

Predicciones sobre CoViD-19

Manuel Febrero-Bande

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

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DEPARTAMENTO DE ESTATÍSTICA,
ANÁLISE MATEMÁTICA E OPTIMIZACIÓN



- Predicciones

- Predicciones Fallecidos

3 Panorama internacional

Tabla Previsión Confirmados: Mod. Lineal.

Last=24/03/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3247797	114	49	3252690	3267207	3282327	3297631	3310208
Andalucía	499747	104	49	500593	503055	505612	508311	510363
Aragón	109974	114	51	110124	110560	111001	111443	111814
Asturias	46508	124	41	46576	46788	46918	47058	47094
Canarias	45727	114	47	45874	46343	46850	47400	47759
Cantabria	25696	82	33	25735	25854	25991	26123	26250
Castilla.y.León	211048	99	44	211322	212108	212869	213644	214290
Castilla.La.Mancha	174449	65	24	174613	175072	175410	175723	175987
Cataluña	527874	151	61	528734	531379	534057	536777	538843
Ceuta	5010	229	94	5022	5062	5107	5153	5188
Comunidad.Valenciana	384688	23	7	384986	385753	386275	386700	387209
Extremadura	70516	88	38	70612	70906	71202	71505	71749
Galicia	115693	65	25	115843	116287	116667	117055	117331
Islas.Baleares	57277	45	19	57338	57513	57658	57801	57911
La.Rioja	27647	82	41	27680	27777	27876	27974	28061
Madrid	616845	194	86	617952	621302	625465	629557	633386
Melilla	7701	432	144	7720	7784	7847	7913	7960
Murcia	108174	48	20	108282	108576	108811	109038	109240
Navarra	53304	181	100	53428	53804	54272	54775	55181
País.Vasco	159919	181	86	160255	161289	162437	163669	164570

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

Tabla Previsión Confirmados: Mod. No Paramétrico.

Last=24/03/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3247797	114	49	3252711	3267871	3290058	3315875	3337389
Andalucía	499747	104	49	500537	502996	506579	510729	514171
Aragón	109974	114	51	110125	110582	111257	112050	112720
Asturias	46508	124	41	46611	46950	47416	47945	48377
Canarias	45727	114	47	45903	46436	47199	48015	48664
Cantabria	25696	82	33	25737	25866	26053	26269	26448
Castilla.y.León	211048	99	44	211311	212100	213271	214666	215862
Castilla.La.Mancha	174449	65	24	174644	175223	176082	177124	178032
Cataluña	527874	151	61	528832	531877	536248	541266	545397
Ceuta	5010	229	94	5024	5070	5134	5206	5268
Comunidad.Valenciana	384688	23	7	385050	386122	387726	389730	391528
Extremadura	70516	88	38	70606	70876	71279	71759	72171
Galicia	115693	65	25	115859	116366	117110	117980	118709
Islas.Baleares	57277	45	19	57343	57540	57834	58188	58495
La.Rioja	27647	82	41	27679	27774	27916	28087	28236
Madrid	616845	194	86	617928	621361	626314	632008	636701
Melilla	7701	432	144	7728	7810	7929	8058	8163
Murcia	108174	48	20	108291	108636	109150	109777	110327
Navarra	53304	181	100	53395	53683	54107	54601	55012
País.Vasco	159919	181	86	160229	161221	162652	164297	165660

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0010	0.0015	0.0060	0.0106	0.0153	0.0192
Andalucía	0.0012	0.0017	0.0066	0.0117	0.0171	0.0212
Aragón	0.0009	0.0014	0.0053	0.0093	0.0134	0.0167
Asturias	0.0013	0.0015	0.0060	0.0088	0.0118	0.0126
Canarias	0.0033	0.0032	0.0135	0.0246	0.0366	0.0444
Cantabria	0.0012	0.0015	0.0061	0.0115	0.0166	0.0215
Castilla.y.León	0.0007	0.0013	0.0050	0.0086	0.0123	0.0154
Castilla.La.Mancha	0.0004	0.0009	0.0036	0.0055	0.0073	0.0088
Cataluña	0.0013	0.0016	0.0066	0.0117	0.0169	0.0208
Ceuta	0.0023	0.0024	0.0104	0.0193	0.0286	0.0355
Comunidad.Valenciana	0.0002	0.0008	0.0028	0.0041	0.0052	0.0066
Extremadura	0.0008	0.0014	0.0055	0.0097	0.0140	0.0175
Galicia	0.0008	0.0013	0.0051	0.0084	0.0118	0.0142
Islas.Baleares	0.0005	0.0011	0.0041	0.0066	0.0091	0.0111
La.Rioja	0.0007	0.0012	0.0047	0.0083	0.0118	0.0150
Madrid	0.0014	0.0018	0.0072	0.0140	0.0206	0.0268
Melilla	0.0027	0.0025	0.0108	0.0190	0.0275	0.0336
Murcia	0.0004	0.0010	0.0037	0.0059	0.0080	0.0099
Navarra	0.0017	0.0023	0.0094	0.0182	0.0276	0.0352
País.Vasco	0.0017	0.0021	0.0086	0.0157	0.0234	0.0291

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0010	0.0015	0.0062	0.0130	0.0210	0.0276
Andalucía	0.0012	0.0016	0.0065	0.0137	0.0220	0.0289
Aragón	0.0009	0.0014	0.0055	0.0117	0.0189	0.0250
Asturias	0.0013	0.0022	0.0095	0.0195	0.0309	0.0402
Canarias	0.0033	0.0038	0.0155	0.0322	0.0500	0.0642
Cantabria	0.0012	0.0016	0.0066	0.0139	0.0223	0.0293
Castilla.y.León	0.0007	0.0012	0.0050	0.0105	0.0171	0.0228
Castilla.La.Mancha	0.0004	0.0011	0.0044	0.0094	0.0153	0.0205
Cataluña	0.0013	0.0018	0.0076	0.0159	0.0254	0.0332
Ceuta	0.0023	0.0028	0.0119	0.0247	0.0392	0.0514
Comunidad.Valenciana	0.0002	0.0009	0.0037	0.0079	0.0131	0.0178
Extremadura	0.0008	0.0013	0.0051	0.0108	0.0176	0.0235
Galicia	0.0008	0.0014	0.0058	0.0122	0.0198	0.0261
Islas.Baleares	0.0005	0.0012	0.0046	0.0097	0.0159	0.0213
La.Rioja	0.0007	0.0012	0.0046	0.0097	0.0159	0.0213
Madrid	0.0014	0.0018	0.0073	0.0154	0.0246	0.0322
Melilla	0.0027	0.0034	0.0142	0.0296	0.0463	0.0600
Murcia	0.0004	0.0011	0.0043	0.0090	0.0148	0.0199
Navarra	0.0017	0.0017	0.0071	0.0151	0.0243	0.0320
País.Vasco	0.0017	0.0019	0.0081	0.0171	0.0274	0.0359

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

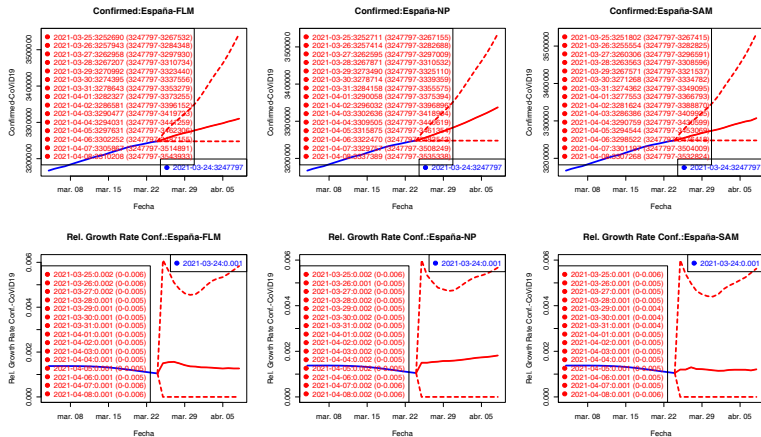
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0010	0.0012	0.0049	0.0092	0.0144	0.0183
Andalucía	0.0012	0.0013	0.0054	0.0100	0.0157	0.0198
Aragón	0.0009	0.0010	0.0042	0.0079	0.0127	0.0165
Asturias	0.0013	0.0016	0.0051	0.0067	0.0087	0.0073
Canarias	0.0033	0.0036	0.0129	0.0223	0.0330	0.0383
Cantabria	0.0012	0.0013	0.0049	0.0103	0.0158	0.0207
Castilla.y.León	0.0007	0.0009	0.0039	0.0074	0.0122	0.0160
Castilla.La.Mancha	0.0004	0.0006	0.0024	0.0042	0.0070	0.0091
Cataluña	0.0013	0.0016	0.0057	0.0101	0.0153	0.0185
Ceuta	0.0023	0.0029	0.0102	0.0184	0.0281	0.0338
Comunidad.Valenciana	0.0002	0.0002	0.0015	0.0030	0.0055	0.0080
Extremadura	0.0008	0.0011	0.0046	0.0088	0.0145	0.0186
Galicia	0.0008	0.0011	0.0041	0.0069	0.0107	0.0129
Islas.Baleares	0.0005	0.0008	0.0033	0.0054	0.0091	0.0117
La.Rioja	0.0007	0.0008	0.0037	0.0072	0.0122	0.0163
Madrid	0.0014	0.0015	0.0059	0.0126	0.0196	0.0257
Melilla	0.0027	0.0033	0.0111	0.0194	0.0285	0.0337
Murcia	0.0004	0.0005	0.0025	0.0046	0.0079	0.0107
Navarra	0.0017	0.0021	0.0088	0.0173	0.0286	0.0373
País.Vasco	0.0017	0.0021	0.0080	0.0142	0.0225	0.0278

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

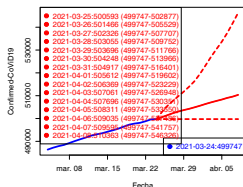
Confirmados: España



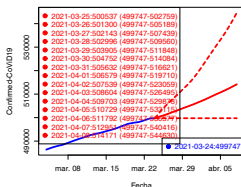
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados: Andalucía

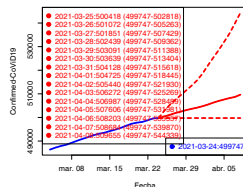
Confirmed:Andalucía-FLM



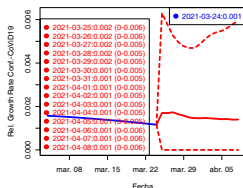
Confirmed:Andalucía-NP



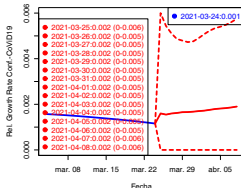
Confirmed:Andalucía-SAM



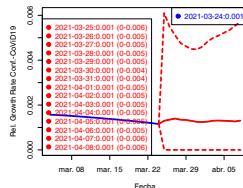
Rel. Growth Rate Conf.:Andalucia-FLM



Rel. Growth Rate Conf.:Andalucia-NP



Rel. Growth Rate Conf.:Andalucia-SAM

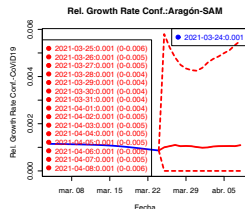
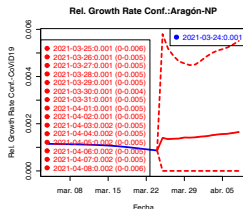
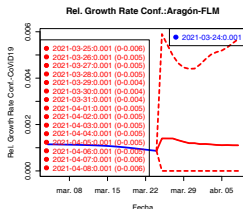
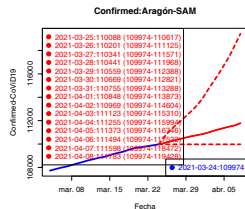
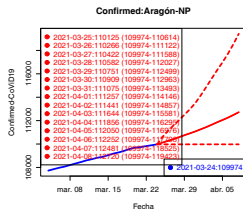
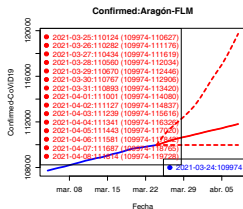


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

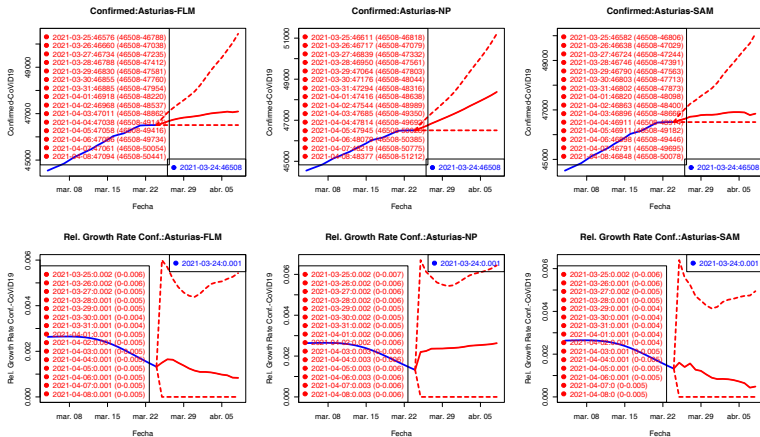
◀ Fallecidos

Confirmados: Aragón



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

Confirmados: Asturias

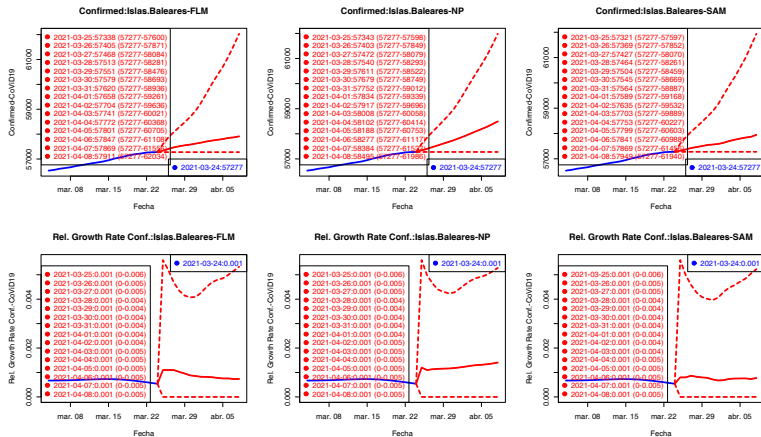


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Islas Baleares

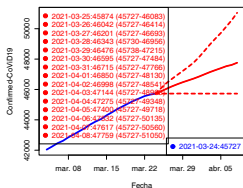


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

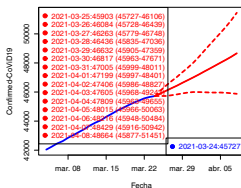
◀ Confirmados ▶ Fallecidos

Confirmados: Canarias

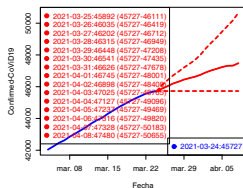
Confirmed:Canarias-FLM



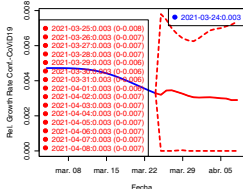
Confirmed:Canarias-NP



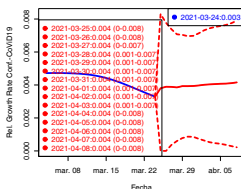
Confirmed:Canarias-SAM



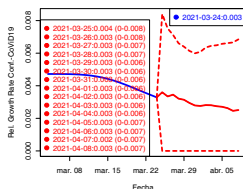
Rel. Growth Rate Conf.:Canarias-FLM



Rel. Growth Rate Conf.:Canarias-NP



Rel. Growth Rate Conf.:Canarias-SAM

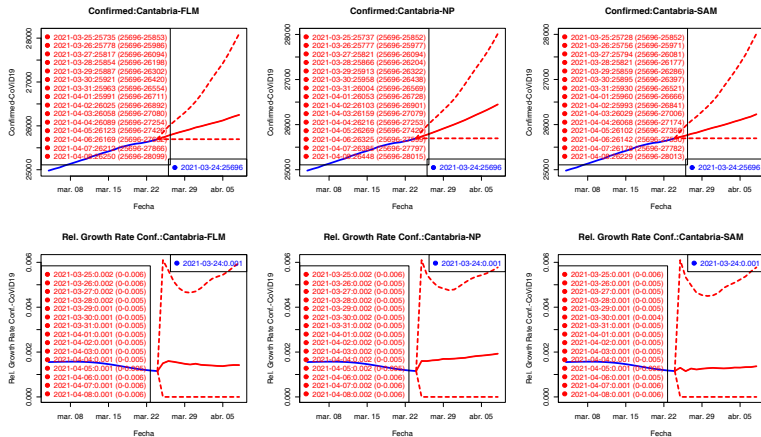


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

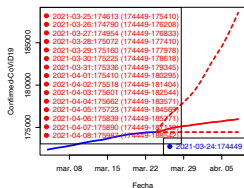
← Fallecidos

Confirmados: Cantabria

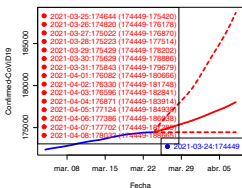


Confirmados: Castilla-La Mancha

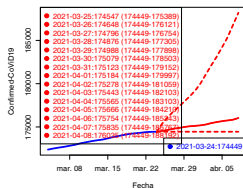
Confirmed:Castilla.La.Mancha-FLM



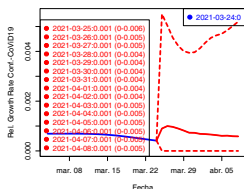
Confirmed:Castilla.La.Mancha-NP



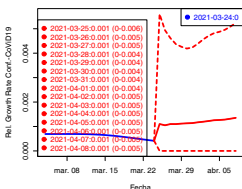
Confirmed:Castilla.La.Mancha-SAM



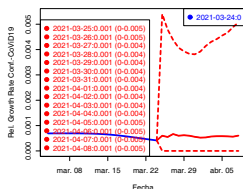
Rel. Growth Rate Conf.:Castilla.La.Mancha-FLM



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



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

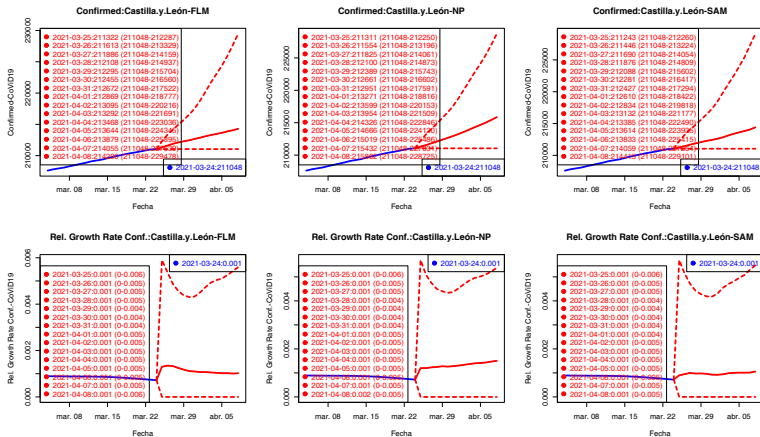


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

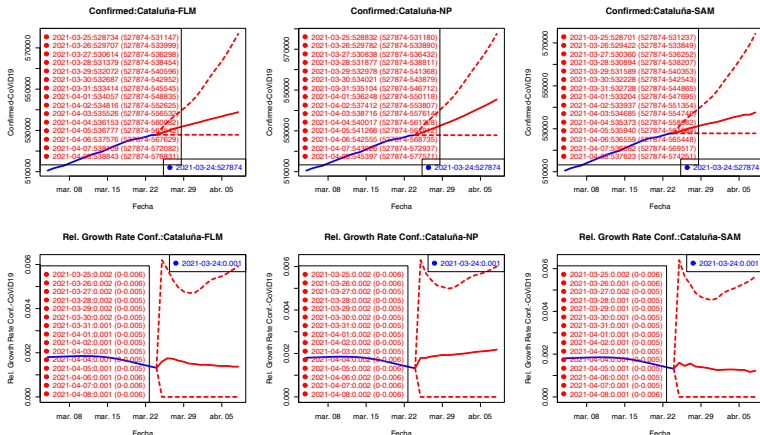
Confirmados: Castilla y León



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

◀ Confirmados ▶ Fallecidos

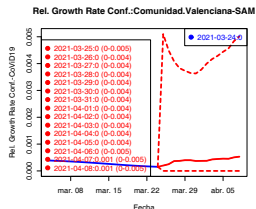
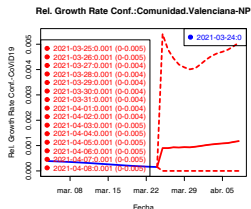
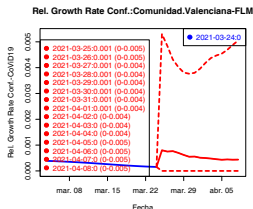
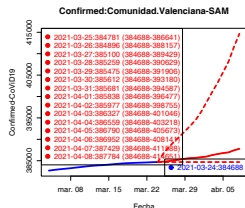
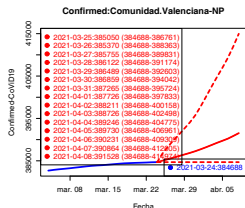
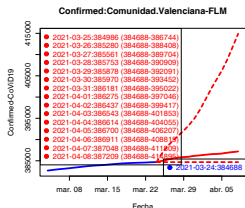
Confirmados: Cataluña



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

◀ Confirmados ▶ Fallecidos

Confirmados: C. Valenciana

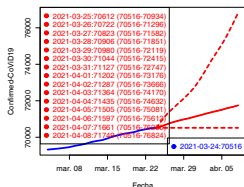


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

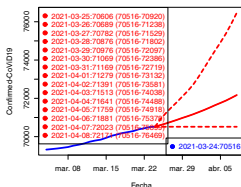
◀ Confirmados ▶ Fallecidos

Confirmados: Extremadura

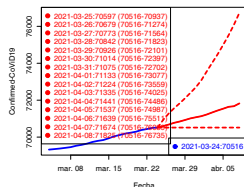
Confirmed:Extremadura-FLM



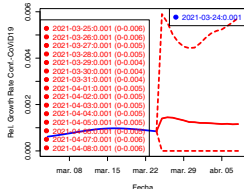
Confirmed:Extremadura-NP



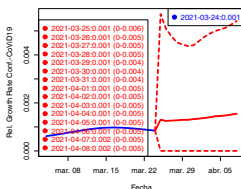
Confirmed:Extremadura-SAM



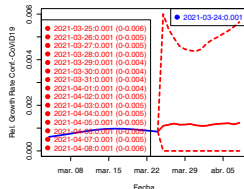
Rel. Growth Rate Conf.:Extremadura-FLM



Rel. Growth Rate Conf.:Extremadura-NP



Rel. Growth Rate Conf.:Extremadura-SAM

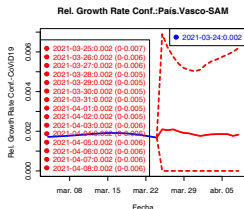
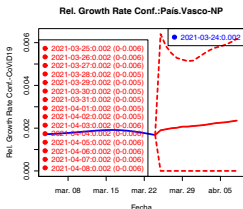
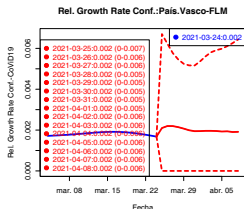
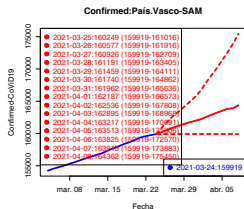
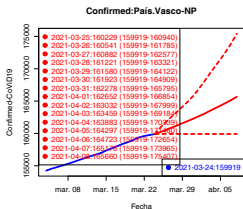
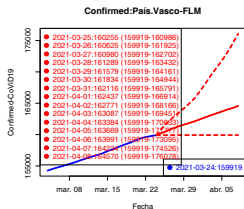


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

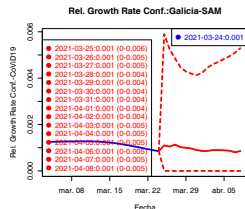
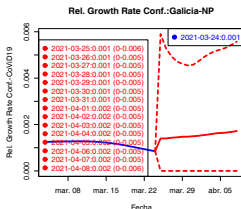
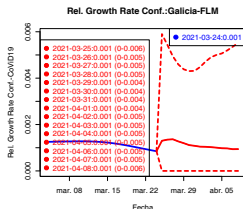
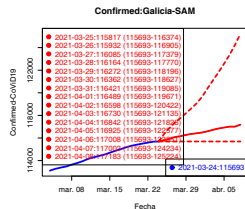
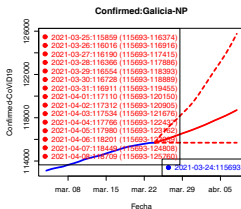
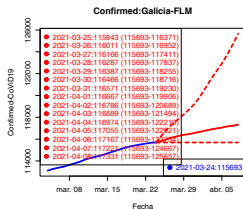
◀ Fallecidos

Confirmados: País Vasco



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

Confirmados: Galicia

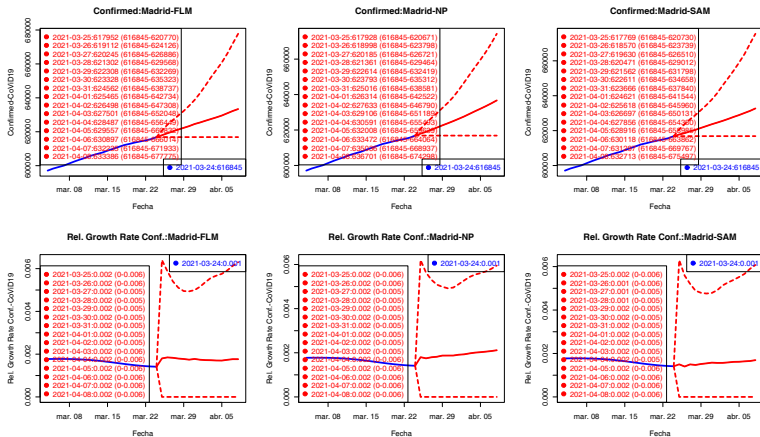


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

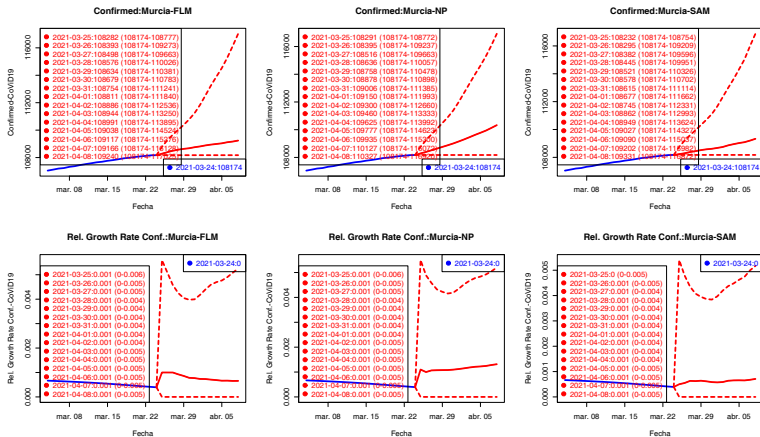
← Fallecidos

Confirmados: Madrid



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

Confirmados: Murcia



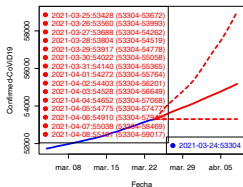
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

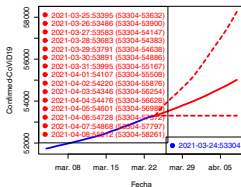
◀ Fallecidos

Confirmados: Navarra

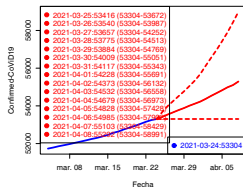
Confirmed:Navarra-FLM



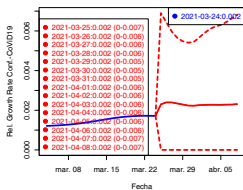
Confirmed:Navarra-NP



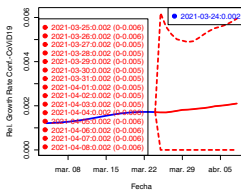
Confirmed:Navarra-SAM



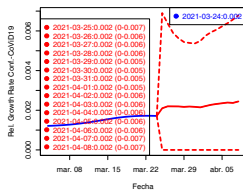
Rel. Growth Rate Conf.:Navarra-FLM



Rel. Growth Rate Conf.:Navarra-NP



Rel. Growth Rate Conf.:Navarra-SAM

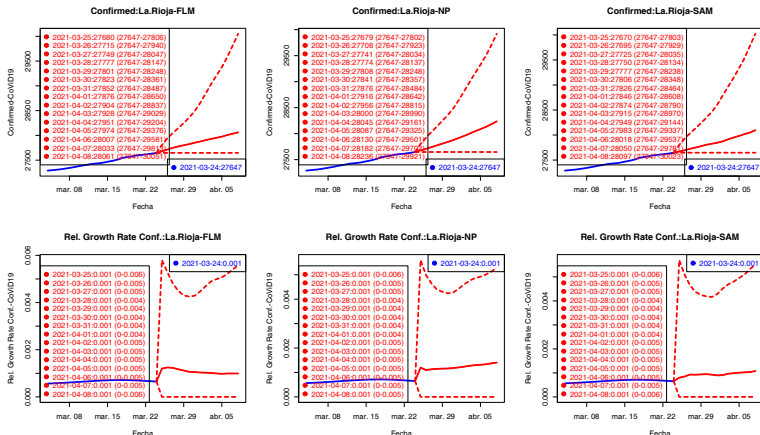


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



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

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 - Predicciones
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Modelos para fallecidos por CoViD-19

Último dato: 24/03/2021 Fuente: https://cnecovid.isciii.es/covid19/resources/casos_hosp_uci_def_sexo_edad_provres.csv

Predicciones:

▶ España

▶ Andalucía

▶ Aragón

▶ Asturias

▶ I. Baleares

▶ Canarias

▶ Cantabria

▶ Castilla-La Mancha

▶ Castilla y León

▶ Cataluña

▶ C. Valenciana

▶ Extremadura

▶ País Vasco

▶ Galicia

▶ Madrid

▶ Murcia

▶ Navarra

▶ La Rioja

▶ Mod Lineal

▶ Mod NP

▶ Mod Aditivo

	$10^2 \sigma_R^2$			$10^2 \sigma_R^2 (rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0.002	0.002	0.002	0.002	0.001	0.002	0.71	0.735	0.746
H4	0.028	0.028	0.027	0.011	0.011	0.01	0.778	0.786	0.787
H8	0.071	0.072	0.064	0.042	0.045	0.036	0.855	0.856	0.869
H12	0.167	0.171	0.144	0.115	0.126	0.105	0.857	0.858	0.876
H15	0.242	0.258	0.2	0.195	0.22	0.17	0.869	0.864	0.891

Tabla Previsión Fallecidos: Mod. Lineal.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	74022	74090	74223	74286	74278	74242
Andalucía	9051	9063	9090	9107	9116	9117
Aragón	3347	3351	3359	3364	3368	3368
Asturias	1877	1880	1887	1893	1897	1898
Canarias	650	653	660	668	677	682
Cantabria	537	537	538	537	537	537
Castilla.y.León	6539	6545	6560	6568	6570	6569
Castilla.La.Mancha	5708	5712	5719	5718	5714	5708
Cataluña	12418	12426	12437	12435	12418	12418
Ceuta	93	94	95	97	100	102
Comunidad.Valenciana	7028	7031	7035	7029	7028	7028
Extremadura	1737	1738	1739	1739	1737	1737
Galicia	2309	2312	2319	2325	2328	2330
Islas.Baleares	777	778	778	777	777	777
La.Rioja	742	743	744	746	747	748
Madrid	14530	14543	14571	14587	14591	14588
Melilla	78	78	79	80	80	81
Murcia	1553	1554	1555	1554	1553	1553
Navarra	1116	1117	1119	1120	1121	1122
País.Vasco	3932	3935	3939	3940	3934	3932

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

Tabla Previsión Fallecidos: Mod. No Paramétrico.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	74022	74114	74368	74892	75397	75799
Andalucía	9051	9069	9118	9200	9289	9356
Aragón	3347	3351	3363	3387	3410	3428
Asturias	1877	1880	1888	1903	1919	1931
Canarias	650	652	660	670	681	689
Cantabria	537	538	540	544	549	552
Castilla.y.León	6539	6547	6570	6617	6663	6699
Castilla.La.Mancha	5708	5713	5729	5763	5794	5820
Cataluña	12418	12429	12463	12536	12600	12655
Ceuta	93	93	94	96	98	99
Comunidad.Valenciana	7028	7035	7056	7101	7143	7177
Extremadura	1737	1739	1743	1754	1763	1770
Galicia	2309	2313	2323	2341	2361	2376
Islas.Baleares	777	778	780	785	789	793
La.Rioja	742	743	745	750	755	759
Madrid	14530	14548	14599	14702	14802	14882
Melilla	78	78	79	80	82	83
Murcia	1553	1555	1560	1570	1580	1588
Navarra	1116	1117	1120	1127	1133	1139
País.Vasco	3932	3937	3952	3981	4010	4033

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	74022	74079	74173	74522	74774	74915
Andalucía	9051	9064	9093	9155	9211	9245
Aragón	3347	3350	3357	3377	3391	3400
Asturias	1877	1879	1885	1891	1897	1898
Canarias	650	653	660	667	676	680
Cantabria	537	537	537	538	540	540
Castilla.y.León	6539	6545	6556	6598	6630	6649
Castilla.La.Mancha	5708	5711	5711	5736	5755	5761
Cataluña	12418	12421	12421	12440	12443	12439
Ceuta	93	93	95	96	98	99
Comunidad.Valenciana	7028	7031	7029	7067	7097	7106
Extremadura	1737	1738	1737	1744	1749	1752
Galicia	2309	2312	2318	2335	2348	2356
Islas.Baleares	777	777	777	781	783	784
La.Rioja	742	743	744	750	754	757
Madrid	14530	14540	14560	14620	14655	14679
Melilla	78	78	79	80	81	81
Murcia	1553	1554	1553	1560	1568	1569
Navarra	1116	1117	1118	1123	1127	1130
País.Vasco	3932	3935	3940	3954	3965	3972

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0009	0.0027	0.0036	0.0035	0.0030
Andalucía	0.0012	0.0014	0.0043	0.0062	0.0072	0.0072
Aragón	0.0008	0.0011	0.0037	0.0052	0.0062	0.0062
Asturias	0.0013	0.0016	0.0054	0.0083	0.0106	0.0113
Canarias	0.0037	0.0042	0.0157	0.0276	0.0416	0.0496
Cantabria	0.0006	0.0007	0.0012	0.0007	0.0000	0.0000
Castilla.y.León	0.0008	0.0010	0.0032	0.0044	0.0048	0.0046
Castilla.La.Mancha	0.0004	0.0007	0.0019	0.0018	0.0011	0.0000
Cataluña	0.0003	0.0006	0.0015	0.0014	0.0000	0.0000
Ceuta	0.0053	0.0063	0.0246	0.0465	0.0757	0.0945
Comunidad.Valenciana	0.0004	0.0005	0.0010	0.0001	0.0000	0.0000
Extremadura	0.0003	0.0005	0.0011	0.0011	0.0000	0.0000
Galicia	0.0012	0.0013	0.0043	0.0069	0.0084	0.0092
Islas.Baleares	0.0003	0.0007	0.0014	0.0003	0.0000	0.0000
La.Rioja	0.0009	0.0009	0.0033	0.0058	0.0070	0.0081
Madrid	0.0007	0.0009	0.0028	0.0040	0.0042	0.0040
Melilla	0.0032	0.0030	0.0123	0.0220	0.0299	0.0345
Murcia	0.0005	0.0007	0.0015	0.0010	0.0000	0.0000
Navarra	0.0004	0.0008	0.0025	0.0040	0.0045	0.0050
País.Vasco	0.0005	0.0008	0.0018	0.0020	0.0004	0.0000

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0012	0.0047	0.0118	0.0186	0.0240
Andalucía	0.0012	0.0020	0.0074	0.0165	0.0263	0.0337
Aragón	0.0008	0.0013	0.0047	0.0119	0.0187	0.0243
Asturias	0.0013	0.0016	0.0059	0.0140	0.0223	0.0288
Canarias	0.0037	0.0038	0.0158	0.0313	0.0476	0.0602
Cantabria	0.0006	0.0015	0.0056	0.0134	0.0215	0.0275
Castilla.y.León	0.0008	0.0013	0.0048	0.0120	0.0189	0.0245
Castilla.La.Mancha	0.0004	0.0009	0.0037	0.0097	0.0151	0.0195
Cataluña	0.0003	0.0009	0.0036	0.0095	0.0147	0.0191
Ceuta	0.0053	0.0038	0.0158	0.0328	0.0509	0.0652
Comunidad.Valenciana	0.0004	0.0010	0.0040	0.0105	0.0164	0.0212
Extremadura	0.0003	0.0009	0.0036	0.0095	0.0147	0.0191
Galicia	0.0012	0.0016	0.0059	0.0141	0.0224	0.0289
Islas.Baleares	0.0003	0.0010	0.0039	0.0101	0.0157	0.0203
La.Rioja	0.0009	0.0012	0.0045	0.0114	0.0180	0.0233
Madrid	0.0007	0.0013	0.0047	0.0118	0.0187	0.0242
Melilla	0.0032	0.0038	0.0161	0.0315	0.0478	0.0603
Murcia	0.0005	0.0011	0.0044	0.0111	0.0176	0.0226
Navarra	0.0004	0.0010	0.0038	0.0100	0.0156	0.0202
País.Vasco	0.0005	0.0014	0.0051	0.0125	0.0199	0.0256

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

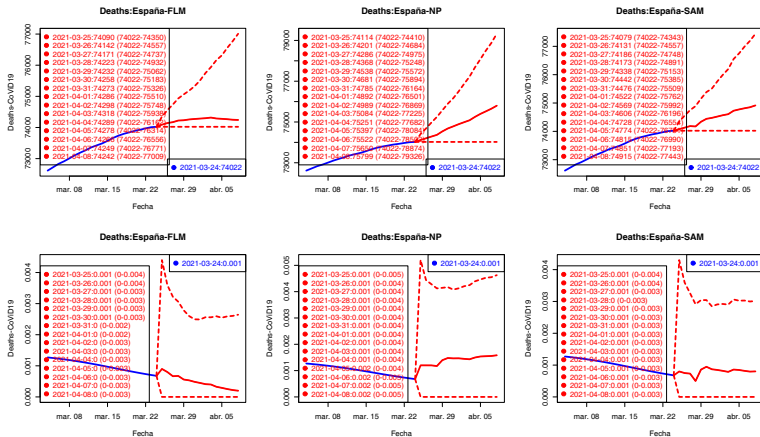
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=24/03/2021

	Last	H1	H4	H8	H12	H15
España	0.0007	0.0008	0.0020	0.0068	0.0102	0.0121
Andalucía	0.0012	0.0015	0.0047	0.0115	0.0177	0.0214
Aragón	0.0008	0.0010	0.0030	0.0090	0.0132	0.0159
Asturias	0.0013	0.0010	0.0041	0.0077	0.0105	0.0113
Canarias	0.0037	0.0039	0.0154	0.0260	0.0392	0.0467
Cantabria	0.0006	0.0005	0.0001	0.0026	0.0064	0.0063
Castilla.y.León	0.0008	0.0010	0.0026	0.0091	0.0139	0.0169
Castilla.La.Mancha	0.0004	0.0005	0.0005	0.0049	0.0083	0.0092
Cataluña	0.0003	0.0002	0.0002	0.0017	0.0020	0.0017
Ceuta	0.0053	0.0043	0.0196	0.0302	0.0551	0.0629
Comunidad.Valenciana	0.0004	0.0004	0.0002	0.0056	0.0098	0.0111
Extremadura	0.0003	0.0003	0.0000	0.0041	0.0072	0.0087
Galicia	0.0012	0.0012	0.0039	0.0111	0.0168	0.0204
Islas.Baleares	0.0003	0.0005	0.0005	0.0046	0.0080	0.0092
La.Rioja	0.0009	0.0009	0.0025	0.0102	0.0160	0.0199
Madrid	0.0007	0.0007	0.0021	0.0062	0.0086	0.0102
Melilla	0.0032	0.0032	0.0151	0.0248	0.0358	0.0427
Murcia	0.0005	0.0005	0.0003	0.0043	0.0095	0.0102
Navarra	0.0004	0.0007	0.0018	0.0065	0.0094	0.0125
País.Vasco	0.0005	0.0007	0.0020	0.0057	0.0083	0.0102

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

Fallecidos: España

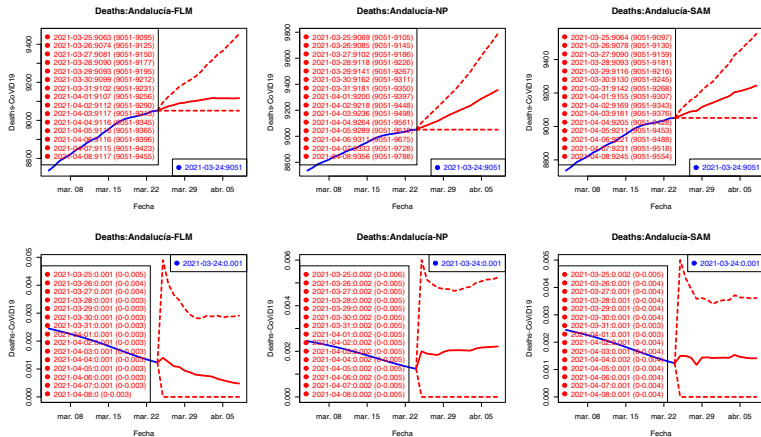


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Andalucía

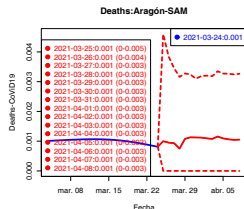
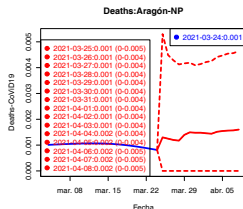
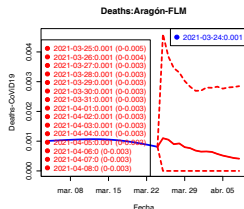
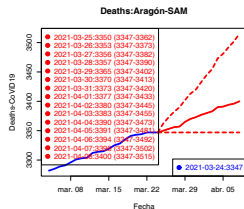
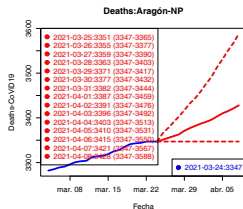
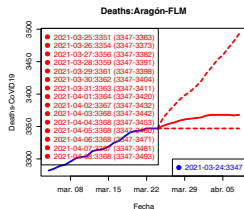


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Aragón

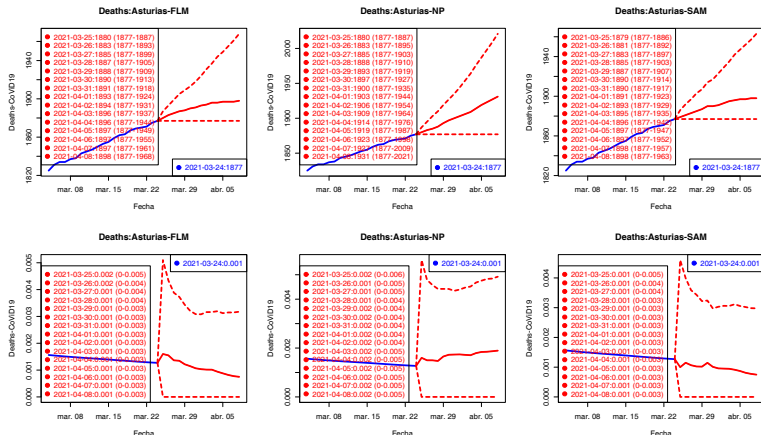


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Asturias

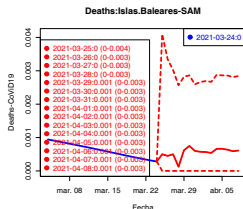
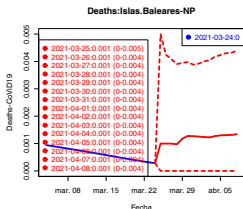
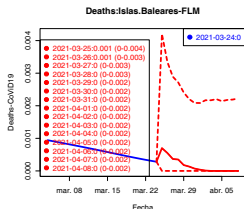
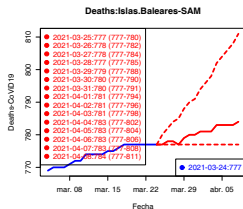
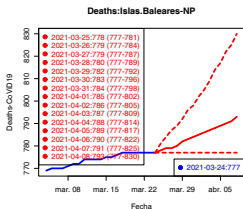
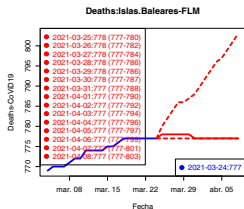


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

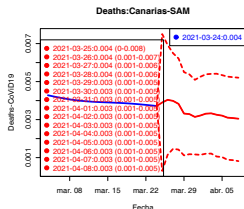
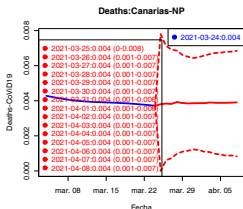
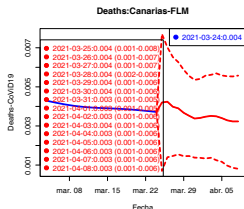
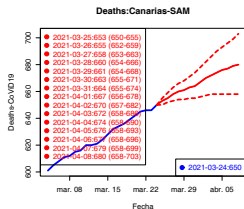
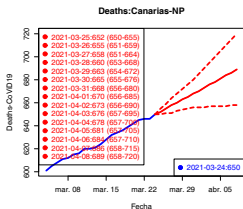
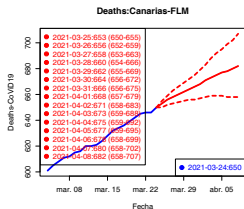
◀ Fallecidos

Fallecidos: Islas Baleares



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

Fallecidos: Canarias

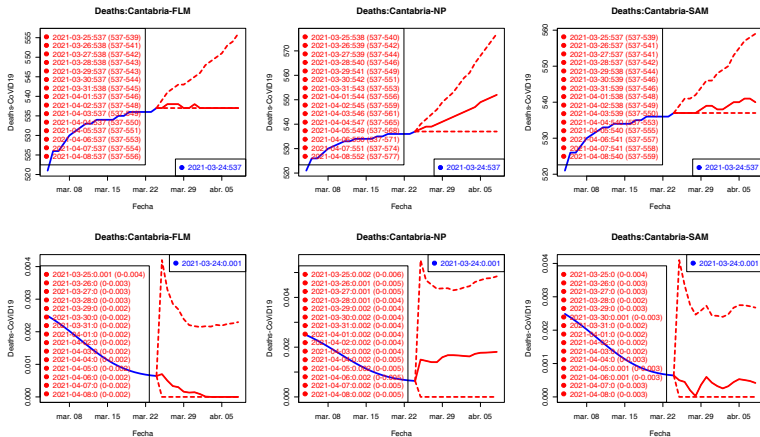


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cantabria



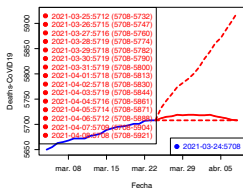
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Confirmados

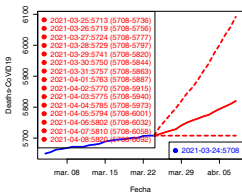
Fallecidos

Fallecidos: Castilla-La Mancha

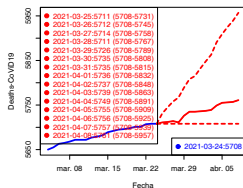
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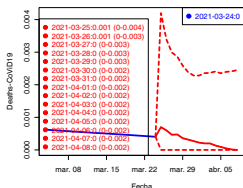
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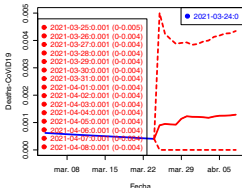
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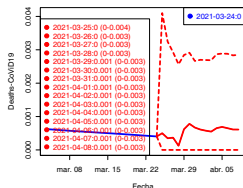
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Deaths:Castilla.La.Mancha-NP



Deaths:Castilla.La.Mancha-SAM

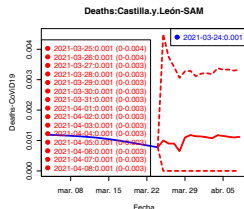
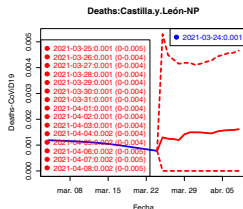
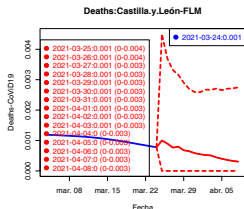
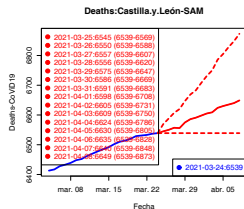
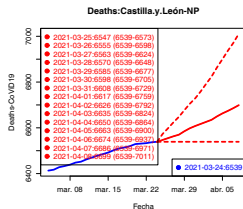
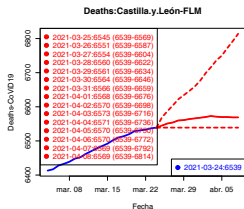


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

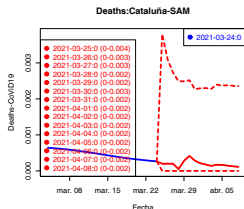
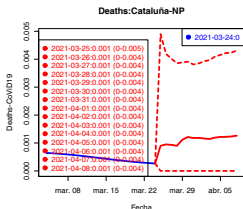
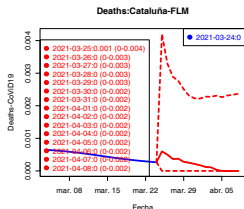
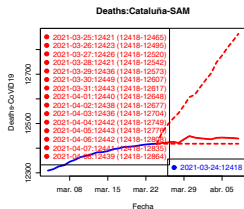
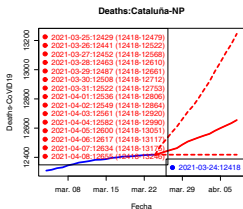
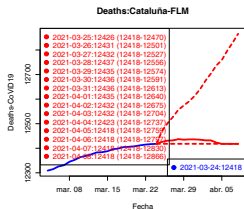
◀ Fallecidos

Fallecidos: Castilla y León



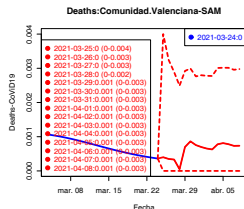
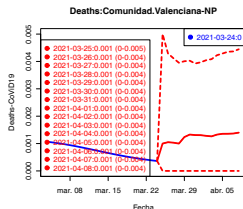
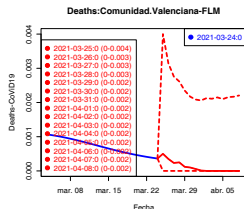
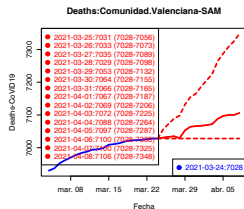
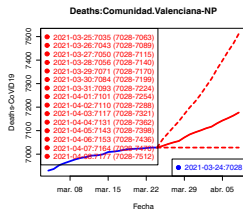
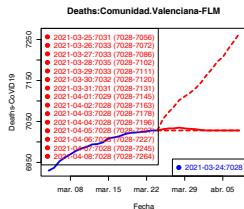
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Cataluña



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

Fallecidos: C. Valenciana

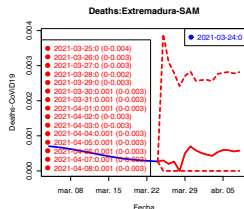
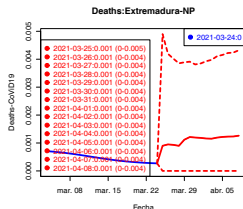
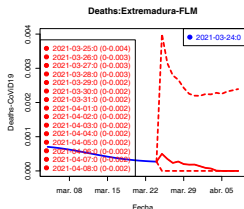
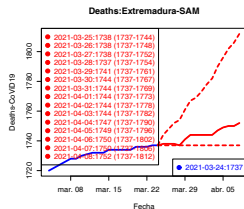
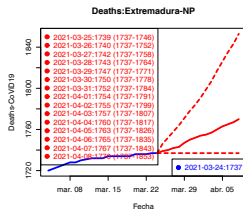
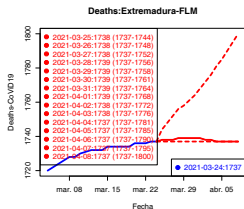


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Extremadura

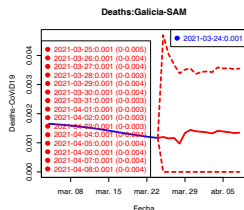
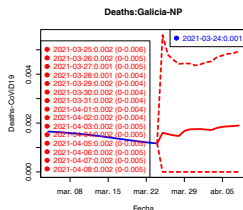
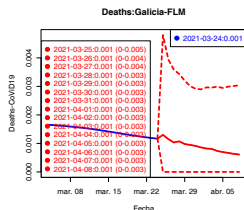
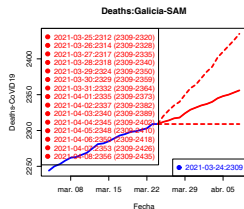
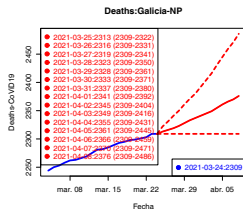
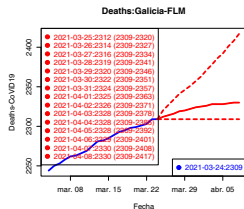


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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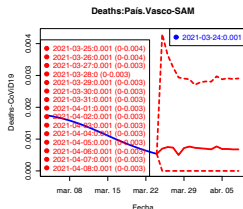
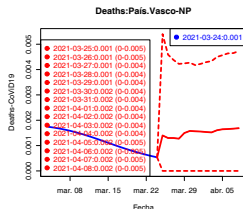
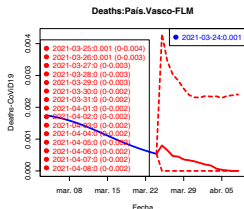
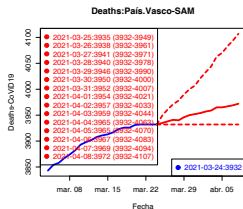
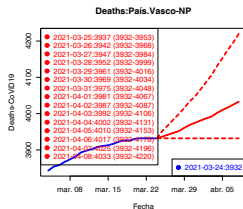
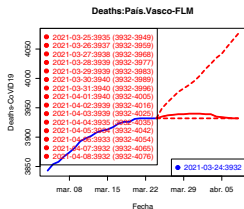


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

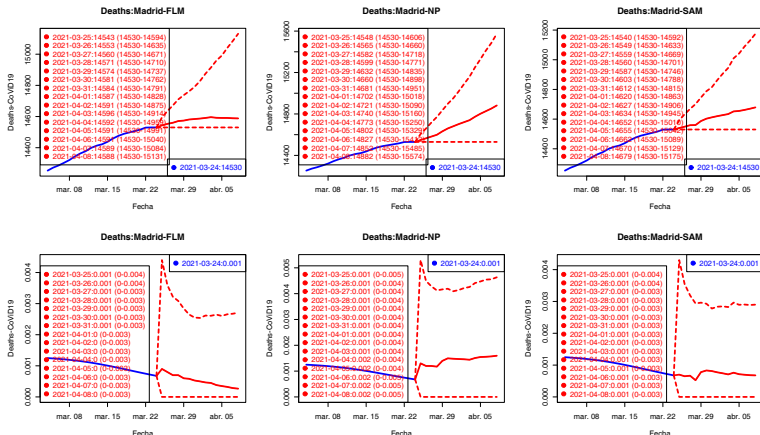
◀ Fallecidos

Fallecidos: País Vasco



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

Fallecidos: Madrid

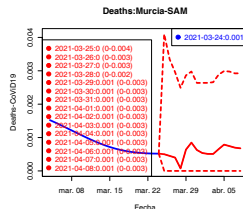
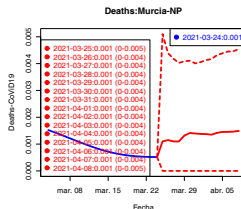
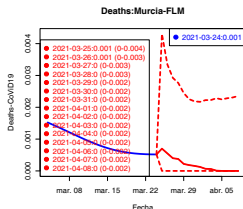
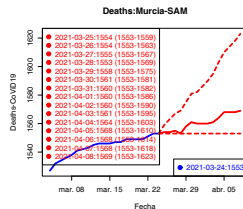
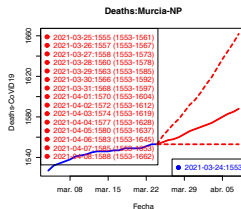
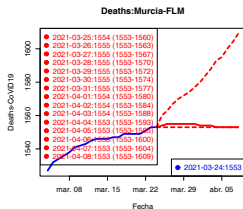


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

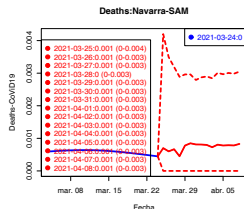
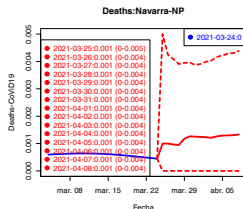
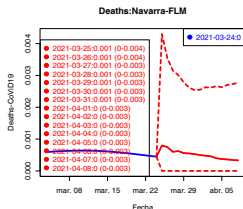
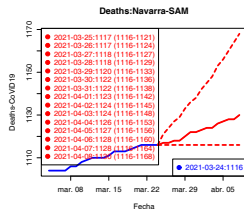
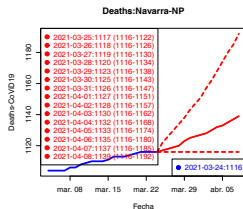
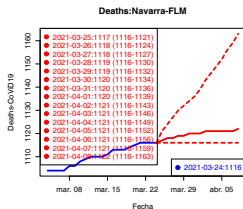
◀ Fallecidos

Fallecidos: Murcia



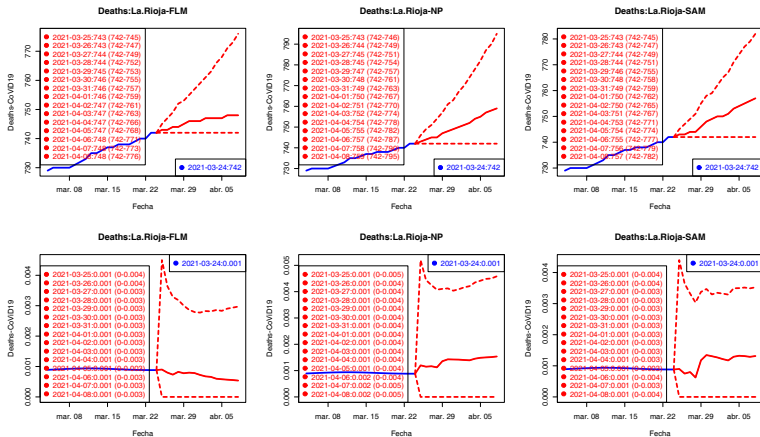
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Fallecidos: Navarra



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

Fallecidos: La Rioja

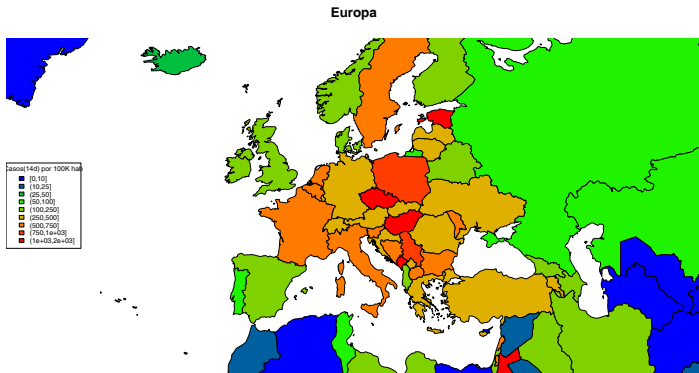


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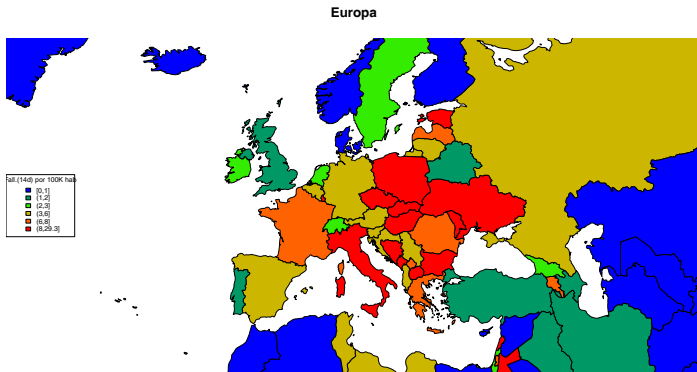
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- 2 Fallecidos
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- 3 Panorama internacional

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

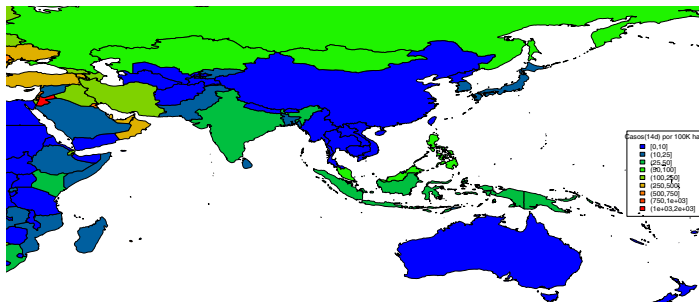


Europa: Fallecidos (14d) por 100K hab.



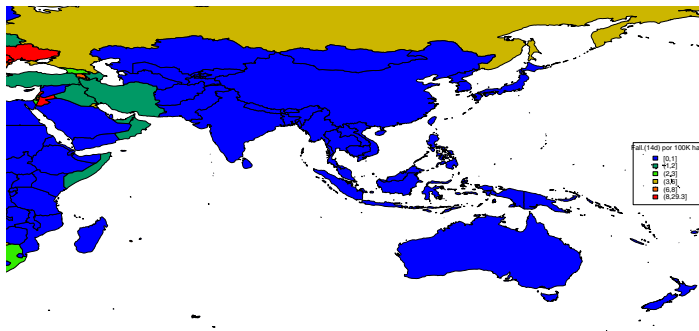
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



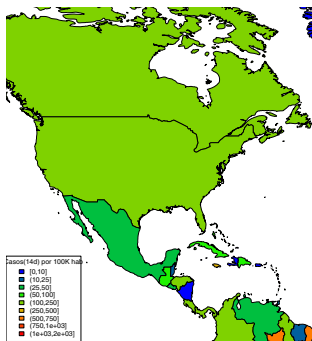
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

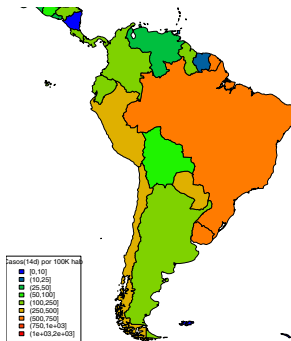


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

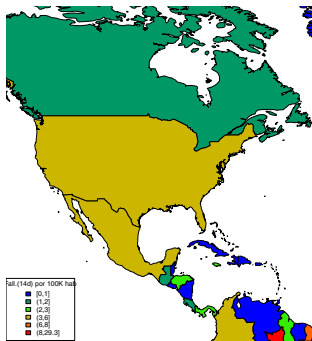


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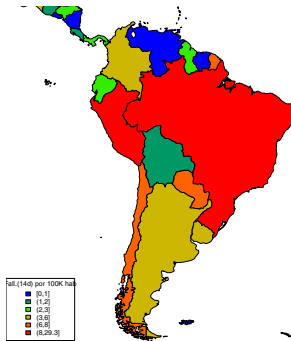


América: Fallecidos (14d) por 100K hab.

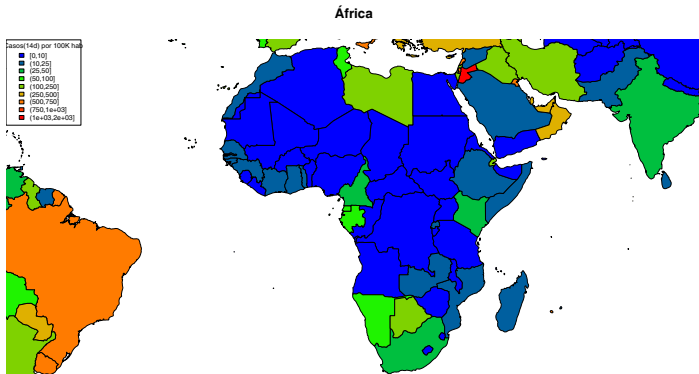
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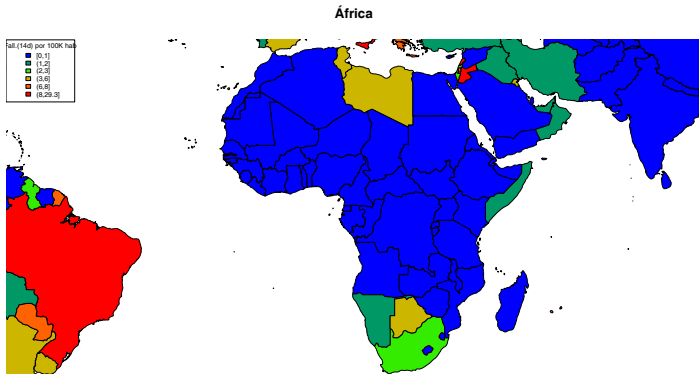
América del sur



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



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



Breve descripción del Modelo de predicción

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

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

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

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

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

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