

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: 28/03/2021

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	0.003	0.006	0.666	0.847	0.688
H4	0.078	0.041	0.073	0.052	0.022	0.053	0.784	0.899	0.796
H8	0.302	0.151	0.284	0.25	0.112	0.252	0.811	0.916	0.822
H12	0.835	0.424	0.782	0.832	0.374	0.832	0.794	0.907	0.807
H15	1.688	0.839	1.584	1.693	0.776	1.692	0.763	0.895	0.778

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

Last=28/03/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3270856	126	57	3275516	3288935	3301438	3318921	3329012
Andalucía	503890	118	58	504713	507177	509804	513343	515613
Aragón	110502	122	53	110630	111008	111391	111915	112277
Asturias	46988	123	49	47063	47248	47293	47390	47303
Canarias	46368	106	39	46495	46819	47091	47385	47455
Cantabria	25952	98	48	25997	26127	26293	26489	26635
Castilla.y.León	211953	108	53	212170	212861	213446	214425	215011
Castilla.La.Mancha	175085	76	28	175198	175555	175863	176354	176693
Cataluña	533791	178	81	534873	537819	540422	544011	545766
Ceuta	5069	224	97	5082	5115	5155	5197	5221
Comunidad.Valenciana	385237	24	10	385340	385888	386501	387614	388703
Extremadura	70740	84	35	70805	70991	71137	71374	71470
Galicia	116177	61	24	116285	116596	116924	117319	117584
Islas.Baleares	57565	55	23	57619	57786	57977	58241	58443
La.Rioja	27805	113	58	27840	27953	28055	28228	28337
Madrid	621716	205	92	622770	625698	628201	631671	633435
Melilla	7785	386	140	7800	7836	7859	7880	7860
Murcia	108423	49	21	108482	108702	108888	109227	109484
Navarra	53955	238	129	54100	54551	55026	55712	56137
País.Vasco	161855	206	98	162225	163257	164121	165415	166011

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=28/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0011	0.0016	0.0064	0.0108	0.0157	0.0188
Andalucía	0.0013	0.0019	0.0077	0.0134	0.0199	0.0243
Aragón	0.0009	0.0014	0.0054	0.0091	0.0130	0.0158
Asturias	0.0014	0.0016	0.0063	0.0090	0.0124	0.0126
Canarias	0.0027	0.0025	0.0104	0.0174	0.0250	0.0290
Cantabria	0.0015	0.0019	0.0077	0.0143	0.0213	0.0268
Castilla.y.León	0.0008	0.0013	0.0052	0.0085	0.0122	0.0144
Castilla.La.Mancha	0.0005	0.0009	0.0037	0.0056	0.0074	0.0087
Cataluña	0.0016	0.0020	0.0082	0.0140	0.0206	0.0245
Ceuta	0.0023	0.0025	0.0105	0.0192	0.0285	0.0350
Comunidad.Valenciana	0.0002	0.0008	0.0029	0.0045	0.0059	0.0073
Extremadura	0.0007	0.0012	0.0047	0.0073	0.0101	0.0115
Galicia	0.0008	0.0012	0.0048	0.0079	0.0110	0.0132
Islas.Baleares	0.0007	0.0012	0.0048	0.0080	0.0114	0.0141
La.Rioja	0.0009	0.0015	0.0059	0.0101	0.0147	0.0177
Madrid	0.0013	0.0018	0.0071	0.0120	0.0175	0.0208
Melilla	0.0021	0.0020	0.0085	0.0126	0.0174	0.0182
Murcia	0.0004	0.0010	0.0036	0.0056	0.0075	0.0090
Navarra	0.0021	0.0026	0.0109	0.0205	0.0313	0.0385
País.Vasco	0.0018	0.0021	0.0089	0.0155	0.0231	0.0275

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

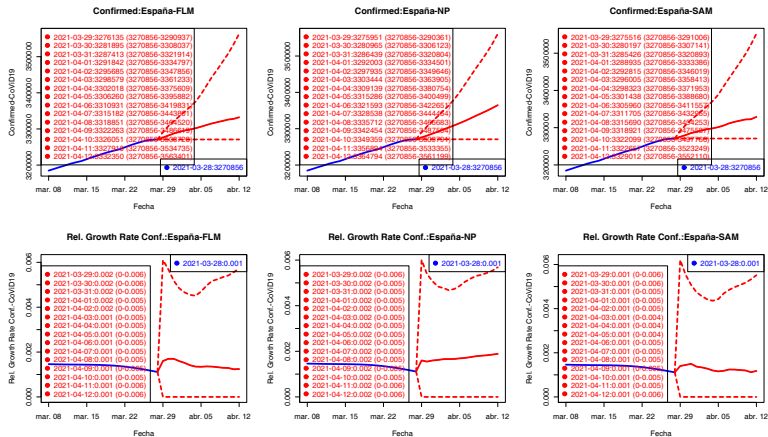
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=28/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0011	0.0014	0.0055	0.0093	0.0147	0.0178
Andalucía	0.0013	0.0016	0.0065	0.0117	0.0188	0.0233
Aragón	0.0009	0.0012	0.0046	0.0080	0.0128	0.0161
Asturias	0.0014	0.0016	0.0055	0.0065	0.0086	0.0067
Canarias	0.0027	0.0027	0.0097	0.0156	0.0219	0.0235
Cantabria	0.0015	0.0017	0.0068	0.0131	0.0207	0.0263
Castilla.y.León	0.0008	0.0010	0.0043	0.0070	0.0117	0.0144
Castilla.La.Mancha	0.0005	0.0006	0.0027	0.0044	0.0072	0.0092
Cataluña	0.0016	0.0020	0.0075	0.0124	0.0191	0.0224
Ceuta	0.0023	0.0025	0.0091	0.0170	0.0253	0.0300
Comunidad.Valenciana	0.0002	0.0003	0.0017	0.0033	0.0062	0.0090
Extremadura	0.0007	0.0009	0.0036	0.0056	0.0090	0.0103
Galicia	0.0008	0.0009	0.0036	0.0064	0.0098	0.0121
Islas.Baleares	0.0007	0.0009	0.0038	0.0072	0.0117	0.0153
La.Rioja	0.0009	0.0012	0.0053	0.0090	0.0152	0.0191
Madrid	0.0013	0.0017	0.0064	0.0104	0.0160	0.0188
Melilla	0.0021	0.0019	0.0066	0.0096	0.0123	0.0096
Murcia	0.0004	0.0005	0.0026	0.0043	0.0074	0.0098
Navarra	0.0021	0.0027	0.0110	0.0198	0.0326	0.0404
País.Vasco	0.0018	0.0023	0.0087	0.0140	0.0220	0.0257

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

Confirmados: España

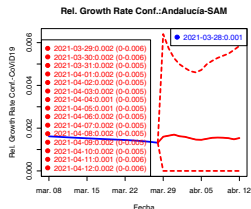
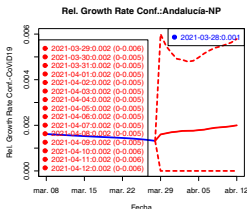
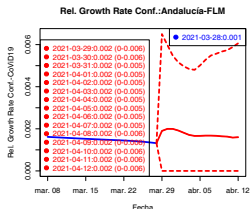
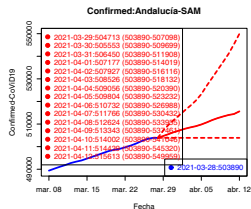
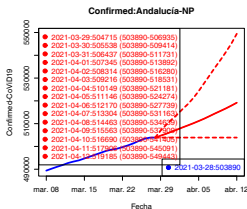
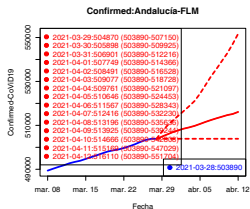


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Andalucía

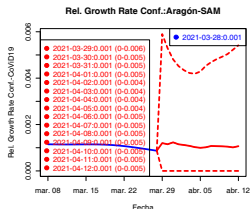
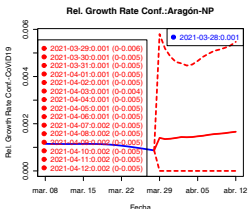
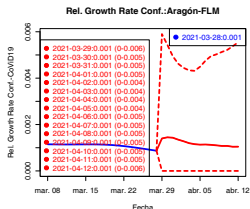
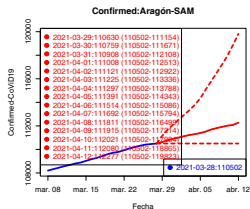
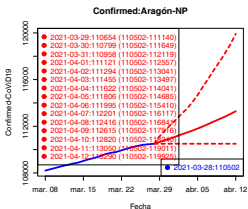
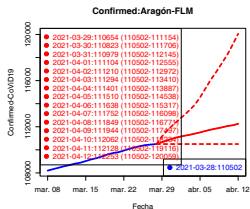


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

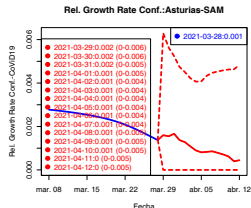
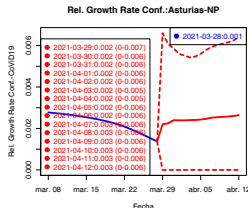
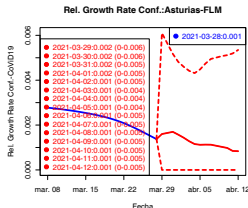
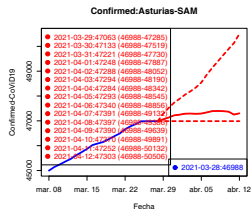
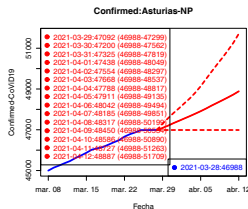
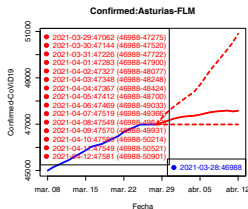
← Fallecidos

Confirmados: Aragón



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

Confirmados: Asturias

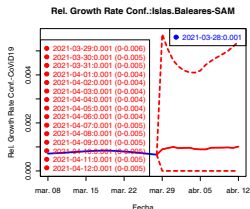
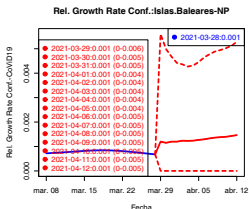
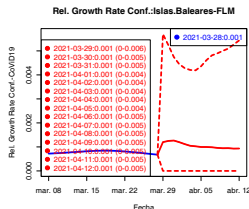
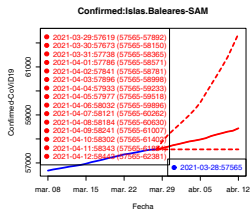
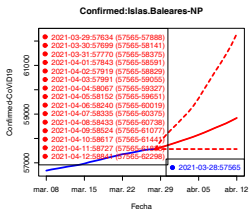
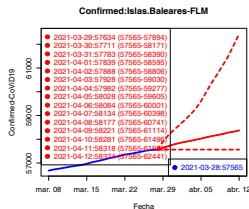


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Islas Baleares

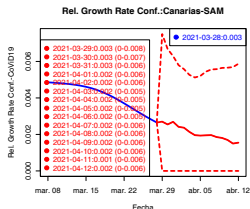
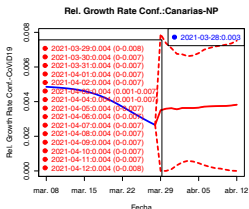
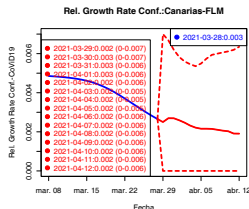
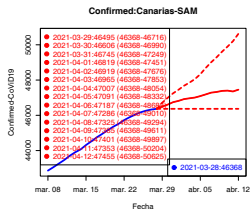
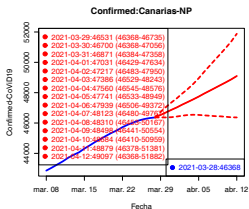
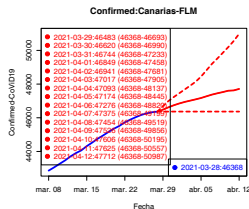


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Canarias



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

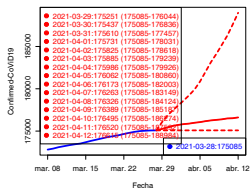
← Confirmados

← Fallecidos

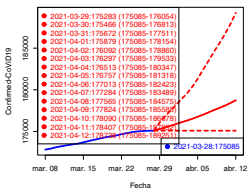
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Confirmados: Castilla-La Mancha

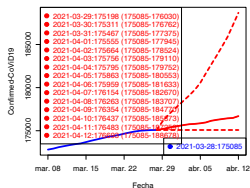
Confirmed:Castilla.La.Mancha-FLM



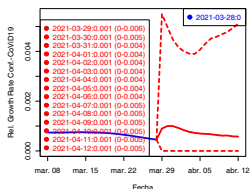
Confirmed:Castilla.La.Mancha-NP



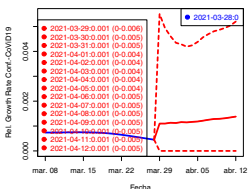
Confirmed:Castilla.La.Mancha-SAM



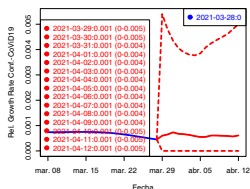
Rel. Growth Rate Conf.:Castilla.La.Mancha-FLM



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



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

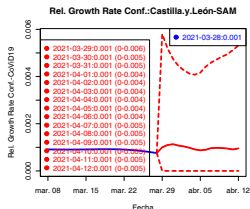
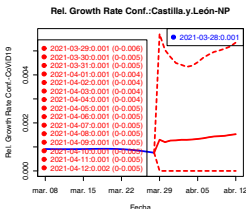
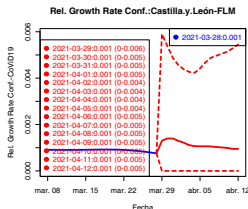
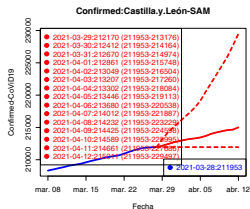
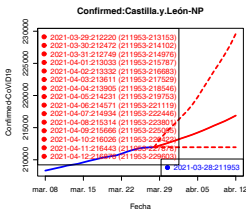
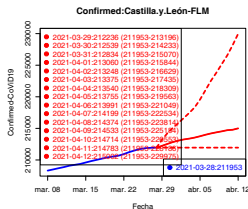


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

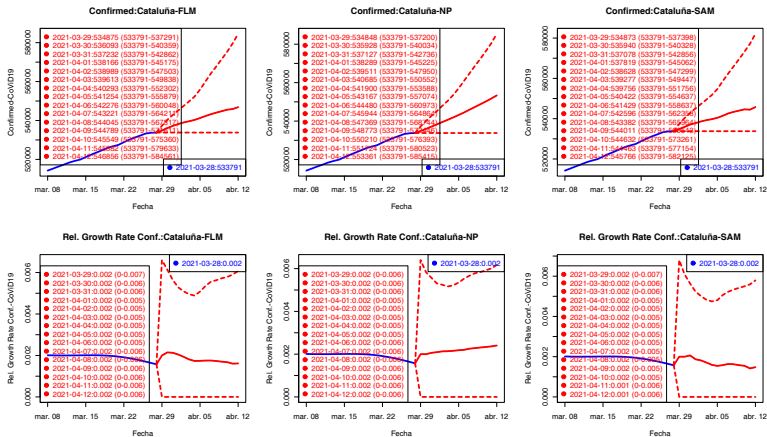


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

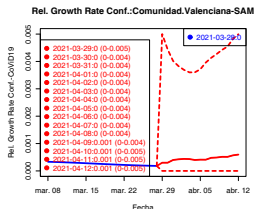
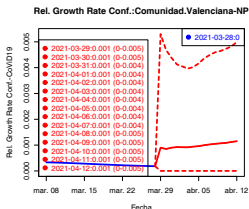
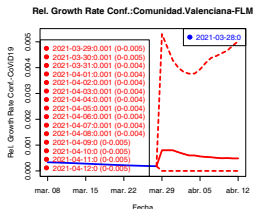
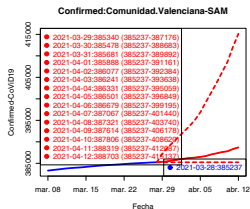
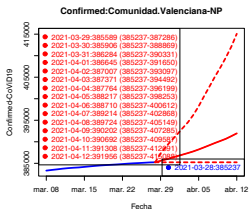
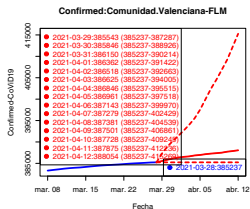
◀ Confirmados

◀ Fallecidos

Confirmados: Cataluña

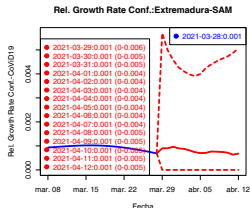
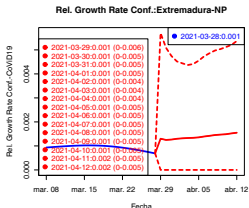
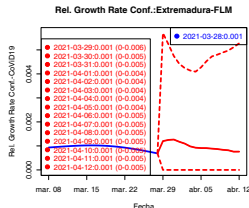
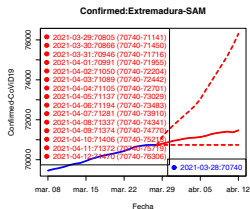
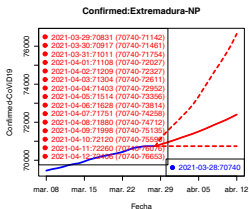
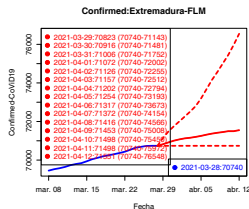


Confirmados: C. Valenciana



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

Confirmados: Extremadura



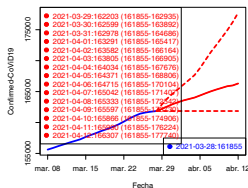
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

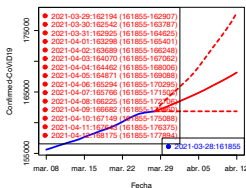
◀ Fallecidos

Confirmados: País Vasco

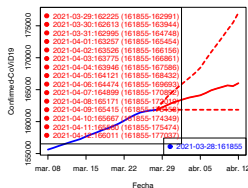
Confirmed:País.Vasco-FLM



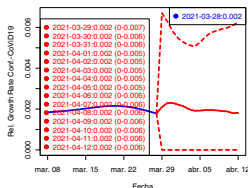
Confirmed:País.Vasco-NP



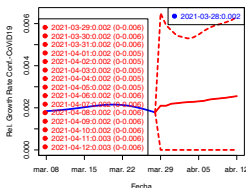
Confirmed:País.Vasco-SAM



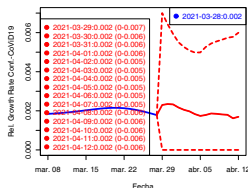
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



Rel. Growth Rate Conf.:País.Vasco-SAM

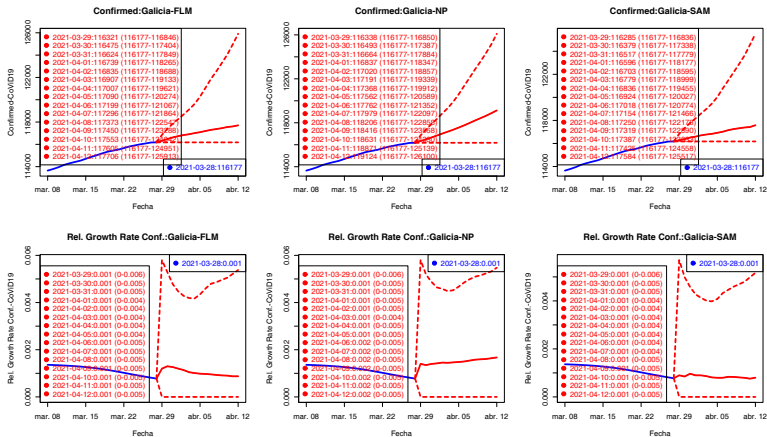


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

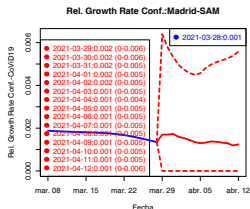
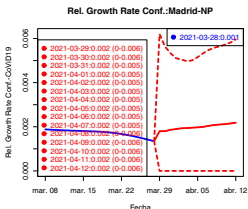
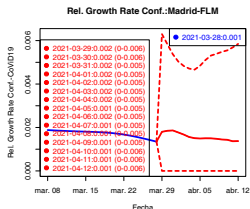
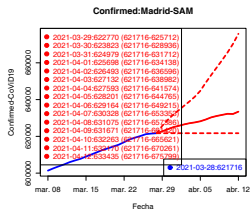
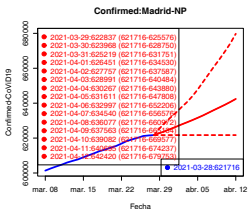
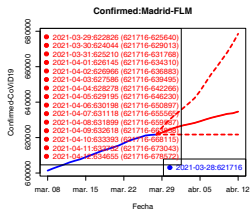
◀ Fallecidos

Confirmados: Galicia



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

Confirmados: Madrid



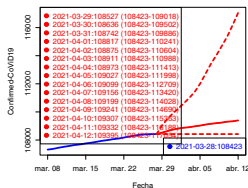
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

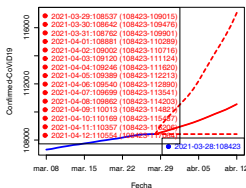
◀ Fallecidos

Confirmados: Murcia

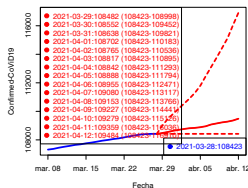
Confirmed:Murcia-FLM



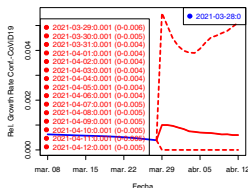
Confirmed:Murcia-NP



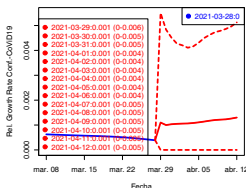
Confirmed:Murcia-SAM



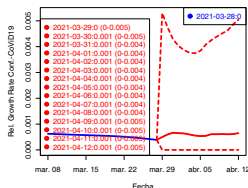
Rel. Growth Rate Conf.:Murcia-FLM



Rel. Growth Rate Conf.:Murcia-NP



Rel. Growth Rate Conf.:Murcia-SAM

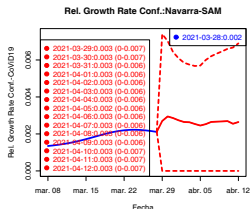
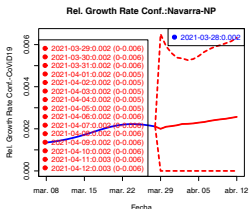
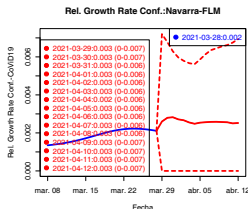
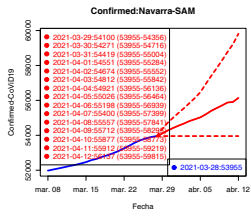
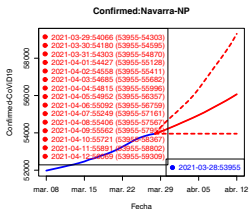
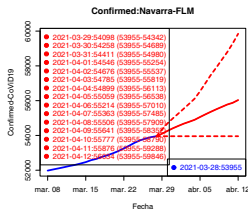


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Navarra

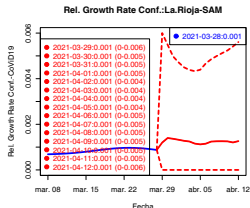
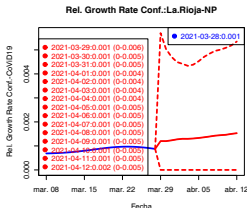
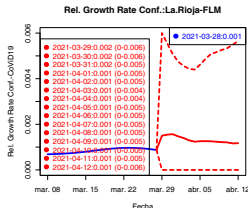
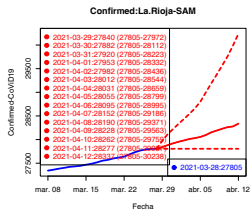
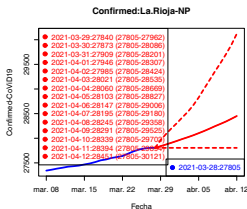
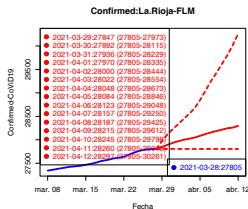


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



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

◀ Confirmados

◀ Fallecidos

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- 1 Casos Confirmados
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- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Último dato: 28/03/2021 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=28/03/2021

	Last	H1	H4	H8	H12	H15
España	74803	74864	74964	74982	74920	74844
Andalucía	9092	9099	9114	9123	9115	9109
Aragón	3311	3314	3320	3324	3324	3322
Asturias	1889	1892	1899	1905	1909	1911
Canarias	659	661	667	675	681	685
Cantabria	542	543	544	545	546	546
Castilla.y.León	6558	6563	6573	6578	6574	6570
Castilla.La.Mancha	5720	5724	5731	5733	5729	5724
Cataluña	13065	13075	13085	13077	13065	13065
Ceuta	93	93	95	95	97	97
Comunidad.Valenciana	7058	7061	7065	7059	7058	7058
Extremadura	1737	1738	1739	1737	1737	1737
Galicia	2315	2317	2322	2324	2324	2323
Islas.Baleares	777	777	777	777	777	777
La.Rioja	744	745	746	748	749	749
Madrid	14546	14558	14575	14570	14548	14546
Melilla	79	79	80	80	81	81
Murcia	1555	1556	1558	1557	1556	1555
Navarra	1121	1122	1125	1129	1132	1134
País.Vasco	3942	3945	3949	3947	3942	3942

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

Tabla Previsión Fallecidos: Mod. No Paramétrico.

Last=28/03/2021

	Last	H1	H4	H8	H12	H15
España	74803	74888	75130	75628	76104	76481
Andalucía	9092	9107	9147	9220	9298	9355
Aragón	3311	3315	3326	3349	3372	3390
Asturias	1889	1892	1900	1915	1930	1942
Canarias	659	661	669	678	689	697
Cantabria	542	543	544	548	552	555
Castilla.y.León	6558	6566	6588	6633	6677	6711
Castilla.La.Mancha	5720	5725	5741	5775	5805	5831
Cataluña	13065	13077	13112	13188	13256	13312
Ceuta	93	93	94	96	97	98
Comunidad.Valenciana	7058	7065	7084	7126	7165	7196
Extremadura	1737	1739	1743	1753	1761	1768
Galicia	2315	2318	2327	2345	2362	2376
Islas.Baleares	777	778	780	784	788	792
La.Rioja	744	745	747	753	758	761
Madrid	14546	14563	14610	14707	14800	14873
Melilla	79	79	80	81	83	83
Murcia	1555	1557	1561	1570	1579	1586
Navarra	1121	1122	1126	1133	1139	1145
País.Vasco	3942	3947	3959	3986	4012	4032

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=28/03/2021

	Last	H1	H4	H8	H12	H15
España	74803	74846	74910	75175	75360	75446
Andalucía	9092	9100	9117	9165	9201	9224
Aragón	3311	3314	3319	3336	3349	3356
Asturias	1889	1891	1897	1905	1910	1913
Canarias	659	661	668	675	681	685
Cantabria	542	542	543	544	547	547
Castilla.y.León	6558	6563	6571	6608	6635	6651
Castilla.La.Mancha	5720	5722	5724	5749	5766	5771
Cataluña	13065	13068	13068	13072	13074	13065
Ceuta	93	93	95	95	96	96
Comunidad.Valenciana	7058	7060	7058	7089	7116	7120
Extremadura	1737	1737	1737	1740	1743	1742
Galicia	2315	2317	2321	2334	2342	2347
Islas.Baleares	777	777	777	779	781	781
La.Rioja	744	745	746	751	755	758
Madrid	14546	14554	14568	14602	14621	14630
Melilla	79	79	80	80	81	81
Murcia	1555	1556	1556	1561	1567	1568
Navarra	1121	1122	1124	1129	1134	1138
País.Vasco	3942	3944	3947	3952	3961	3963

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=28/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0008	0.0022	0.0024	0.0016	0.0006
Andalucía	0.0008	0.0008	0.0024	0.0034	0.0025	0.0018
Aragón	0.0007	0.0009	0.0028	0.0038	0.0039	0.0034
Asturias	0.0013	0.0016	0.0052	0.0086	0.0105	0.0115
Canarias	0.0033	0.0032	0.0126	0.0238	0.0330	0.0391
Cantabria	0.0007	0.0013	0.0039	0.0051	0.0073	0.0079
Castilla.y.León	0.0006	0.0008	0.0024	0.0030	0.0025	0.0018
Castilla.La.Mancha	0.0004	0.0007	0.0019	0.0022	0.0016	0.0007
Cataluña	0.0002	0.0007	0.0016	0.0010	0.0000	0.0000
Ceuta	0.0030	0.0042	0.0163	0.0241	0.0375	0.0418
Comunidad.Valenciana	0.0003	0.0005	0.0010	0.0001	0.0000	0.0000
Extremadura	0.0001	0.0005	0.0011	0.0001	0.0000	0.0000
Galicia	0.0008	0.0009	0.0029	0.0041	0.0039	0.0034
Islas.Baleares	0.0001	0.0004	0.0005	0.0000	0.0000	0.0000
La.Rioja	0.0008	0.0011	0.0033	0.0052	0.0064	0.0071
Madrid	0.0004	0.0008	0.0020	0.0016	0.0001	0.0000
Melilla	0.0028	0.0021	0.0085	0.0162	0.0203	0.0232
Murcia	0.0004	0.0008	0.0018	0.0012	0.0005	0.0000
Navarra	0.0007	0.0012	0.0039	0.0069	0.0094	0.0116
País.Vasco	0.0003	0.0009	0.0018	0.0012	0.0000	0.0000

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=28/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0011	0.0044	0.0110	0.0174	0.0224
Andalucía	0.0008	0.0016	0.0060	0.0141	0.0226	0.0289
Aragón	0.0007	0.0012	0.0047	0.0116	0.0184	0.0233
Asturias	0.0013	0.0015	0.0058	0.0137	0.0219	0.0283
Canarias	0.0033	0.0036	0.0147	0.0294	0.0448	0.0569
Cantabria	0.0007	0.0012	0.0046	0.0114	0.0181	0.0233
Castilla.y.León	0.0006	0.0012	0.0046	0.0115	0.0181	0.0234
Castilla.La.Mancha	0.0004	0.0009	0.0037	0.0096	0.0149	0.0193
Cataluña	0.0002	0.0009	0.0036	0.0094	0.0146	0.0189
Ceuta	0.0030	0.0036	0.0142	0.0289	0.0445	0.0567
Comunidad.Valenciana	0.0003	0.0010	0.0037	0.0097	0.0151	0.0195
Extremadura	0.0001	0.0009	0.0034	0.0089	0.0138	0.0179
Galicia	0.0008	0.0014	0.0053	0.0128	0.0204	0.0263
Islas.Baleares	0.0001	0.0009	0.0036	0.0094	0.0146	0.0189
La.Rioja	0.0008	0.0012	0.0046	0.0115	0.0182	0.0234
Madrid	0.0004	0.0011	0.0044	0.0110	0.0174	0.0225
Melilla	0.0028	0.0036	0.0147	0.0290	0.0440	0.0555
Murcia	0.0004	0.0010	0.0038	0.0098	0.0154	0.0199
Navarra	0.0007	0.0011	0.0041	0.0105	0.0165	0.0213
País.Vasco	0.0003	0.0012	0.0044	0.0112	0.0177	0.0227

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

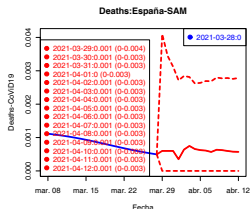
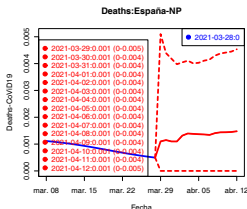
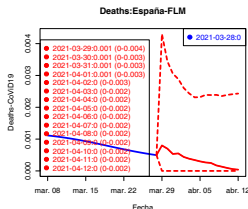
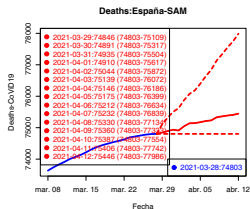
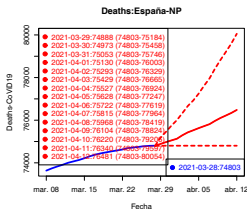
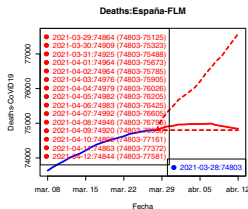
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=28/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0006	0.0014	0.0050	0.0075	0.0086
Andalucía	0.0008	0.0009	0.0027	0.0081	0.0119	0.0145
Aragón	0.0007	0.0008	0.0023	0.0076	0.0114	0.0136
Asturias	0.0013	0.0010	0.0043	0.0084	0.0111	0.0125
Canarias	0.0033	0.0027	0.0137	0.0240	0.0334	0.0394
Cantabria	0.0007	0.0009	0.0018	0.0041	0.0086	0.0096
Castilla.y.León	0.0006	0.0007	0.0020	0.0077	0.0117	0.0141
Castilla.La.Mancha	0.0004	0.0004	0.0006	0.0050	0.0080	0.0089
Cataluña	0.0002	0.0002	0.0003	0.0005	0.0007	0.0000
Ceuta	0.0030	0.0042	0.0178	0.0188	0.0316	0.0342
Comunidad.Valenciana	0.0003	0.0003	0.0000	0.0044	0.0082	0.0088
Extremadura	0.0001	0.0002	0.0000	0.0017	0.0033	0.0028
Galicia	0.0008	0.0008	0.0024	0.0081	0.0118	0.0137
Islas.Baleares	0.0001	0.0002	0.0000	0.0023	0.0045	0.0045
La.Rioja	0.0008	0.0009	0.0026	0.0091	0.0149	0.0184
Madrid	0.0004	0.0005	0.0015	0.0039	0.0052	0.0057
Melilla	0.0028	0.0014	0.0095	0.0167	0.0229	0.0249
Murcia	0.0004	0.0005	0.0004	0.0041	0.0079	0.0084
Navarra	0.0007	0.0007	0.0027	0.0068	0.0118	0.0151
País.Vasco	0.0003	0.0005	0.0013	0.0026	0.0047	0.0053

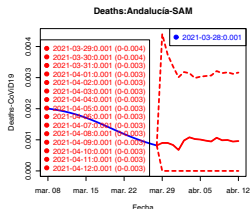
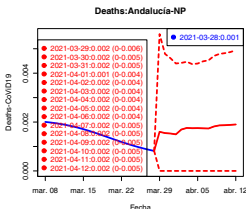
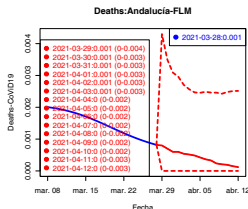
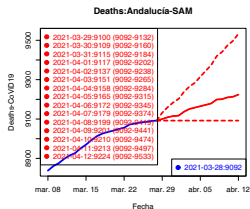
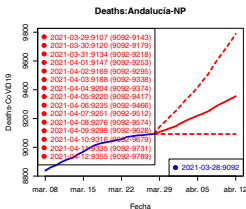
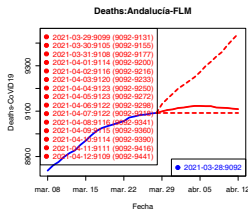
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Fallecidos: España



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

Fallecidos: Andalucía

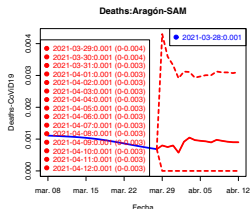
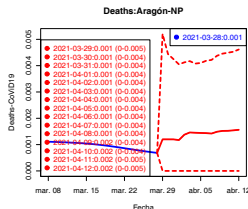
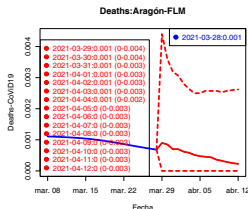
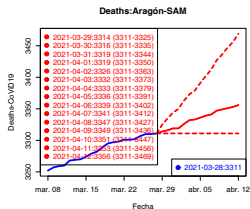
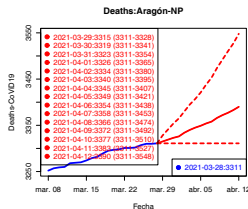
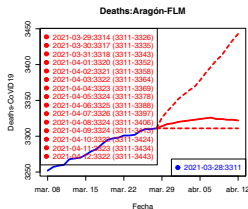


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

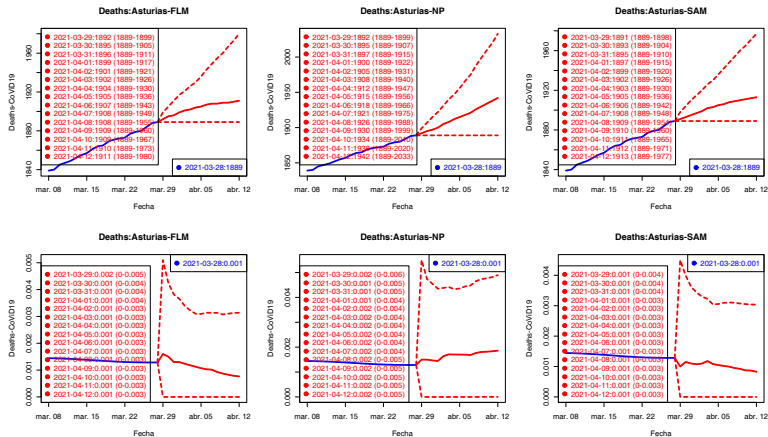
◀ Fallecidos

Fallecidos: Aragón



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

Fallecidos: Asturias

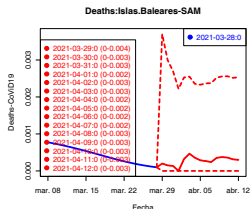
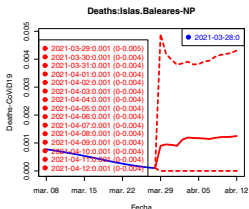
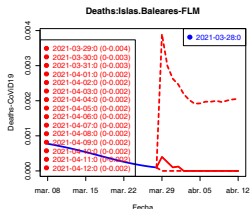
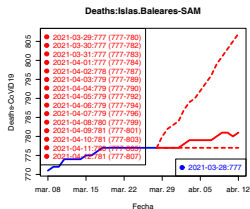
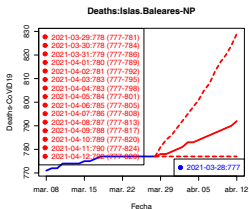
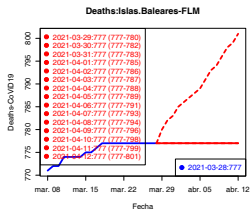


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Islas Baleares



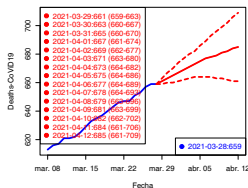
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

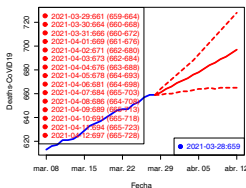
◀ Fallecidos

Fallecidos: Canarias

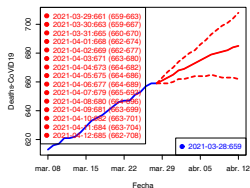
Deaths:Canarias-FLM



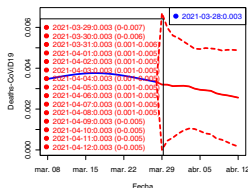
Deaths:Canarias-NP



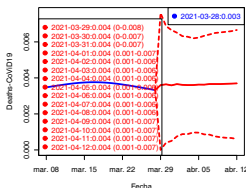
Deaths:Canarias-SAM



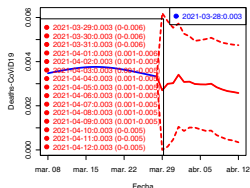
Deaths:Canarias-FLM



Deaths:Canarias-NP



Deaths:Canarias-SAM

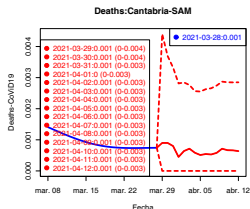
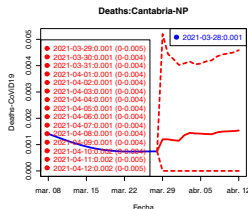
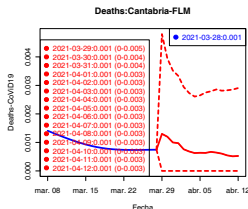
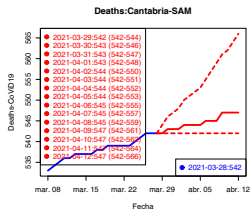
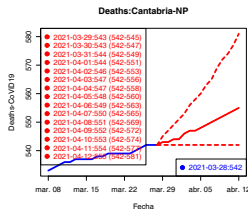
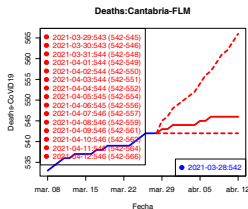


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

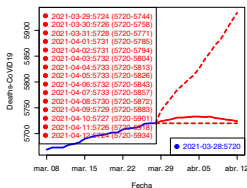
Fallecidos: Cantabria



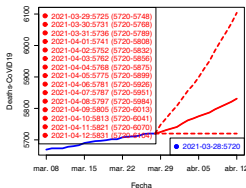
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Castilla-La Mancha

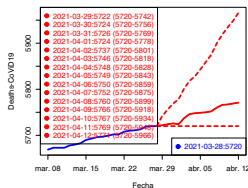
Deaths:Castilla,La Mancha-FLM



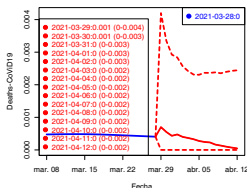
Deaths:Castilla-La-Mancha-NP



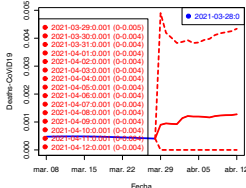
Deaths:Castilla,La Mancha-SAM



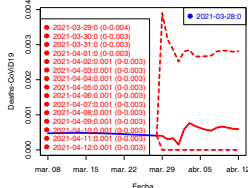
Deaths:Castilla-La-Mancha-FLM



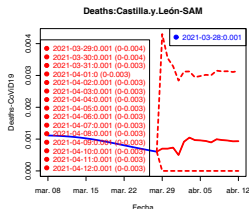
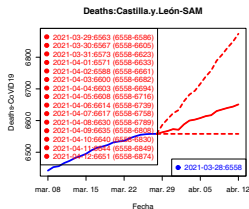
Deaths:Castilla-La-Mancha-NP



Deaths:Castilla-La-Mancha-SAM

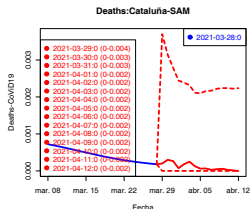
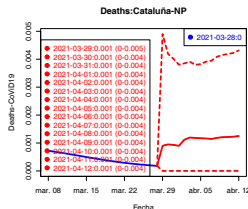
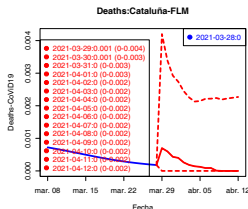
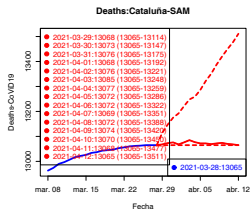
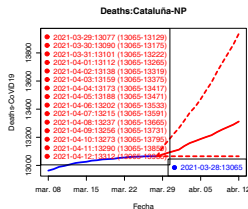
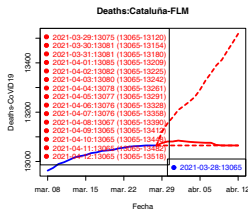


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.



◀ Confirmados ▶ Fallecidos

Fallecidos: Cataluña

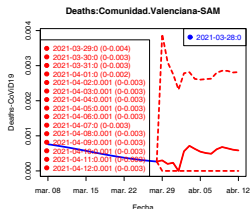
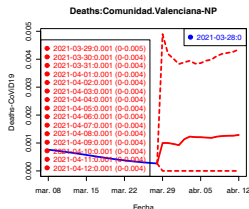
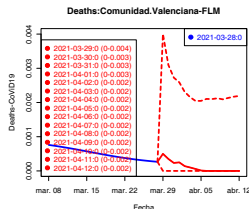
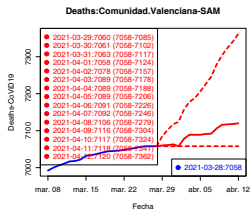
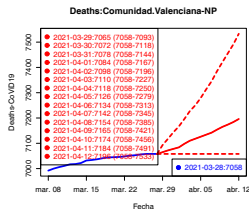
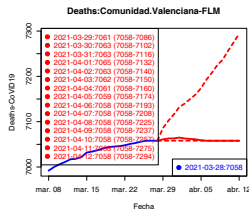


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

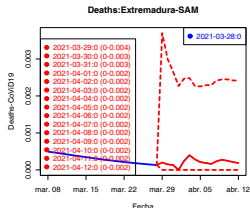
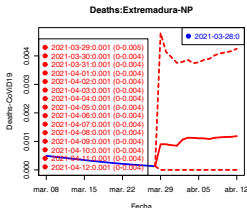
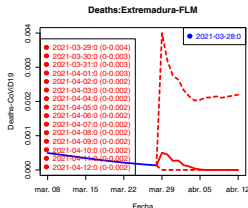
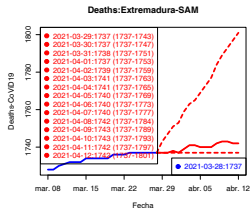
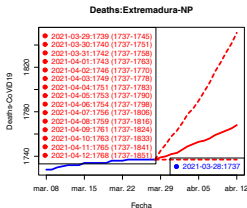
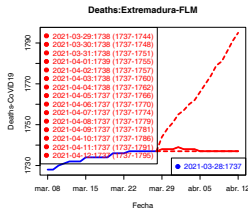
◀ Fallecidos

Fallecidos: C. Valenciana



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

Fallecidos: Extremadura

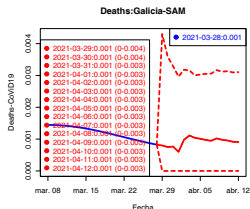
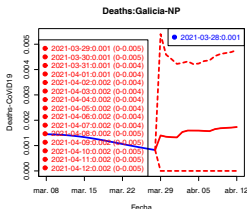
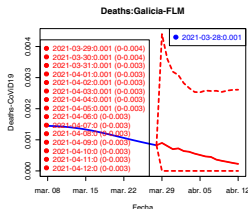
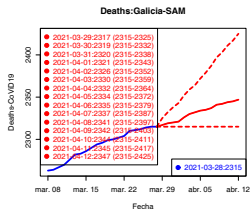
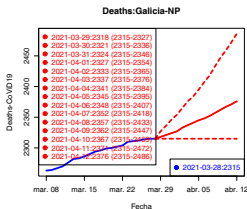
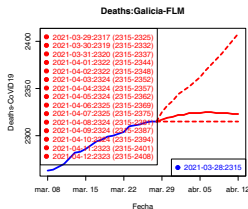


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Galicia

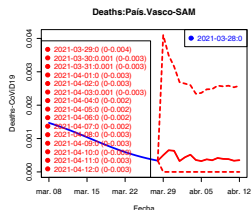
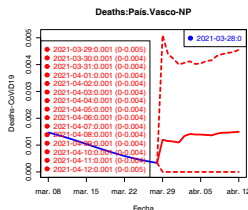
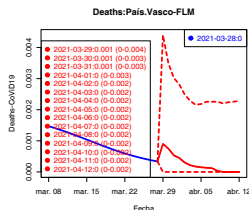
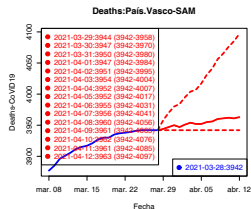
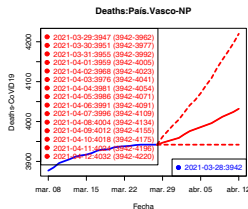
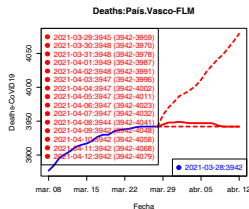


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: País Vasco

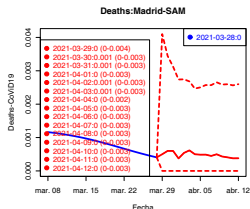
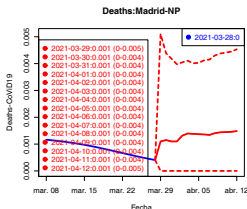
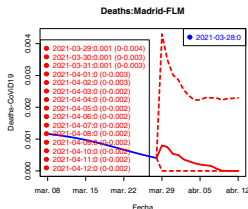
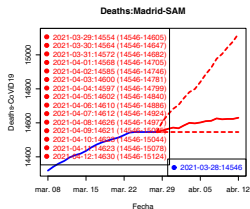
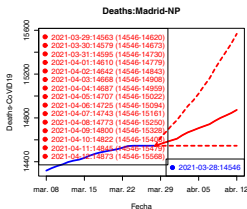
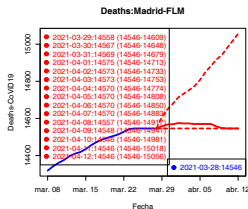


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Madrid



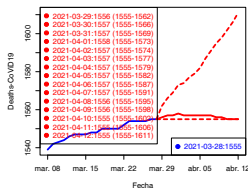
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

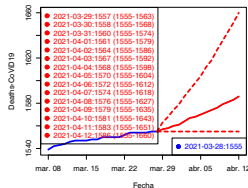
◀ Fallecidos

Fallecidos: Murcia

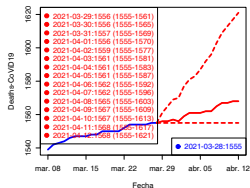
Deaths:Murcia-FLM



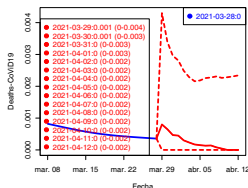
Deaths:Murcia-NP



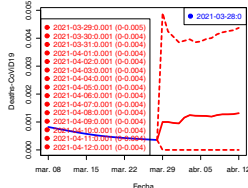
Deaths:Murcia-SAM



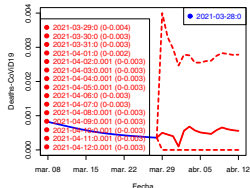
Deaths:Murcia-FLM



Deaths:Murcia-NP



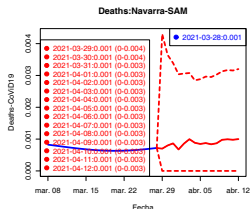
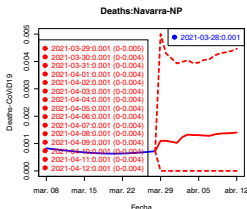
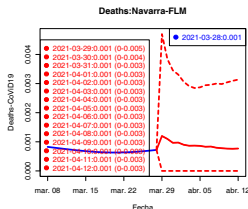
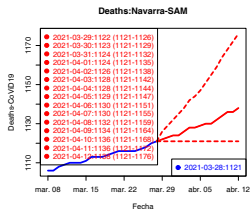
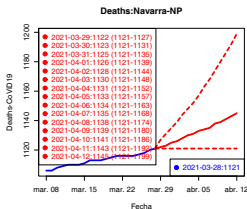
Deaths:Murcia-SAM



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

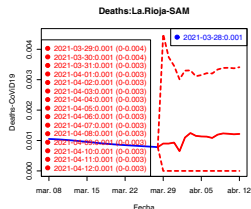
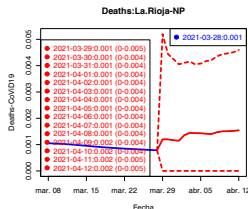
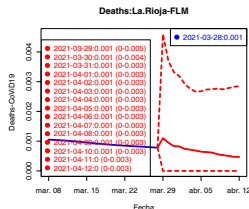
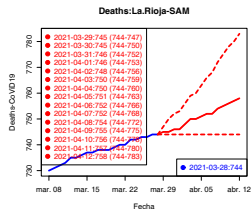
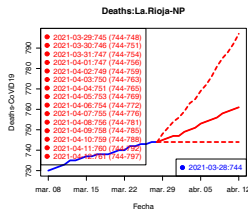
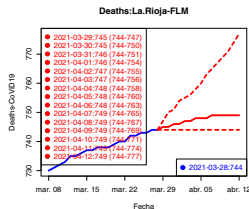
◀ Confirmados

◀ Fallecidos



◀ Confirmados ▶ Fallecidos

Fallecidos: La Rioja



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

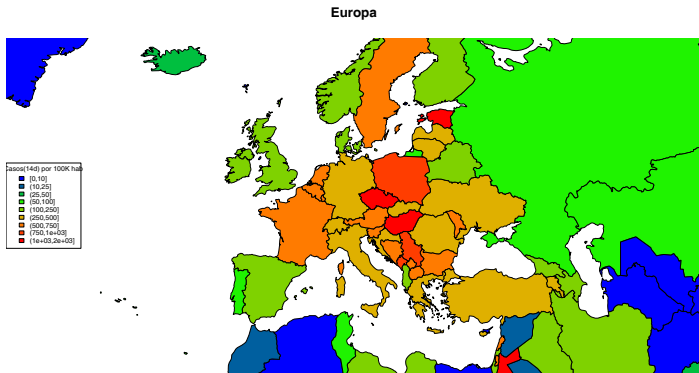
◀ Confirmados

◀ Fallecidos

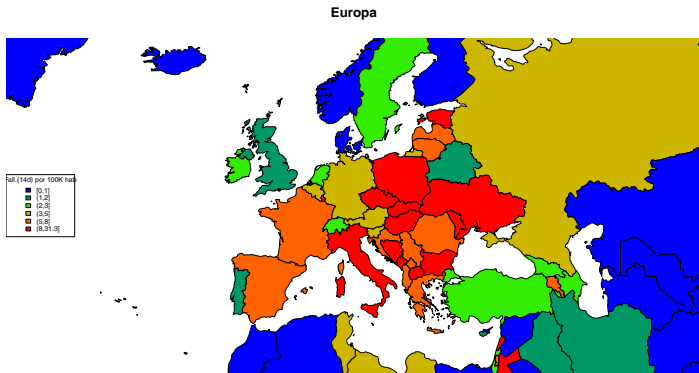
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Europa: Incidencia Acumulada (14d) por 100K hab.

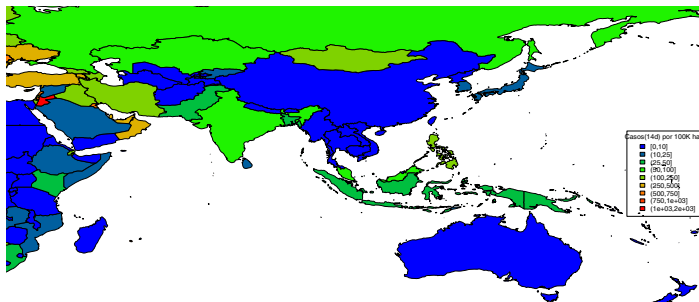


Europa: Fallecidos (14d) por 100K hab.



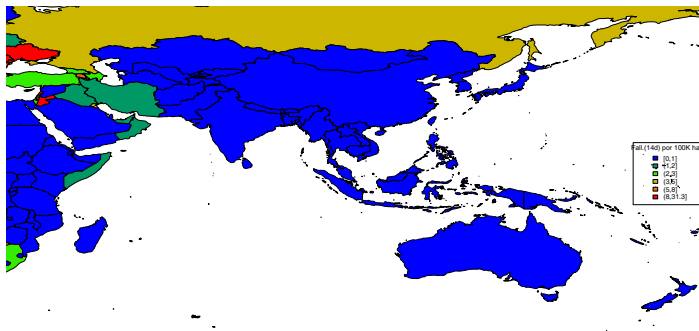
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



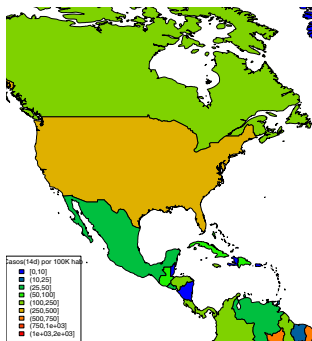
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

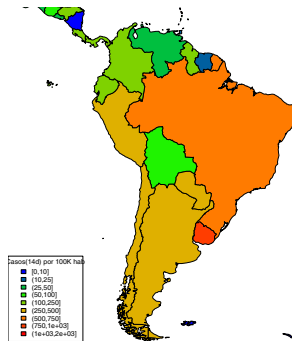


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

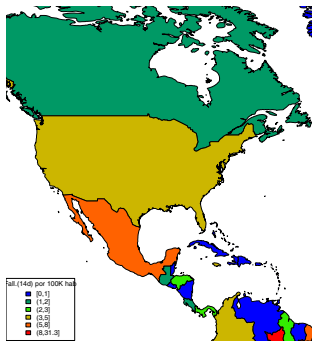


América del sur

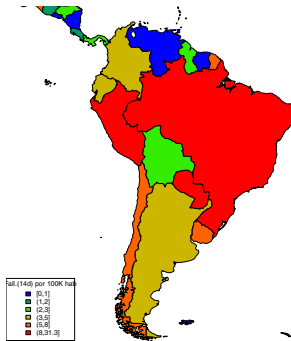


América: Fallecidos (14d) por 100K hab.

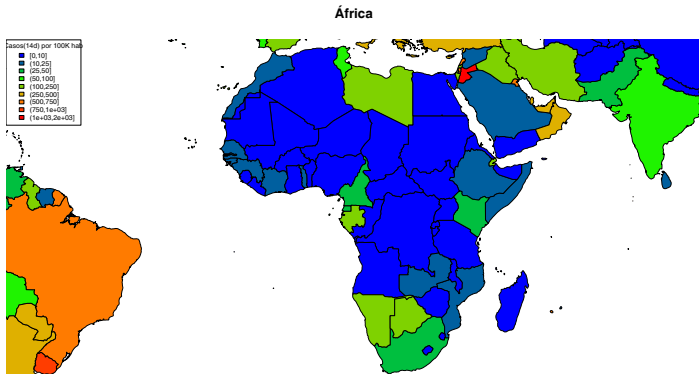
América del Norte



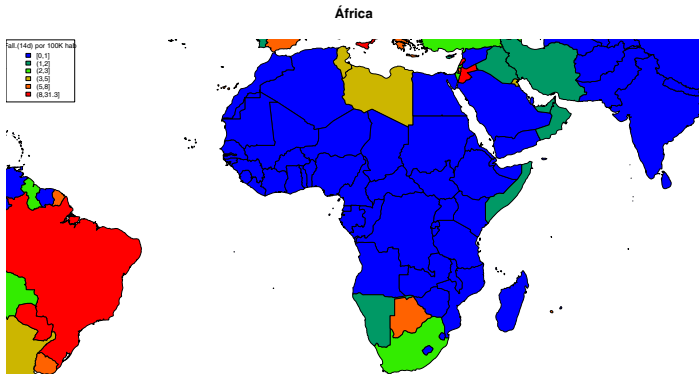
América del sur



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.