

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: 06/04/2021

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	0.003	0.006	0.665	0.844	0.687
H4	0.076	0.04	0.072	0.052	0.023	0.052	0.784	0.898	0.796
H8	0.296	0.149	0.278	0.252	0.114	0.249	0.81	0.915	0.821
H12	0.82	0.419	0.766	0.825	0.377	0.819	0.793	0.905	0.806
H15	1.657	0.83	1.554	1.697	0.776	1.648	0.762	0.893	0.776

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

Tabla Previsión Confirmados: Mod. Aditivo.

Last=06/04/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3326778	141	58	3331985	3345492	3362343	3382051	3394486
Andalucía	513656	140	62	514610	517141	520220	523892	526226
Aragón	112182	156	73	112358	112872	113577	114429	115080
Asturias	48021	121	38	48100	48256	48356	48477	48406
Canarias	48144	97	41	48283	48647	49039	49439	49669
Cantabria	26493	121	54	26551	26707	26916	27158	27328
Castilla.y.León	214952	151	71	215285	216237	217347	218838	219802
Castilla.La.Mancha	177031	101	34	177194	177613	178046	178651	178968
Cataluña	543725	164	50	544545	546233	547592	549110	548931
Ceuta	5331	373	177	5359	5438	5523	5636	5705
Comunidad.Valenciana	386456	25	8	386570	387104	387747	388864	389787
Extremadura	71737	110	53	71850	72169	72486	72943	73223
Galicia	117464	59	23	117599	117968	118318	118810	119104
Islas.Baleares	58007	51	19	58050	58181	58344	58558	58705
La.Rioja	28196	158	63	28240	28352	28470	28633	28712
Madrid	635823	246	109	637060	640516	646325	652333	657307
Melilla	8074	387	162	8100	8166	8249	8340	8399
Murcia	109071	54	20	109141	109368	109611	109987	110253
Navarra	55590	325	143	55764	56205	56711	57335	57637
País.Vasco	166825	237	105	167245	168309	169512	170933	171720

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0012	0.0015	0.0063	0.0113	0.0164	0.0202
Andalucía	0.0014	0.0018	0.0075	0.0136	0.0201	0.0247
Aragón	0.0012	0.0017	0.0068	0.0128	0.0191	0.0242
Asturias	0.0013	0.0012	0.0054	0.0082	0.0110	0.0116
Canarias	0.0027	0.0028	0.0112	0.0205	0.0305	0.0372
Cantabria	0.0017	0.0021	0.0085	0.0161	0.0241	0.0303
Castilla.y.León	0.0011	0.0016	0.0065	0.0117	0.0172	0.0211
Castilla.La.Mancha	0.0006	0.0010	0.0039	0.0061	0.0083	0.0097
Cataluña	0.0011	0.0012	0.0051	0.0076	0.0102	0.0111
Ceuta	0.0040	0.0043	0.0179	0.0340	0.0524	0.0647
Comunidad.Valenciana	0.0002	0.0007	0.0027	0.0041	0.0053	0.0063
Extremadura	0.0011	0.0016	0.0064	0.0111	0.0163	0.0196
Galicia	0.0008	0.0012	0.0048	0.0078	0.0110	0.0130
Islas.Baleares	0.0006	0.0010	0.0042	0.0068	0.0095	0.0113
La.Rioja	0.0010	0.0014	0.0059	0.0099	0.0142	0.0168
Madrid	0.0018	0.0020	0.0084	0.0169	0.0253	0.0330
Melilla	0.0027	0.0028	0.0116	0.0222	0.0335	0.0419
Murcia	0.0004	0.0009	0.0036	0.0056	0.0077	0.0091
Navarra	0.0024	0.0026	0.0113	0.0208	0.0313	0.0380
País.Vasco	0.0020	0.0022	0.0093	0.0171	0.0255	0.0312

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0012	0.0017	0.0070	0.0148	0.0239	0.0313
Andalucía	0.0014	0.0018	0.0077	0.0162	0.0261	0.0341
Aragón	0.0012	0.0015	0.0064	0.0135	0.0219	0.0289
Asturias	0.0013	0.0021	0.0091	0.0187	0.0298	0.0388
Canarias	0.0027	0.0033	0.0138	0.0286	0.0446	0.0575
Cantabria	0.0017	0.0020	0.0085	0.0178	0.0286	0.0374
Castilla.y.León	0.0011	0.0014	0.0060	0.0126	0.0206	0.0272
Castilla.La.Mancha	0.0006	0.0012	0.0051	0.0107	0.0176	0.0233
Cataluña	0.0011	0.0020	0.0083	0.0172	0.0275	0.0358
Ceuta	0.0040	0.0041	0.0172	0.0366	0.0581	0.0755
Comunidad.Valenciana	0.0002	0.0009	0.0037	0.0078	0.0130	0.0176
Extremadura	0.0011	0.0014	0.0060	0.0126	0.0206	0.0272
Galicia	0.0008	0.0013	0.0056	0.0118	0.0192	0.0254
Islas.Baleares	0.0006	0.0012	0.0049	0.0103	0.0169	0.0225
La.Rioja	0.0010	0.0015	0.0062	0.0131	0.0212	0.0280
Madrid	0.0018	0.0020	0.0087	0.0181	0.0290	0.0378
Melilla	0.0027	0.0031	0.0132	0.0274	0.0432	0.0562
Murcia	0.0004	0.0011	0.0043	0.0091	0.0151	0.0202
Navarra	0.0024	0.0028	0.0120	0.0249	0.0396	0.0519
País.Vasco	0.0020	0.0024	0.0103	0.0215	0.0342	0.0447

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

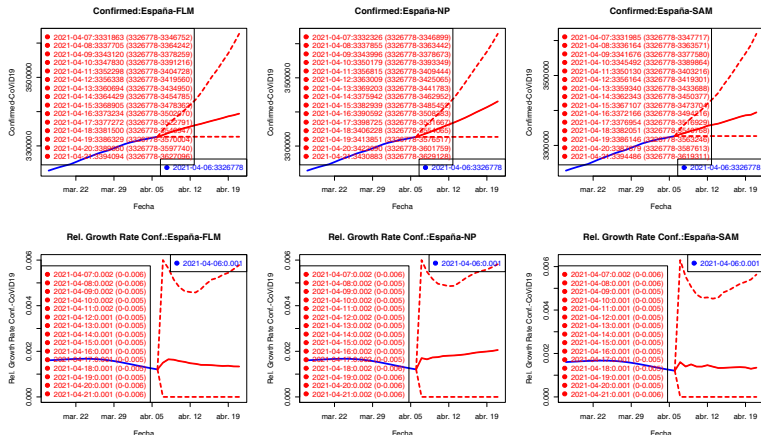
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0012	0.0016	0.0056	0.0107	0.0166	0.0204
Andalucía	0.0014	0.0019	0.0068	0.0128	0.0199	0.0245
Aragón	0.0012	0.0016	0.0062	0.0124	0.0200	0.0258
Asturias	0.0013	0.0016	0.0049	0.0070	0.0095	0.0080
Canarias	0.0027	0.0029	0.0104	0.0186	0.0269	0.0317
Cantabria	0.0017	0.0022	0.0081	0.0160	0.0251	0.0315
Castilla.y.León	0.0011	0.0016	0.0060	0.0111	0.0181	0.0226
Castilla.La.Mancha	0.0006	0.0009	0.0033	0.0057	0.0091	0.0109
Cataluña	0.0011	0.0015	0.0046	0.0071	0.0099	0.0096
Ceuta	0.0040	0.0053	0.0201	0.0360	0.0573	0.0702
Comunidad.Valenciana	0.0002	0.0003	0.0017	0.0033	0.0062	0.0086
Extremadura	0.0011	0.0016	0.0060	0.0104	0.0168	0.0207
Galicia	0.0008	0.0011	0.0043	0.0073	0.0115	0.0140
Islas.Baleares	0.0006	0.0007	0.0030	0.0058	0.0095	0.0120
La.Rioja	0.0010	0.0016	0.0055	0.0097	0.0155	0.0183
Madrid	0.0018	0.0019	0.0074	0.0165	0.0260	0.0338
Melilla	0.0027	0.0032	0.0114	0.0217	0.0330	0.0403
Murcia	0.0004	0.0006	0.0027	0.0049	0.0084	0.0108
Navarra	0.0024	0.0031	0.0111	0.0202	0.0314	0.0368
País.Vasco	0.0020	0.0025	0.0089	0.0161	0.0246	0.0293

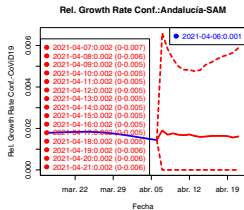
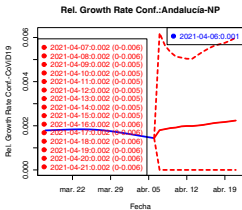
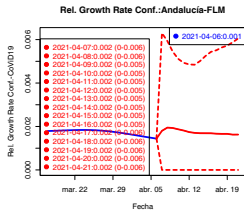
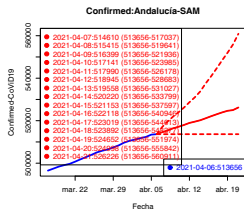
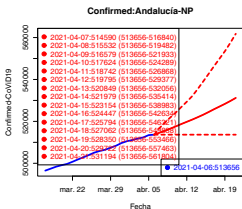
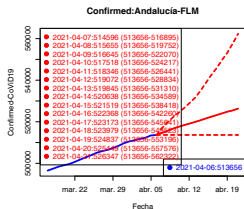
Cuadro: Previsión Ratio Incr. Confirmados: Mod. Aditivo - Horiz. (días).

Confirmados: España



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

Confirmados: Andalucía

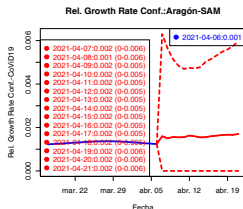
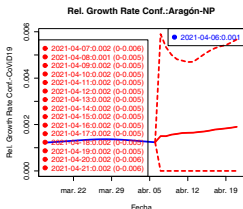
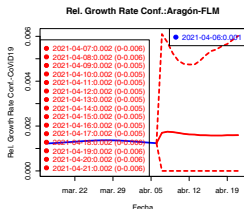
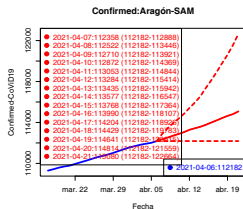
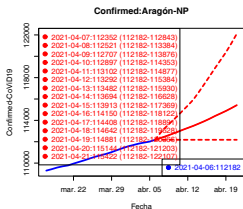
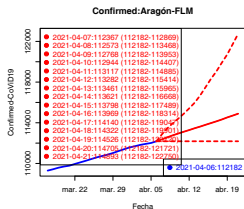


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Aragón

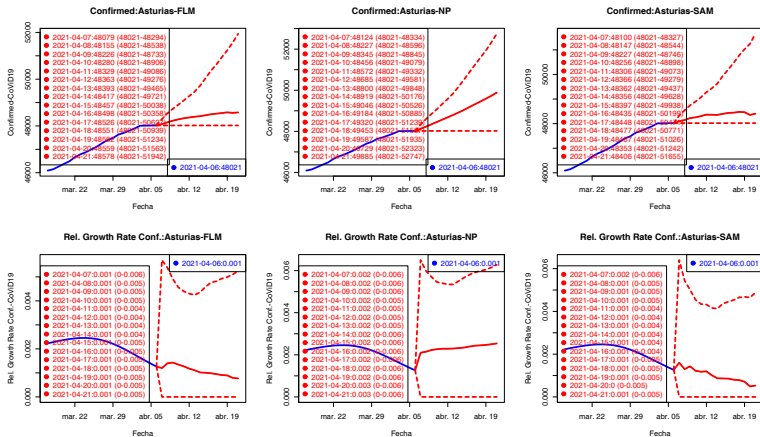


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Asturias



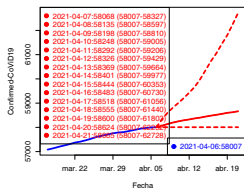
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

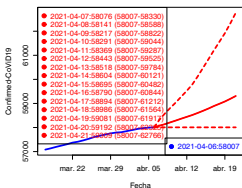
◀ Fallecidos

Confirmados: Islas Baleares

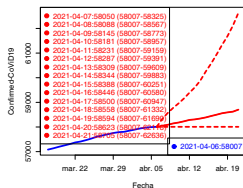
Confirmed:Islas.Baleares-FLM



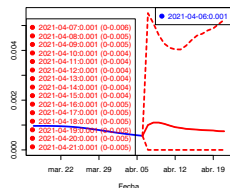
Confirmed:Islas.Baleares-NP



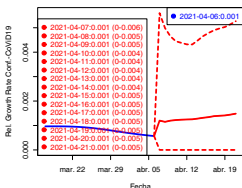
Confirmed:Islas.Baleares-SAM



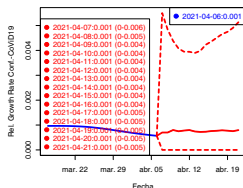
Rel. Growth Rate Conf.:Islas.Baleares-FLM



Rel. Growth Rate Conf.:Islas.Baleares-NP



Rel. Growth Rate Conf.:Islas.Baleares-SAM

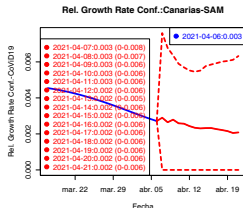
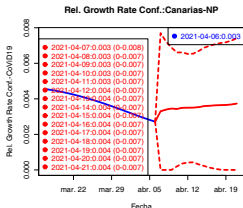
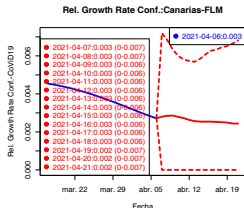
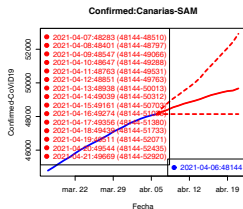
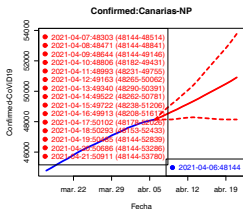
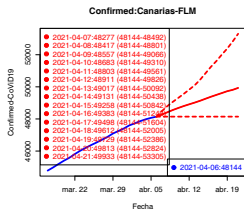


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

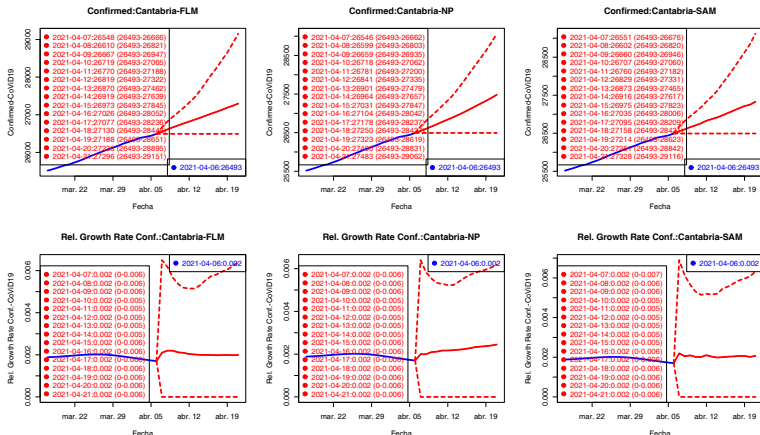
◀ Fallecidos

Confirmados: Canarias



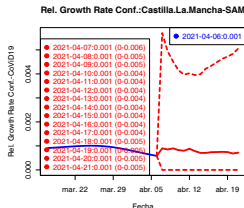
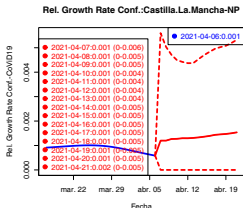
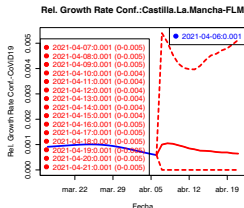
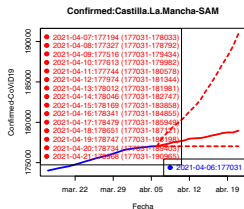
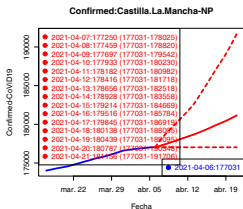
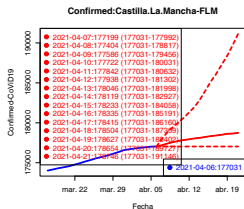
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados: Cantabria



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

Confirmados: Castilla-La Mancha

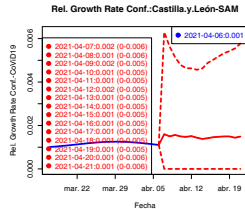
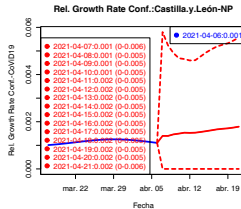
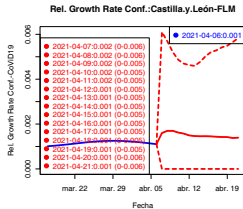
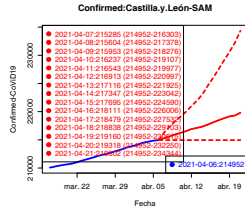
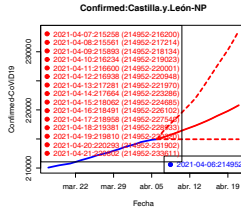
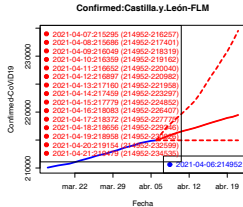


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

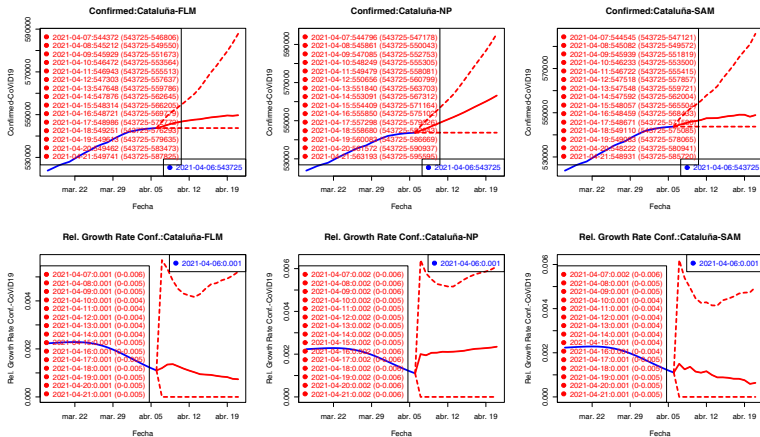


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

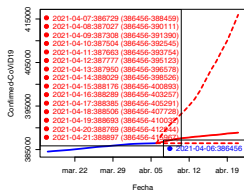
← Fallecidos

Confirmados: Cataluña

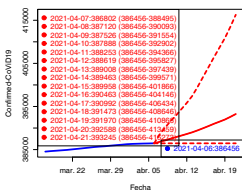


Confirmados: C. Valenciana

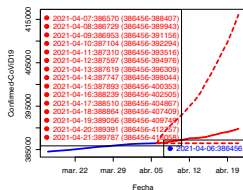
Confirmed:Comunidad.Valenciana-FLM



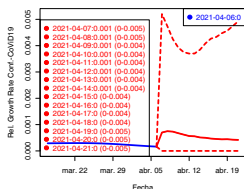
Confirmed:Comunidad.Valenciana-NP



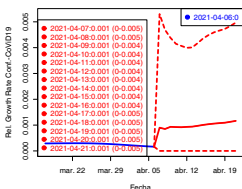
Confirmed:Comunidad.Valenciana-SAM



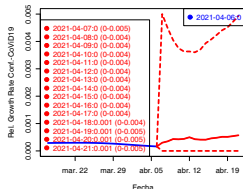
Rel. Growth Rate Conf.:Comunidad.Valenciana-FLM



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



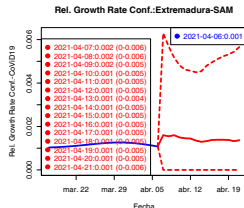
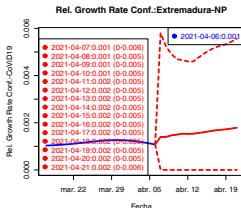
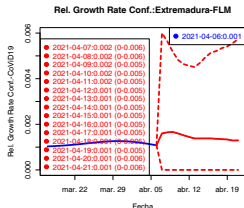
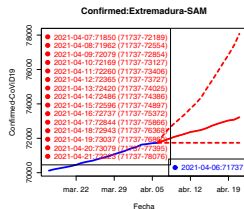
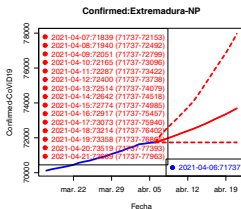
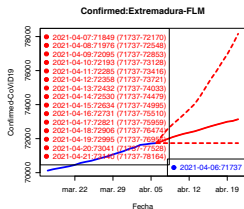
Rel. Growth Rate Conf.:Comunidad.Valenciana-SAM



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

◀ Confirmados ▶ Fallecidos

Confirmados: Extremadura



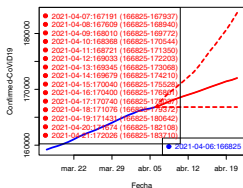
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

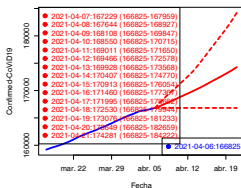
◀ Fallecidos

Confirmados: País Vasco

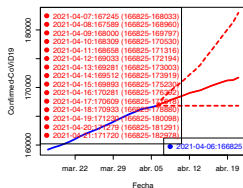
Confirmed:País.Vasco-FLM



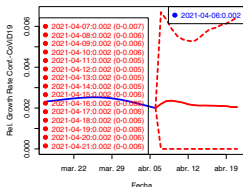
Confirmed:País.Vasco-NP



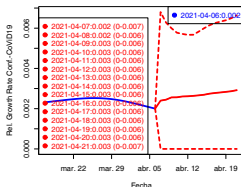
Confirmed:País.Vasco-SAM



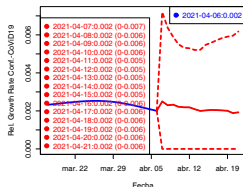
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Rel. Growth Rate Conf.:País.Vasco-NP



Rel. Growth Rate Conf.:País.Vasco-SAM



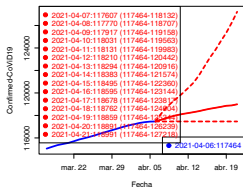
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

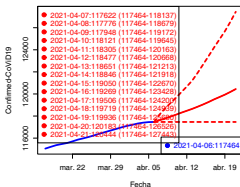
◀ Fallecidos

Confirmados: Galicia

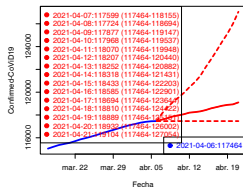
Confirmed:Galicia-FLM



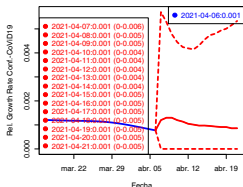
Confirmed:Galicia-NP



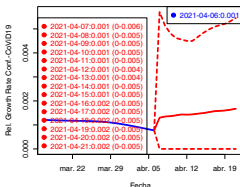
Confirmed:Galicia-SAM



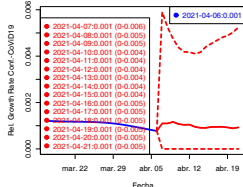
Rel. Growth Rate Conf.:Galicia-FLM



Rel. Growth Rate Conf.:Galicia-NP



Rel. Growth Rate Conf.:Galicia-SAM

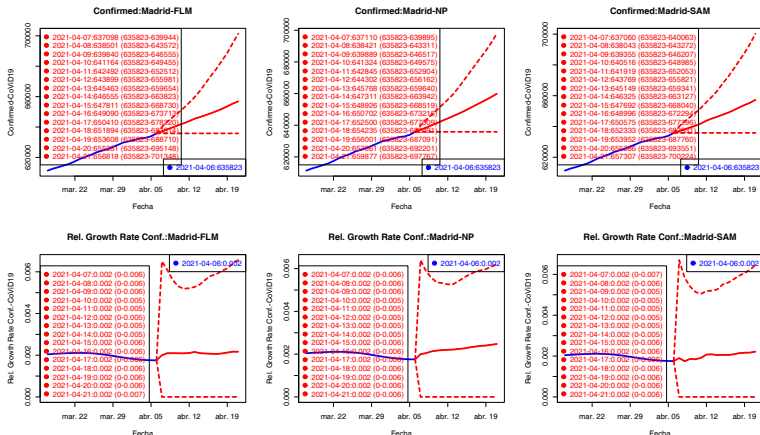


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

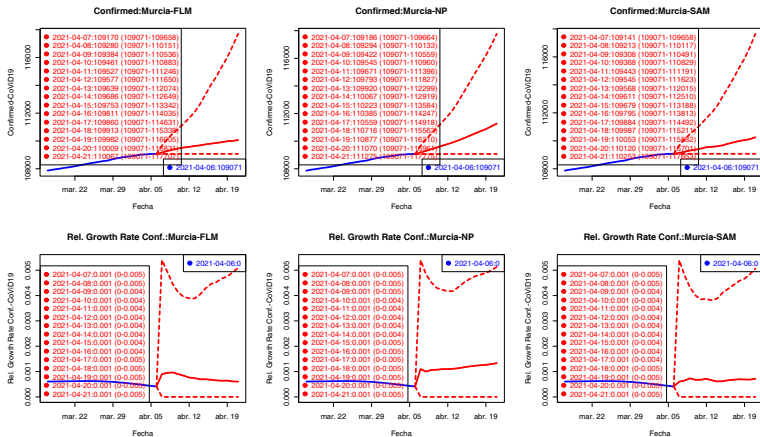


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

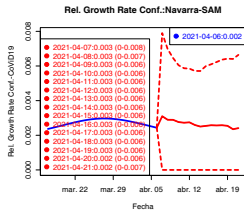
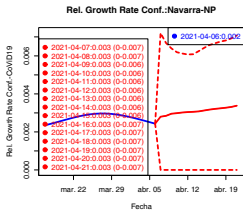
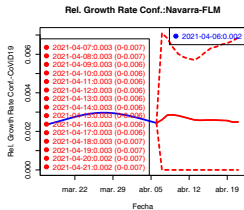
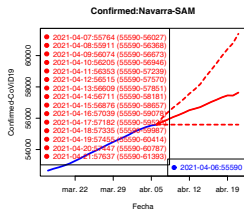
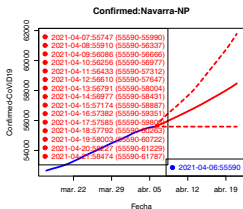
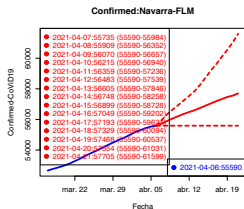
◀ Fallecidos

Confirmados: Murcia



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

Confirmados: Navarra

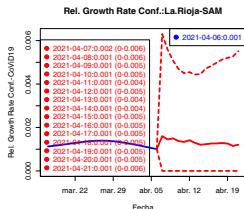
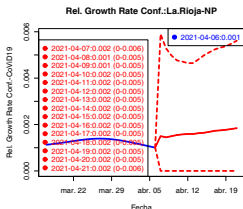
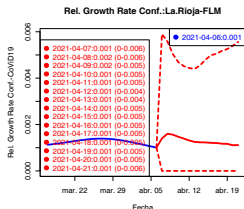
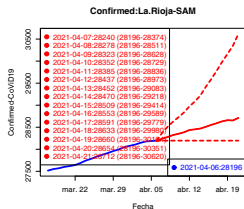
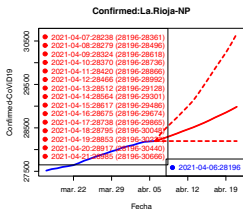
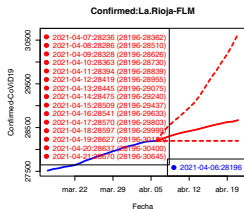


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



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

◀ Confirmados

◀ Fallecidos

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- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Último dato: **06/04/2021** 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	0.711	0.734	0.745
H4	0.026	0.026	0.025	0.01	0.01	0.01	0.781	0.787	0.79
H8	0.067	0.069	0.06	0.038	0.044	0.033	0.857	0.857	0.87
H12	0.158	0.162	0.136	0.11	0.117	0.098	0.859	0.858	0.877
H15	0.229	0.247	0.19	0.179	0.208	0.162	0.87	0.864	0.892

Tabla Previsión Fallecidos: Mod. Lineal.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	75639	75704	75843	75902	75927	75897
Andalucía	9230	9240	9263	9275	9284	9283
Aragón	3341	3345	3355	3363	3372	3377
Asturias	1908	1910	1917	1923	1927	1928
Canarias	676	678	683	687	691	692
Cantabria	545	546	547	548	549	549
Castilla.y.León	6604	6609	6620	6627	6629	6629
Castilla.La.Mancha	5744	5748	5755	5756	5752	5746
Cataluña	13344	13352	13362	13350	13344	13344
Ceuta	98	98	100	101	103	104
Comunidad.Valenciana	7117	7120	7125	7119	7117	7117
Extremadura	1742	1743	1745	1745	1744	1742
Galicia	2342	2345	2354	2361	2368	2372
Islas.Baleares	778	778	779	778	778	778
La.Rioja	748	749	750	752	752	753
Madrid	14696	14711	14747	14771	14796	14804
Melilla	83	84	85	87	89	90
Murcia	1572	1574	1578	1580	1582	1581
Navarra	1124	1125	1127	1130	1131	1132
País.Vasco	3947	3950	3953	3951	3948	3947

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

Tabla Previsión Fallecidos: Mod. No Paramétrico.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	75639	75719	75952	76426	76873	77231
Andalucía	9230	9242	9278	9345	9413	9464
Aragón	3341	3345	3357	3380	3402	3420
Asturias	1908	1911	1918	1932	1946	1957
Canarias	676	678	684	693	702	709
Cantabria	545	546	547	551	554	557
Castilla.y.León	6604	6611	6632	6674	6714	6746
Castilla.La.Mancha	5744	5749	5765	5799	5829	5854
Cataluña	13344	13356	13391	13463	13529	13584
Ceuta	98	98	100	102	103	105
Comunidad.Valenciana	7117	7123	7142	7180	7215	7244
Extremadura	1742	1743	1748	1757	1766	1773
Galicia	2342	2345	2354	2371	2388	2401
Islas.Baleares	778	779	781	785	788	791
La.Rioja	748	749	751	756	760	764
Madrid	14696	14713	14761	14857	14950	15023
Melilla	83	83	84	86	88	89
Murcia	1572	1574	1579	1589	1599	1607
Navarra	1124	1125	1128	1135	1141	1146
País.Vasco	3947	3950	3961	3982	4002	4018

Cuadro: Previsión fallecidos: Mod. No Paramétrico - Horiz. (días).

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	75639	75675	75740	75938	76062	76078
Andalucía	9230	9238	9257	9293	9318	9333
Aragón	3341	3344	3351	3366	3382	3390
Asturias	1908	1909	1914	1920	1924	1925
Canarias	676	678	683	687	692	695
Cantabria	545	545	546	548	549	549
Castilla.y.León	6604	6608	6614	6644	6666	6678
Castilla.La.Mancha	5744	5746	5748	5767	5780	5781
Cataluña	13344	13344	13344	13344	13344	13344
Ceuta	98	98	100	102	104	105
Comunidad.Valenciana	7117	7119	7117	7141	7164	7166
Extremadura	1742	1742	1743	1747	1750	1751
Galicia	2342	2345	2350	2364	2377	2383
Islas.Baleares	778	778	778	778	779	778
La.Rioja	748	748	749	752	755	756
Madrid	14696	14705	14724	14761	14780	14788
Melilla	83	83	85	85	87	88
Murcia	1572	1574	1577	1586	1593	1595
Navarra	1124	1124	1126	1127	1127	1127
País.Vasco	3947	3947	3947	3947	3947	3947

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0009	0.0027	0.0035	0.0038	0.0034
Andalucía	0.0008	0.0011	0.0036	0.0049	0.0059	0.0057
Aragón	0.0009	0.0013	0.0043	0.0066	0.0094	0.0107
Asturias	0.0011	0.0013	0.0046	0.0076	0.0097	0.0107
Canarias	0.0024	0.0027	0.0097	0.0158	0.0215	0.0241
Cantabria	0.0006	0.0010	0.0034	0.0054	0.0070	0.0078
Castilla.y.León	0.0005	0.0008	0.0025	0.0035	0.0038	0.0038
Castilla.La.Mancha	0.0004	0.0006	0.0018	0.0021	0.0013	0.0004
Cataluña	0.0001	0.0006	0.0013	0.0004	0.0000	0.0000
Ceuta	0.0043	0.0047	0.0180	0.0339	0.0504	0.0618
Comunidad.Valenciana	0.0002	0.0005	0.0011	0.0003	0.0000	0.0000
Extremadura	0.0002	0.0007	0.0017	0.0017	0.0010	0.0002
Galicia	0.0011	0.0014	0.0050	0.0082	0.0112	0.0128
Islas.Baleares	0.0001	0.0006	0.0014	0.0003	0.0000	0.0000
La.Rioja	0.0007	0.0009	0.0029	0.0049	0.0058	0.0065
Madrid	0.0006	0.0010	0.0035	0.0051	0.0068	0.0074
Melilla	0.0051	0.0063	0.0241	0.0425	0.0692	0.0846
Murcia	0.0007	0.0011	0.0037	0.0049	0.0061	0.0060
Navarra	0.0004	0.0008	0.0029	0.0050	0.0062	0.0072
País.Vasco	0.0001	0.0007	0.0015	0.0011	0.0002	0.0000

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*

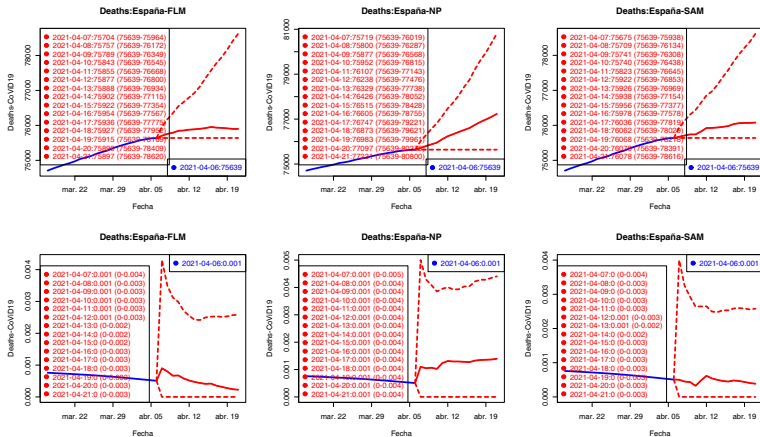
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=06/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0005	0.0013	0.0040	0.0056	0.0058
Andalucía	0.0008	0.0009	0.0029	0.0068	0.0096	0.0111
Aragón	0.0009	0.0010	0.0029	0.0074	0.0122	0.0145
Asturias	0.0011	0.0007	0.0030	0.0063	0.0086	0.0088
Canarias	0.0024	0.0024	0.0105	0.0169	0.0236	0.0274
Cantabria	0.0006	0.0006	0.0020	0.0047	0.0067	0.0077
Castilla.y.León	0.0005	0.0006	0.0016	0.0060	0.0094	0.0113
Castilla.La.Mancha	0.0004	0.0003	0.0006	0.0041	0.0062	0.0064
Cataluña	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
Ceuta	0.0043	0.0045	0.0204	0.0375	0.0583	0.0745
Comunidad.Valenciana	0.0002	0.0002	0.0000	0.0034	0.0067	0.0068
Extremadura	0.0002	0.0003	0.0005	0.0028	0.0048	0.0052
Galicia	0.0011	0.0011	0.0036	0.0093	0.0151	0.0177
Islas.Baleares	0.0001	0.0001	0.0000	0.0000	0.0016	0.0001
La.Rioja	0.0007	0.0005	0.0016	0.0058	0.0094	0.0109
Madrid	0.0006	0.0006	0.0019	0.0044	0.0057	0.0063
Melilla	0.0051	0.0052	0.0215	0.0294	0.0521	0.0576
Murcia	0.0007	0.0010	0.0030	0.0086	0.0131	0.0149
Navarra	0.0004	0.0004	0.0014	0.0026	0.0025	0.0026
País.Vasco	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000

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

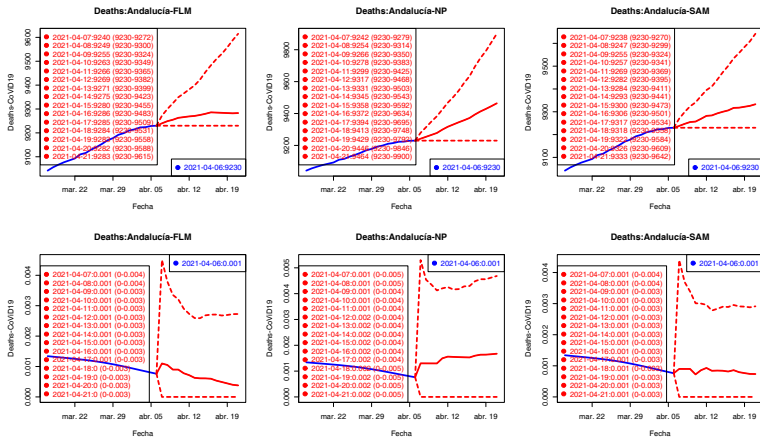
Fallecidos: España



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

◀ Confirmados ▶ Fallecidos

Fallecidos: Andalucía

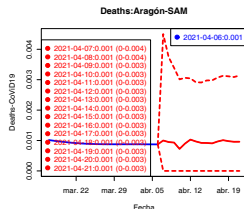
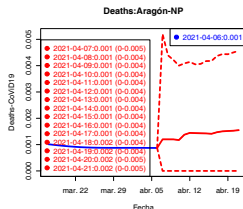
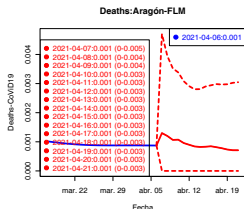
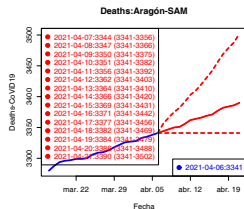
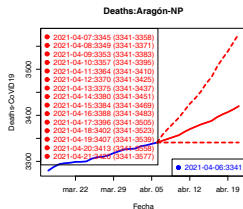
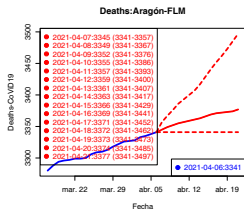


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

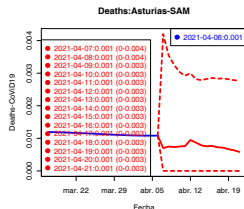
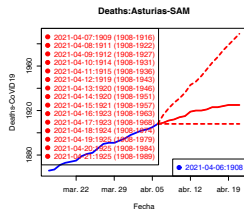
Fallecidos: Aragón



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

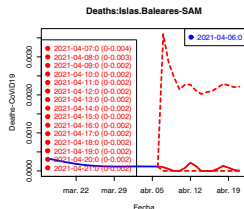
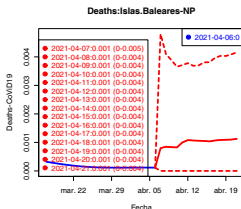
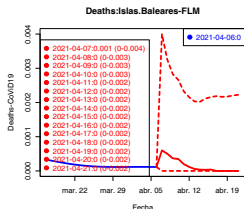
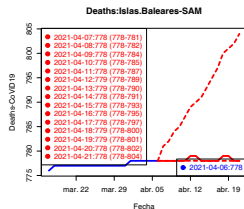
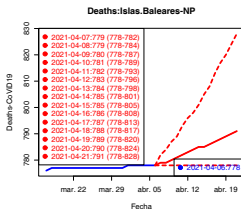
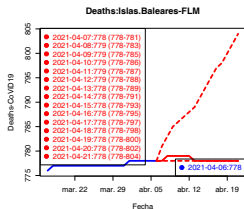
◀ Confirmados

◀ Fallecidos



◀ Confirmados ▶ Fallecidos

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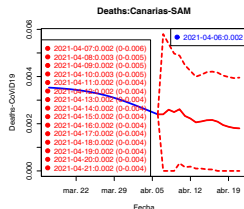
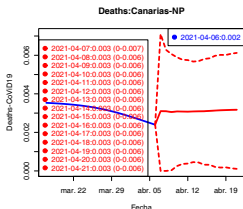
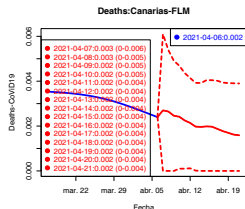
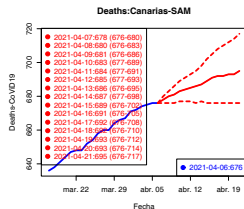
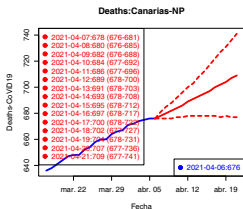
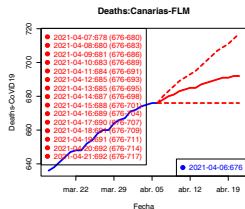


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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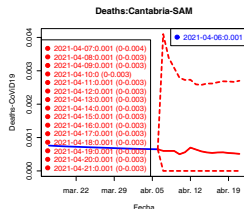
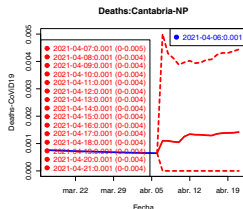
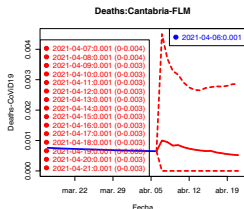
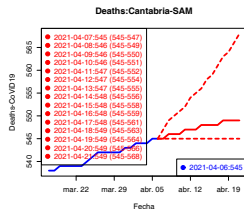
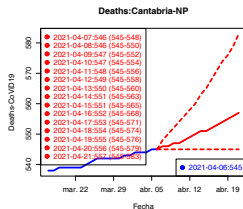
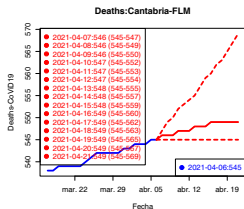


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

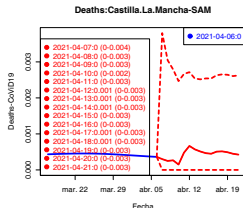
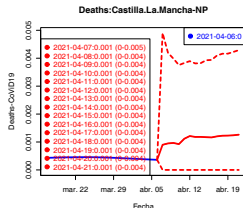
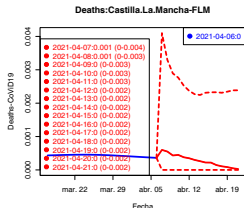
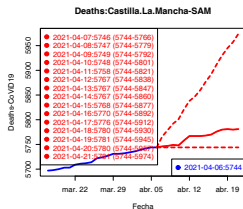
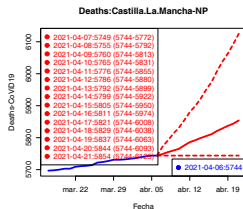
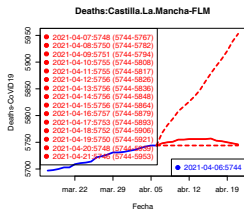
◀ Fallecidos

Fallecidos: Cantabria



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

Fallecidos: Castilla-La Mancha

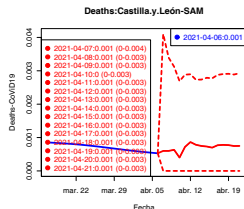
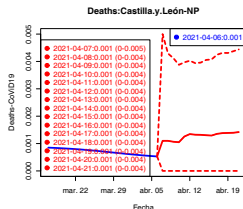
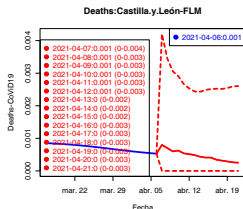
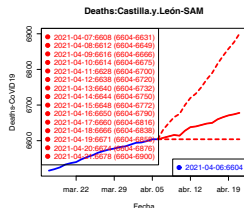
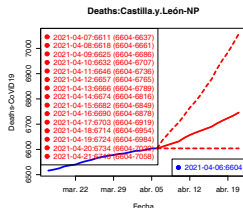
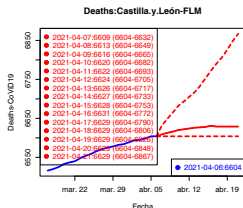


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

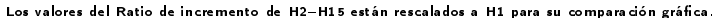
Fallecidos: Castilla y León



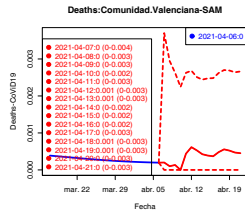
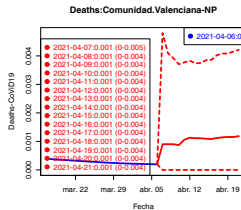
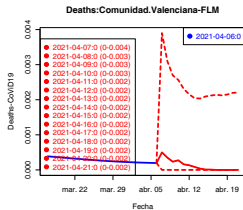
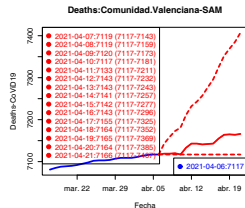
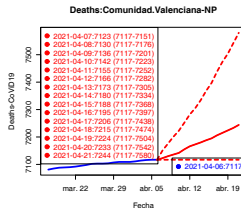
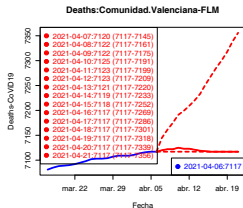
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

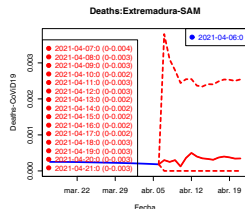
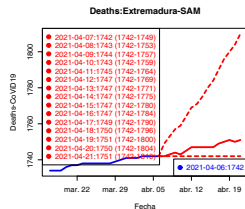
◀ Fallecidos



Fallecidos: C. Valenciana

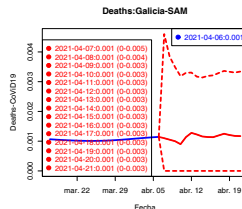
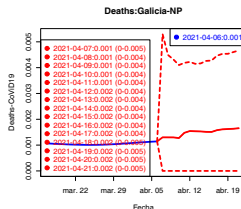
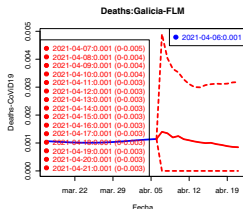
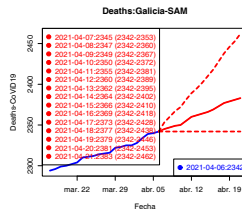
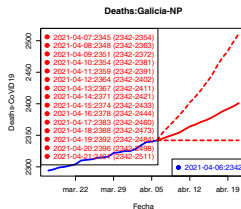
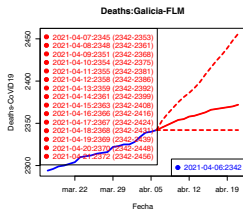


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.



◀ Confirmados ▶ Fallecidos

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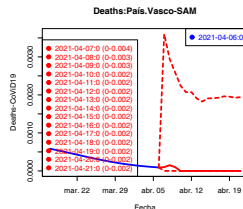
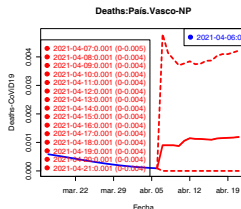
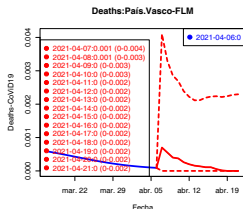
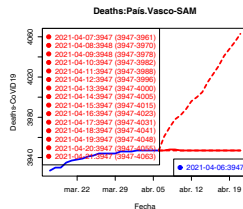
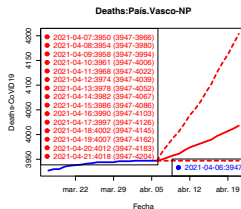
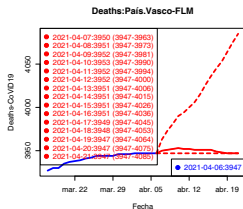


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: País Vasco



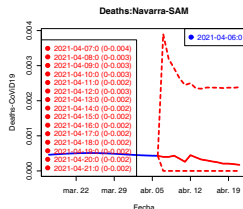
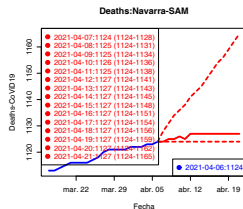
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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

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◀ Confirmados ▶ Fallecidos

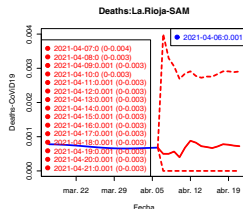
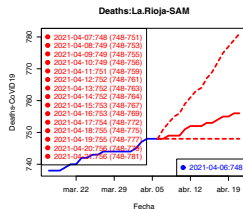
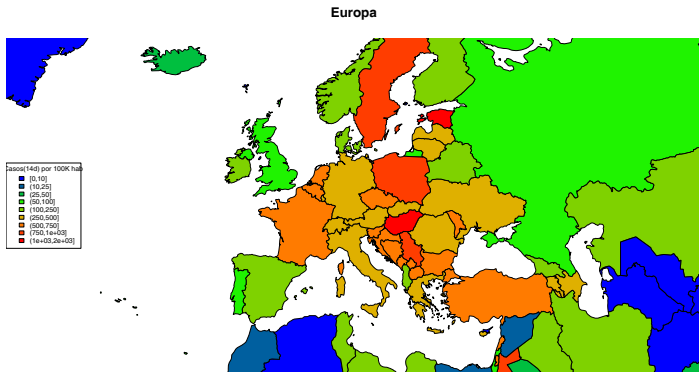


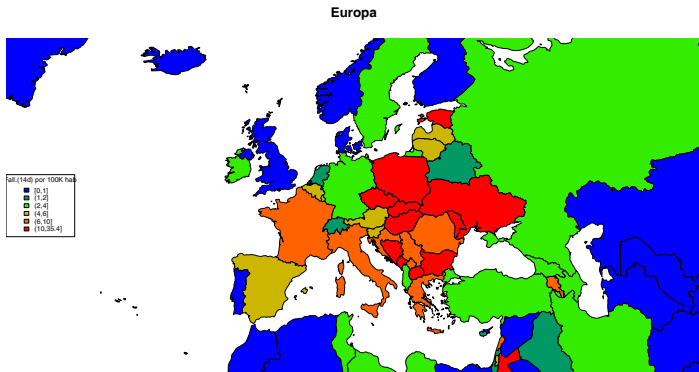
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Europa: Incidencia Acumulada (14d) por 100K hab.

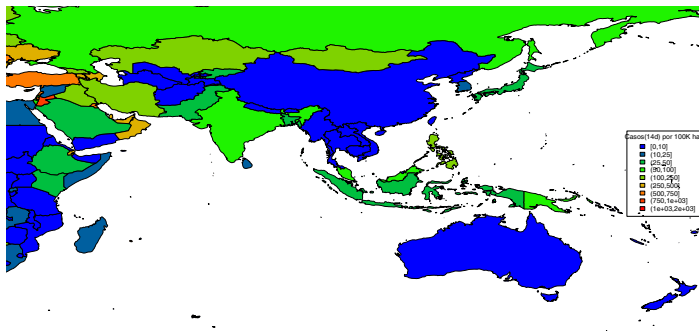


Europa: Fallecidos (14d) por 100K hab.



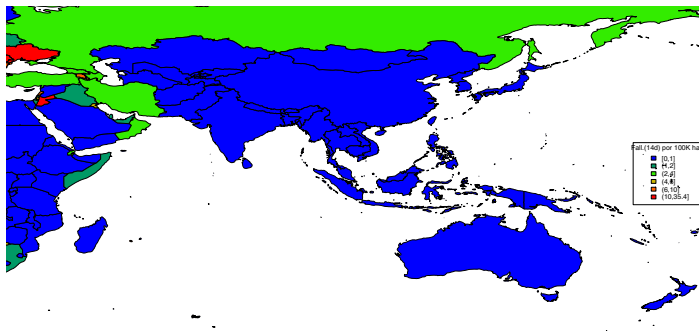
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



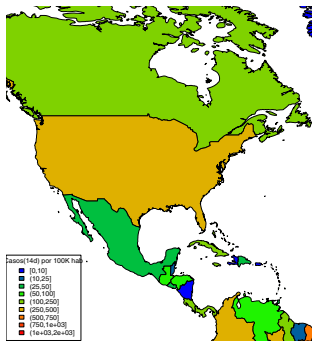
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

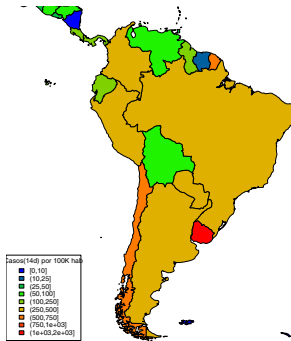


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

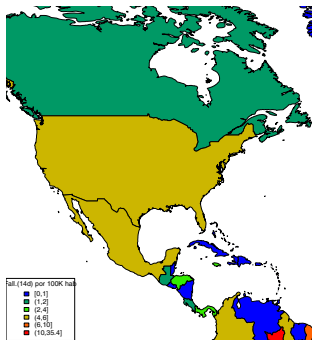


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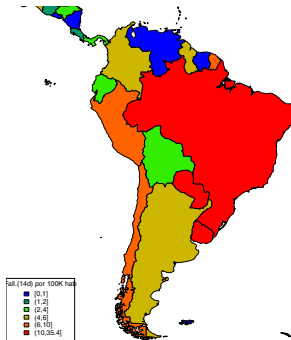


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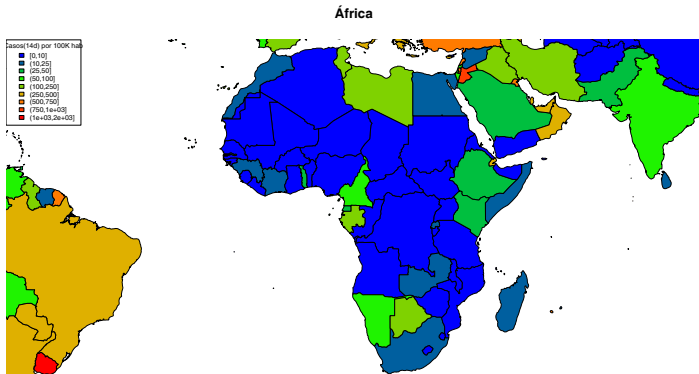
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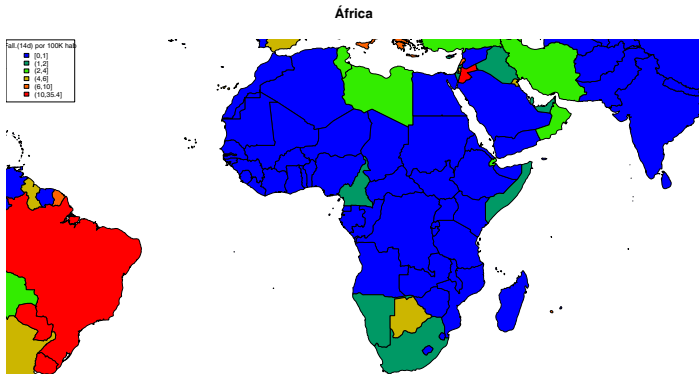
América del sur



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



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



Breve descripción del Modelo de predicción

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

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

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

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

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

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