

Predicciones sobre CoViD-19

Manuel Febrero-Bande

Dpt. de Estadística, Análisis Matemático y Optimización
Univ. de Santiago de Compostela

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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: 22/03/2021

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	0.004	0.008	0.006	0.003	0.006	0.666	0.847	0.69
H4	0.08	0.042	0.075	0.052	0.023	0.054	0.783	0.899	0.796
H8	0.309	0.154	0.289	0.255	0.113	0.256	0.81	0.916	0.822
H12	0.855	0.433	0.798	0.853	0.382	0.855	0.794	0.907	0.807
H15	1.73	0.858	1.619	1.742	0.796	1.769	0.763	0.896	0.778

Tabla Previsión Confirmados: Mod. Aditivo.

Last=22/03/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3234367	107	43	3237832	3247882	3256938	3268648	3275615
Andalucía	497568	99	42	498140	499798	501189	503094	503997
Aragón	109656	110	46	109762	110084	110397	110820	111103
Asturias	46273	125	39	46345	46509	46555	46610	46541
Canarias	45244	110	46	45402	45806	46216	46671	46897
Cantabria	25595	79	31	25626	25707	25760	25838	25854
Castilla.y.León	210514	93	40	210682	211226	211752	212516	213060
Castilla.La.Mancha	174100	64	24	174193	174511	174754	175169	175462
Cataluña	525140	143	56	525907	527943	529195	531047	531566
Ceuta	4984	235	105	5001	5048	5089	5146	5179
Comunidad.Valenciana	384279	22	7	384367	384805	385249	386050	386877
Extremadura	70322	81	37	70399	70641	70871	71227	71460
Galicia	115367	64	25	115490	115842	116099	116477	116671
Islas.Baleares	57136	40	17	57177	57317	57428	57622	57774
La.Rioja	27567	71	32	27587	27654	27708	27805	27869
Madrid	613135	175	67	613849	615835	618327	620707	622570
Melilla	7636	436	156	7662	7725	7777	7840	7875
Murcia	108035	47	18	108089	108286	108478	108777	109027
Navarra	52958	149	76	53043	53307	53592	53990	54263
País.Vasco	158858	166	74	159137	159925	160645	161623	162167

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=22/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0009	0.0014	0.0052	0.0086	0.0120	0.0144
Andalucía	0.0010	0.0015	0.0058	0.0094	0.0133	0.0156
Aragón	0.0008	0.0013	0.0050	0.0083	0.0117	0.0141
Asturias	0.0013	0.0013	0.0054	0.0075	0.0097	0.0099
Canarias	0.0032	0.0031	0.0130	0.0236	0.0350	0.0424
Cantabria	0.0010	0.0014	0.0054	0.0084	0.0117	0.0132
Castilla.y.León	0.0006	0.0012	0.0045	0.0073	0.0102	0.0124
Castilla.La.Mancha	0.0004	0.0009	0.0035	0.0051	0.0067	0.0078
Cataluña	0.0011	0.0016	0.0061	0.0095	0.0133	0.0152
Ceuta	0.0025	0.0030	0.0122	0.0214	0.0322	0.0388
Comunidad.Valenciana	0.0001	0.0008	0.0026	0.0038	0.0047	0.0057
Extremadura	0.0007	0.0013	0.0051	0.0086	0.0122	0.0148
Galicia	0.0008	0.0013	0.0050	0.0078	0.0108	0.0126
Islas.Baleares	0.0005	0.0011	0.0040	0.0063	0.0086	0.0103
La.Rioja	0.0005	0.0011	0.0041	0.0064	0.0088	0.0104
Madrid	0.0011	0.0014	0.0056	0.0099	0.0140	0.0175
Melilla	0.0027	0.0024	0.0103	0.0182	0.0265	0.0320
Murcia	0.0004	0.0010	0.0035	0.0055	0.0073	0.0088
Navarra	0.0013	0.0019	0.0073	0.0134	0.0199	0.0246
País.Vasco	0.0014	0.0018	0.0074	0.0130	0.0190	0.0230

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=22/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0009	0.0015	0.0059	0.0125	0.0202	0.0266
Andalucía	0.0010	0.0015	0.0063	0.0133	0.0213	0.0280
Aragón	0.0008	0.0013	0.0054	0.0114	0.0185	0.0245
Asturias	0.0013	0.0022	0.0096	0.0198	0.0311	0.0404
Canarias	0.0032	0.0038	0.0153	0.0317	0.0493	0.0633
Cantabria	0.0010	0.0016	0.0064	0.0136	0.0218	0.0287
Castilla.y.León	0.0006	0.0012	0.0049	0.0103	0.0167	0.0223
Castilla.La.Mancha	0.0004	0.0011	0.0044	0.0092	0.0151	0.0203
Cataluña	0.0011	0.0018	0.0073	0.0153	0.0245	0.0320
Ceuta	0.0025	0.0029	0.0122	0.0254	0.0400	0.0524
Comunidad.Valenciana	0.0001	0.0009	0.0037	0.0079	0.0131	0.0177
Extremadura	0.0007	0.0012	0.0048	0.0103	0.0168	0.0224
Galicia	0.0008	0.0014	0.0058	0.0122	0.0196	0.0259
Islas.Baleares	0.0005	0.0011	0.0045	0.0095	0.0155	0.0208
La.Rioja	0.0005	0.0011	0.0044	0.0092	0.0152	0.0204
Madrid	0.0011	0.0017	0.0068	0.0143	0.0230	0.0301
Melilla	0.0027	0.0035	0.0143	0.0298	0.0466	0.0604
Murcia	0.0004	0.0011	0.0043	0.0090	0.0148	0.0198
Navarra	0.0013	0.0015	0.0063	0.0133	0.0215	0.0284
País.Vasco	0.0014	0.0018	0.0076	0.0160	0.0256	0.0335

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

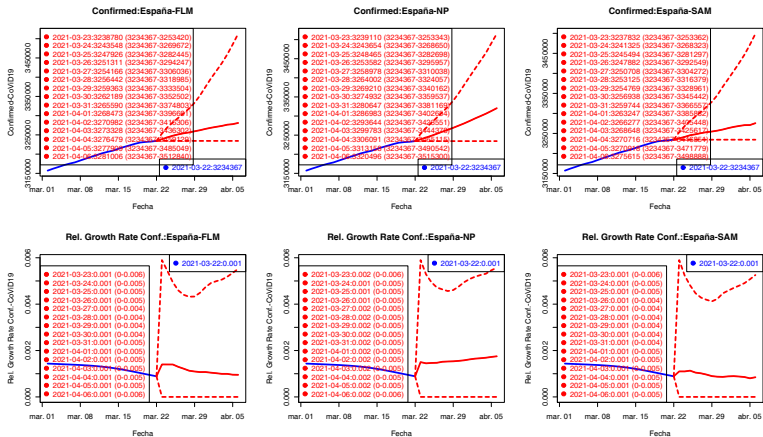
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=22/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0009	0.0011	0.0042	0.0070	0.0106	0.0128
Andalucía	0.0010	0.0011	0.0045	0.0073	0.0111	0.0129
Aragón	0.0008	0.0010	0.0039	0.0068	0.0106	0.0132
Asturias	0.0013	0.0015	0.0051	0.0061	0.0073	0.0058
Canarias	0.0032	0.0035	0.0124	0.0215	0.0315	0.0365
Cantabria	0.0010	0.0012	0.0044	0.0065	0.0095	0.0101
Castilla.y.León	0.0006	0.0008	0.0034	0.0059	0.0095	0.0121
Castilla.La.Mancha	0.0004	0.0005	0.0024	0.0038	0.0061	0.0078
Cataluña	0.0011	0.0015	0.0053	0.0077	0.0112	0.0122
Ceuta	0.0025	0.0035	0.0128	0.0211	0.0326	0.0391
Comunidad.Valenciana	0.0001	0.0002	0.0014	0.0025	0.0046	0.0068
Extremadura	0.0007	0.0011	0.0045	0.0078	0.0129	0.0162
Galicia	0.0008	0.0011	0.0041	0.0063	0.0096	0.0113
Islas.Baleares	0.0005	0.0007	0.0032	0.0051	0.0085	0.0112
La.Rioja	0.0005	0.0007	0.0031	0.0051	0.0086	0.0110
Madrid	0.0011	0.0012	0.0044	0.0085	0.0123	0.0154
Melilla	0.0027	0.0033	0.0116	0.0185	0.0266	0.0313
Murcia	0.0004	0.0005	0.0023	0.0041	0.0069	0.0092
Navarra	0.0013	0.0016	0.0066	0.0120	0.0195	0.0247
País.Vasco	0.0014	0.0018	0.0067	0.0113	0.0174	0.0208

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

Confirmados: España

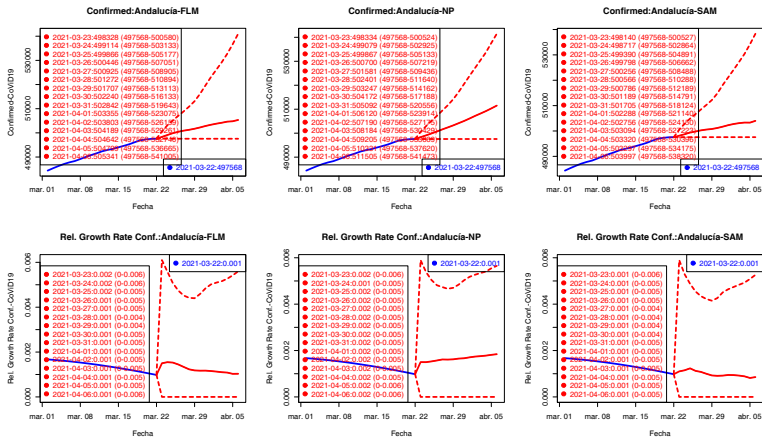


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Andalucía

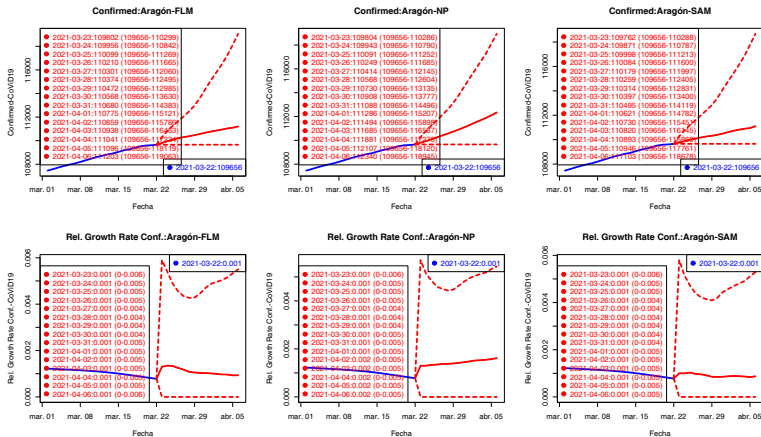


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Aragón

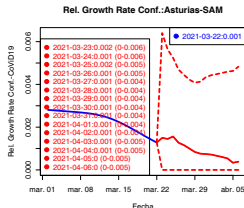
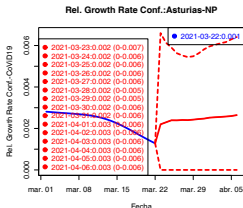
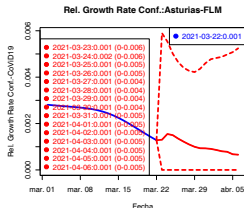
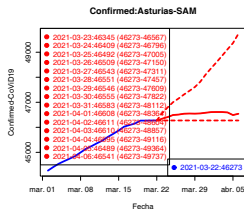
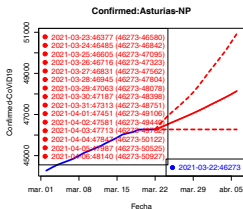
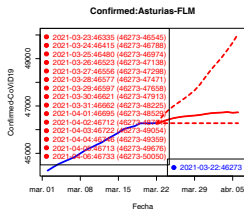


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Asturias

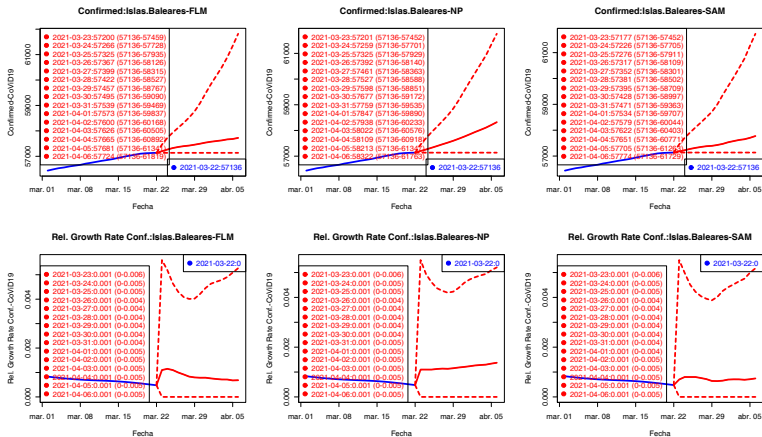


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

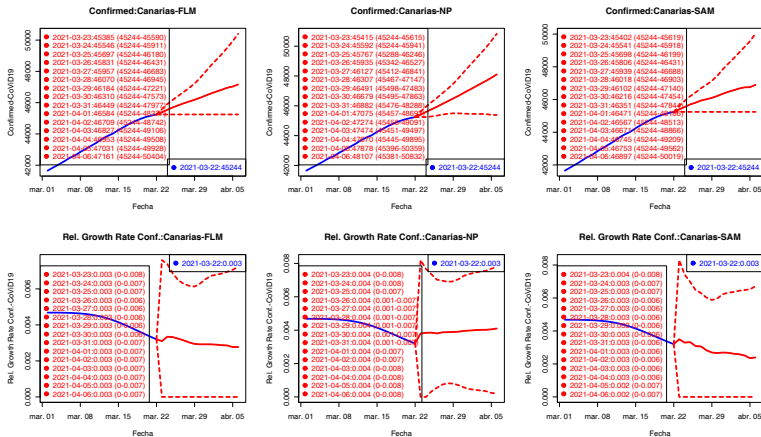
◀ Fallecidos

Confirmados: Islas Baleares



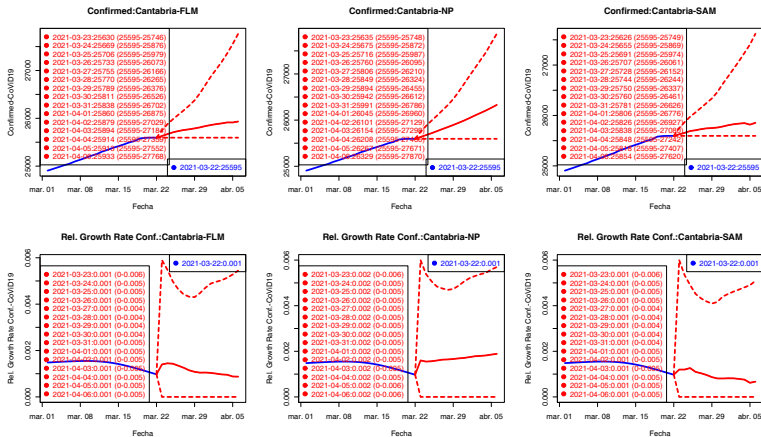
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados: Canarias



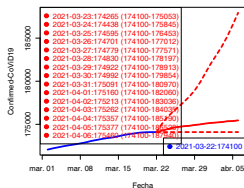
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados: Cantabria

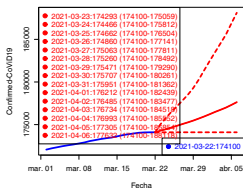


Confirmados: Castilla-La Mancha

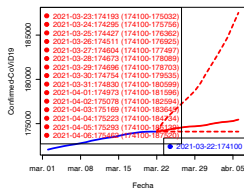
Confirmed:Castilla.La.Mancha-FLM



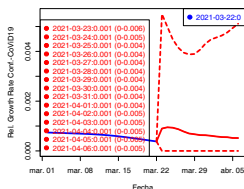
Confirmed:Castilla.La.Mancha-NP



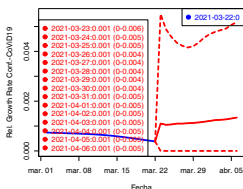
Confirmed:Castilla.La.Mancha-SAM



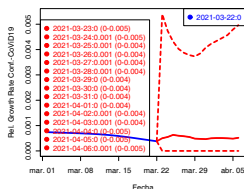
Rel. Growth Rate Conf.:Castilla.La.Mancha-FLM



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



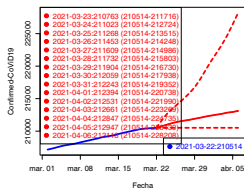
Rel. Growth Rate Conf.:Castilla.La.Mancha-SAM



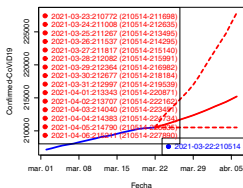
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados: Castilla y León

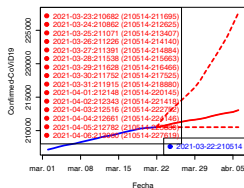
Confirmed:Castilla.yLeón-FLM



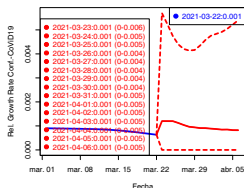
Confirmed:Castilla.yLeón-NP



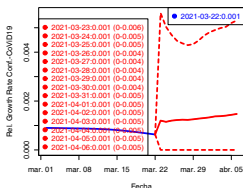
Confirmed:Castilla.yLeón-SAM



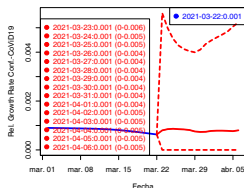
Rel. Growth Rate Conf.:Castilla.yLeón-FLM



Rel. Growth Rate Conf.:Castilla.yLeón-NP



Rel. Growth Rate Conf.:Castilla.yLeón-SAM

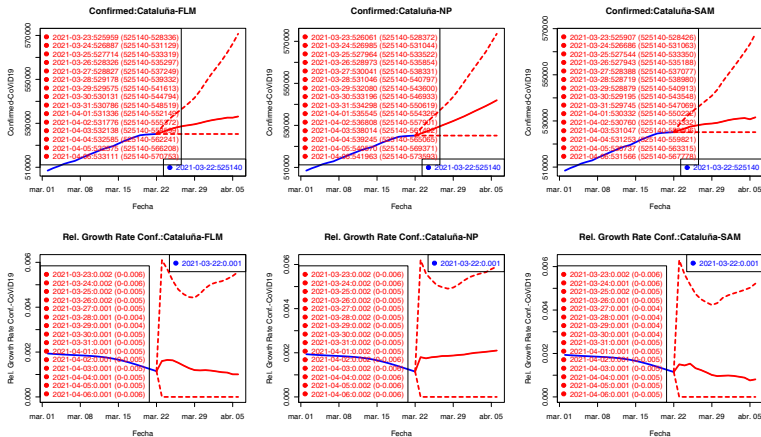


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

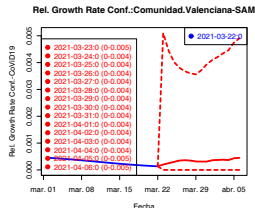
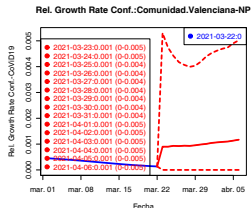
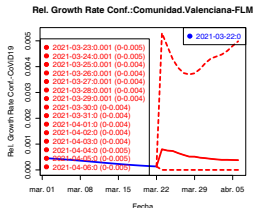
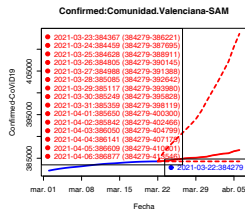
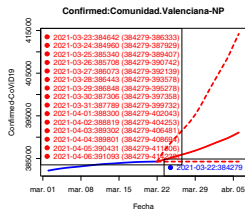
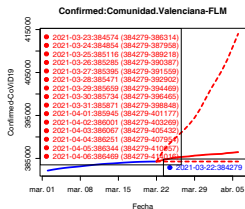
Confirmados: Cataluña



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

◀ Confirmados ▶ Fallecidos

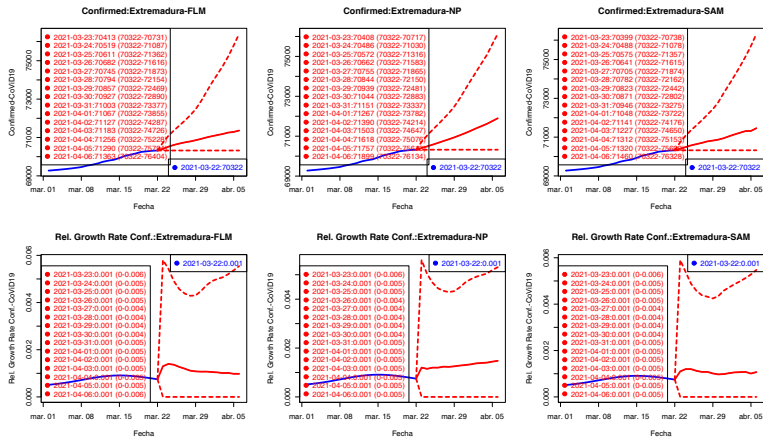
Confirmados: C. Valenciana



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

◀ Confirmados ▶ Fallecidos

Confirmados: Extremadura

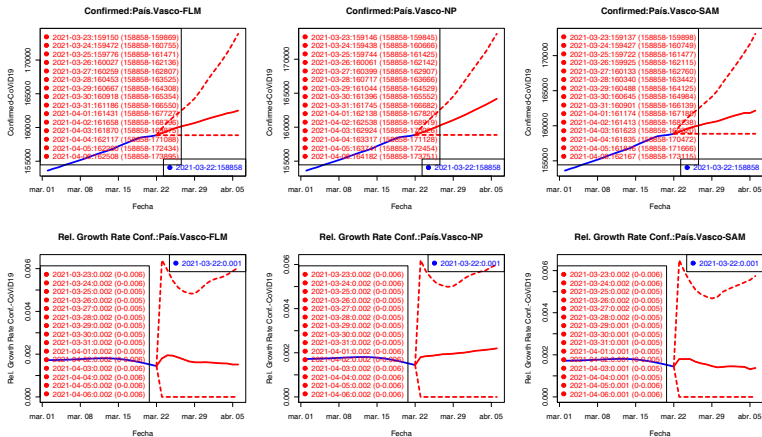


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

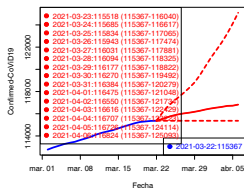
← Fallecidos

Confirmados: País Vasco

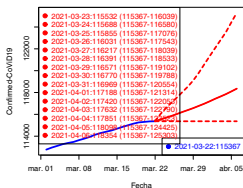


Confirmados: Galicia

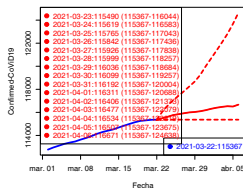
Confirmed:Galicia-FLM



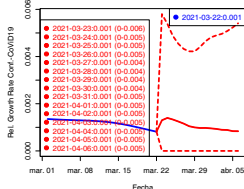
Confirmed:Galicia-NP



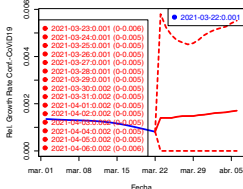
Confirmed:Galicia-SAM



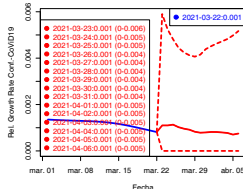
Rel. Growth Rate Conf.:Galicia-FLM



Rel. Growth Rate Conf.:Galicia-NP



Rel. Growth Rate Conf.:Galicia-SAM

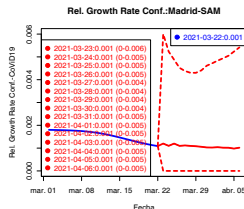
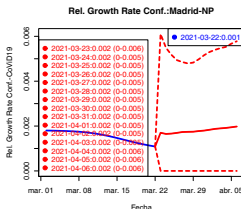
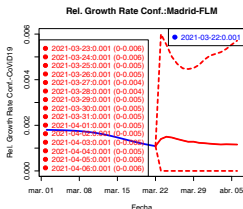
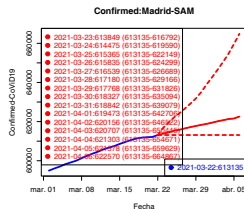
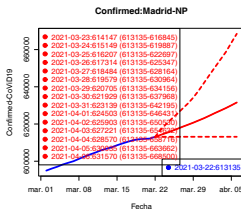
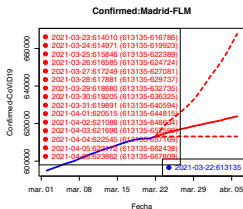


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Madrid

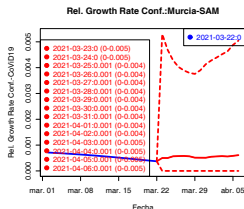
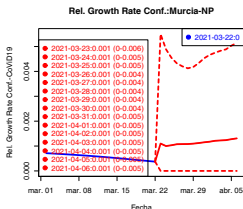
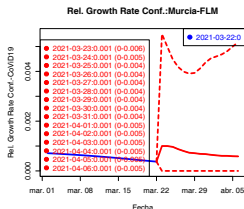
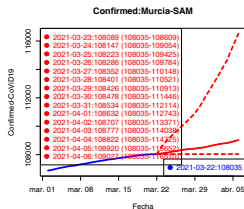
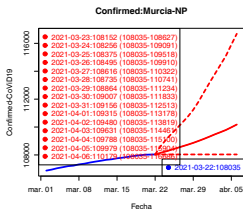
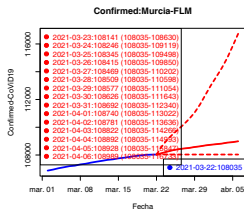


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

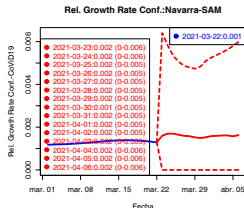
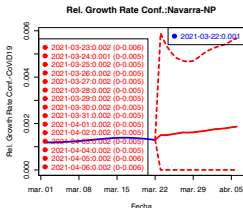
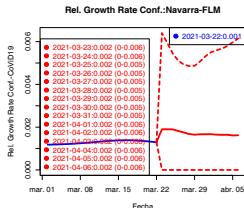
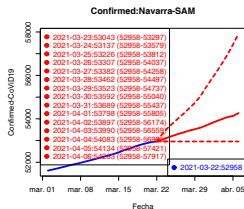
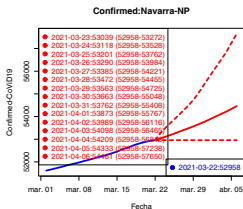
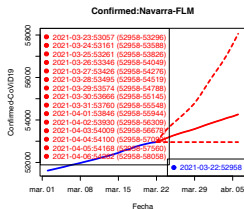
◀ Fallecidos

Confirmados: Murcia



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

Confirmados: Navarra

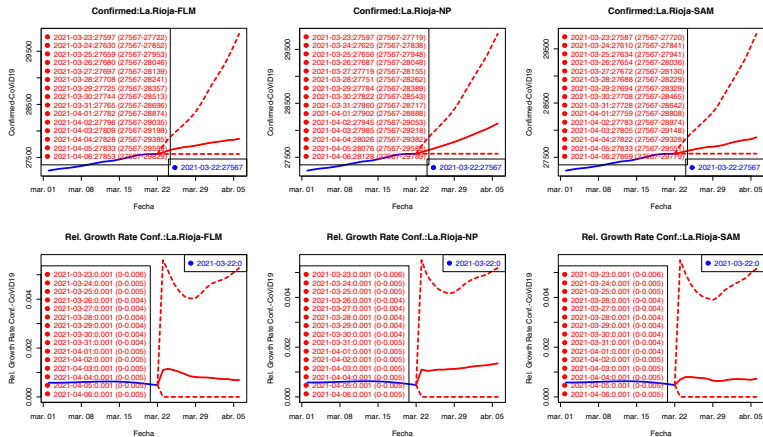


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← 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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Modelos para fallecidos por CoViD-19

Último dato: 22/03/2021 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	0.001	0.002	0.71	0.735	0.746
H4	0.028	0.028	0.027	0.011	0.011	0.01	0.778	0.786	0.787
H8	0.071	0.072	0.064	0.042	0.045	0.036	0.855	0.856	0.869
H12	0.167	0.171	0.144	0.115	0.126	0.105	0.857	0.858	0.876
H15	0.242	0.258	0.2	0.195	0.22	0.17	0.869	0.864	0.891

Tabla Previsión Fallecidos: Mod. Lineal.

Last=22/03/2021

	Last	H1	H4	H8	H12	H15
España	73347	73421	73560	73603	73583	73519
Andalucía	9008	9021	9048	9056	9063	9056
Aragón	3348	3353	3363	3368	3375	3375
Asturias	1870	1874	1881	1883	1887	1886
Canarias	644	647	654	662	672	677
Cantabria	532	532	532	532	532	532
Castilla.y.León	6532	6540	6557	6567	6575	6575
Castilla.La.Mancha	5701	5705	5712	5709	5704	5701
Cataluña	11908	11917	11928	11925	11908	11908
Ceuta	93	94	95	98	100	103
Comunidad.Valenciana	6998	7002	7006	6999	6998	6998
Extremadura	1735	1736	1737	1737	1735	1735
Galicia	2294	2297	2304	2308	2310	2310
Islas.Baleares	772	772	773	772	772	772
La.Rioja	740	741	742	743	744	744
Madrid	14503	14517	14544	14552	14547	14533
Melilla	78	78	79	81	82	83
Murcia	1550	1551	1551	1550	1550	1550
Navarra	1116	1117	1119	1121	1122	1122
País.Vasco	3925	3928	3935	3941	3937	3936

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=22/03/2021

	Last	H1	H4	H8	H12	H15
España	73347	73408	73515	73851	74115	74236
Andalucía	9008	9022	9050	9103	9161	9186
Aragón	3348	3352	3359	3376	3395	3403
Asturias	1870	1872	1878	1883	1888	1889
Canarias	644	646	654	661	670	674
Cantabria	532	532	532	534	536	536
Castilla.y.León	6532	6539	6552	6595	6631	6651
Castilla.La.Mancha	5701	5704	5704	5727	5748	5751
Cataluña	11908	11911	11915	11934	11936	11930
Ceuta	93	93	95	96	99	100
Comunidad.Valenciana	6998	7002	7001	7041	7071	7081
Extremadura	1735	1736	1736	1744	1750	1754
Galicia	2294	2297	2304	2320	2332	2340
Islas.Baleares	772	772	772	776	778	779
La.Rioja	740	741	742	747	751	753
Madrid	14503	14513	14534	14589	14621	14635
Melilla	78	78	79	81	82	83
Murcia	1550	1551	1550	1556	1563	1564
Navarra	1116	1117	1118	1123	1128	1130
País.Vasco	3925	3928	3937	3958	3971	3982

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=22/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0010	0.0029	0.0035	0.0032	0.0023
Andalucía	0.0012	0.0015	0.0044	0.0054	0.0061	0.0053
Aragón	0.0010	0.0015	0.0046	0.0059	0.0080	0.0082
Asturias	0.0012	0.0019	0.0056	0.0072	0.0089	0.0084
Canarias	0.0038	0.0042	0.0158	0.0284	0.0427	0.0513
Cantabria	0.0006	0.0007	0.0008	0.0000	0.0000	0.0000
Castilla.y.León	0.0009	0.0012	0.0038	0.0054	0.0065	0.0066
Castilla.La.Mancha	0.0004	0.0008	0.0019	0.0014	0.0004	0.0000
Cataluña	0.0003	0.0007	0.0017	0.0014	0.0000	0.0000
Ceuta	0.0062	0.0064	0.0238	0.0490	0.0789	0.1014
Comunidad.Valenciana	0.0004	0.0005	0.0011	0.0002	0.0000	0.0000
Extremadura	0.0003	0.0005	0.0010	0.0011	0.0000	0.0000
Galicia	0.0011	0.0013	0.0042	0.0063	0.0071	0.0071
Islas.Baleares	0.0003	0.0006	0.0010	0.0000	0.0000	0.0000
La.Rioja	0.0008	0.0011	0.0033	0.0045	0.0052	0.0051
Madrid	0.0007	0.0009	0.0028	0.0034	0.0030	0.0021
Melilla	0.0043	0.0041	0.0172	0.0342	0.0486	0.0593
Murcia	0.0004	0.0005	0.0007	0.0000	0.0000	0.0000
Navarra	0.0006	0.0010	0.0030	0.0045	0.0053	0.0058
País.Vasco	0.0008	0.0009	0.0026	0.0041	0.0032	0.0027

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

Keywords: *depression, mood, mood disorder, mood disorder with anxiety, mood disorder without anxiety, mood disorder with anxiety, mood disorder without anxiety, mood disorder with anxiety, mood disorder without anxiety*

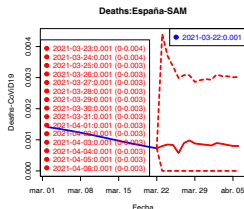
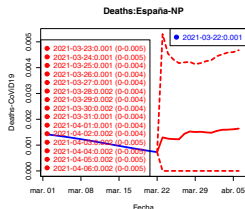
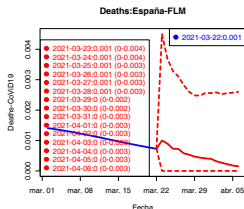
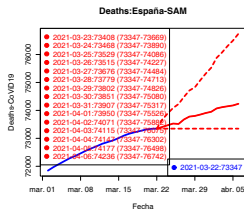
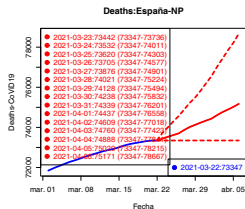
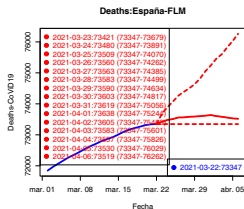
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=22/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0008	0.0023	0.0069	0.0105	0.0121
Andalucía	0.0012	0.0015	0.0046	0.0106	0.0169	0.0197
Aragón	0.0010	0.0012	0.0032	0.0084	0.0142	0.0163
Asturias	0.0012	0.0013	0.0045	0.0067	0.0099	0.0099
Canarias	0.0038	0.0038	0.0154	0.0264	0.0396	0.0472
Cantabria	0.0006	0.0006	0.0006	0.0039	0.0078	0.0082
Castilla.y.León	0.0009	0.0011	0.0030	0.0096	0.0152	0.0182
Castilla.La.Mancha	0.0004	0.0005	0.0005	0.0045	0.0082	0.0088
Cataluña	0.0003	0.0002	0.0006	0.0021	0.0024	0.0019
Ceuta	0.0062	0.0043	0.0167	0.0288	0.0612	0.0728
Comunidad.Valenciana	0.0004	0.0005	0.0005	0.0061	0.0104	0.0118
Extremadura	0.0003	0.0003	0.0004	0.0052	0.0086	0.0107
Galicia	0.0011	0.0012	0.0043	0.0113	0.0164	0.0199
Islas.Baleares	0.0003	0.0005	0.0005	0.0046	0.0078	0.0087
La.Rioja	0.0008	0.0010	0.0024	0.0090	0.0145	0.0174
Madrid	0.0007	0.0007	0.0021	0.0059	0.0081	0.0091
Melilla	0.0043	0.0035	0.0189	0.0323	0.0483	0.0586
Murcia	0.0004	0.0005	0.0000	0.0041	0.0085	0.0089
Navarra	0.0006	0.0007	0.0020	0.0066	0.0103	0.0128
País.Vasco	0.0008	0.0008	0.0031	0.0085	0.0116	0.0145

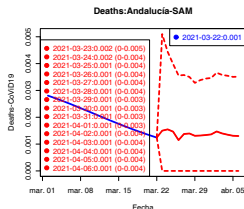
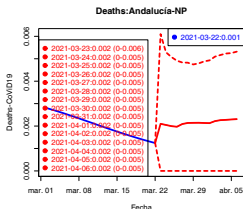
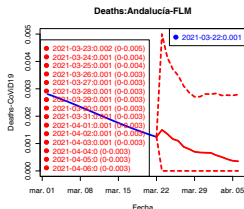
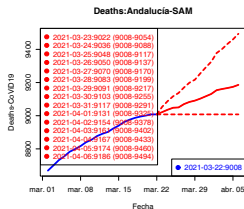
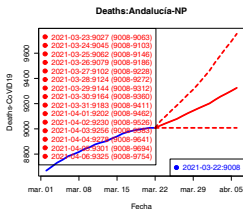
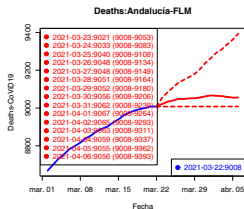
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Fallecidos: España



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

Fallecidos: Andalucía

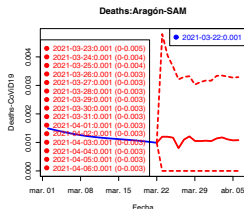
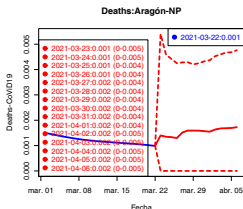
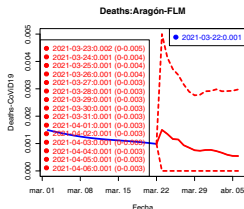
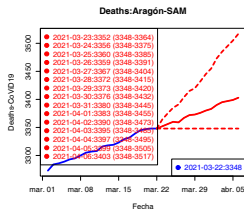
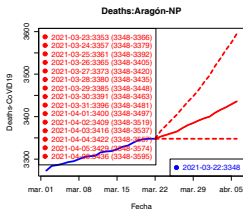
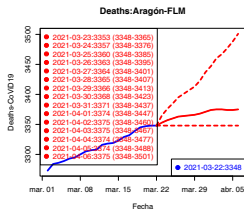


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

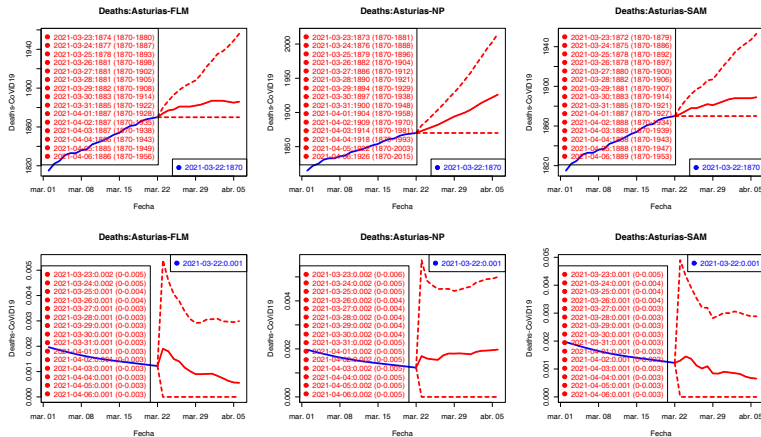
◀ Fallecidos

Fallecidos: Aragón



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

Fallecidos: Asturias

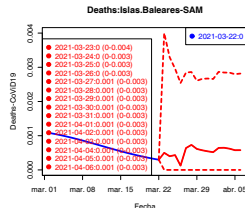
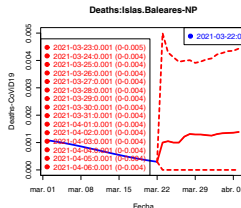
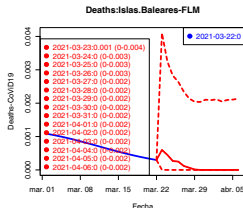
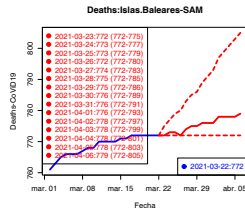
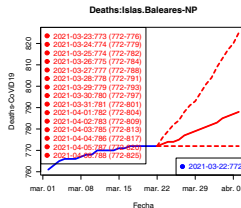
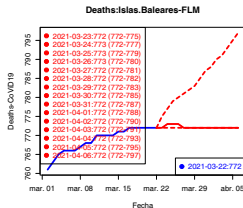


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Islas Baleares

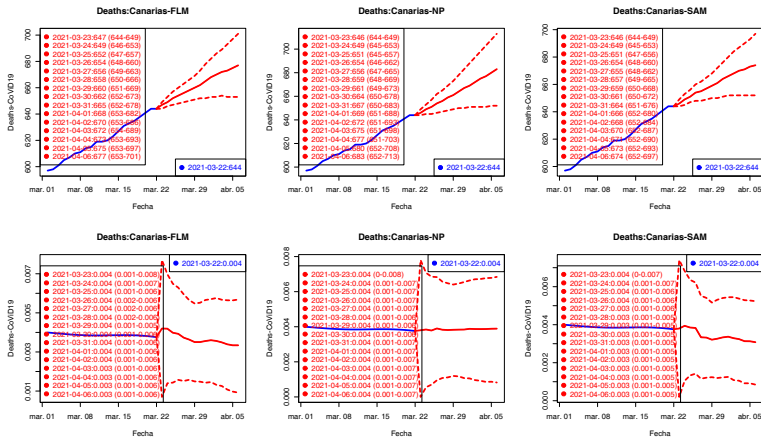


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

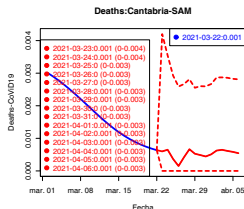
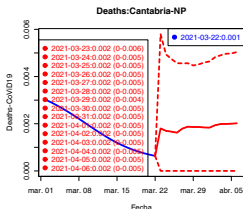
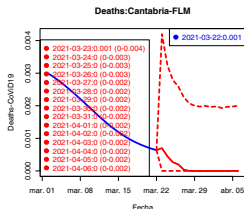
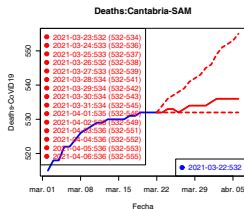
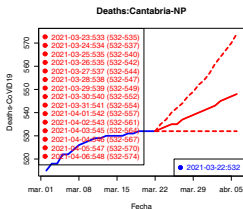
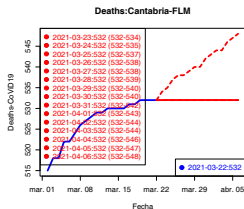
Fallecidos: Canarias



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

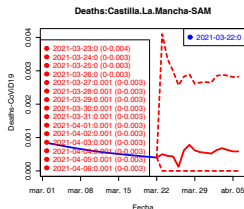
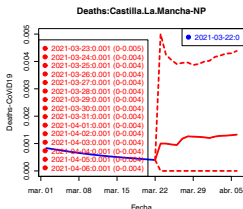
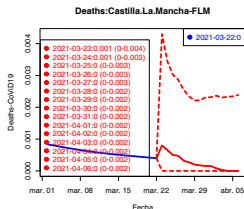
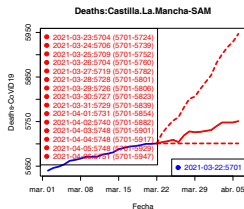
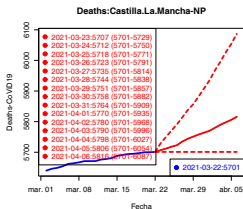
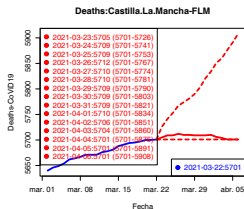
◀ Confirmados ▶ Fallecidos

Fallecidos: Cantabria



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

Fallecidos: Castilla-La Mancha

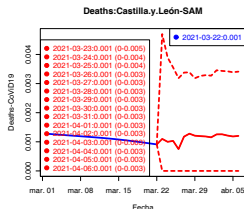
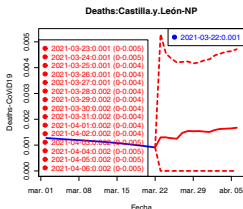
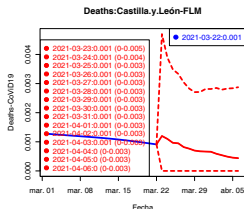
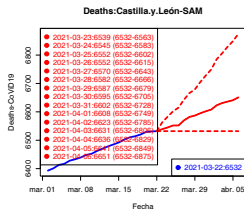
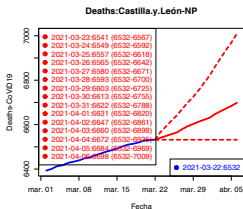
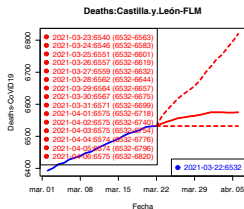


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

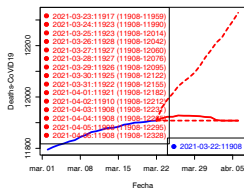
Fallecidos: Castilla y León



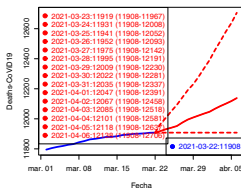
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Cataluña

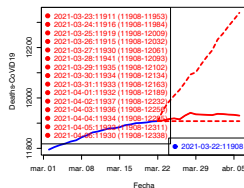
Deaths:Cataluña-FLM



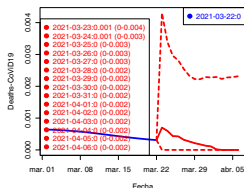
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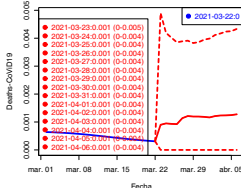
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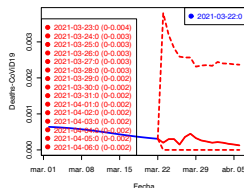
Deaths:Cataluña-FLM



Deaths:Cataluña-NP



Deaths:Cataluña-SAM

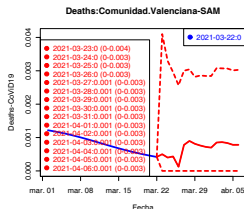
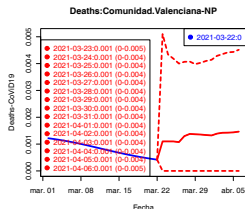
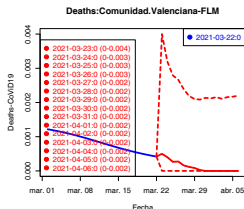
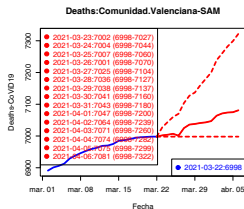
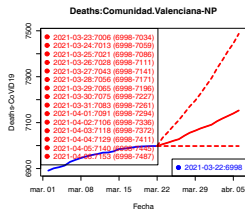
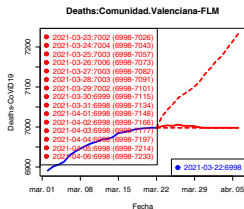


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: C. Valenciana

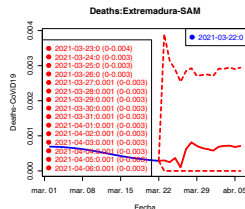
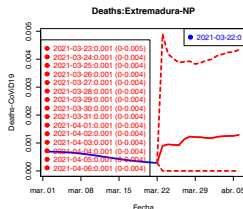
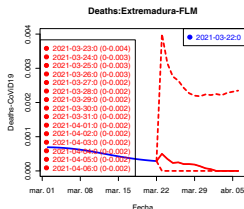
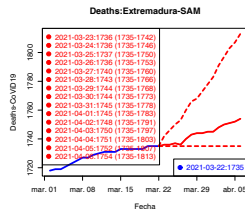
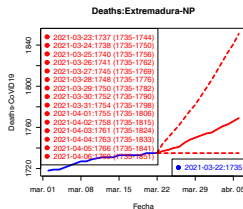
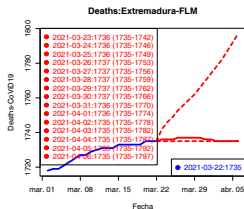


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

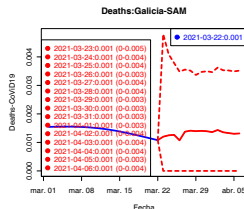
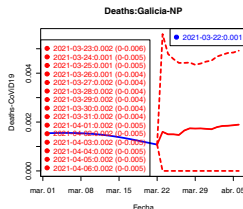
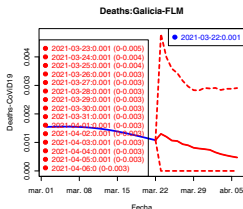
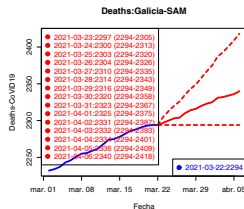
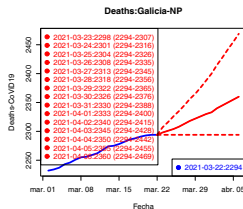
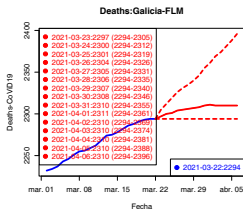
◀ Fallecidos

Fallecidos: Extremadura



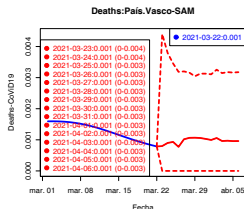
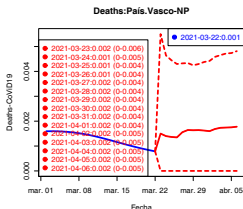
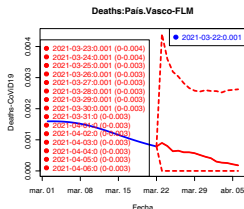
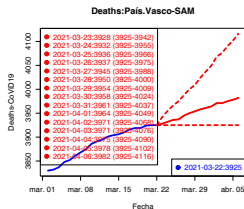
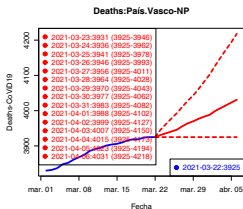
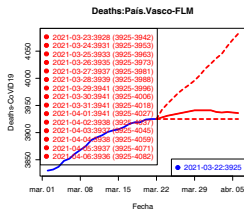
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Galicia



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

Fallecidos: País Vasco

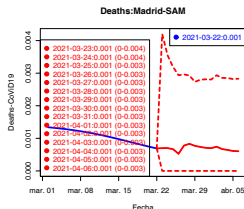
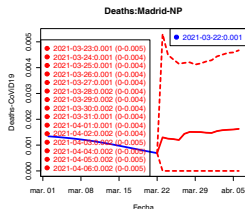
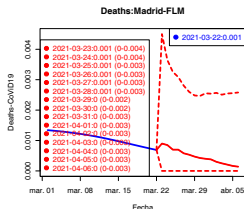
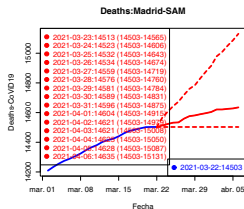
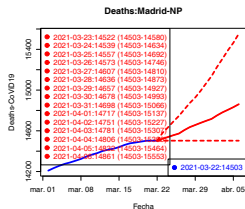
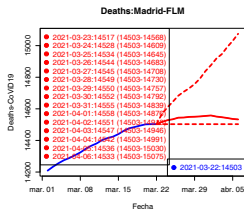


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

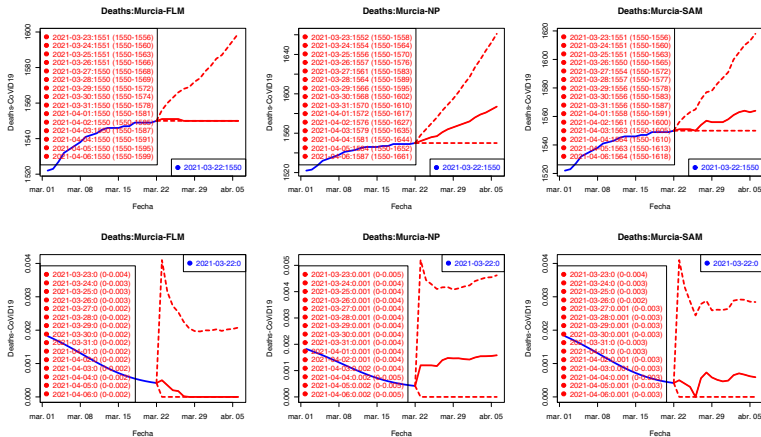
◀ Fallecidos

Fallecidos: Madrid



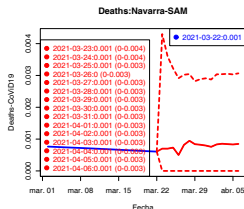
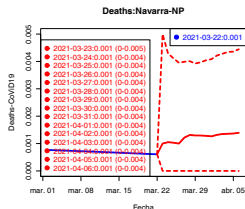
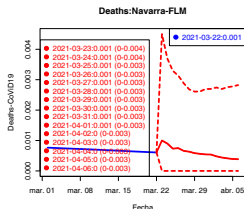
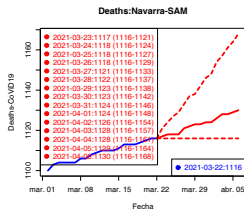
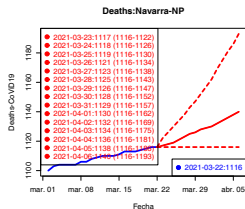
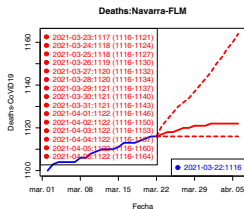
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Murcia



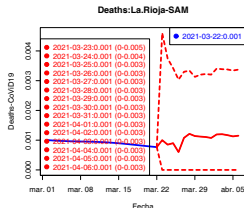
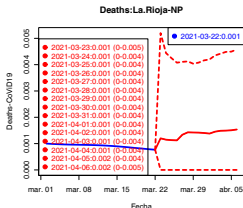
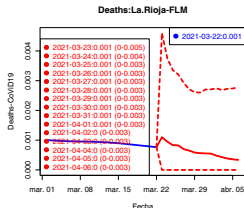
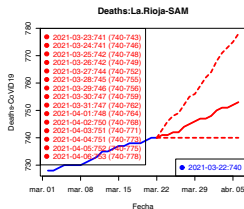
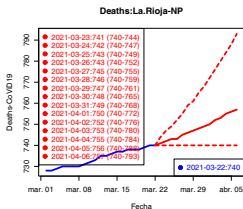
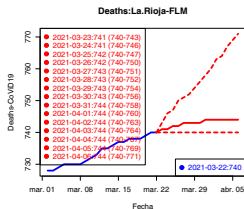
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Navarra



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

Fallecidos: La Rioja

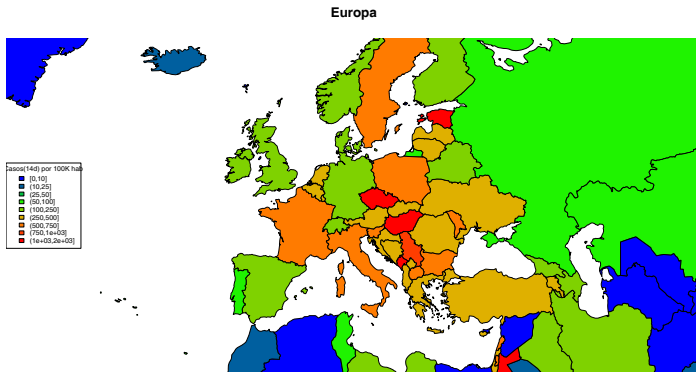


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

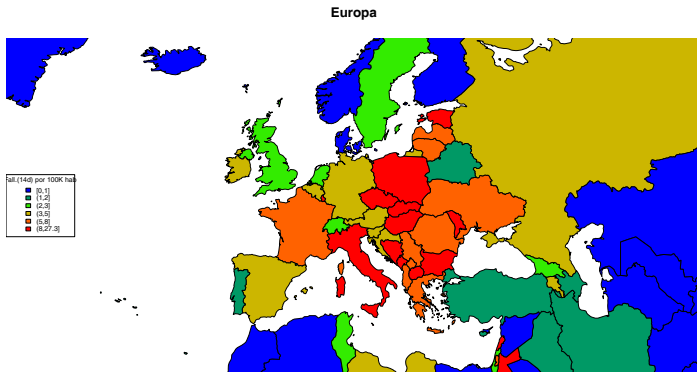
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- 3 Panorama internacional

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

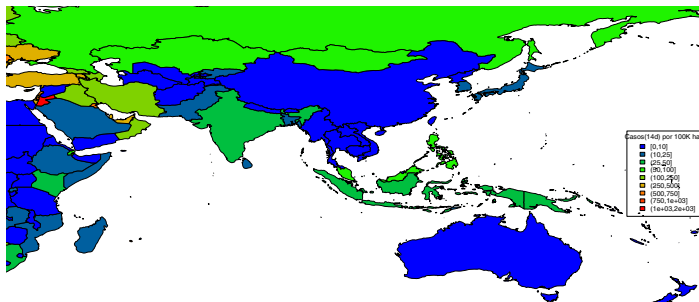


Europa: Fallecidos (14d) por 100K hab.



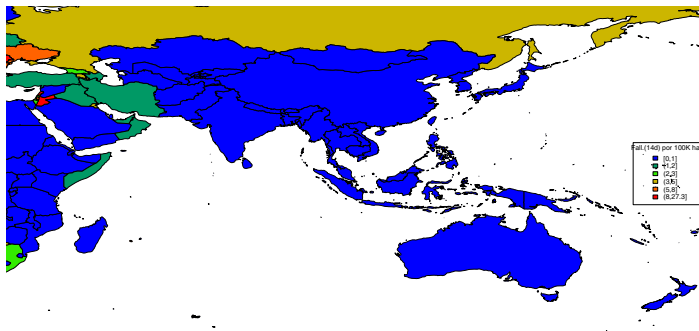
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



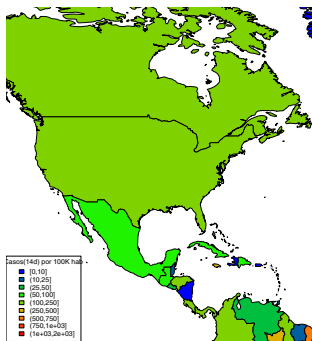
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

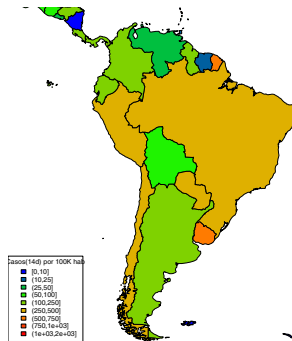


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

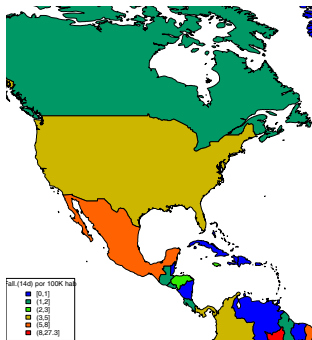


América del sur

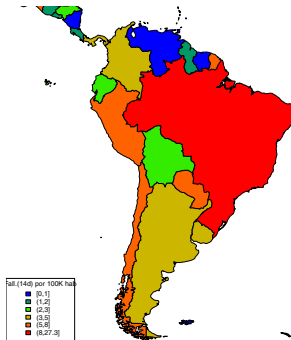


América: Fallecidos (14d) por 100K hab.

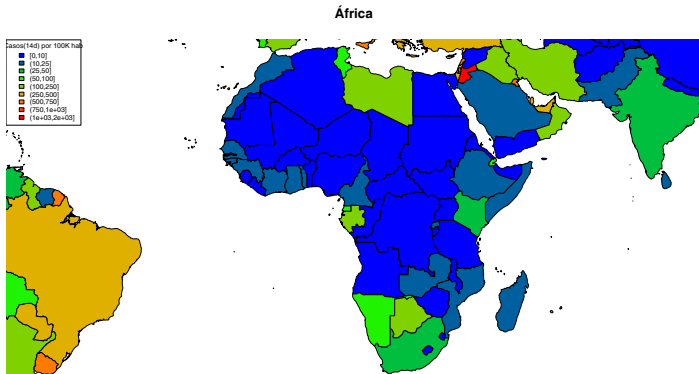
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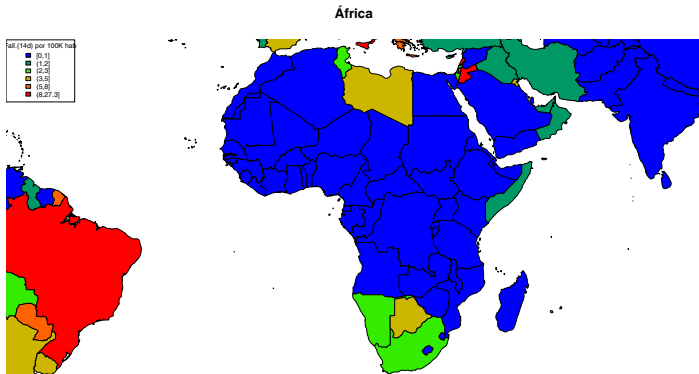


América del sur



África: Incidencia acumulada (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.