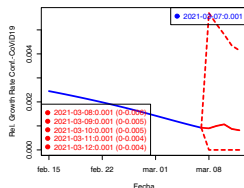
Rel. Growth Rate Conf.:Cantabria-FLM



Rel. Growth Rate Conf.:Cantabria-NP



Rel. Growth Rate Conf.:Cantabria-SAM

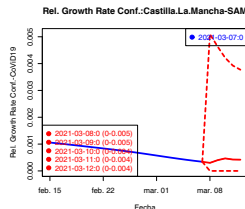
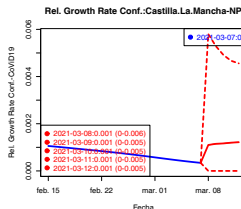
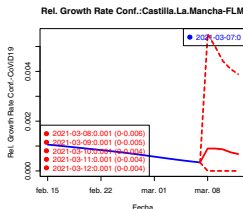
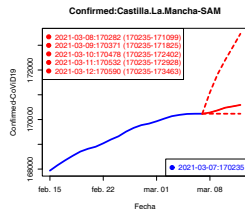
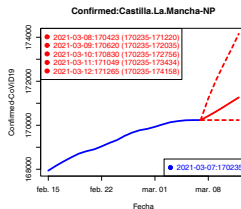
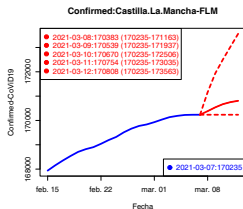


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla-La Mancha

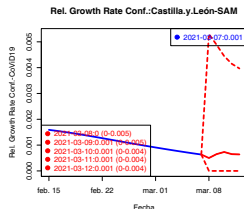
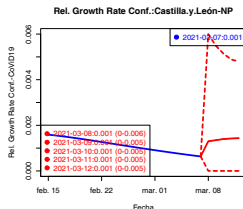
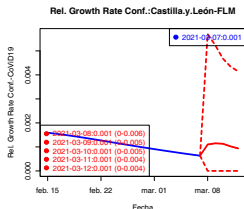
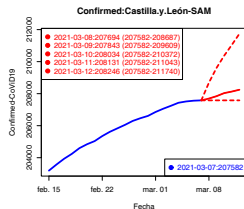
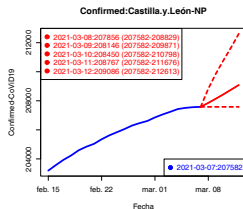
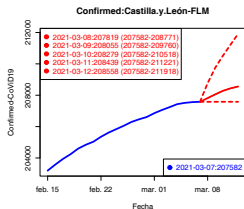


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

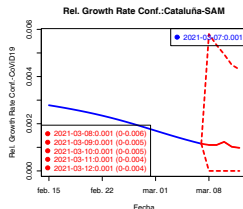
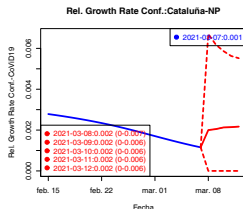
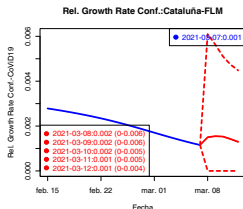
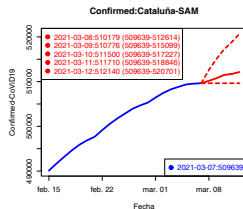
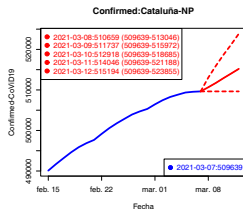
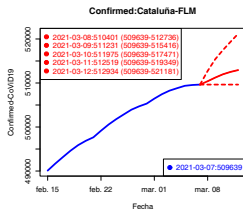


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cataluña



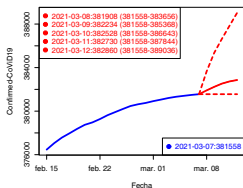
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

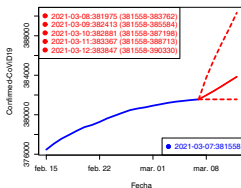
◀ Fallecidos

Confirmados: C. Valenciana

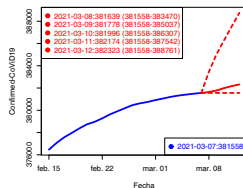
Confirmed:Comunidad.Valenciana-FLM



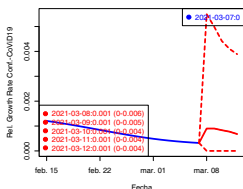
Confirmed:Comunidad.Valenciana-NP



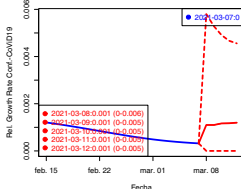
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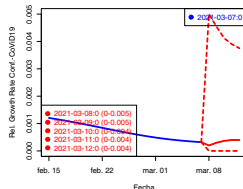
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Rel. Growth Rate Conf.:Comunidad.Valenciana-NP



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

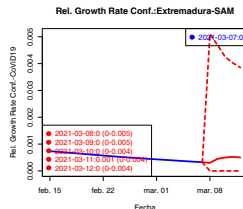
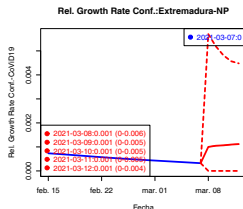
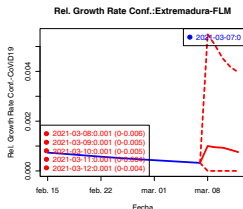
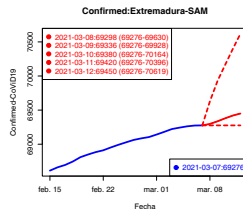
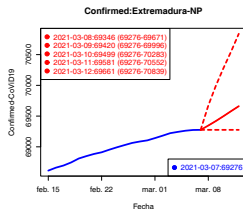
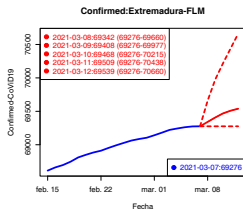


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Extremadura



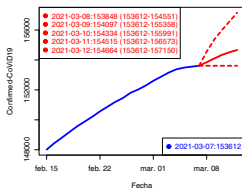
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

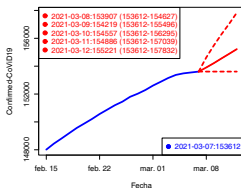
◀ Fallecidos

Confirmados: País Vasco

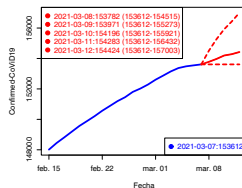
Confirmed:País.Vasco-FLM



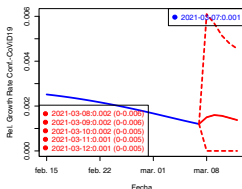
Confirmed:País.Vasco-NP



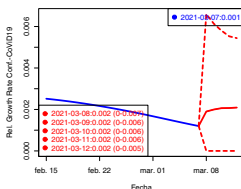
Confirmed:País.Vasco-SAM



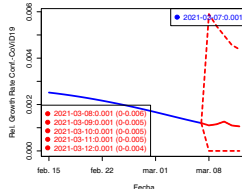
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



Rel. Growth Rate Conf.:País.Vasco-SAM

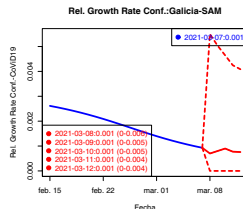
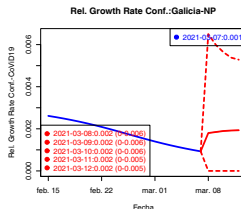
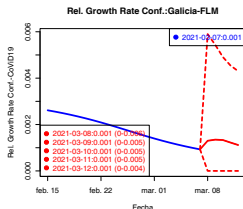
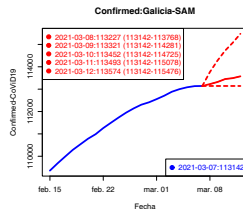
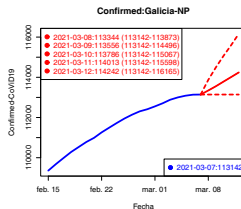
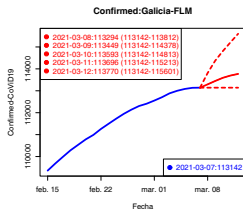


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Galicia

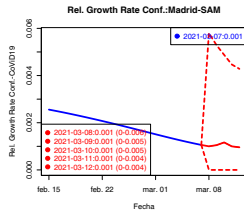
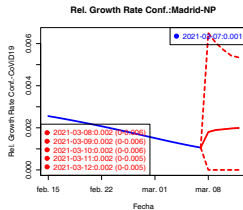
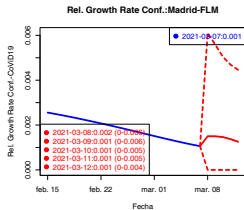
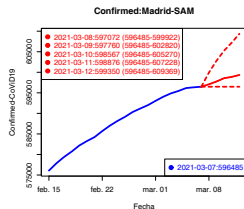
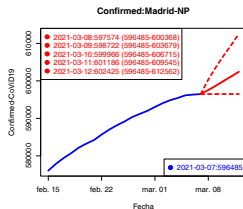
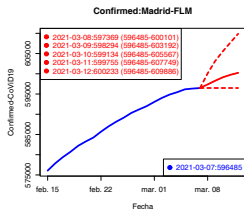


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

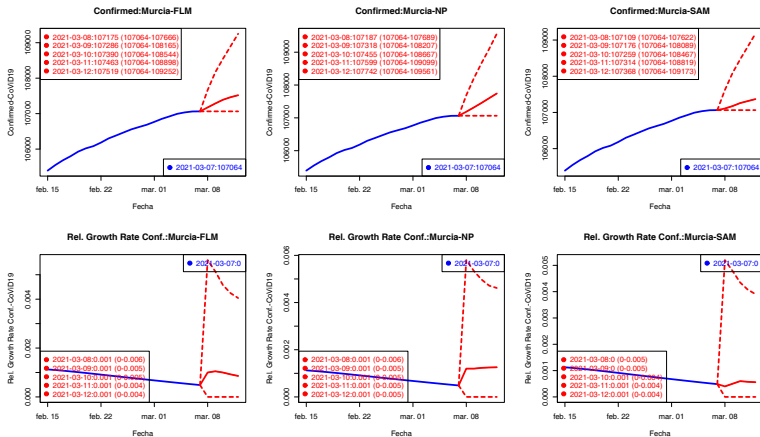


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

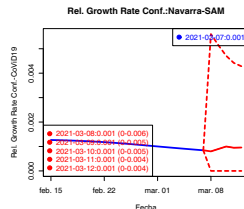
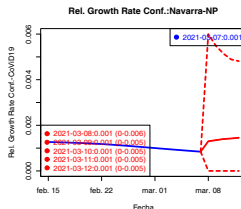
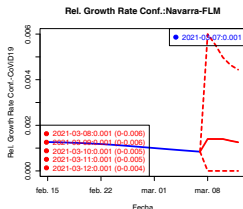
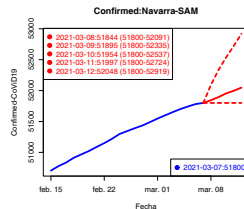
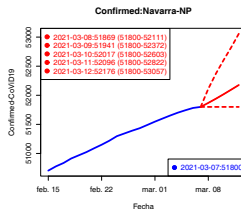
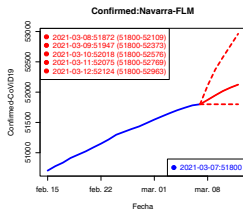


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

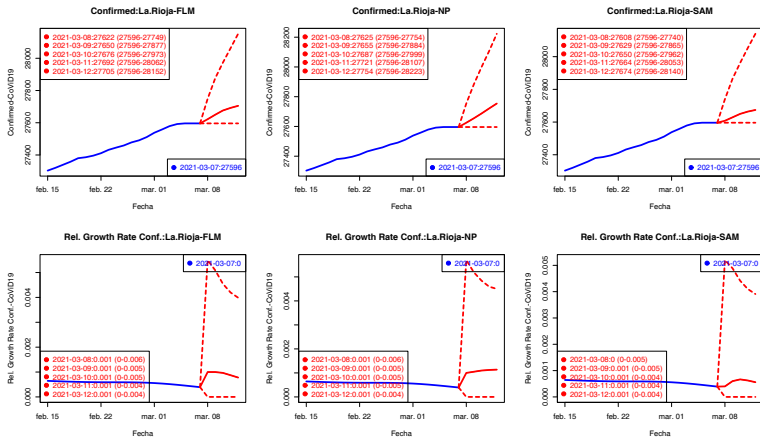


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ 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
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- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Último dato: 07/03/2021 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	0.002	0.002	0.002	0.002	0.002	0.002	0.708	0.688	0.746
H2	0.005	0.006	0.004	0.004	0.005	0.004	0.824	0.797	0.853
H3	0.008	0.01	0.006	0.008	0.009	0.007	0.878	0.849	0.897
H4	0.029	0.032	0.027	0.012	0.015	0.01	0.777	0.752	0.786
H5	0.041	0.046	0.039	0.017	0.023	0.014	0.796	0.774	0.806

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=07/03/2021

	Last	H1	H2	H3	H4	H5
España	71043	71120	71215	71264	71304	71453
Andalucía	8544	8559	8576	8586	8597	8619
Aragón	3289	3294	3300	3306	3307	3315
Asturias	1797	1802	1808	1813	1818	1820
Canarias	607	609	611	614	617	618
Cantabria	523	524	525	526	527	528
Castilla.y.León	6408	6416	6425	6431	6434	6451
Castilla.La.Mancha	5649	5654	5659	5662	5661	5678
Cataluña	11280	11283	11287	11286	11286	11295
Ceuta	86	86	87	87	88	89
Comunidad.Valenciana	6787	6794	6801	6802	6801	6822
Extremadura	1719	1721	1722	1724	1724	1730
Galicia	2250	2255	2261	2265	2269	2275
Islas.Baleares	731	732	732	732	732	734
La.Rioja	730	731	731	732	731	733
Madrid	14157	14168	14182	14186	14191	14210
Melilla	73	73	73	73	73	74
Murcia	1525	1529	1533	1536	1538	1544
Navarra	1103	1104	1104	1104	1104	1107
País.Vasco	3785	3788	3792	3793	3794	3799

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=07/03/2021

	Last	H1	H2	H3	H4	H5
España	0.0011	0.0012	0.0021	0.0026	0.0032	0.0032
Andalucía	0.0019	0.0015	0.0027	0.0035	0.0045	0.0049
Aragón	0.0015	0.0018	0.0033	0.0043	0.0055	0.0058
Asturias	0.0025	0.0028	0.0055	0.0075	0.0096	0.0111
Canarias	0.0041	0.0035	0.0070	0.0106	0.0146	0.0188
Cantabria	0.0026	0.0030	0.0058	0.0081	0.0109	0.0128
Castilla.y.León	0.0011	0.0012	0.0022	0.0027	0.0034	0.0034
Castilla.La.Mancha	0.0008	0.0009	0.0015	0.0018	0.0023	0.0021
Cataluña	0.0004	0.0008	0.0014	0.0014	0.0017	0.0013
Ceuta	0.0052	0.0045	0.0094	0.0138	0.0184	0.0239
Comunidad.Valenciana	0.0011	0.0008	0.0013	0.0013	0.0015	0.0009
Extremadura	0.0009	0.0008	0.0013	0.0017	0.0024	0.0027
Galicia	0.0023	0.0022	0.0042	0.0057	0.0074	0.0081
Islas.Baleares	0.0008	0.0009	0.0014	0.0015	0.0018	0.0014
La.Rioja	0.0008	0.0008	0.0012	0.0014	0.0018	0.0016
Madrid	0.0007	0.0010	0.0018	0.0019	0.0023	0.0019
Melilla	0.0042	0.0000	0.0000	0.0000	0.0014	0.0060
Murcia	0.0024	0.0019	0.0037	0.0051	0.0067	0.0076
Navarra	0.0005	0.0008	0.0013	0.0015	0.0022	0.0022
País.Vasco	0.0007	0.0009	0.0015	0.0016	0.0019	0.0015

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=07/03/2021

	Last	H1	H2	H3	H4	H5
España	0.0011	0.0024	0.0047	0.0069	0.0092	0.0120
Andalucía	0.0019	0.0034	0.0069	0.0102	0.0139	0.0174
Aragón	0.0015	0.0025	0.0050	0.0074	0.0099	0.0128
Asturias	0.0025	0.0033	0.0066	0.0098	0.0133	0.0167
Canarias	0.0041	0.0040	0.0081	0.0121	0.0166	0.0206
Cantabria	0.0026	0.0026	0.0051	0.0075	0.0101	0.0130
Castilla.y.León	0.0011	0.0023	0.0045	0.0066	0.0088	0.0116
Castilla.La.Mancha	0.0008	0.0019	0.0038	0.0056	0.0075	0.0101
Cataluña	0.0004	0.0016	0.0032	0.0048	0.0063	0.0087
Ceuta	0.0052	0.0054	0.0108	0.0163	0.0222	0.0274
Comunidad.Valenciana	0.0011	0.0028	0.0055	0.0082	0.0110	0.0141
Extremadura	0.0009	0.0020	0.0040	0.0059	0.0078	0.0104
Galicia	0.0023	0.0034	0.0068	0.0101	0.0138	0.0173
Islas.Baleares	0.0008	0.0022	0.0043	0.0063	0.0084	0.0111
La.Rioja	0.0008	0.0020	0.0039	0.0057	0.0075	0.0101
Madrid	0.0007	0.0021	0.0041	0.0060	0.0081	0.0107
Melilla	0.0042	0.0063	0.0125	0.0187	0.0251	0.0312
Murcia	0.0024	0.0035	0.0071	0.0105	0.0143	0.0178
Navarra	0.0005	0.0016	0.0032	0.0047	0.0062	0.0085
País.Vasco	0.0007	0.0021	0.0042	0.0062	0.0082	0.0109

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

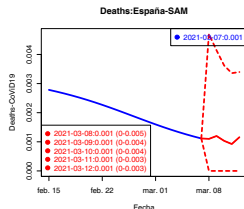
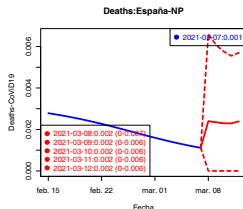
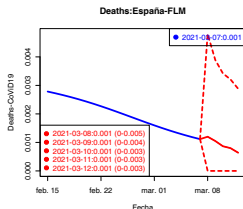
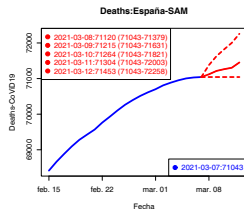
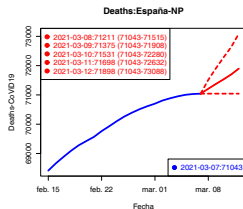
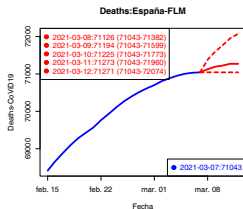
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=07/03/2021

	Last	H1	H2	H3	H4	H5
España	0.0011	0.0011	0.0024	0.0031	0.0037	0.0058
Andalucía	0.0019	0.0017	0.0038	0.0049	0.0063	0.0088
Aragón	0.0015	0.0016	0.0035	0.0050	0.0056	0.0080
Asturias	0.0025	0.0027	0.0061	0.0091	0.0114	0.0129
Canarias	0.0041	0.0032	0.0070	0.0108	0.0157	0.0189
Cantabria	0.0026	0.0023	0.0046	0.0057	0.0086	0.0102
Castilla.y.León	0.0011	0.0012	0.0026	0.0036	0.0040	0.0068
Castilla.La.Mancha	0.0008	0.0008	0.0017	0.0024	0.0021	0.0051
Cataluña	0.0004	0.0002	0.0006	0.0006	0.0006	0.0014
Ceuta	0.0052	0.0040	0.0096	0.0167	0.0244	0.0295
Comunidad.Valenciana	0.0011	0.0010	0.0021	0.0022	0.0021	0.0052
Extremadura	0.0009	0.0009	0.0018	0.0027	0.0028	0.0066
Galicia	0.0023	0.0021	0.0047	0.0066	0.0085	0.0109
Islas.Baleares	0.0008	0.0009	0.0017	0.0019	0.0016	0.0042
La.Rioja	0.0008	0.0008	0.0016	0.0021	0.0016	0.0047
Madrid	0.0007	0.0007	0.0018	0.0021	0.0024	0.0038
Melilla	0.0042	0.0002	0.0013	0.0033	0.0061	0.0117
Murcia	0.0024	0.0024	0.0050	0.0071	0.0085	0.0123
Navarra	0.0005	0.0006	0.0009	0.0013	0.0010	0.0033
País.Vasco	0.0007	0.0007	0.0017	0.0020	0.0024	0.0037

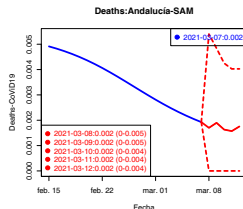
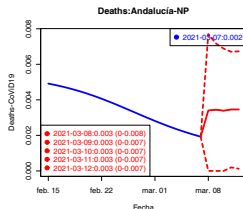
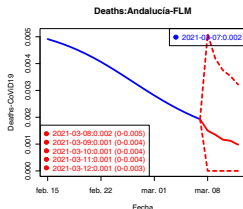
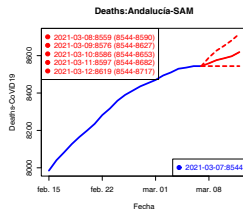
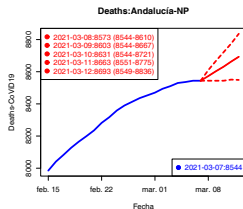
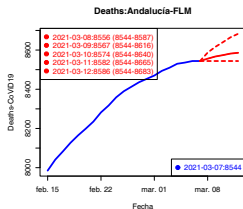
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Fallecidos: España



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

Fallecidos: Andalucía

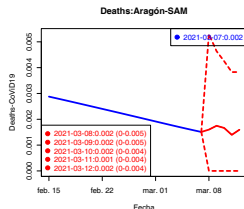
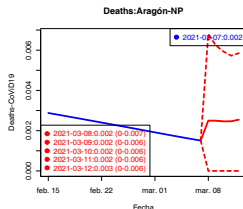
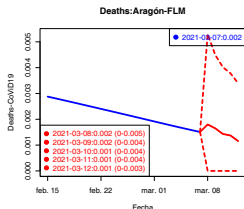
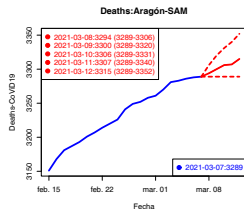
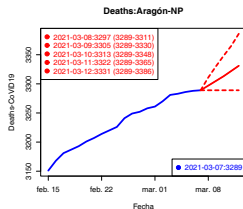
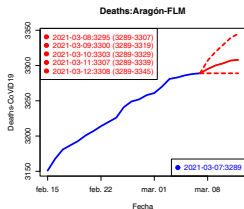


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

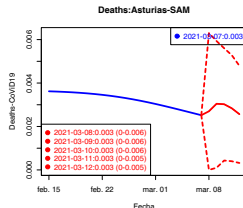
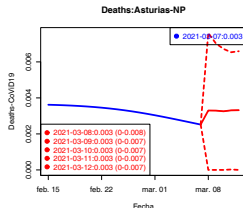
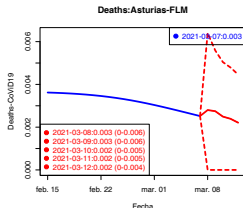
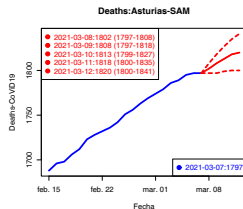
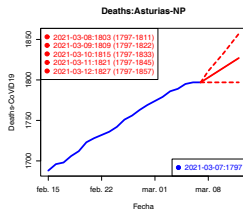
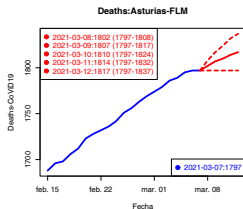
◀ Fallecidos

Fallecidos: Aragón



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

Fallecidos: Asturias

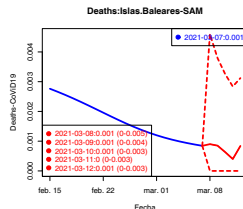
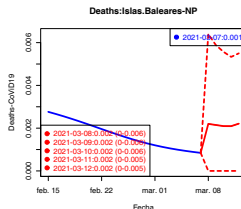
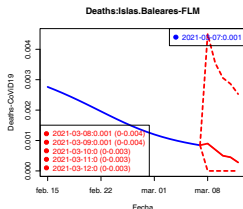
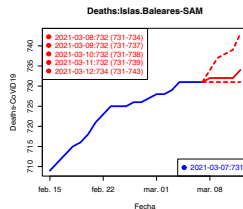
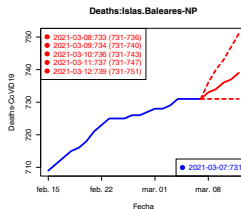
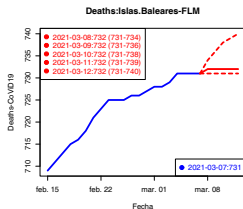


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Islas Baleares

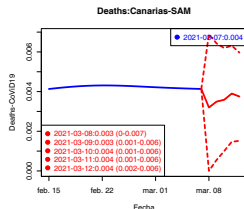
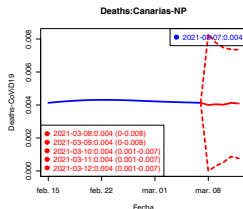
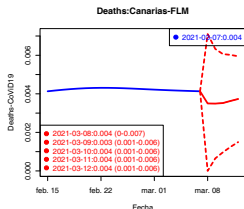
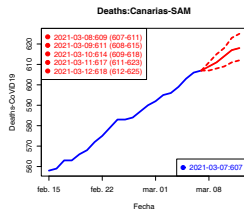
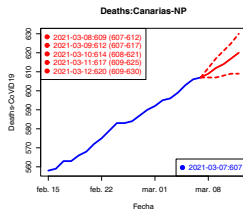
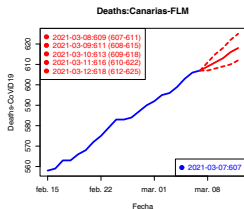


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Canarias

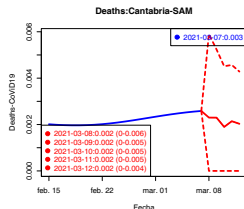
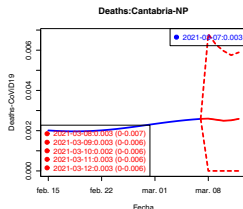
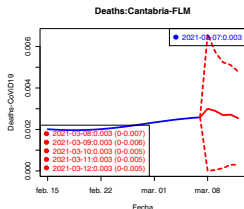
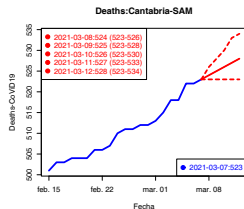
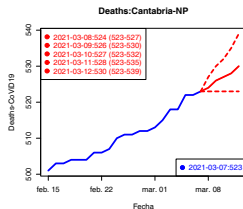
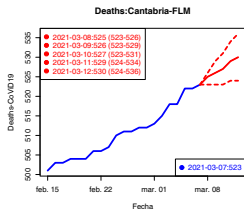


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cantabria

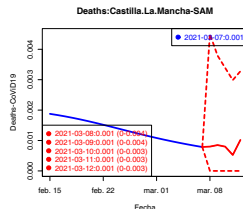
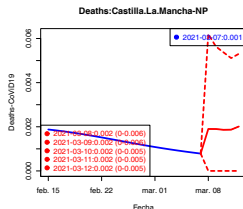
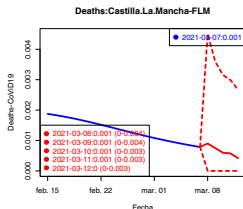
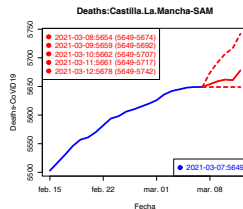
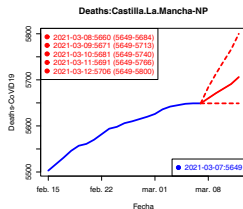
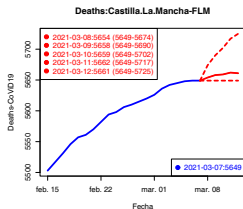


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla-La Mancha

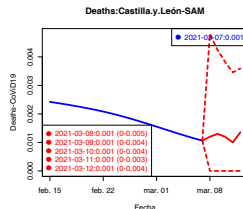
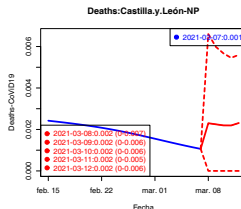
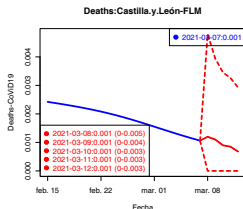
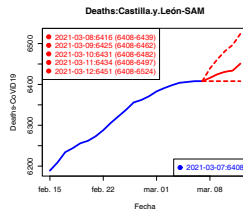
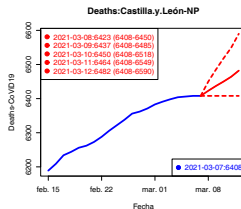
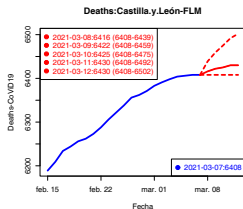


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla y León

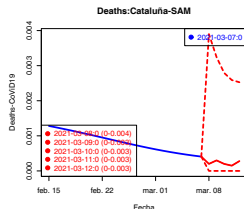
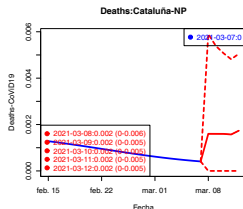
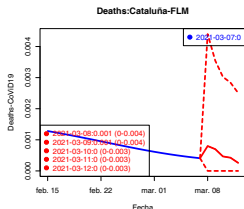
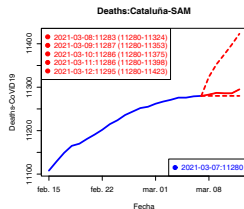
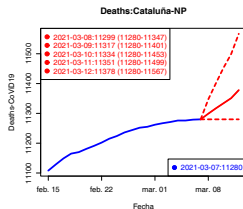
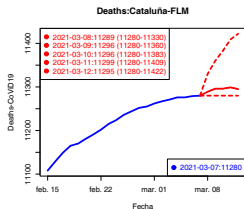


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

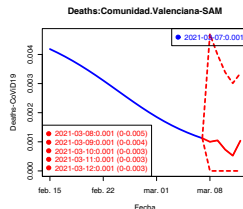
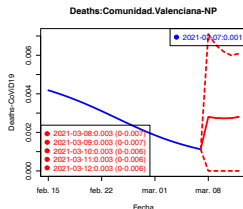
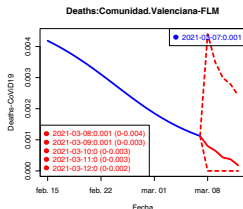
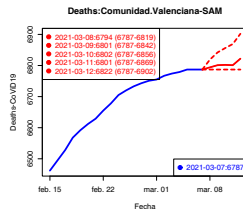
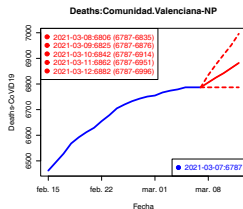
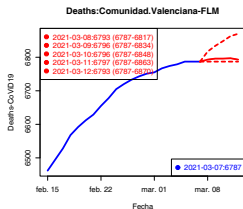
◀ Fallecidos

Fallecidos: Cataluña



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

Fallecidos: C. Valenciana

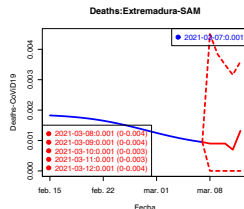
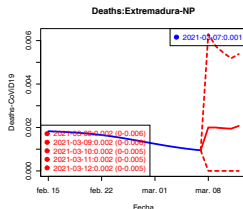
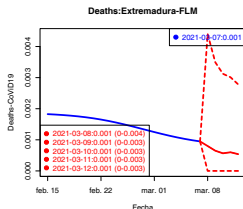
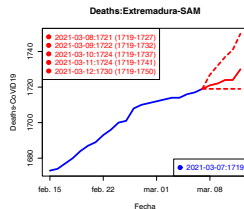
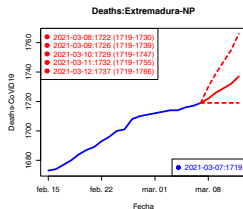
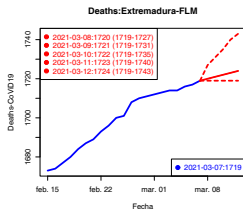


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

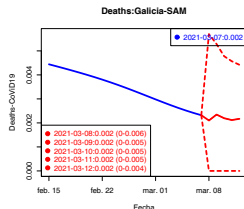
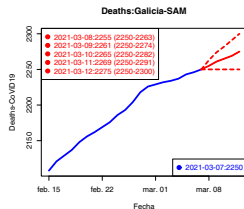
Fallecidos: Extremadura



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

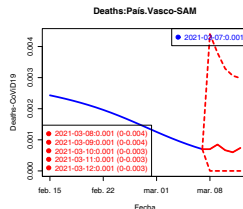
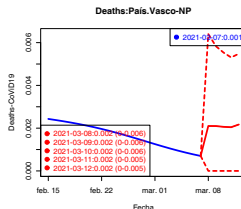
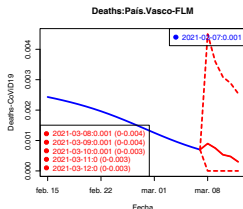
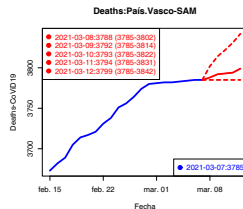
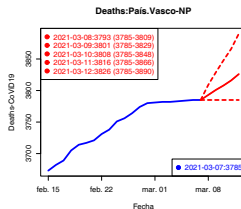
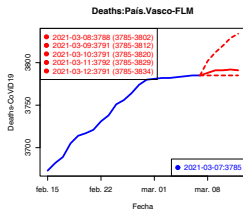
◀ Confirmados

◀ Fallecidos



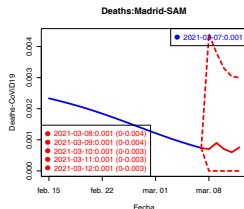
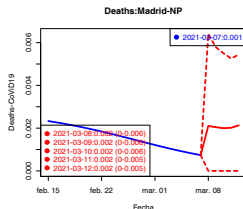
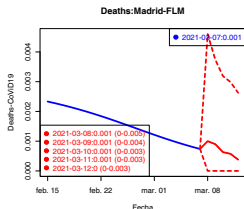
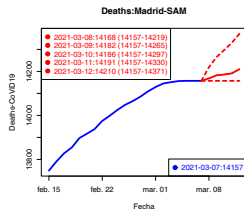
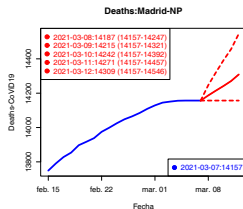
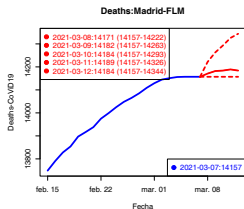
◀ Confirmados ▶ Fallecidos

Fallecidos: País Vasco



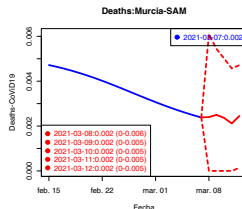
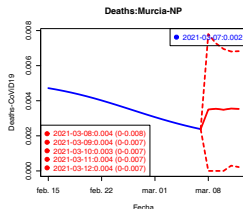
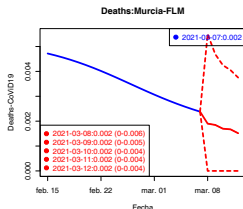
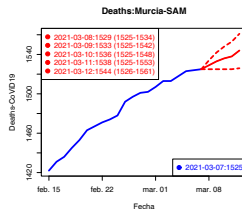
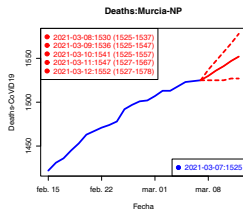
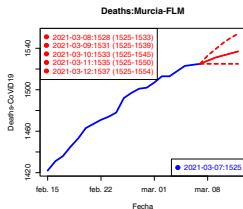
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Madrid



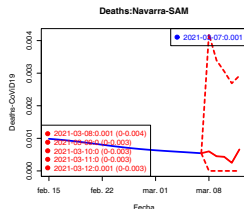
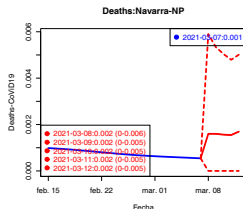
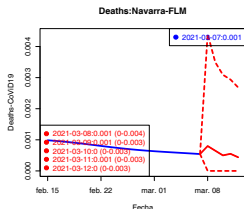
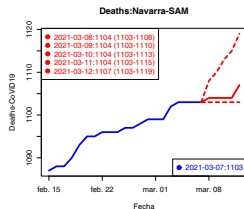
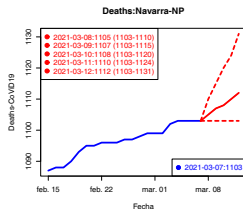
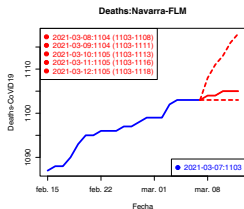
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

Fallecidos: Murcia



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

Fallecidos: Navarra

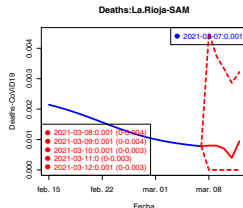
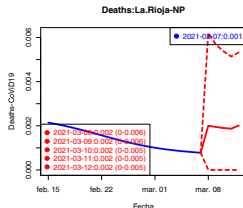
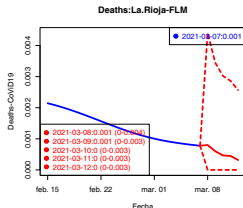
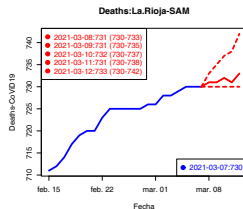
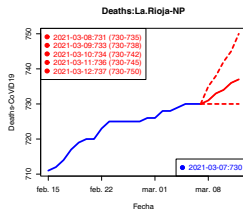
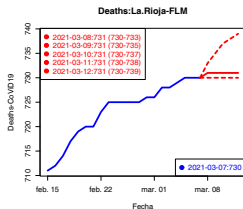


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: La Rioja



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

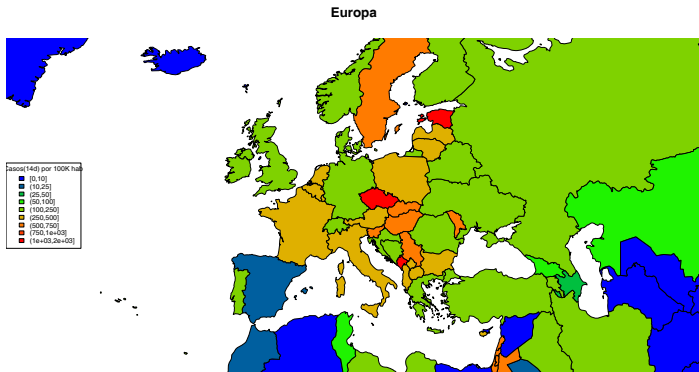
◀ Confirmados

◀ Fallecidos

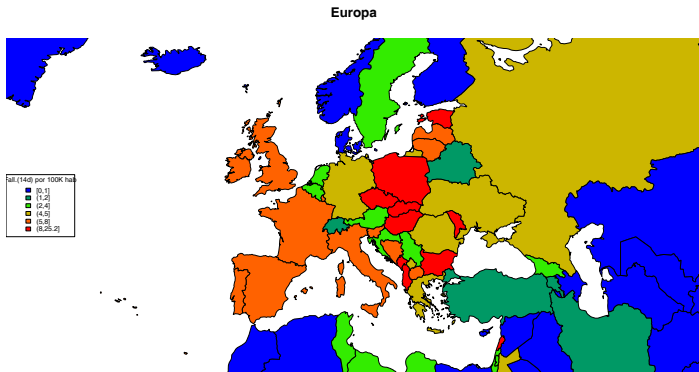
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Europa: Incidencia Acumulada (14d) por 100K hab.

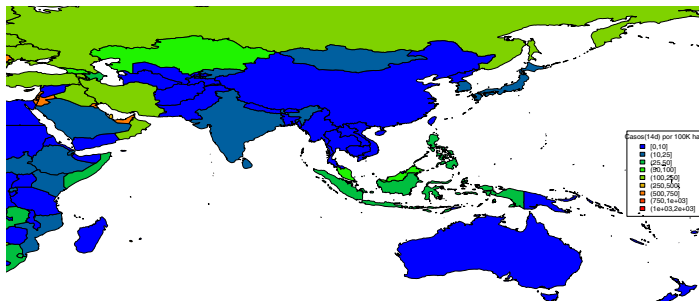


Europa: Fallecidos (14d) por 100K hab.



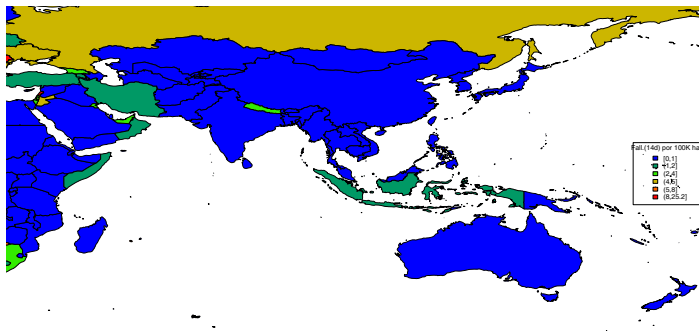
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



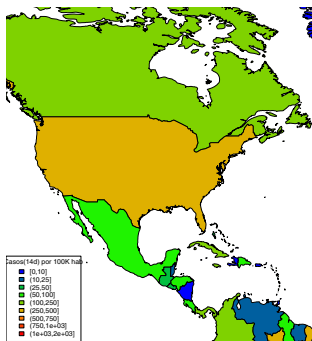
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

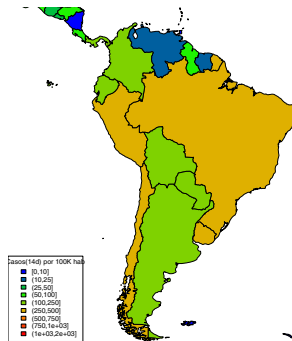


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

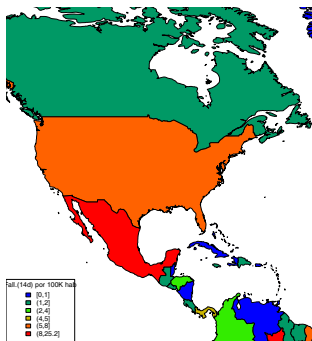


América del sur

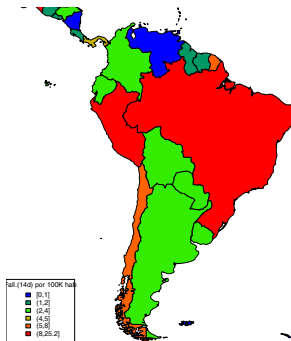


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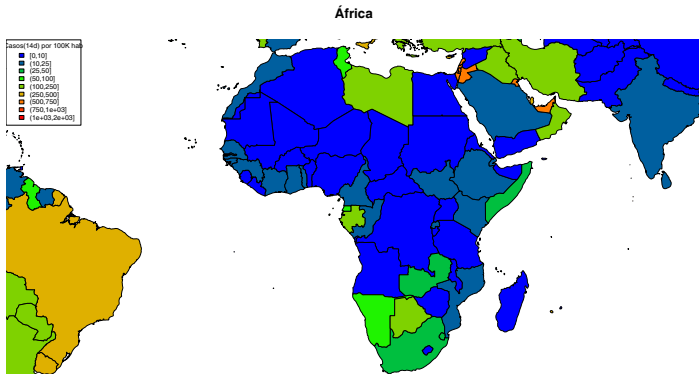
América del Norte



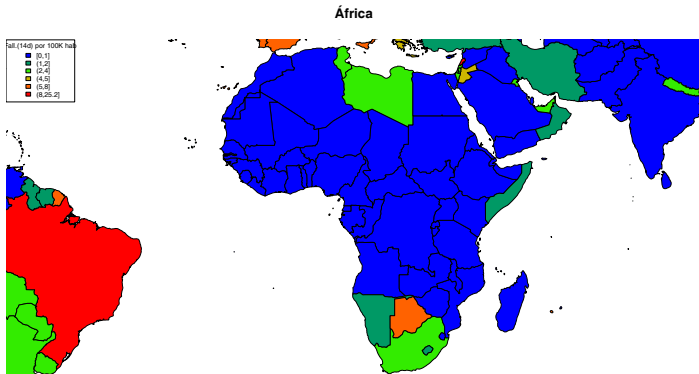
América del sur



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.