

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: 27/06/2021

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

	$10^2 \sigma_R^2$			$10^2 \sigma_R^2(\text{rob.})$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0.013	0.003	0.011	0.004	0.002	0.004	0.495	0.888	0.582
H4	0.045	0.025	0.041	0.035	0.02	0.035	0.818	0.904	0.834
H8	0.198	0.131	0.186	0.156	0.089	0.15	0.816	0.886	0.827
H12	0.637	0.46	0.605	0.564	0.304	0.51	0.771	0.846	0.782
H15	1.403	1.044	1.337	1.145	0.648	1.093	0.723	0.808	0.735

C **I** **D** **E** **F** **G** **H** **I** **J** **K** **L** **M** **N** **O** **P** **Q** **R** **S** **T** **U** **V** **W** **X** **Y** **Z**

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=27/06/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0013	0.0031	0.0064	0.0082	0.0107
Andalucía	0.0011	0.0017	0.0046	0.0090	0.0119	0.0149
Aragón	0.0004	0.0010	0.0021	0.0043	0.0050	0.0066
Asturias	0.0006	0.0012	0.0023	0.0042	0.0043	0.0051
Canarias	0.0020	0.0028	0.0082	0.0156	0.0219	0.0273
Cantabria	0.0021	0.0032	0.0102	0.0216	0.0322	0.0422
Castilla.y.León	0.0003	0.0009	0.0016	0.0034	0.0035	0.0047
Castilla.La.Mancha	0.0002	0.0007	0.0007	0.0015	0.0004	0.0007
Cataluña	0.0009	0.0016	0.0042	0.0087	0.0119	0.0156
Ceuta	0.0002	0.0005	0.0009	0.0027	0.0026	0.0040
Comunidad.Valenciana	0.0006	0.0013	0.0035	0.0075	0.0102	0.0136
Extremadura	0.0006	0.0013	0.0030	0.0064	0.0083	0.0110
Galicia	0.0006	0.0013	0.0033	0.0068	0.0090	0.0117
Islas.Baleares	0.0009	0.0016	0.0046	0.0100	0.0141	0.0186
La.Rioja	0.0005	0.0012	0.0023	0.0041	0.0043	0.0051
Madrid	0.0004	0.0010	0.0019	0.0041	0.0047	0.0063
Melilla	0.0006	0.0014	0.0039	0.0086	0.0120	0.0162
Murcia	0.0004	0.0010	0.0019	0.0040	0.0045	0.0060
Navarra	0.0004	0.0010	0.0020	0.0040	0.0044	0.0058
País.Vasco	0.0004	0.0010	0.0018	0.0035	0.0034	0.0042

Cuadro: Previsión Ratio Incr. Confirmados: Mod. lineal - Horiz. (días).

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=27/06/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0011	0.0042	0.0090	0.0142	0.0192
Andalucía	0.0011	0.0017	0.0064	0.0135	0.0209	0.0278
Aragón	0.0004	0.0009	0.0036	0.0077	0.0122	0.0166
Asturias	0.0006	0.0012	0.0044	0.0094	0.0148	0.0199
Canarias	0.0020	0.0027	0.0100	0.0214	0.0329	0.0436
Cantabria	0.0021	0.0020	0.0074	0.0161	0.0253	0.0341
Castilla.y.León	0.0003	0.0009	0.0034	0.0074	0.0118	0.0160
Castilla.La.Mancha	0.0002	0.0009	0.0032	0.0070	0.0112	0.0152
Cataluña	0.0009	0.0012	0.0046	0.0098	0.0153	0.0207
Ceuta	0.0002	0.0008	0.0030	0.0066	0.0106	0.0145
Comunidad.Valenciana	0.0006	0.0009	0.0036	0.0078	0.0124	0.0169
Extremadura	0.0006	0.0010	0.0038	0.0081	0.0128	0.0174
Galicia	0.0006	0.0010	0.0039	0.0084	0.0132	0.0180
Islas.Baleares	0.0009	0.0011	0.0042	0.0090	0.0143	0.0194
La.Rioja	0.0005	0.0011	0.0043	0.0092	0.0144	0.0194
Madrid	0.0004	0.0009	0.0034	0.0075	0.0118	0.0161
Melilla	0.0006	0.0009	0.0034	0.0073	0.0117	0.0160
Murcia	0.0004	0.0009	0.0034	0.0074	0.0118	0.0161
Navarra	0.0004	0.0010	0.0038	0.0081	0.0128	0.0174
País.Vasco	0.0004	0.0010	0.0039	0.0083	0.0131	0.0178

Cuadro: Previsión Ratio Incr. Confirmados: Mod. No Paramétrico - Horiz. (días).

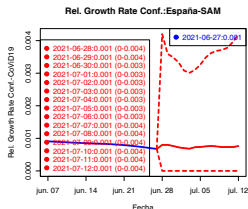
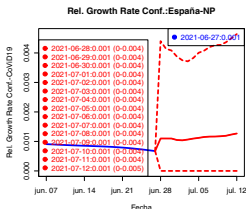
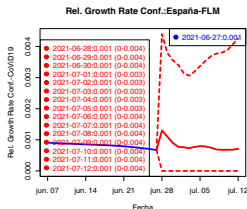
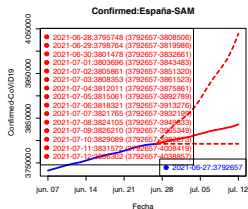
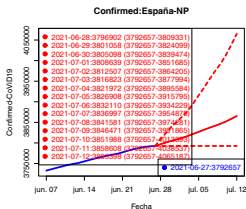
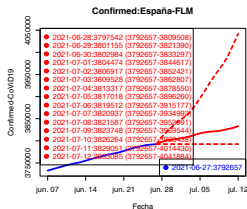
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=27/06/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0008	0.0029	0.0059	0.0088	0.0115
Andalucía	0.0011	0.0012	0.0041	0.0080	0.0105	0.0120
Aragón	0.0004	0.0004	0.0018	0.0036	0.0058	0.0078
Asturias	0.0006	0.0007	0.0020	0.0033	0.0040	0.0044
Canarias	0.0020	0.0026	0.0078	0.0135	0.0181	0.0208
Cantabria	0.0021	0.0036	0.0116	0.0239	0.0389	0.0529
Castilla.y.León	0.0003	0.0003	0.0012	0.0025	0.0039	0.0050
Castilla.La.Mancha	0.0002	0.0000	0.0003	0.0005	0.0008	0.0014
Cataluña	0.0009	0.0012	0.0042	0.0087	0.0134	0.0180
Ceuta	0.0002	0.0000	0.0004	0.0011	0.0022	0.0029
Comunidad.Valenciana	0.0006	0.0010	0.0035	0.0073	0.0121	0.0165
Extremadura	0.0006	0.0008	0.0030	0.0060	0.0096	0.0129
Galicia	0.0006	0.0009	0.0032	0.0064	0.0100	0.0130
Islas.Baleares	0.0009	0.0014	0.0047	0.0099	0.0158	0.0206
La.Rioja	0.0005	0.0006	0.0020	0.0034	0.0044	0.0054
Madrid	0.0004	0.0004	0.0017	0.0035	0.0056	0.0076
Melilla	0.0006	0.0011	0.0040	0.0085	0.0145	0.0200
Murcia	0.0004	0.0004	0.0017	0.0033	0.0053	0.0071
Navarra	0.0004	0.0004	0.0017	0.0034	0.0050	0.0069
País.Vasco	0.0004	0.0004	0.0015	0.0026	0.0035	0.0041

Cuadro: Previsión Ratio Incr. Confirmados: Mod. Aditivo - Horiz. (días).

Confirmados: España

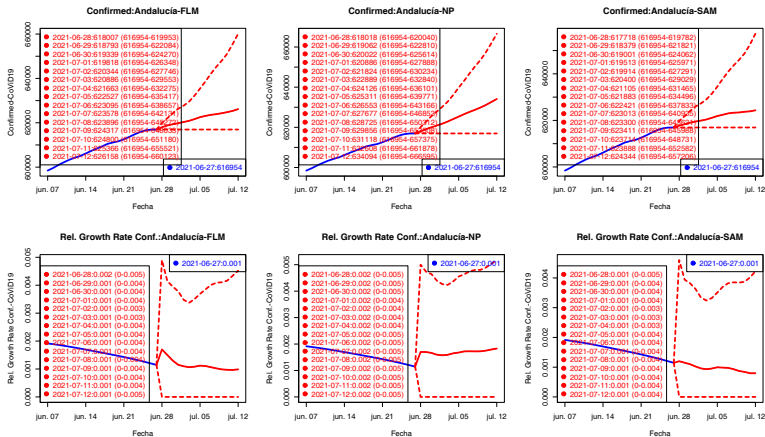


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

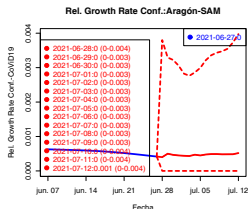
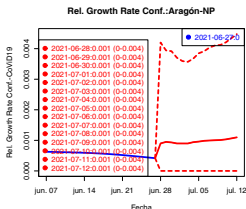
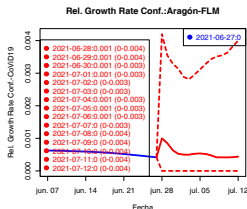
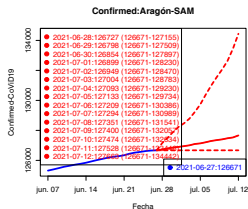
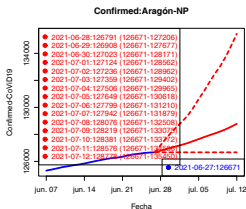
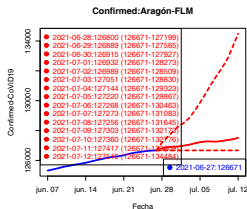
Confirmados: Andalucía



Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados ▶ Fallecidos

Confirmados: Aragón

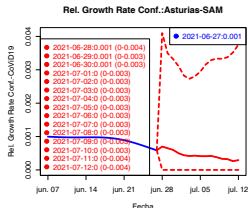
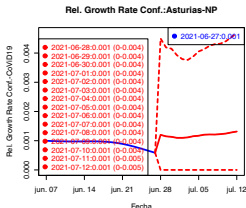
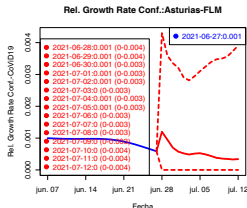
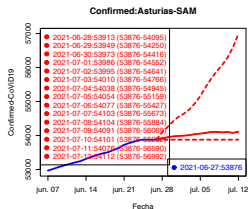
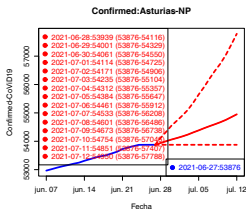
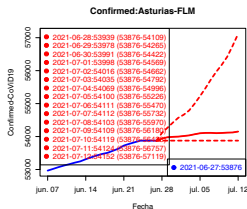


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Asturias

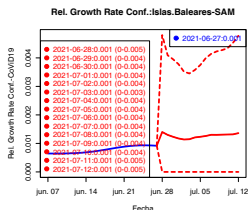
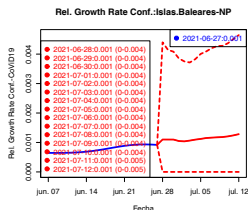
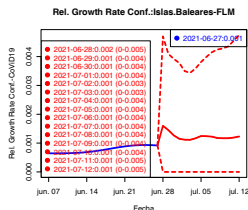
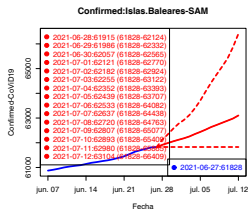
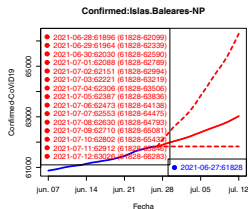
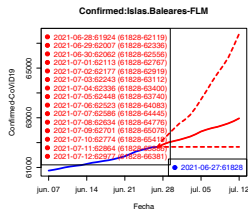


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

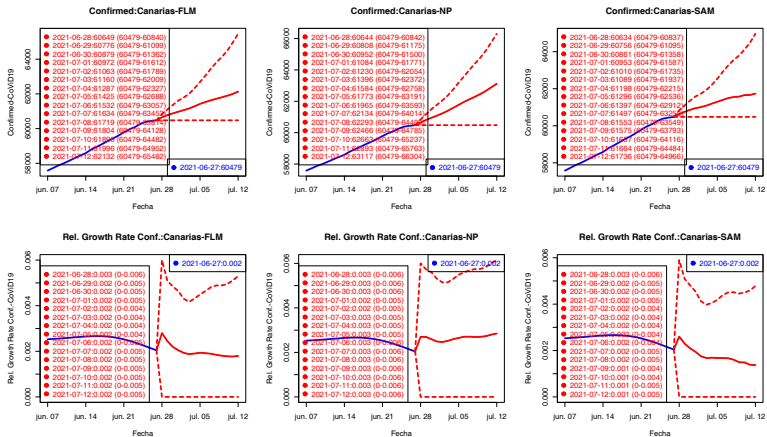
Confirmados: Islas Baleares



Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados ▶ Fallecidos

Confirmados: Canarias

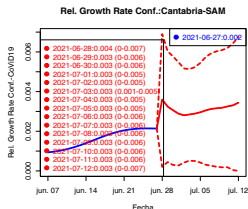
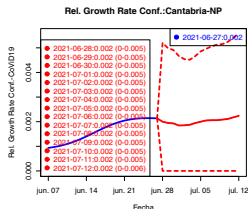
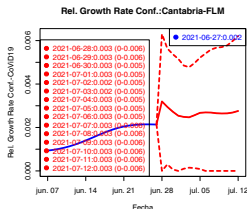
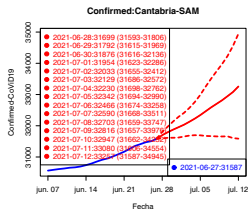
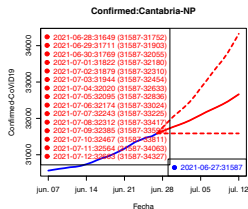
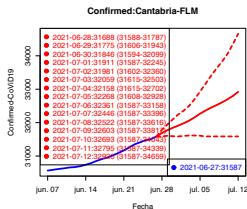


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Cantabria



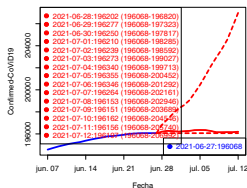
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

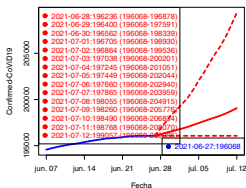
← Fallecidos

Confirmados: Castilla-La Mancha

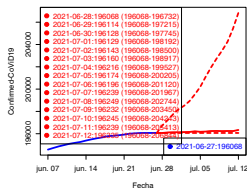
Confirmed:Castilla.La.Mancha-FLM



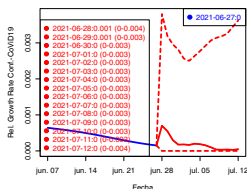
Confirmed:Castilla.La.Mancha-NP



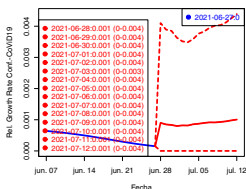
Confirmed:Castilla.La.Mancha-SAM



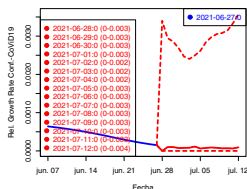
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Rel. Growth Rate Conf.:Castilla.La.Mancha-NP



Rel. Growth Rate Conf.:Castilla.La.Mancha-SAM

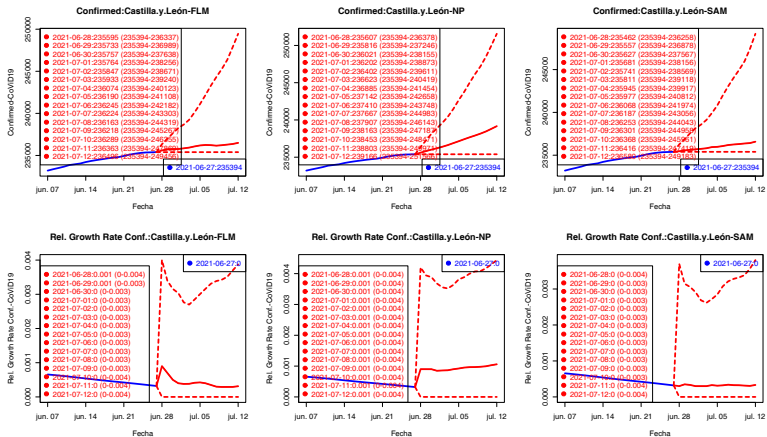


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

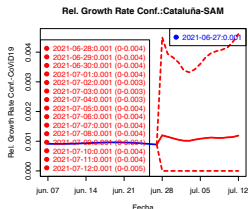
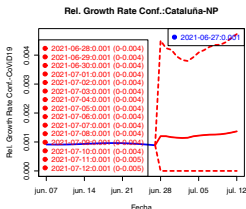
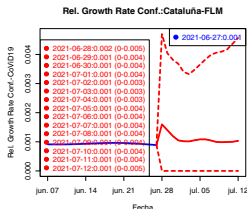
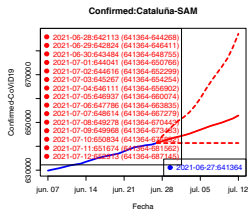
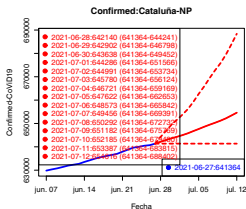
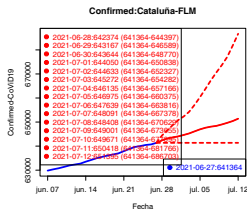


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cataluña



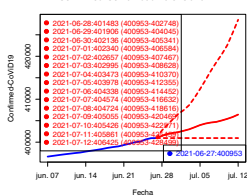
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

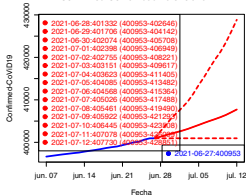
← Fallecidos

Confirmados: C. Valenciana

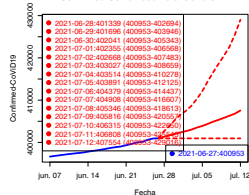
Confirmed:Comunidad.Valenciana-FLM



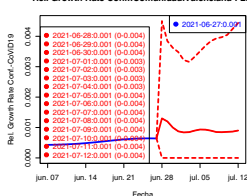
Confirmed:Comunidad.Valenciana-NP



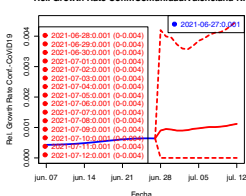
Confirmed:Comunidad.Valenciana-SAM



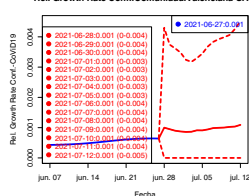
Rel. Growth Rate Conf.:Comunidad.Valenciana-FLM



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



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



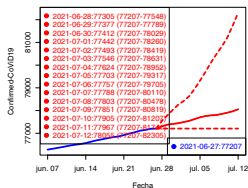
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

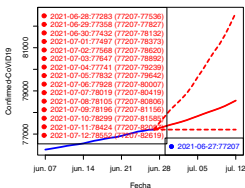
← Fallecidos

Confirmados: Extremadura

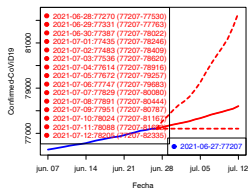
Confirmed:Extremadura-FLM



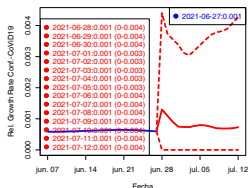
Confirmed:Extremadura-NP



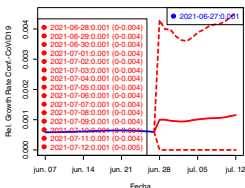
Confirmed:Extremadura-SAM



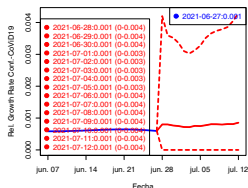
Rel. Growth Rate Conf.:Extremadura-FLM



Rel. Growth Rate Conf.:Extremadura-NP



Rel. Growth Rate Conf.:Extremadura-SAM



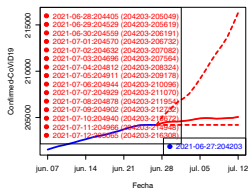
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

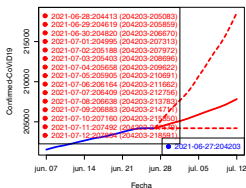
◀ Fallecidos

Confirmados: País Vasco

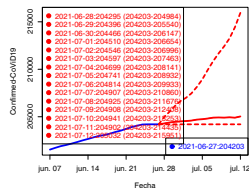
Confirmed:País.Vasco-FLM



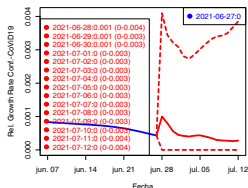
Confirmed:País.Vasco-NP



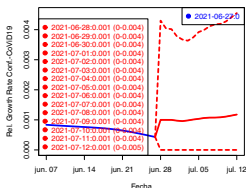
Confirmed:País.Vasco-SAM



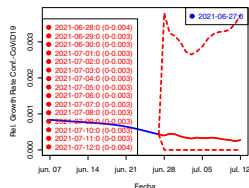
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



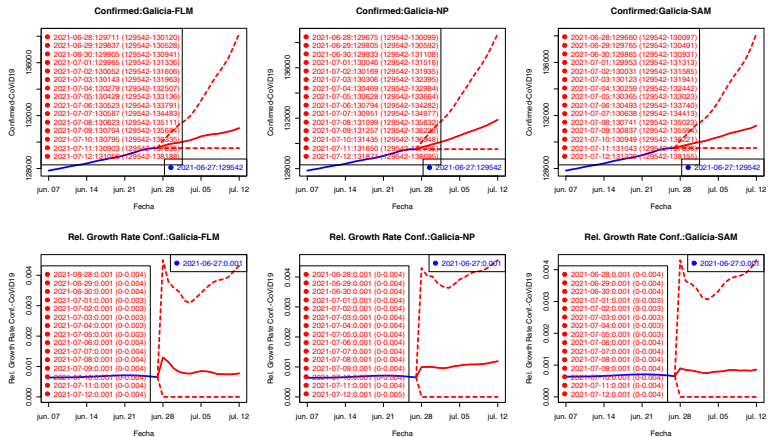
Rel. Growth Rate Conf.:País.Vasco-SAM



Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados ▶ Fallecidos

Confirmados: Galicia

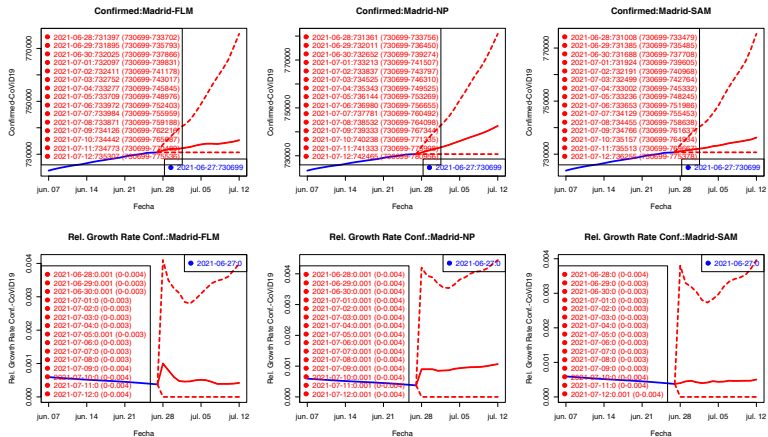


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

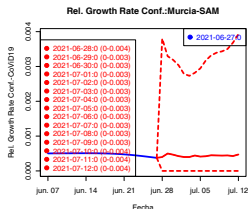
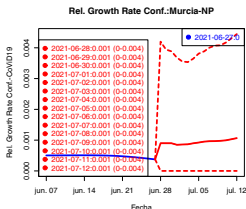
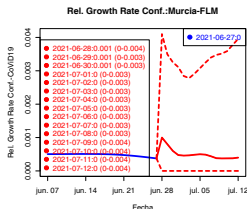
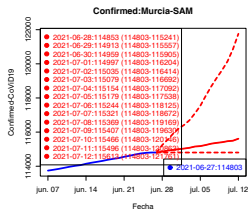
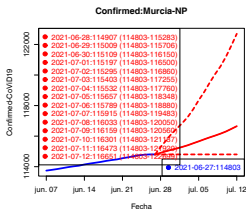
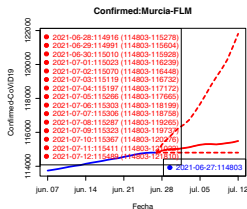
Confirmados: Madrid



Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados ▶ Fallecidos

Confirmados: Murcia

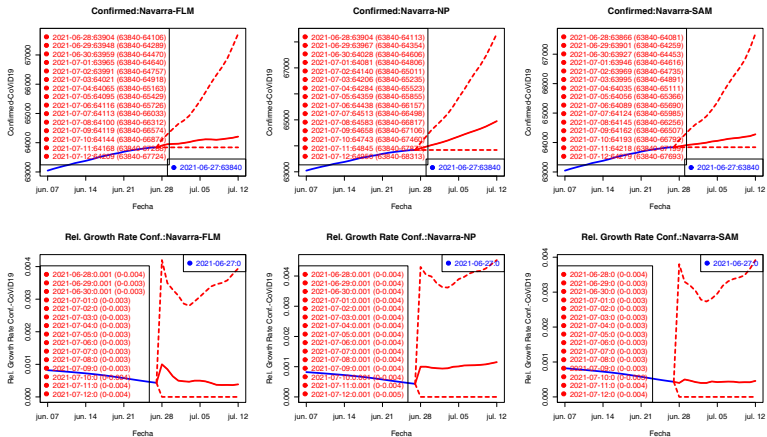


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

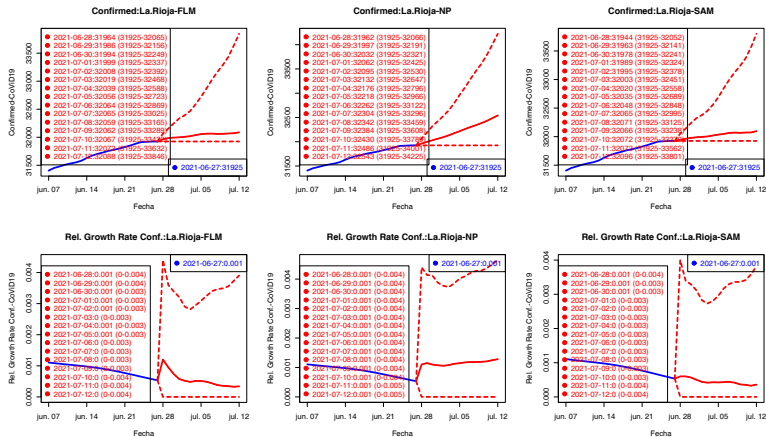


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

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

Modelos para fallecidos por CoViD-19

Último dato: 27/06/2021 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	0.001	0.002	0.001	0.001	0.001	0.74	0.807	0.749
H4	0.013	0.013	0.012	0.007	0.008	0.007	0.845	0.855	0.859
H8	0.048	0.053	0.043	0.026	0.033	0.024	0.874	0.865	0.887
H12	0.111	0.125	0.098	0.072	0.088	0.064	0.871	0.858	0.887
H15	0.179	0.21	0.151	0.131	0.168	0.114	0.876	0.858	0.896

Tabla Previsión Fallecidos: Mod. Lineal.

Last=27/06/2021

	Last	H1	H4	H8	H12	H15
España	80394	80410	80394	80394	80394	80394
Andalucía	9955	9958	9956	9955	9955	9955
Aragón	3520	3520	3520	3520	3520	3520
Asturias	1977	1977	1977	1977	1977	1977
Canarias	779	780	781	782	783	783
Cantabria	568	568	568	569	569	569
Castilla.y.León	6863	6864	6863	6863	6863	6863
Castilla.La.Mancha	5982	5983	5982	5982	5982	5982
Cataluña	14555	14558	14555	14555	14555	14555
Ceuta	116	116	116	116	116	116
Comunidad.Valenciana	7378	7379	7378	7378	7378	7378
Extremadura	1789	1789	1789	1789	1789	1789
Galicia	2419	2420	2419	2419	2419	2419
Islas.Baleares	844	844	844	844	844	844
La.Rioja	778	778	779	779	779	778
Madrid	15455	15457	15455	15455	15455	15455
Melilla	97	97	97	97	97	97
Murcia	1606	1606	1606	1606	1606	1606
Navarra	1184	1184	1184	1184	1184	1184
País.Vasco	4529	4530	4529	4529	4529	4529

Cuadro: Previsión fallecidos: Mod. lineal - Horiz. (días).

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=27/06/2021

	Last	H1	H4	H8	H12	H15
España	80394	80394	80425	80394	80399	80394
Andalucía	9955	9956	9962	9955	9955	9955
Aragón	3520	3520	3521	3520	3520	3520
Asturias	1977	1977	1978	1977	1978	1977
Canarias	779	780	781	782	782	781
Cantabria	568	568	570	570	572	573
Castilla y León	6863	6863	6863	6863	6863	6863
Castilla-La Mancha	5982	5982	5982	5982	5982	5982
Cataluña	14555	14555	14559	14555	14555	14555
Ceuta	116	116	116	116	116	116
Comunidad Valenciana	7378	7378	7380	7378	7383	7378
Extremadura	1789	1789	1790	1789	1790	1789
Galicia	2419	2419	2421	2421	2423	2422
Islas Baleares	844	844	845	845	846	846
La Rioja	778	778	778	778	779	778
Madrid	15455	15455	15457	15455	15455	15455
Melilla	97	97	97	97	97	97
Murcia	1606	1606	1606	1606	1606	1606
Navarra	1184	1184	1184	1184	1184	1184
País Vasco	4529	4529	4532	4529	4529	4529

Cuadro: Previsión fallecidos: Mod. Aditivo - Horiz. (días).

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=27/06/2021

	Last	H1	H4	H8	H12	H15
España	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000
Andalucía	0.0002	0.0003	0.0001	0.0000	0.0000	0.0000
Aragón	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
Asturias	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000
Canarias	0.0007	0.0009	0.0025	0.0042	0.0050	0.0049
Cantabria	0.0001	0.0004	0.0007	0.0013	0.0015	0.0017
Castilla.y.León	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000
Castilla.La.Mancha	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
Cataluña	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000
Ceuta	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
Comunidad.Valenciana	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000
Extremadura	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000
Galicia	0.0001	0.0003	0.0000	0.0000	0.0000	0.0000
Islas.Baleares	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000
La.Rioja	0.0004	0.0006	0.0010	0.0018	0.0013	0.0001
Madrid	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
Melilla	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000
Murcia	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
Navarra	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000
País.Vasco	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000

Cuadro: Previsión Ratio Incr. Fallecidos: Mod. lineal - Horiz. (días).

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	Last	H1	H4	H8	H12	H15
España	0.0001	0.0008	0.0035	0.0076	0.0114	0.0150
Andalucía	0.0002	0.0009	0.0038	0.0082	0.0123	0.0162
Aragón	0.0001	0.0009	0.0036	0.0078	0.0117	0.0155
Asturias	0.0001	0.0008	0.0034	0.0075	0.0112	0.0148
Canarias	0.0007	0.0012	0.0046	0.0100	0.0151	0.0200
Cantabria	0.0001	0.0009	0.0036	0.0079	0.0119	0.0157
Castilla.y.León	0.0001	0.0008	0.0035	0.0075	0.0113	0.0149
Castilla.La.Mancha	0.0001	0.0008	0.0035	0.0076	0.0113	0.0150
Cataluña	0.0000	0.0008	0.0033	0.0073	0.0108	0.0143
Ceuta	0.0000	0.0008	0.0033	0.0072	0.0107	0.0141
Comunidad.Valenciana	0.0000	0.0008	0.0033	0.0072	0.0108	0.0143
Extremadura	0.0000	0.0008	0.0034	0.0073	0.0110	0.0145
Galicia	0.0001	0.0008	0.0035	0.0076	0.0114	0.0151
Islas.Baleares	0.0000	0.0008	0.0034	0.0074	0.0110	0.0145
La.Rioja	0.0004	0.0009	0.0036	0.0079	0.0118	0.0156
Madrid	0.0000	0.0008	0.0034	0.0075	0.0112	0.0148
Melilla	0.0000	0.0008	0.0033	0.0072	0.0107	0.0141
Murcia	0.0000	0.0008	0.0034	0.0073	0.0110	0.0145
Navarra	0.0001	0.0008	0.0034	0.0074	0.0111	0.0147
País.Vasco	0.0001	0.0009	0.0037	0.0081	0.0122	0.0161

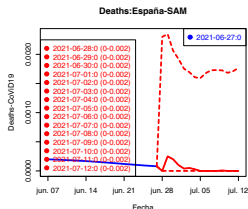
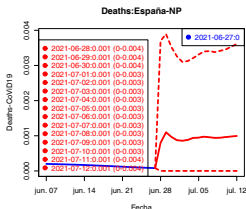
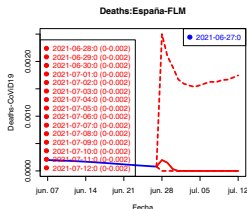
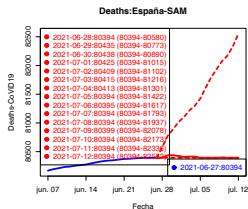
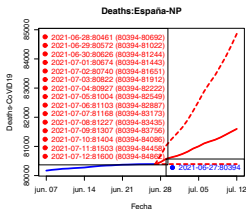
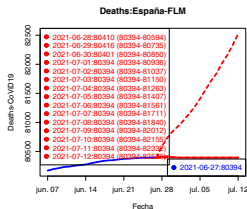
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=27/06/2021

	Last	H1	H4	H8	H12	H15
España	0.0001	0.0000	0.0004	0.0000	0.0001	0.0000
Andalucía	0.0002	0.0001	0.0007	0.0000	0.0000	0.0000
Aragón	0.0001	0.0000	0.0003	0.0000	0.0001	0.0000
Asturias	0.0001	0.0001	0.0007	0.0001	0.0006	0.0000
Canarias	0.0007	0.0009	0.0028	0.0033	0.0044	0.0031
Cantabria	0.0001	0.0004	0.0027	0.0036	0.0062	0.0079
Castilla.y.León	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
Castilla.La.Mancha	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
Cataluña	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000
Ceuta	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Comunidad.Valenciana	0.0000	0.0000	0.0003	0.0000	0.0007	0.0000
Extremadura	0.0000	0.0000	0.0004	0.0001	0.0008	0.0000
Galicia	0.0001	0.0000	0.0007	0.0007	0.0016	0.0011
Islas.Baleares	0.0000	0.0000	0.0009	0.0010	0.0022	0.0023
La.Rioja	0.0004	0.0001	0.0005	0.0000	0.0011	0.0000
Madrid	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
Melilla	0.0000	0.0000	0.0001	0.0000	0.0007	0.0003
Murcia	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Navarra	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000
País.Vasco	0.0001	0.0000	0.0006	0.0000	0.0001	0.0000

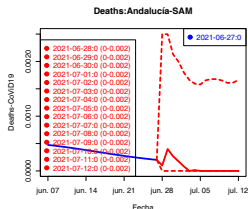
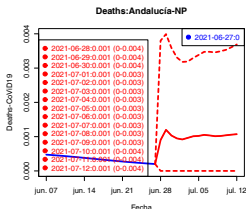
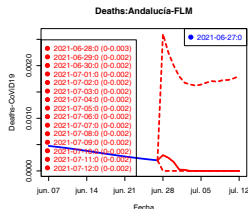
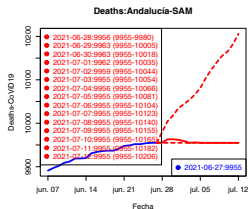
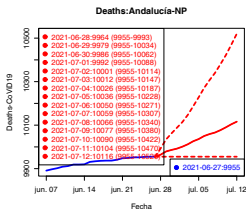
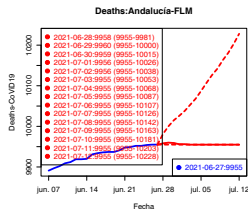
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Fallecidos: España



Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Andalucía

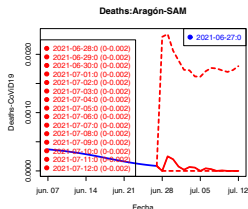
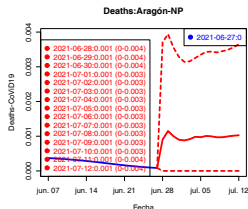
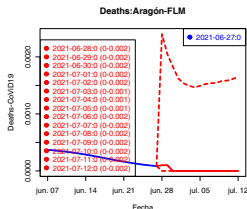
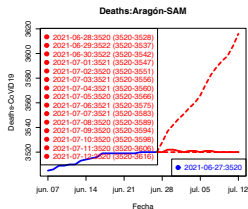
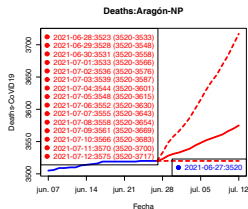
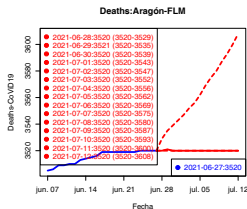


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

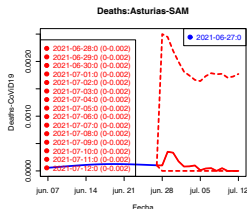
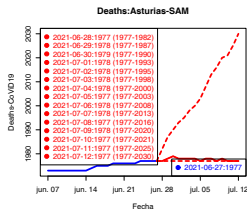
◀ Confirmados

◀ Fallecidos

Fallecidos: Aragón



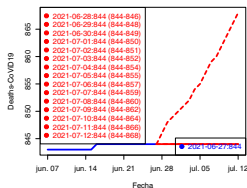
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.



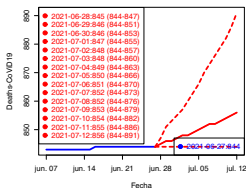
◀ Confirmados ▶ Fallecidos

Fallecidos: Islas Baleares

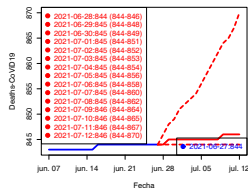
Deaths:Islas.Baleares-FLM



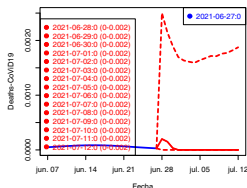
Deaths:Islas.Baleares-NP



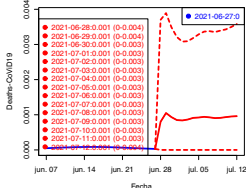
Deaths:Islas.Baleares-SAM



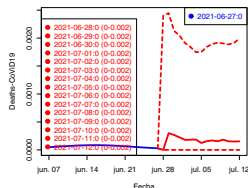
Deaths:Islas.Baleares-FLM



Deaths:Islas.Baleares-NP



Deaths:Islas.Baleares-SAM

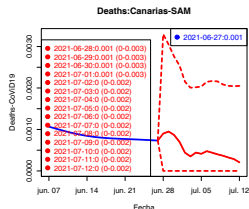
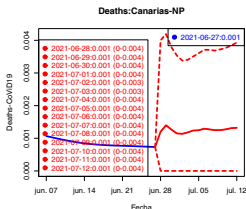
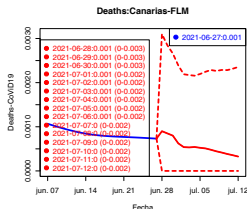
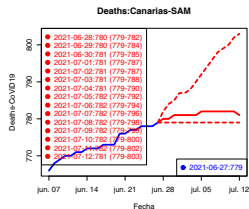
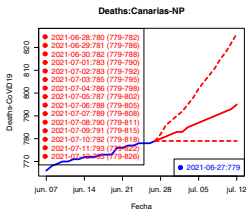
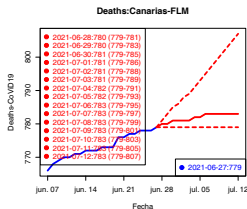


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

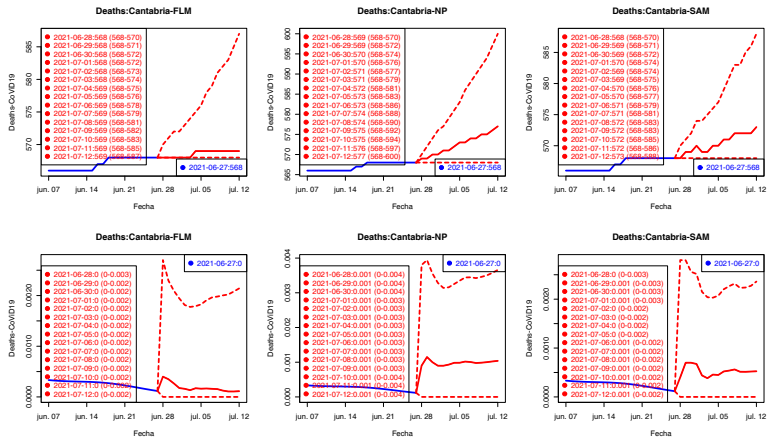
◀ Fallecidos

Fallecidos: Canarias



Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Cantabria



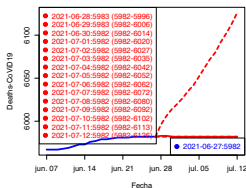
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◀ Confirmados

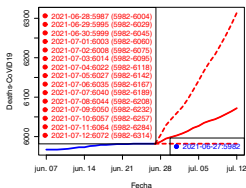
◀ Fallecidos

Fallecidos: Castilla-La Mancha

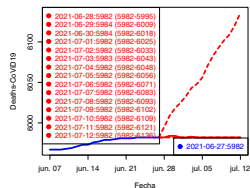
Deaths:Castilla,La Mancha-FLM



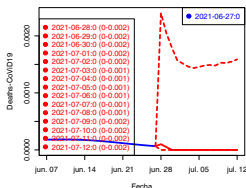
Deaths:Castilla-La-Mancha-NP



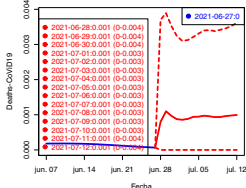
Deaths:Castilla,La Mancha-SAM



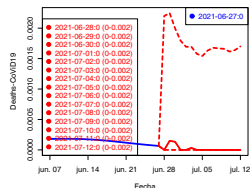
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Deaths:Castilla-La-Mancha-NP



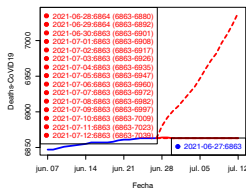
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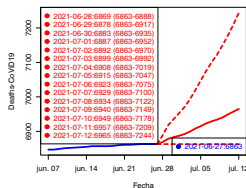
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Castilla y León

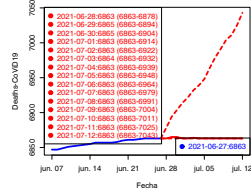
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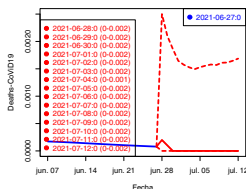
Deaths:Castilla y León-NP



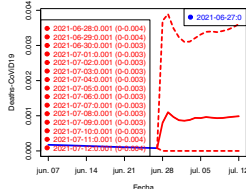
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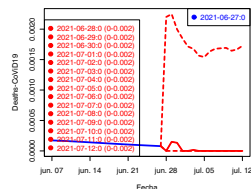
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Deaths:Castilla y León-NP



Deaths:Castilla y León-SAM

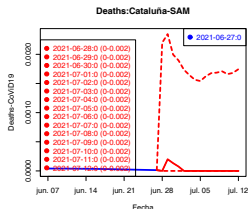
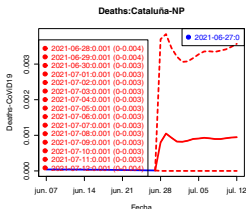
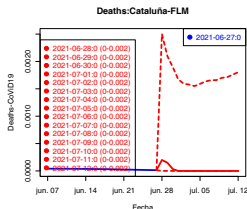
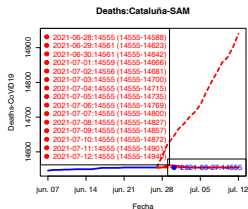
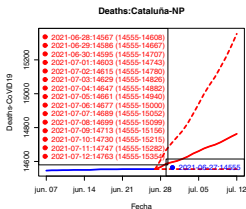
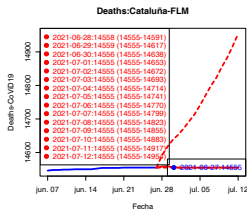


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cataluña

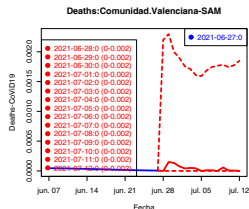
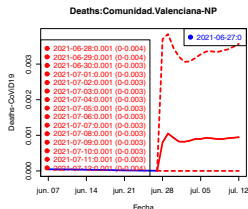
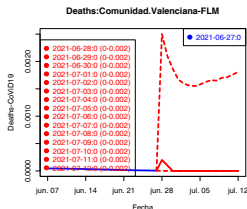
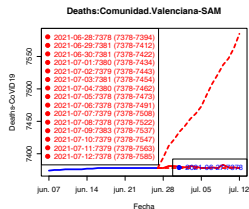
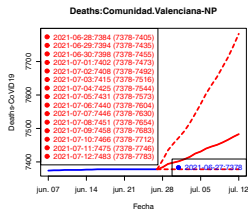
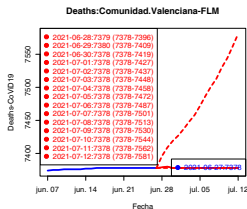


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

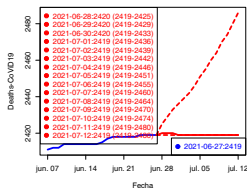
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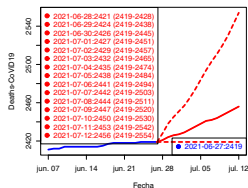
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Galicia

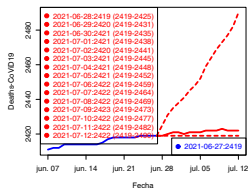
Deaths:Galicia-FLM



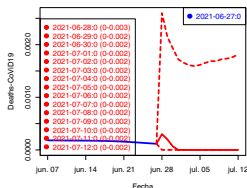
Deaths:Galicia-NP



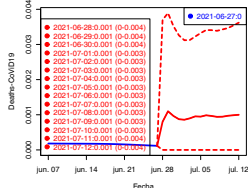
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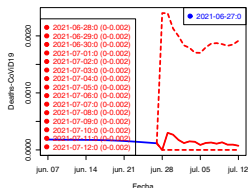
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Deaths:Galicia-SAM

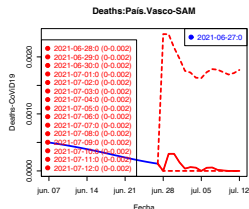
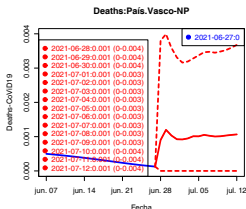
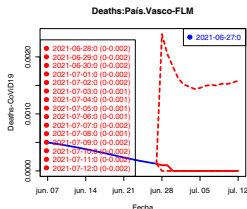
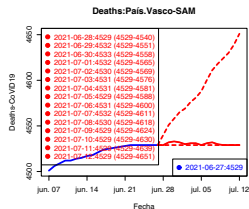
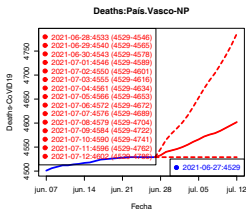
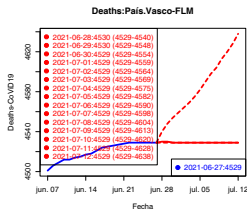


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: País Vasco

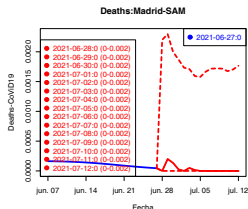
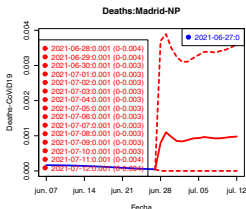
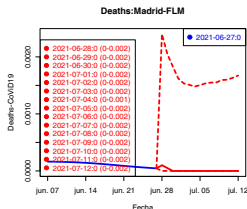
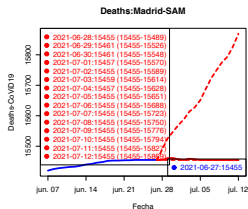
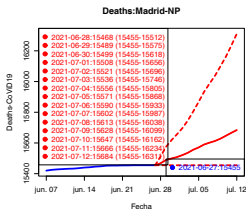
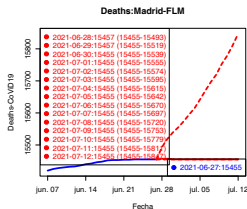


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

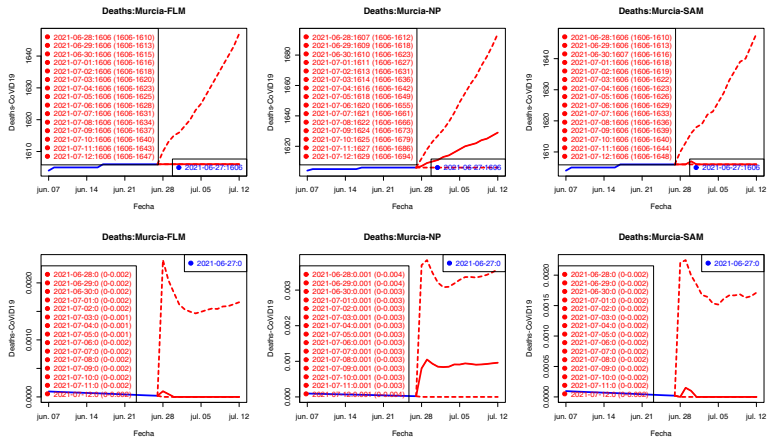
◀ Fallecidos

Fallecidos: Madrid



Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Murcia

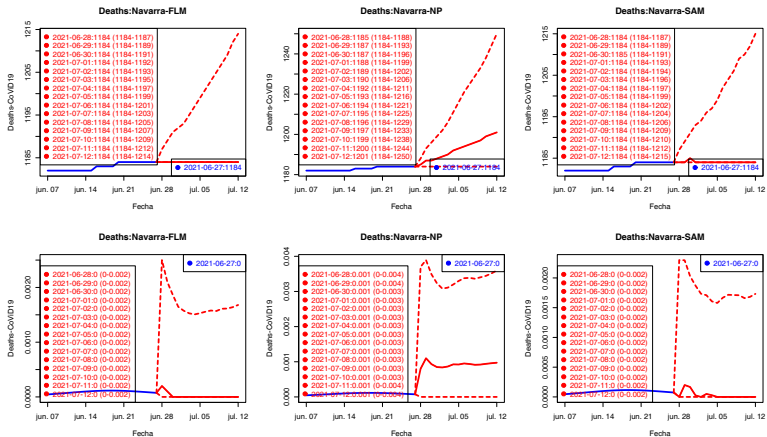


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Navarra

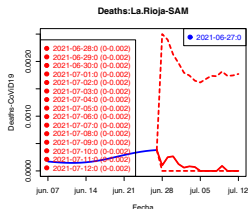
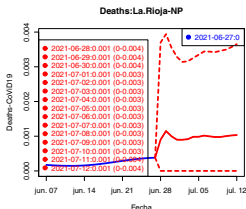
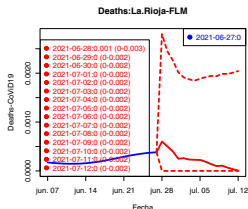
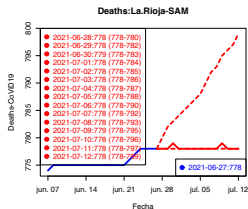
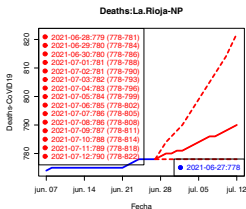
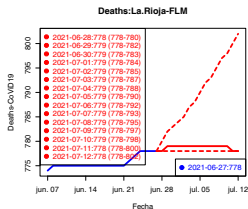


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: La Rioja

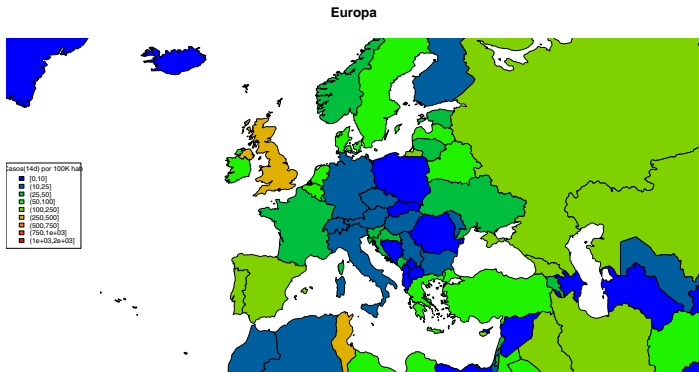


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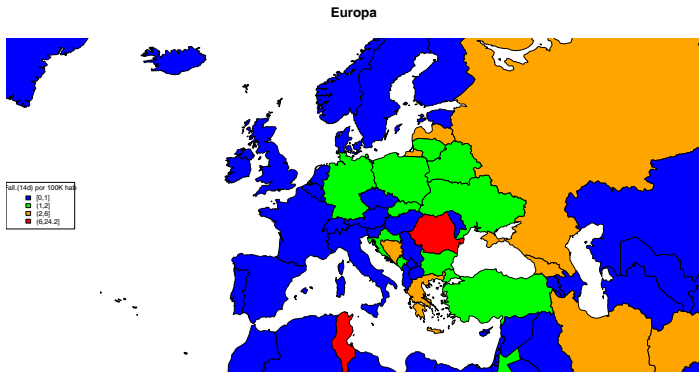
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- 3 Panorama internacional

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

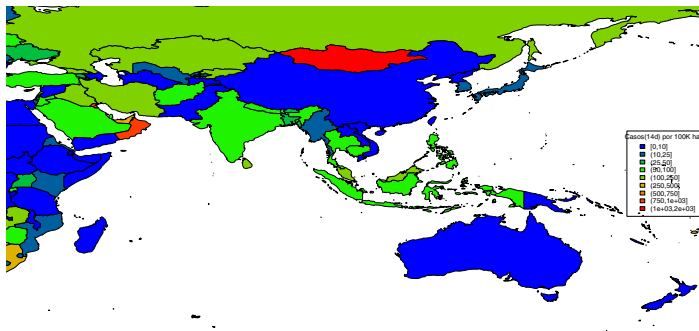


Europa: Fallecidos (14d) por 100K hab.



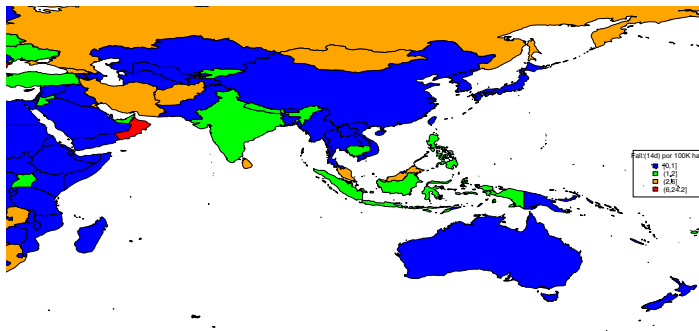
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



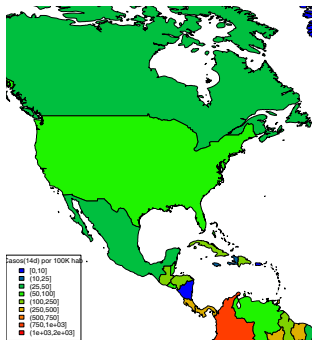
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

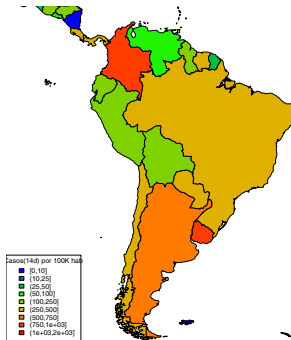


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

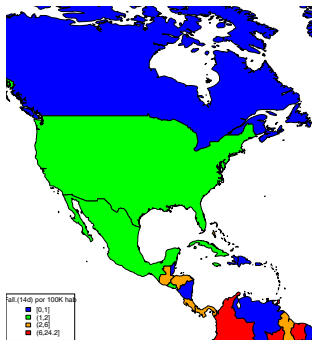


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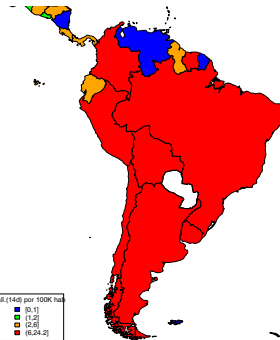


América: Fallecidos (14d) por 100K hab.

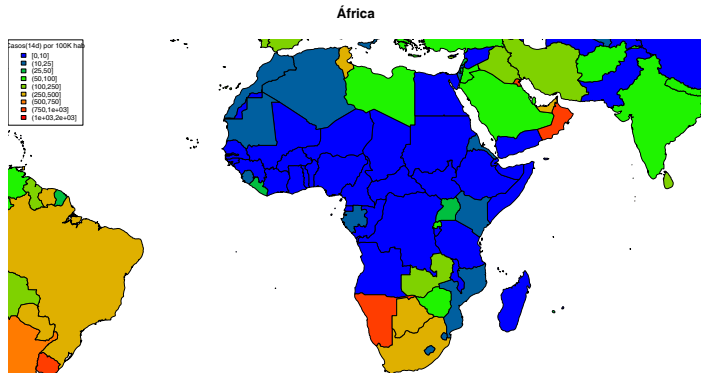
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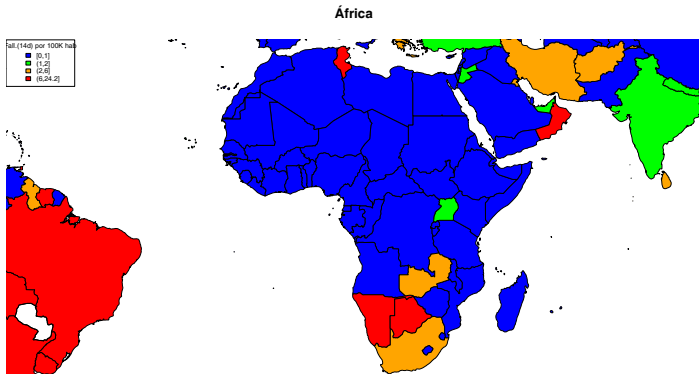
América del sur



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



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



Breve descripción del Modelo de predicción

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

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

Datos para alimentar el modelo: https://github.com/CSSEGISandData/COVID-19/tree/master/csse_covid_19_data/csse_covid_19_time_series/. Algunas series de tiempo (como el Diamond Princess) son filtrados por inconsistencia, presunta falta de veracidad o por valores anormalmente bajos. En la predicción final se reconstruye el número de casos esperado.

Se construyen tres modelos funcionales de la regresión general: $r^{(k)}(0) = f(R^{(1)}) + \epsilon$ donde la diferencia radica en la forma de la función f

- Lineal: $f(R^{(1)}) = \int_{-21}^0 R^{(1)}(t)\beta(t)dt$
- NP: f es una estimación no paramétrica tipo núcleo.
- SAM: f es una combinación aditiva de funciones suaves de las componentes principales funcionales.

Para el objetivo de predecir el ratio de incremento de fallecidos, se usa además del pasado de la propia variable, el ratio de incremento pasado de casos confirmados.