

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: 29/03/2021

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	0.007	0.006	0.002	0.006	0.665	0.846	0.688
H4	0.078	0.041	0.073	0.052	0.022	0.052	0.784	0.898	0.796
H8	0.3	0.15	0.282	0.248	0.112	0.251	0.811	0.916	0.822
H12	0.831	0.423	0.778	0.829	0.372	0.829	0.794	0.907	0.807
H15	1.68	0.836	1.577	1.69	0.772	1.678	0.763	0.895	0.778

Tabla Previsión Confirmados: Mod. Lineal.

Last=29/03/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3264498	125	55	3269501	3284557	3298201	3313024	3322387
Andalucía	504038	110	50	504867	507305	509239	511538	512588
Aragón	110640	122	53	110790	111239	111645	112074	112378
Asturias	47107	121	44	47177	47391	47530	47686	47713
Canarias	46567	103	38	46681	47049	47417	47794	48041
Cantabria	26014	102	48	26065	26222	26407	26601	26758
Castilla.y.León	212342	114	58	212647	213544	214388	215313	215930
Castilla.La.Mancha	175376	83	33	175558	176088	176468	176862	177108
Cataluña	534412	169	70	535330	538168	540505	543153	544440
Ceuta	5096	236	115	5111	5158	5211	5270	5310
Comunidad.Valenciana	373917	22	8	374200	374954	375426	375840	376244
Extremadura	70929	93	45	71035	71350	71653	71981	72208
Galicia	116338	60	24	116489	116928	117300	117689	117953
Islas.Baleares	57626	56	22	57696	57905	58082	58269	58401
La.Rioja	27851	120	66	27894	28021	28133	28263	28336
Madrid	623485	213	94	624604	628026	631746	635609	638612
Melilla	7829	371	141	7848	7905	7956	8011	8038
Murcia	108488	49	21	108592	108885	109104	109323	109483
Navarra	54151	255	134	54298	54763	55299	55904	56314
País.Vasco	162292	205	93	162621	163661	164687	165827	166504

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

Last=29/03/2021

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=29/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0011	0.0015	0.0061	0.0103	0.0149	0.0177
Andalucía	0.0011	0.0016	0.0065	0.0103	0.0149	0.0170
Aragón	0.0009	0.0014	0.0054	0.0091	0.0130	0.0157
Asturias	0.0014	0.0015	0.0060	0.0090	0.0123	0.0129
Canarias	0.0027	0.0024	0.0103	0.0182	0.0263	0.0317
Cantabria	0.0015	0.0020	0.0080	0.0151	0.0225	0.0286
Castilla.y.León	0.0009	0.0014	0.0057	0.0096	0.0140	0.0169
Castilla.La.Mancha	0.0005	0.0010	0.0041	0.0062	0.0085	0.0099
Cataluña	0.0014	0.0017	0.0070	0.0114	0.0164	0.0188
Ceuta	0.0026	0.0030	0.0122	0.0226	0.0341	0.0420
Comunidad.Valenciana	0.0002	0.0008	0.0028	0.0040	0.0051	0.0062
Extremadura	0.0009	0.0015	0.0059	0.0102	0.0148	0.0180
Galicia	0.0008	0.0013	0.0051	0.0083	0.0116	0.0139
Islas.Baleares	0.0007	0.0012	0.0048	0.0079	0.0112	0.0135
La.Rioja	0.0009	0.0015	0.0061	0.0101	0.0148	0.0174
Madrid	0.0014	0.0018	0.0073	0.0133	0.0194	0.0243
Melilla	0.0023	0.0024	0.0097	0.0162	0.0233	0.0267
Murcia	0.0004	0.0010	0.0037	0.0057	0.0077	0.0092
Navarra	0.0022	0.0027	0.0113	0.0212	0.0324	0.0399
País.Vasco	0.0017	0.0020	0.0084	0.0148	0.0218	0.0260

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

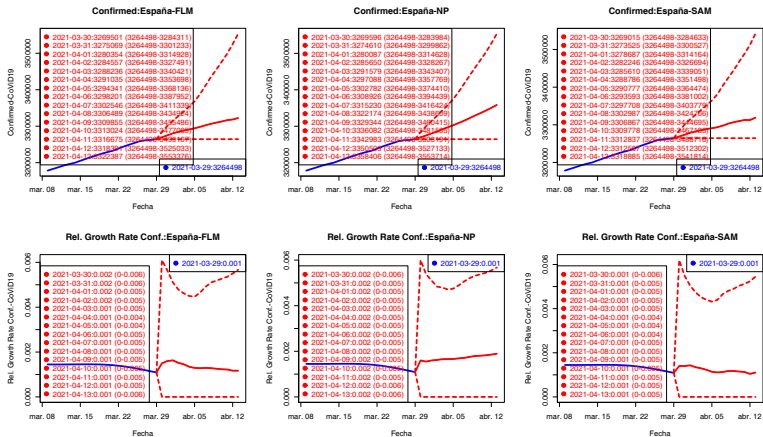
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=29/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0011	0.0014	0.0054	0.0089	0.0139	0.0167
Andalucía	0.0011	0.0014	0.0056	0.0084	0.0131	0.0149
Aragón	0.0009	0.0011	0.0046	0.0080	0.0127	0.0158
Asturias	0.0014	0.0015	0.0056	0.0066	0.0087	0.0073
Canarias	0.0027	0.0026	0.0094	0.0165	0.0235	0.0264
Cantabria	0.0015	0.0018	0.0072	0.0141	0.0222	0.0286
Castilla.y.León	0.0009	0.0011	0.0048	0.0083	0.0137	0.0173
Castilla.La.Mancha	0.0005	0.0007	0.0032	0.0051	0.0083	0.0103
Cataluña	0.0014	0.0018	0.0066	0.0098	0.0147	0.0161
Ceuta	0.0026	0.0029	0.0109	0.0200	0.0307	0.0369
Comunidad.Valenciana	0.0002	0.0002	0.0016	0.0028	0.0055	0.0079
Extremadura	0.0009	0.0011	0.0048	0.0087	0.0142	0.0178
Galicia	0.0008	0.0010	0.0039	0.0067	0.0104	0.0128
Islas.Baleares	0.0007	0.0010	0.0040	0.0069	0.0113	0.0144
La.Rioja	0.0009	0.0013	0.0057	0.0090	0.0152	0.0186
Madrid	0.0014	0.0017	0.0067	0.0122	0.0187	0.0234
Melilla	0.0023	0.0021	0.0078	0.0128	0.0176	0.0176
Murcia	0.0004	0.0005	0.0026	0.0044	0.0076	0.0100
Navarra	0.0022	0.0028	0.0117	0.0208	0.0338	0.0419
País.Vasco	0.0017	0.0022	0.0085	0.0135	0.0208	0.0243

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

Confirmados: España

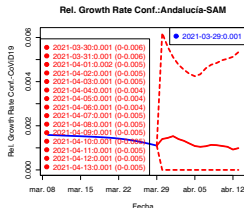
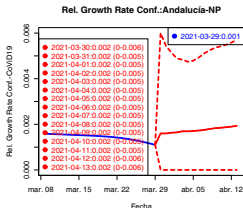
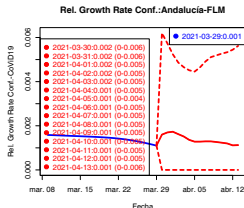
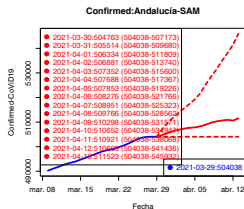
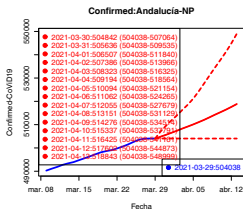
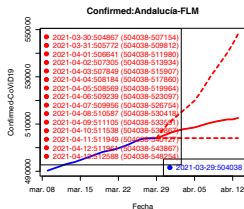


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Andalucía

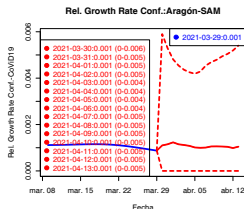
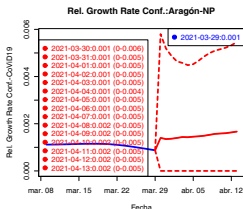
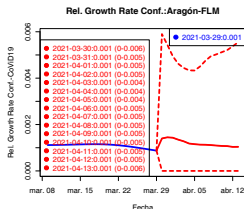
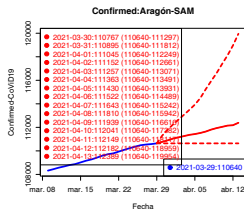
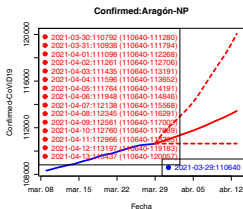
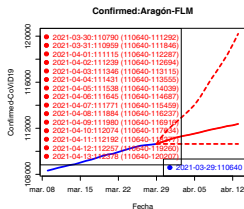


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Aragón

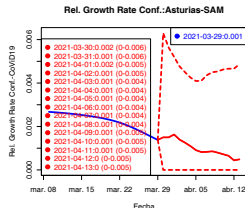
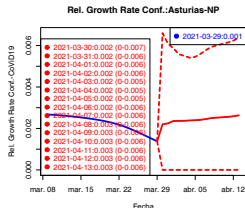
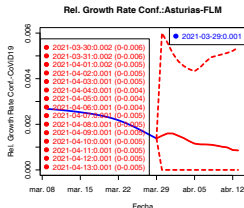
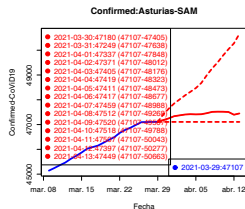
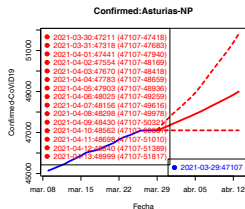
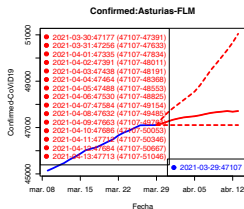


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados

Fallecidos

Confirmados: Asturias

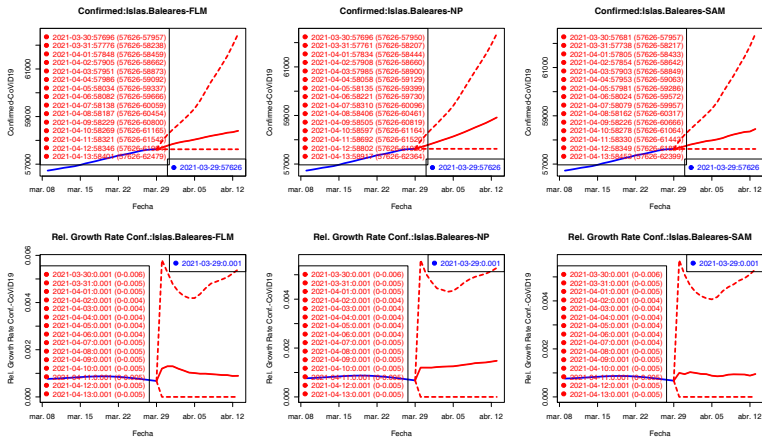


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

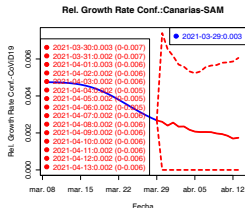
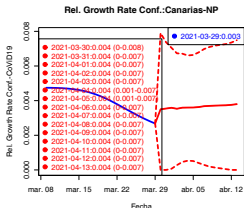
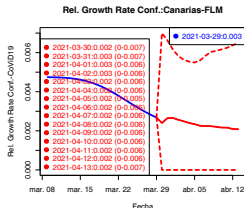
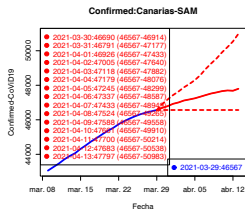
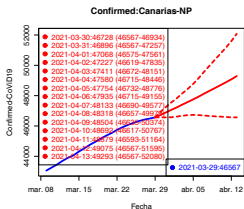
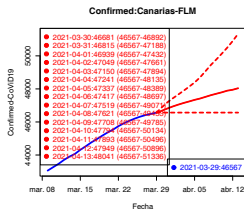
Confirmados: Islas Baleares



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

◀ Confirmados ▶ Fallecidos

Confirmados: Canarias

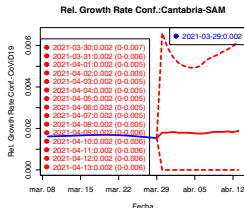
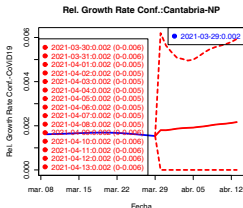
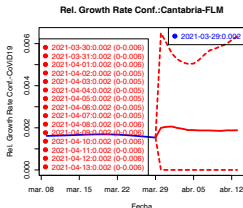
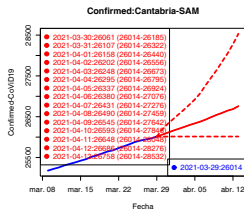
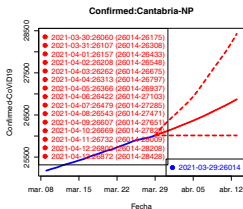
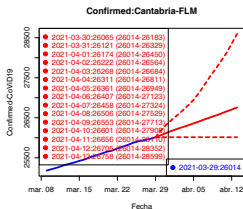


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

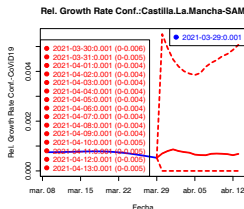
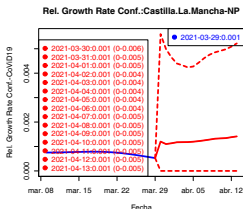
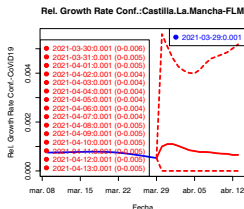
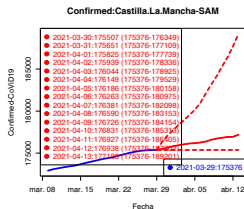
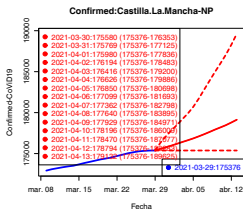
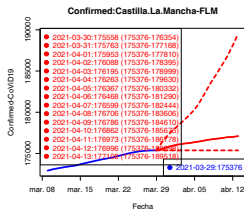
Confirmados: Cantabria



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

◀ Confirmados ▶ Fallecidos

Confirmados: Castilla-La Mancha

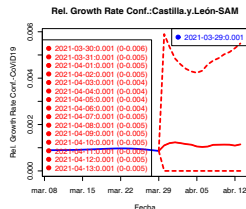
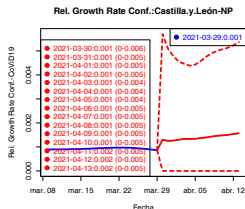
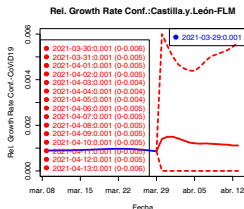
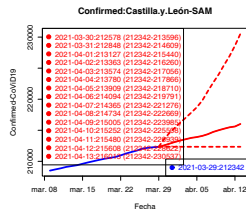
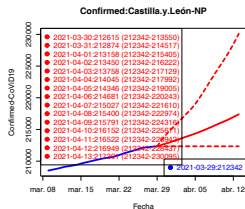
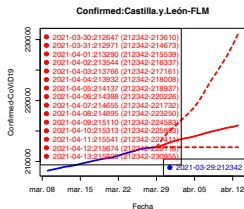


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

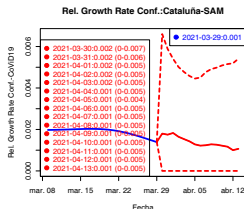
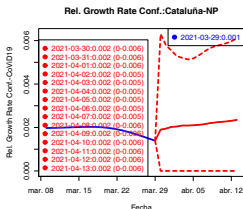
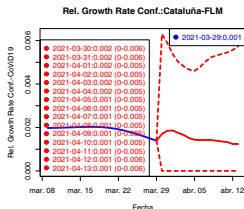
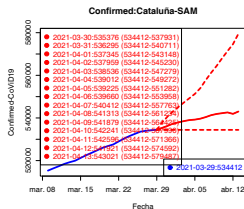
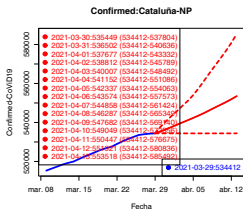
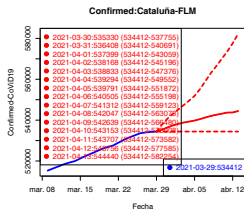


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cataluña

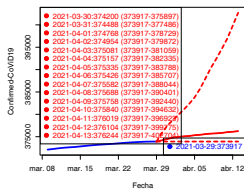


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

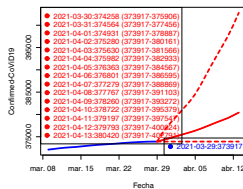
◀ Confirmados ▶ Fallecidos

Confirmados: C. Valenciana

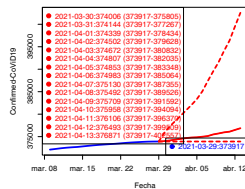
Confirmed:Comunidad.Valenciana-FLM



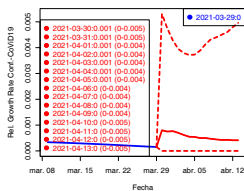
Confirmed:Comunidad.Valenciana-NP



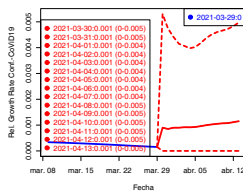
Confirmed:Comunidad.Valenciana-SAM



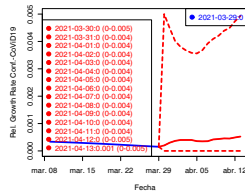
Rel. Growth Rate Conf.:Comunidad.Valenciana-FLM



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



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

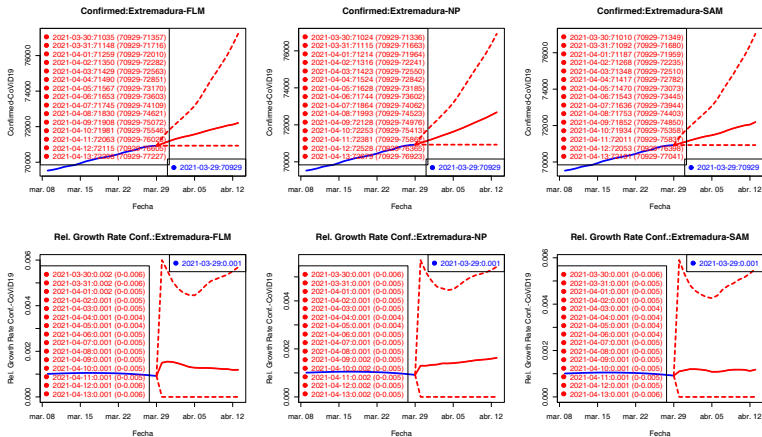


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Extremadura



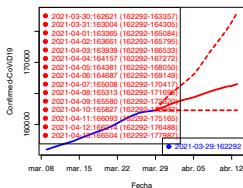
Los valores del Ratio de incremento de H2—H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

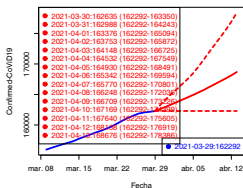
◀ Fallecidos

Confirmados: País Vasco

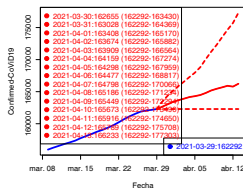
Confirmed:País.Vasco-FLM



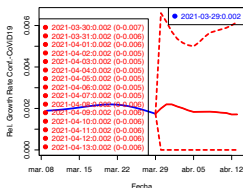
Confirmed:País.Vasco-NP



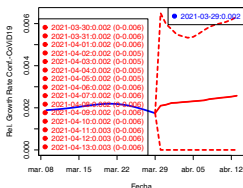
Confirmed:País.Vasco-SAM



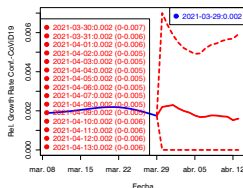
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



Rel. Growth Rate Conf.:País.Vasco-SAM

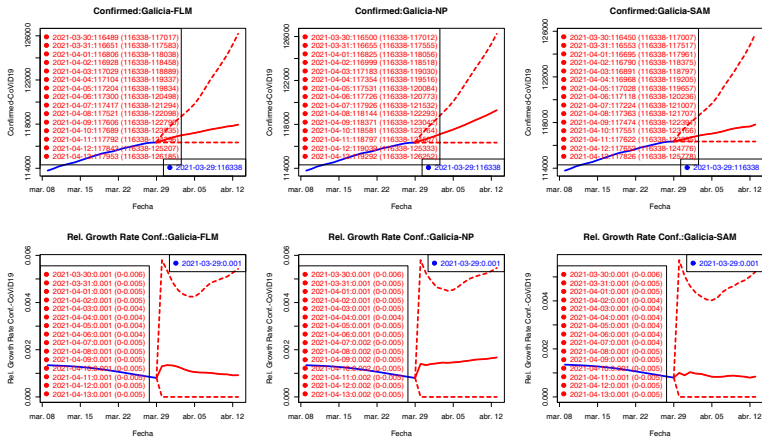


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

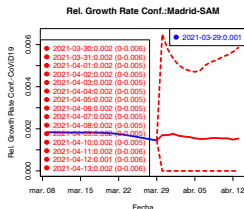
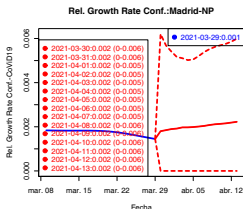
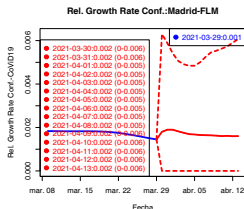
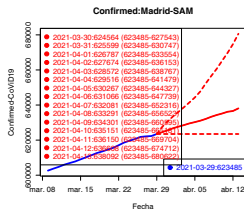
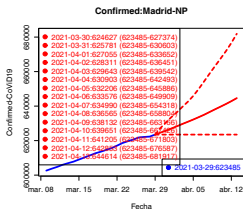
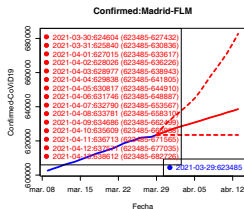
Confirmados: Galicia



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

◀ Confirmados ▶ Fallecidos

Confirmados: Madrid



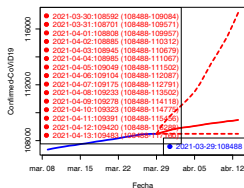
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

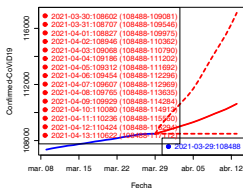
← Fallecidos

Confirmados: Murcia

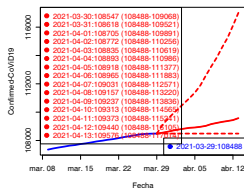
Confirmed:Murcia-FLM



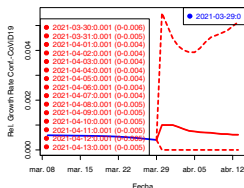
Confirmed:Murcia-NP



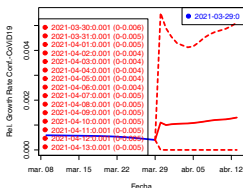
Confirmed:Murcia-SAM



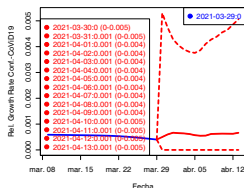
Rel. Growth Rate Conf.:Murcia-FLM



Rel. Growth Rate Conf.:Murcia-NP

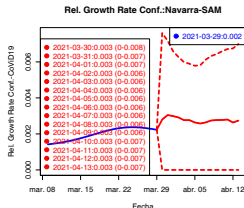
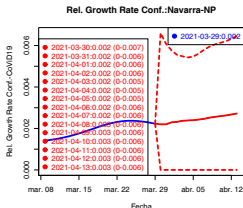
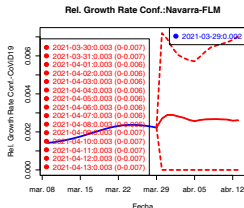
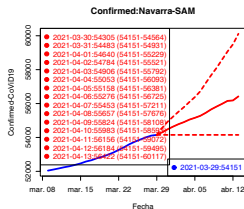
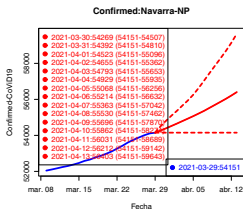
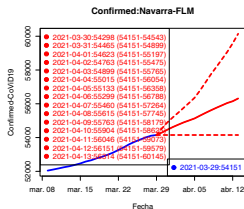


Rel. Growth Rate Conf.:Murcia-SAM



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

Confirmados: Navarra

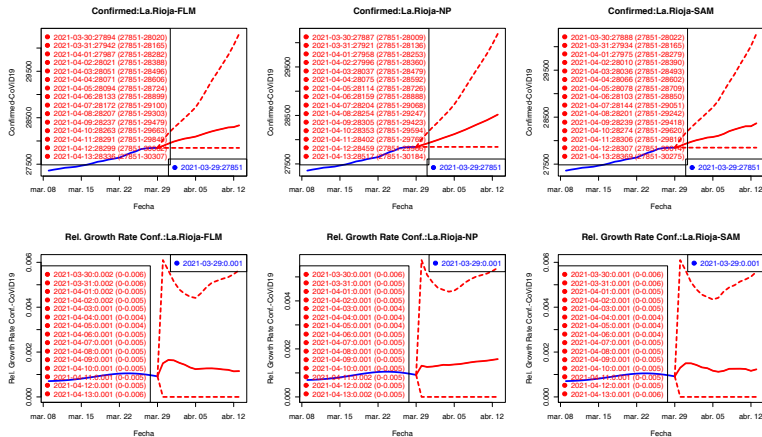


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



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

◀ Confirmados ▶ Fallecidos

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 - Predicciones
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- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Último dato: 29/03/2021 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	0.709	0.733	0.745
H4	0.027	0.027	0.026	0.011	0.01	0.01	0.78	0.786	0.788
H8	0.069	0.071	0.062	0.041	0.044	0.034	0.856	0.856	0.869
H12	0.162	0.167	0.14	0.114	0.122	0.103	0.858	0.858	0.877
H15	0.236	0.253	0.195	0.187	0.214	0.169	0.869	0.864	0.892

Tabla Previsión Fallecidos: Mod. Lineal.

Last=29/03/2021

	Last	H1	H4	H8	H12	H15
España	73456	73520	73633	73677	73645	73593
Andalucía	9109	9118	9133	9144	9137	9131
Aragón	3316	3319	3325	3331	3331	3332
Asturias	1889	1892	1898	1903	1905	1906
Canarias	661	663	669	676	682	686
Cantabria	542	543	544	545	546	546
Castilla y León	6569	6575	6587	6596	6597	6597
Castilla-La Mancha	5725	5729	5737	5741	5739	5736
Cataluña	13073	13082	13092	13081	13073	13073
Ceuta	95	95	97	99	101	102
Comunidad Valenciana	5617	5620	5622	5617	5617	5617
Extremadura	1738	1739	1740	1740	1738	1738
Galicia	2320	2322	2327	2332	2333	2334
Islas Baleares	777	777	777	777	777	777
La Rioja	744	745	746	747	748	748
Madrid	14578	14592	14619	14632	14632	14626
Melilla	79	79	79	80	80	80
Murcia	1559	1561	1564	1564	1566	1565
Navarra	1121	1122	1125	1129	1131	1133
País Vasco	3944	3948	3952	3949	3944	3944

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=29/03/2021

	Last	H1	H4	H8	H12	H15
España	73456	73499	73570	73838	74040	74129
Andalucía	9109	9117	9134	9181	9219	9239
Aragón	3316	3318	3323	3343	3356	3364
Asturias	1889	1891	1897	1904	1908	1910
Canarias	661	663	669	676	682	686
Cantabria	542	542	543	544	546	547
Castilla.y.León	6569	6574	6584	6622	6653	6671
Castilla.La.Mancha	5725	5727	5730	5756	5775	5781
Cataluña	13073	13075	13074	13074	13073	13073
Ceuta	95	95	97	98	100	101
Comunidad.Valenciana	5617	5619	5617	5642	5663	5667
Extremadura	1738	1738	1738	1742	1745	1745
Galicia	2320	2322	2326	2340	2350	2356
Islas.Baleares	777	777	777	779	780	780
La.Rioja	744	745	746	750	754	756
Madrid	14578	14588	14606	14651	14683	14700
Melilla	79	79	80	80	81	81
Murcia	1559	1560	1561	1568	1575	1577
Navarra	1121	1122	1124	1129	1134	1137
País.Vasco	3944	3946	3949	3952	3960	3961

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=29/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0006	0.0009	0.0024	0.0030	0.0026	0.0019
Andalucía	0.0009	0.0009	0.0027	0.0038	0.0030	0.0024
Aragón	0.0007	0.0009	0.0028	0.0044	0.0046	0.0047
Asturias	0.0011	0.0015	0.0049	0.0074	0.0087	0.0090
Canarias	0.0032	0.0030	0.0120	0.0226	0.0315	0.0374
Cantabria	0.0007	0.0013	0.0037	0.0050	0.0070	0.0075
Castilla.y.León	0.0007	0.0009	0.0028	0.0040	0.0043	0.0043
Castilla.La.Mancha	0.0005	0.0007	0.0021	0.0028	0.0024	0.0019
Cataluña	0.0001	0.0007	0.0014	0.0006	0.0000	0.0000
Ceuta	0.0050	0.0048	0.0204	0.0406	0.0620	0.0772
Comunidad.Valenciana	0.0003	0.0005	0.0008	0.0000	0.0000	0.0000
Extremadura	0.0002	0.0005	0.0012	0.0009	0.0000	0.0000
Galicia	0.0010	0.0009	0.0032	0.0053	0.0058	0.0062
Islas.Baleares	0.0001	0.0003	0.0003	0.0000	0.0000	0.0000
La.Rioja	0.0007	0.0012	0.0033	0.0043	0.0052	0.0052
Madrid	0.0006	0.0010	0.0028	0.0037	0.0037	0.0033
Melilla	0.0024	0.0011	0.0057	0.0143	0.0149	0.0178
Murcia	0.0006	0.0010	0.0029	0.0035	0.0043	0.0040
Navarra	0.0007	0.0012	0.0038	0.0067	0.0091	0.0111
País.Vasco	0.0003	0.0009	0.0019	0.0013	0.0000	0.0000

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=29/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0006	0.0011	0.0044	0.0111	0.0174	0.0225
Andalucía	0.0009	0.0016	0.0060	0.0140	0.0225	0.0288
Aragón	0.0007	0.0012	0.0047	0.0116	0.0184	0.0237
Asturias	0.0011	0.0015	0.0056	0.0134	0.0214	0.0275
Canarias	0.0032	0.0036	0.0147	0.0292	0.0446	0.0565
Cantabria	0.0007	0.0011	0.0043	0.0108	0.0171	0.0220
Castilla.y.León	0.0007	0.0012	0.0047	0.0116	0.0183	0.0236
Castilla.La.Mancha	0.0005	0.0010	0.0037	0.0096	0.0150	0.0194
Cataluña	0.0001	0.0009	0.0035	0.0092	0.0143	0.0185
Ceuta	0.0050	0.0042	0.0178	0.0356	0.0551	0.0698
Comunidad.Valenciana	0.0003	0.0010	0.0038	0.0099	0.0155	0.0200
Extremadura	0.0002	0.0009	0.0034	0.0089	0.0137	0.0177
Galicia	0.0010	0.0014	0.0053	0.0128	0.0204	0.0263
Islas.Baleares	0.0001	0.0009	0.0035	0.0092	0.0142	0.0184
La.Rioja	0.0007	0.0012	0.0046	0.0114	0.0180	0.0233
Madrid	0.0006	0.0012	0.0045	0.0113	0.0178	0.0229
Melilla	0.0024	0.0033	0.0132	0.0264	0.0404	0.0513
Murcia	0.0006	0.0010	0.0039	0.0101	0.0158	0.0204
Navarra	0.0007	0.0010	0.0040	0.0103	0.0161	0.0208
País.Vasco	0.0003	0.0011	0.0043	0.0109	0.0172	0.0221

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

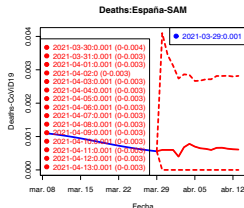
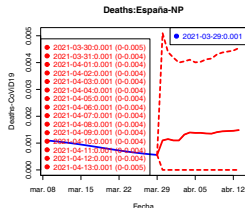
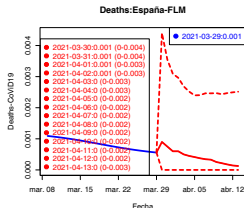
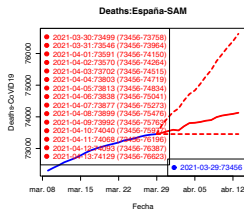
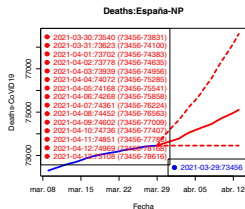
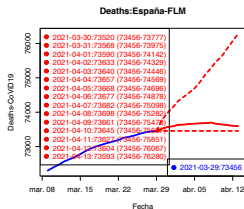
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=29/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0006	0.0006	0.0016	0.0052	0.0080	0.0092
Andalucía	0.0009	0.0009	0.0027	0.0079	0.0121	0.0143
Aragón	0.0007	0.0007	0.0022	0.0080	0.0119	0.0144
Asturias	0.0011	0.0010	0.0041	0.0077	0.0101	0.0113
Canarias	0.0032	0.0024	0.0126	0.0225	0.0316	0.0370
Cantabria	0.0007	0.0009	0.0020	0.0046	0.0080	0.0092
Castilla.y.León	0.0007	0.0008	0.0022	0.0081	0.0128	0.0156
Castilla.La.Mancha	0.0005	0.0004	0.0009	0.0054	0.0087	0.0099
Cataluña	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
Ceuta	0.0050	0.0042	0.0203	0.0347	0.0549	0.0673
Comunidad.Valenciana	0.0003	0.0003	0.0000	0.0045	0.0082	0.0088
Extremadura	0.0002	0.0002	0.0000	0.0023	0.0040	0.0041
Galicia	0.0010	0.0007	0.0025	0.0087	0.0130	0.0153
Islas.Baleares	0.0001	0.0001	0.0000	0.0020	0.0039	0.0037
La.Rioja	0.0007	0.0010	0.0026	0.0080	0.0137	0.0167
Madrid	0.0006	0.0007	0.0019	0.0050	0.0072	0.0084
Melilla	0.0024	0.0006	0.0083	0.0166	0.0203	0.0239
Murcia	0.0006	0.0007	0.0012	0.0056	0.0104	0.0115
Navarra	0.0007	0.0007	0.0028	0.0067	0.0112	0.0143
País.Vasco	0.0003	0.0005	0.0012	0.0021	0.0040	0.0043

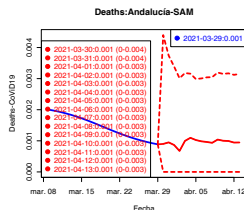
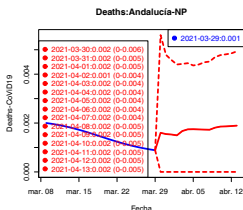
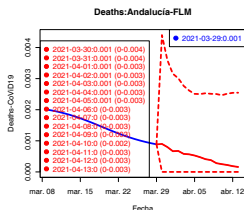
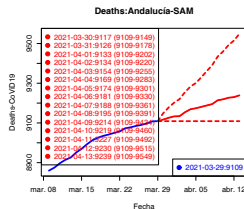
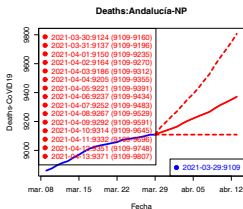
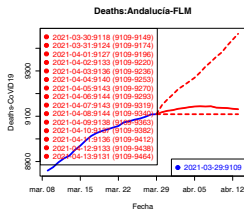
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Fallecidos: España



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

Fallecidos: Andalucía

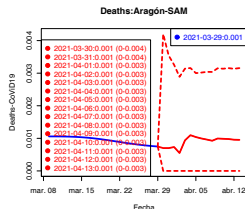
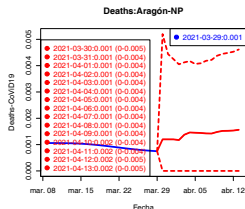
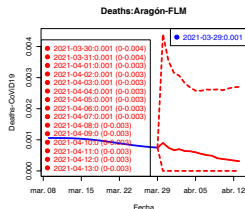
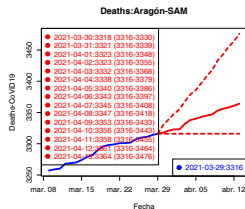
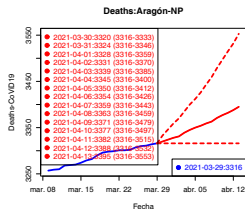
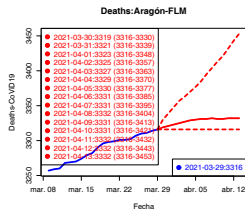


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

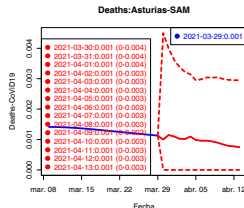
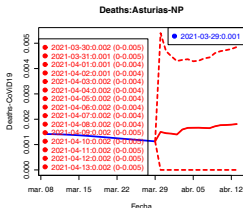
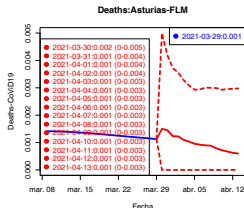
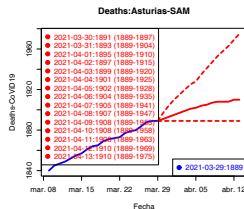
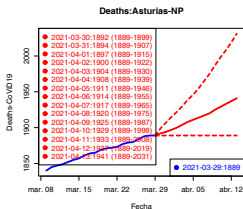
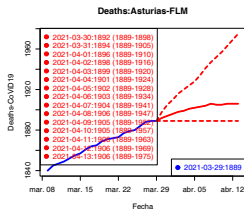
◀ Fallecidos

Fallecidos: Aragón



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

Fallecidos: Asturias

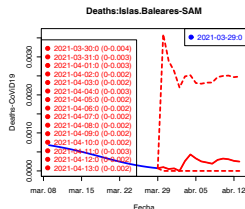
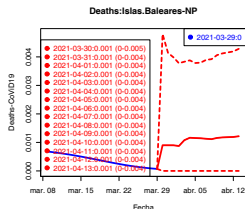
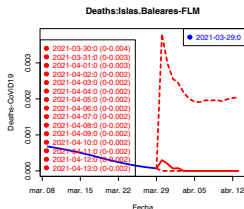
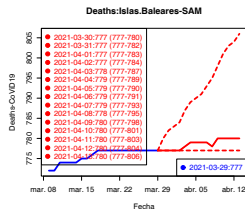
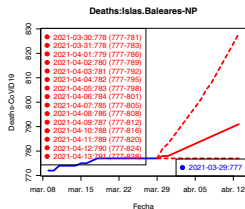
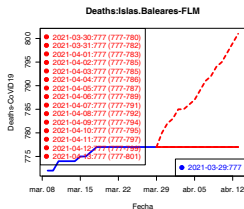


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Islas Baleares

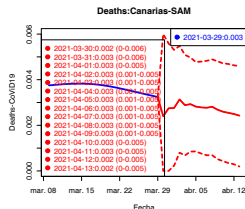
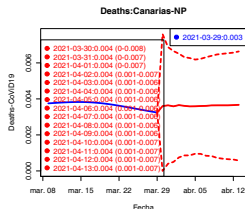
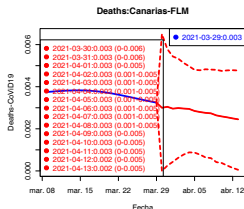
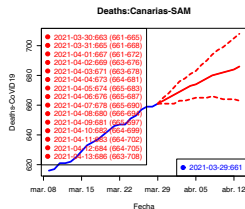
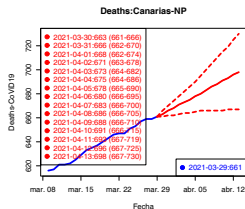
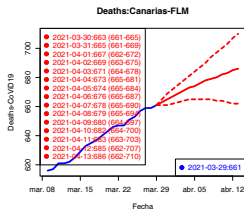


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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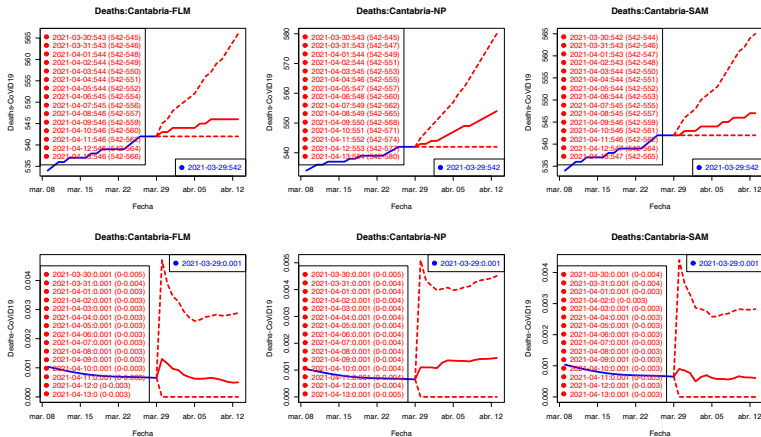


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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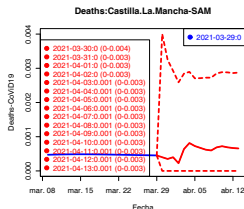
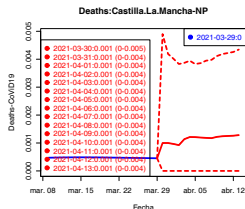
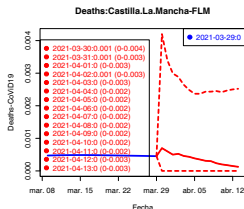
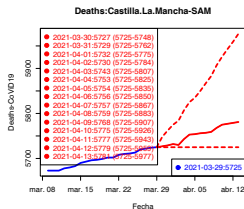
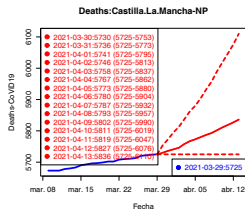
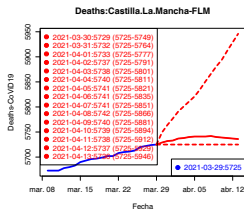


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla-La Mancha

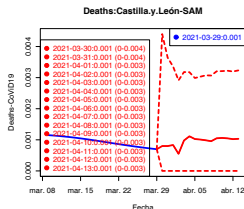
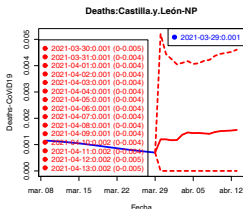
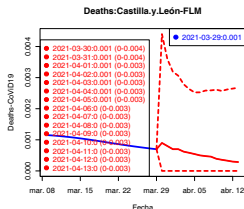
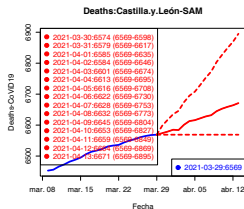
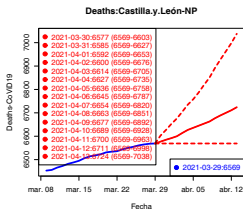
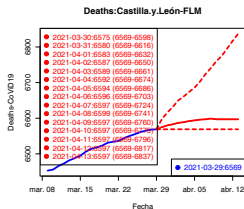


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla y León

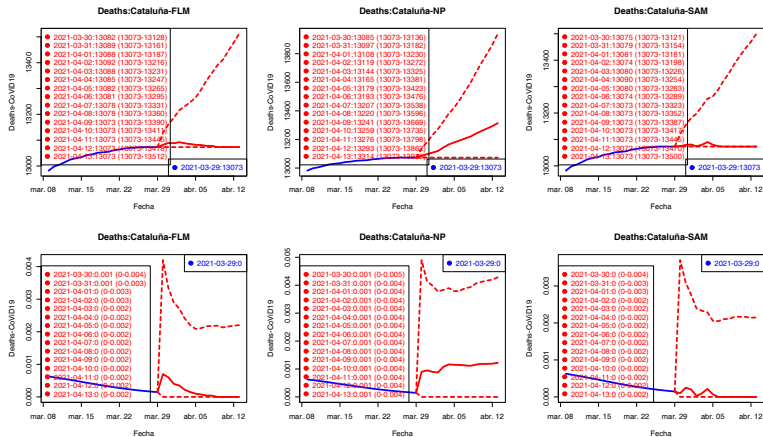


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cataluña

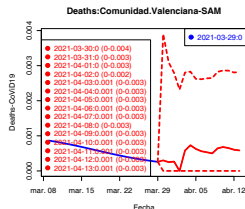
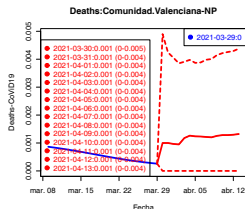
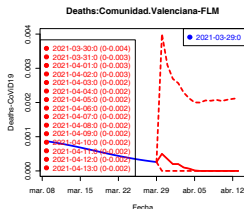
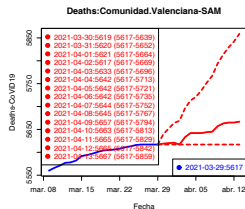
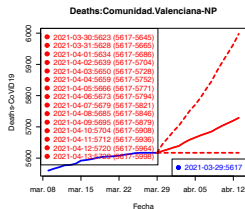
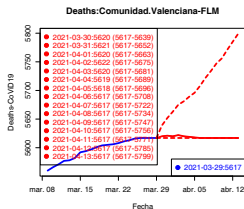


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: C. Valenciana

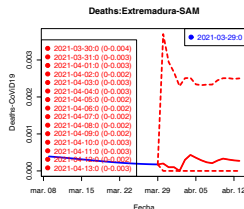
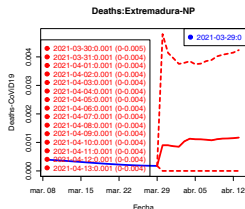
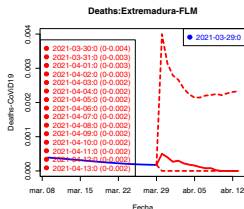
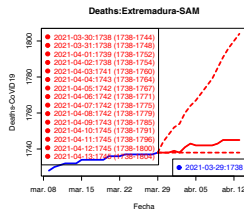
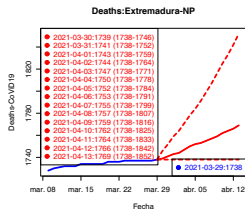
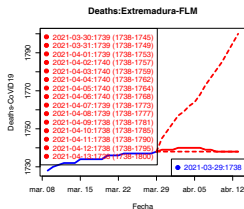


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Extremadura

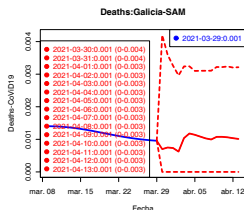
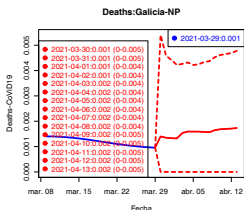
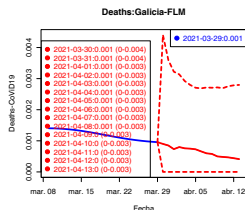
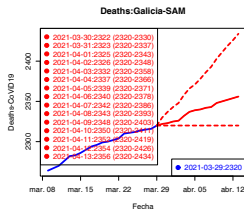
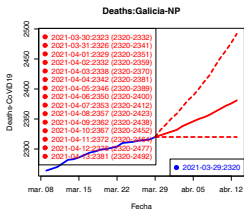
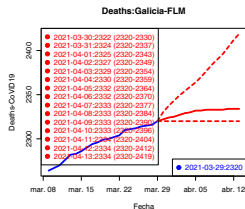


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Galicia

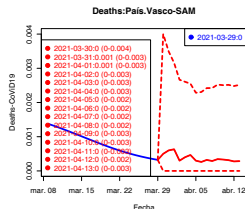
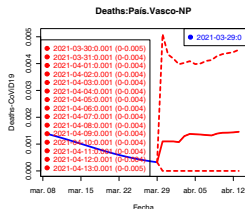
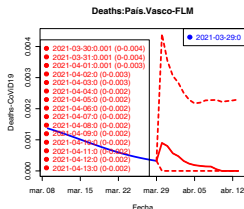
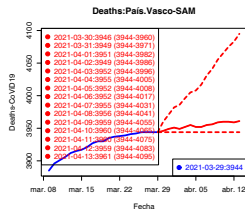
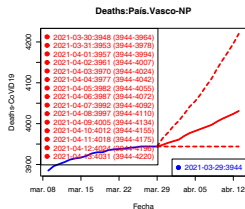
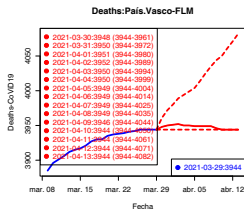


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

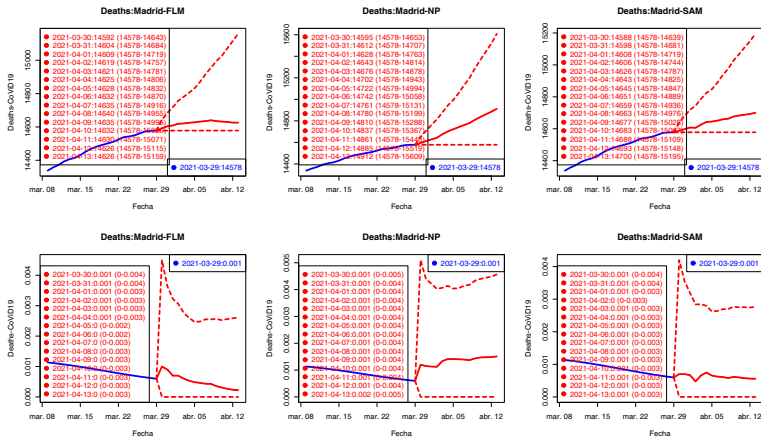
◀ Fallecidos

Fallecidos: País Vasco



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

Fallecidos: Madrid

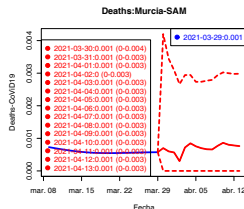
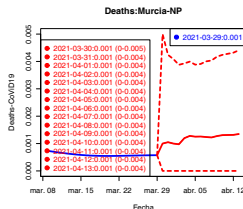
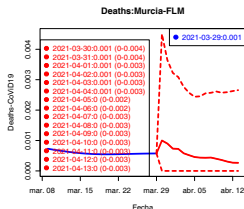
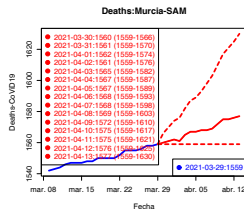
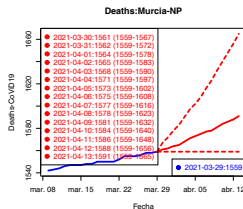
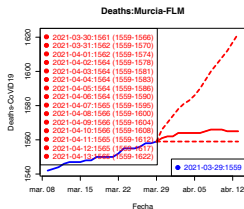


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

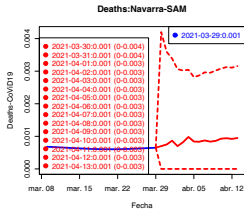
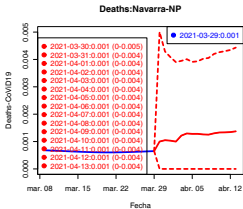
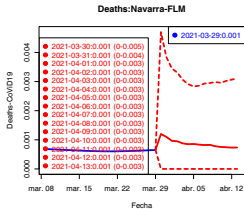
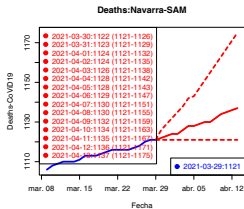
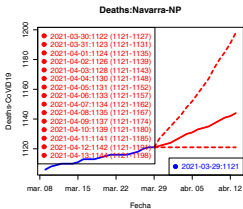
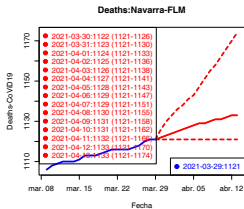
◀ Fallecidos

Fallecidos: Murcia



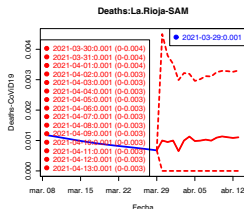
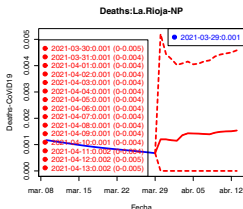
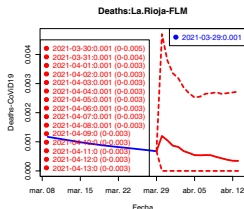
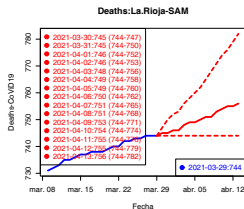
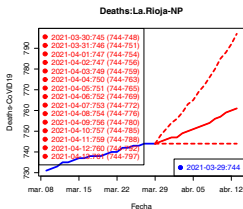
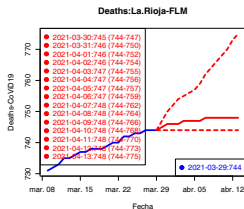
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Navarra



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

Fallecidos: La Rioja

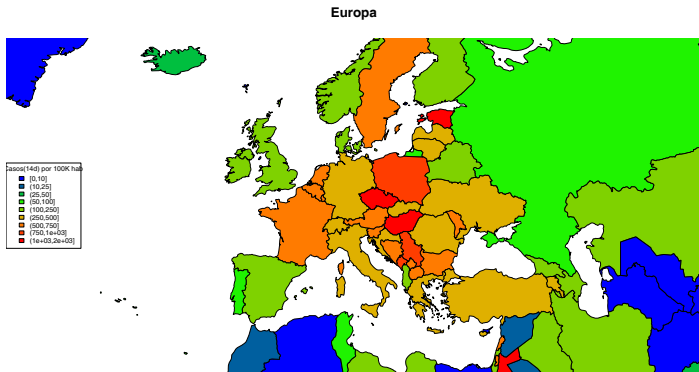


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

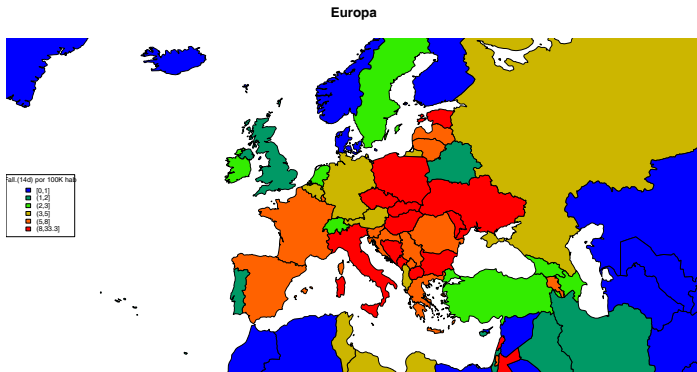
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Europa: Incidencia Acumulada (14d) por 100K hab.

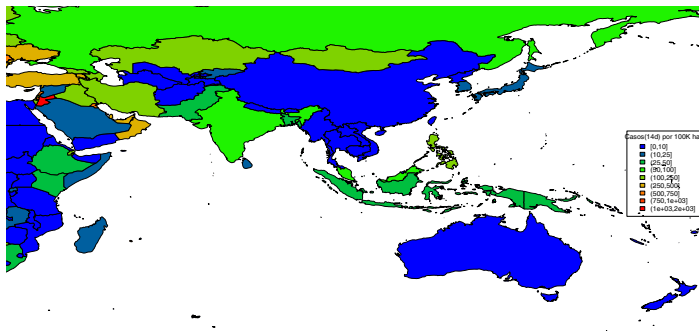


Europa: Fallecidos (14d) por 100K hab.



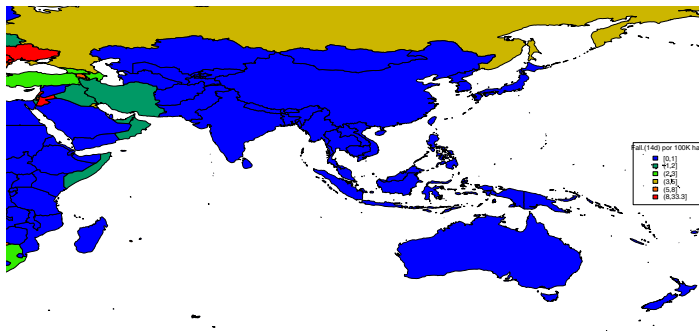
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



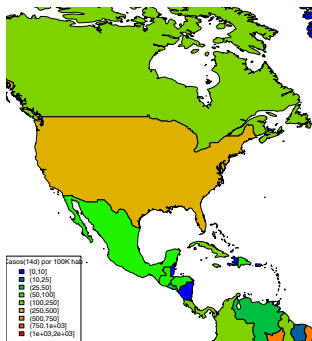
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

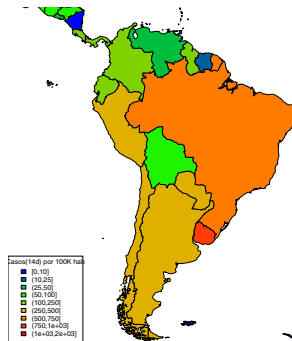


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

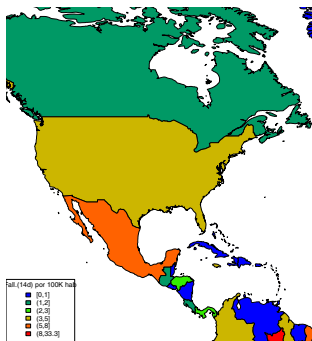


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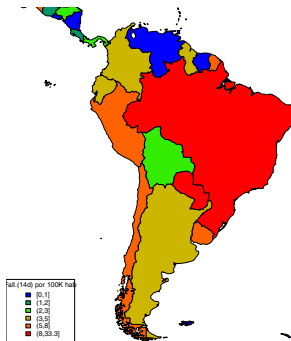


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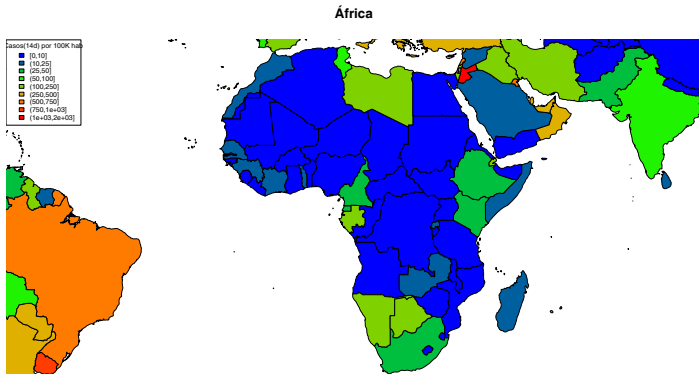
América del Norte



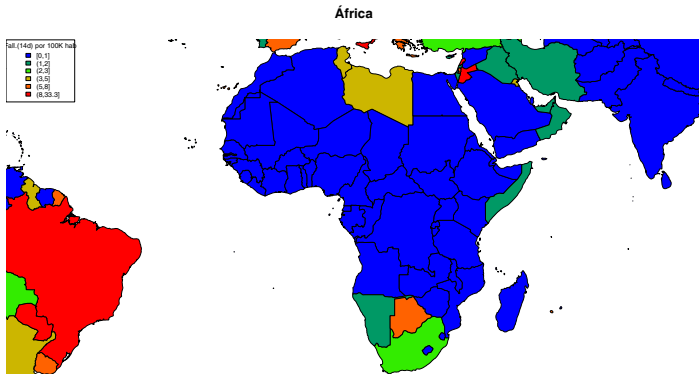
América del sur



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



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



Breve descripción del Modelo de predicción

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

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

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

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

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

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