

Predicciones sobre CoViD-19

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DEPARTAMENTO DE ESTATÍSTICA,
ANÁLISE MATEMÁTICA E OPTIMIZACIÓN



- Predicciones

- Predicciones Fallecidos

3 Panorama internacional

Tabla Previsión Confirmados: Mod. Lineal.

Last=26/04/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3496167	193	78	3503639	3515911	3532651	3543607	3554450
Andalucía	546981	195	78	548274	550587	553475	555553	557381
Aragón	117227	231	100	117500	117983	118691	119219	119757
Asturias	50423	117	40	50498	50593	50719	50737	50771
Canarias	52110	95	35	52251	52497	52804	53020	53214
Cantabria	28444	223	93	28556	28778	29096	29381	29644
Castilla.y.León	222013	169	70	222402	223028	223985	224567	225261
Castilla.La.Mancha	183944	173	61	184252	184622	185111	185267	185495
Cataluña	578266	246	106	579751	582331	585637	588080	590060
Ceuta	5736	197	71	5743	5758	5776	5780	5787
Comunidad.Valenciana	389846	34	14	390207	390481	391202	391172	391681
Extremadura	73626	105	40	73734	73890	74133	74248	74406
Galicia	121305	85	36	121528	121872	122389	122707	123063
Islas.Baleares	59081	47	18	59148	59220	59357	59380	59471
La.Rioja	29416	222	86	29477	29572	29705	29788	29872
Madrid	675834	325	131	677569	680646	684918	688095	691218
Melilla	8652	325	133	8670	8707	8755	8787	8815
Murcia	110643	60	27	110776	110933	111230	111328	111539
Navarra	59384	304	127	59524	59815	60214	60515	60794
País.Vasco	183236	408	140	183776	184588	185405	185878	186061

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

Tabla Previsión Confirmados: Mod. No Paramétrico.

Last=26/04/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3496167	193	78	3504409	3526797	3562148	3598205	3631771
Andalucía	546981	195	78	548524	552633	559113	565529	571540
Aragón	117227	231	100	117491	118214	119357	120534	121631
Asturias	50423	117	40	50540	50856	51356	51862	52331
Canarias	52110	95	35	52297	52806	53559	54294	54977
Cantabria	28444	223	93	28554	28851	29298	29749	30179
Castilla.y.León	222013	169	70	222387	223448	225102	226863	228500
Castilla.La.Mancha	183944	173	61	184275	185202	186651	188173	189581
Cataluña	578266	246	106	579967	584477	591581	598747	605534
Ceuta	5736	197	71	5753	5801	5875	5944	6007
Comunidad.Valenciana	389846	34	14	390209	391273	392998	394964	396880
Extremadura	73626	105	40	73737	74052	74543	75072	75566
Galicia	121305	85	36	121511	122097	123011	123986	124894
Islas.Baleares	59081	47	18	59151	59352	59668	60019	60354
La.Rioja	29416	222	86	29478	29650	29920	30201	30463
Madrid	675834	325	131	677809	683050	691297	699540	707317
Melilla	8652	325	133	8679	8753	8867	8977	9081
Murcia	110643	60	27	110764	111117	111675	112303	112906
Navarra	59384	304	127	59574	60081	60868	61641	62369
País.Vasco	183236	408	140	184004	186146	189073	192028	194673

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

Tabla Previsión Confirmados: Mod. Aditivo.

Last=26/04/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3496167	193	78	3501489	3514095	3527975	3539454	3544743
Andalucía	546981	195	78	547918	550187	552574	554341	554810
Aragón	117227	231	100	117426	117933	118585	119200	119689
Asturias	50423	117	40	50463	50562	50608	50612	50487
Canarias	52110	95	35	52220	52470	52700	52884	52933
Cantabria	28444	223	93	28547	28780	29077	29376	29629
Castilla.y.León	222013	169	70	222273	222950	223876	224779	225502
Castilla.La.Mancha	183944	173	61	184115	184532	184931	185280	185434
Cataluña	578266	246	106	579620	582199	584593	586714	586761
Ceuta	5736	197	71	5741	5757	5771	5779	5769
Comunidad.Valenciana	389846	34	14	389969	390449	391138	392428	393592
Extremadura	73626	105	40	73681	73850	74055	74277	74415
Galicia	121305	85	36	121455	121833	122299	122786	123129
Islas.Baleares	59081	47	18	59110	59204	59341	59515	59669
La.Rioja	29416	222	86	29463	29564	29671	29777	29827
Madrid	675834	325	131	677121	680268	683964	687057	689220
Melilla	8652	325	133	8666	8701	8737	8756	8743
Murcia	110643	60	27	110714	110920	111209	111623	111968
Navarra	59384	304	127	59492	59769	60083	60307	60359
País.Vasco	183236	408	140	183843	184755	185400	185969	185607

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0015	0.0021	0.0056	0.0104	0.0136	0.0167
Andalucía	0.0017	0.0024	0.0066	0.0119	0.0157	0.0190
Aragón	0.0016	0.0023	0.0064	0.0125	0.0170	0.0216
Asturias	0.0012	0.0015	0.0034	0.0059	0.0062	0.0069
Canarias	0.0022	0.0027	0.0074	0.0133	0.0175	0.0212
Cantabria	0.0029	0.0039	0.0117	0.0229	0.0329	0.0422
Castilla.y.León	0.0011	0.0018	0.0046	0.0089	0.0115	0.0146
Castilla.La.Mancha	0.0010	0.0017	0.0037	0.0063	0.0072	0.0084
Cataluña	0.0019	0.0026	0.0070	0.0127	0.0170	0.0204
Ceuta	0.0015	0.0013	0.0038	0.0069	0.0077	0.0089
Comunidad.Valenciana	0.0003	0.0009	0.0016	0.0035	0.0034	0.0047
Extremadura	0.0008	0.0015	0.0036	0.0069	0.0084	0.0106
Galicia	0.0011	0.0018	0.0047	0.0089	0.0116	0.0145
Islas.Baleares	0.0005	0.0011	0.0024	0.0047	0.0051	0.0066
La.Rioja	0.0014	0.0021	0.0053	0.0098	0.0127	0.0155
Madrid	0.0019	0.0026	0.0071	0.0134	0.0181	0.0228
Melilla	0.0019	0.0021	0.0064	0.0119	0.0156	0.0188
Murcia	0.0005	0.0012	0.0026	0.0053	0.0062	0.0081
Navarra	0.0020	0.0024	0.0073	0.0140	0.0190	0.0237
País.Vasco	0.0025	0.0029	0.0074	0.0118	0.0144	0.0154

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0015	0.0024	0.0088	0.0189	0.0292	0.0388
Andalucía	0.0017	0.0028	0.0103	0.0222	0.0339	0.0449
Aragón	0.0016	0.0022	0.0084	0.0182	0.0282	0.0376
Asturias	0.0012	0.0023	0.0086	0.0185	0.0285	0.0378
Canarias	0.0022	0.0036	0.0134	0.0278	0.0419	0.0550
Cantabria	0.0029	0.0039	0.0143	0.0300	0.0459	0.0610
Castilla.y.León	0.0011	0.0017	0.0065	0.0139	0.0218	0.0292
Castilla.La.Mancha	0.0010	0.0018	0.0068	0.0147	0.0230	0.0306
Cataluña	0.0019	0.0029	0.0107	0.0230	0.0354	0.0472
Ceuta	0.0015	0.0030	0.0114	0.0243	0.0363	0.0473
Comunidad.Valenciana	0.0003	0.0009	0.0037	0.0081	0.0131	0.0180
Extremadura	0.0008	0.0015	0.0058	0.0125	0.0196	0.0263
Galicia	0.0011	0.0017	0.0065	0.0141	0.0221	0.0296
Islas.Baleares	0.0005	0.0012	0.0046	0.0099	0.0159	0.0216
La.Rioja	0.0014	0.0021	0.0079	0.0171	0.0267	0.0356
Madrid	0.0019	0.0029	0.0107	0.0229	0.0351	0.0466
Melilla	0.0019	0.0032	0.0116	0.0248	0.0376	0.0496
Murcia	0.0005	0.0011	0.0043	0.0093	0.0150	0.0205
Navarra	0.0020	0.0032	0.0117	0.0250	0.0380	0.0503
País.Vasco	0.0025	0.0042	0.0159	0.0319	0.0480	0.0624

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

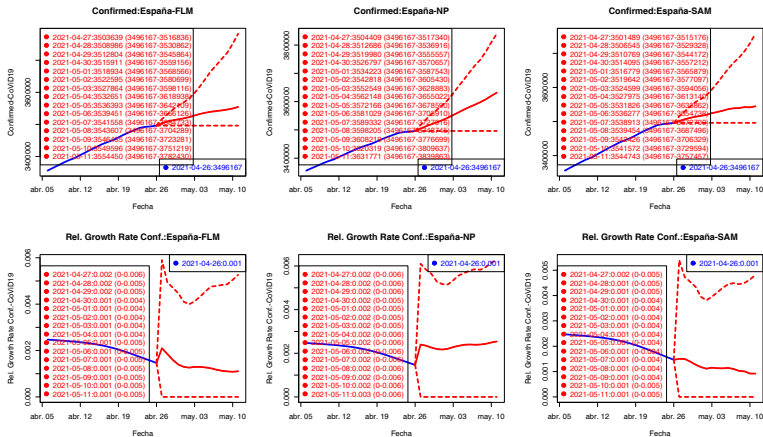
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0015	0.0015	0.0051	0.0091	0.0124	0.0139
Andalucía	0.0017	0.0017	0.0059	0.0102	0.0135	0.0143
Aragón	0.0016	0.0017	0.0060	0.0116	0.0168	0.0210
Asturias	0.0012	0.0008	0.0027	0.0037	0.0037	0.0013
Canarias	0.0022	0.0021	0.0069	0.0113	0.0149	0.0158
Cantabria	0.0029	0.0036	0.0118	0.0222	0.0328	0.0417
Castilla.y.León	0.0011	0.0012	0.0042	0.0084	0.0125	0.0157
Castilla.La.Mancha	0.0010	0.0009	0.0032	0.0054	0.0073	0.0081
Cataluña	0.0019	0.0023	0.0068	0.0109	0.0146	0.0147
Ceuta	0.0015	0.0009	0.0036	0.0062	0.0075	0.0057
Comunidad.Valenciana	0.0003	0.0003	0.0015	0.0033	0.0066	0.0096
Extremadura	0.0008	0.0007	0.0030	0.0058	0.0088	0.0107
Galicia	0.0011	0.0012	0.0044	0.0082	0.0122	0.0150
Islas.Baleares	0.0005	0.0005	0.0021	0.0044	0.0073	0.0100
La.Rioja	0.0014	0.0016	0.0050	0.0087	0.0123	0.0140
Madrid	0.0019	0.0019	0.0066	0.0120	0.0166	0.0198
Melilla	0.0019	0.0016	0.0057	0.0098	0.0121	0.0105
Murcia	0.0005	0.0006	0.0025	0.0051	0.0089	0.0120
Navarra	0.0020	0.0018	0.0065	0.0118	0.0155	0.0164
País.Vasco	0.0025	0.0033	0.0083	0.0118	0.0149	0.0129

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

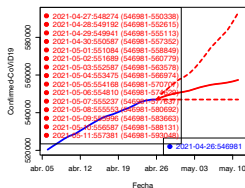
Confirmados: España



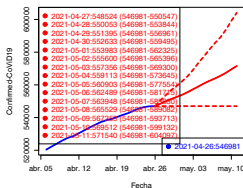
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados: Andalucía

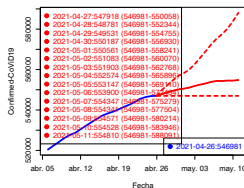
Confirmed:Andalucía-FLM



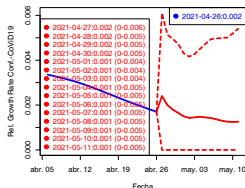
Confirmed:Andalucía-NP



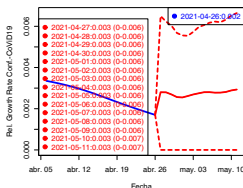
Confirmed:Andalucía-SAM



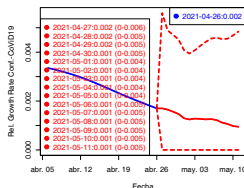
Rel. Growth Rate Conf.:Andalucía-FLM



Rel. Growth Rate Conf.:Andalucía-NP



Rel. Growth Rate Conf.:Andalucía-SAM

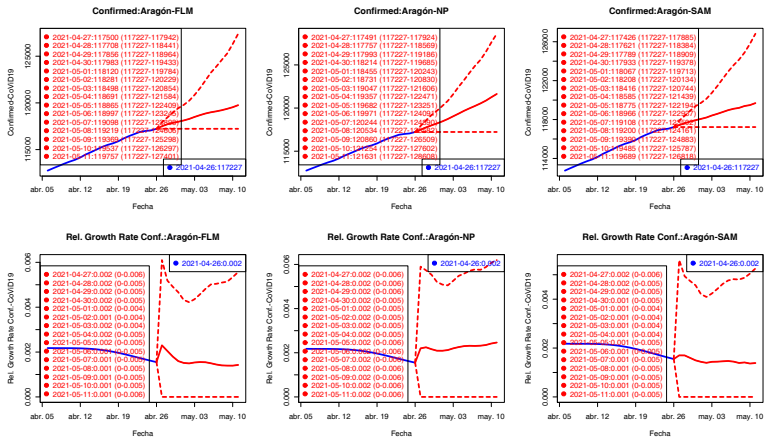


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

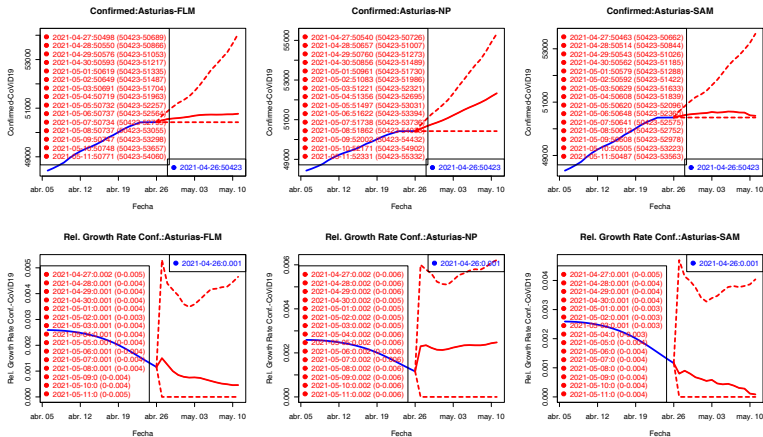
← Confirmados

← Fallecidos

Confirmados: Aragón



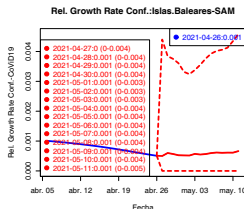
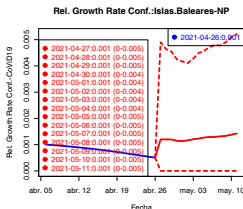
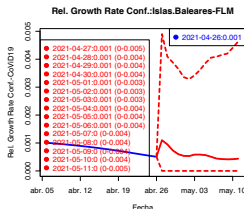
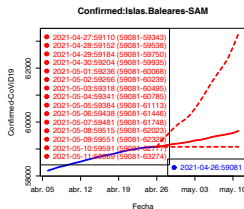
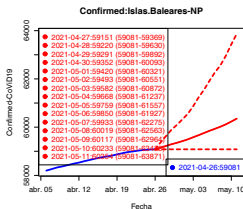
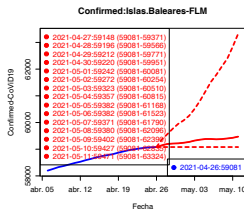
Confirmados: Asturias



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

◀ Confirmados ▶ Fallecidos

Confirmados: Islas Baleares

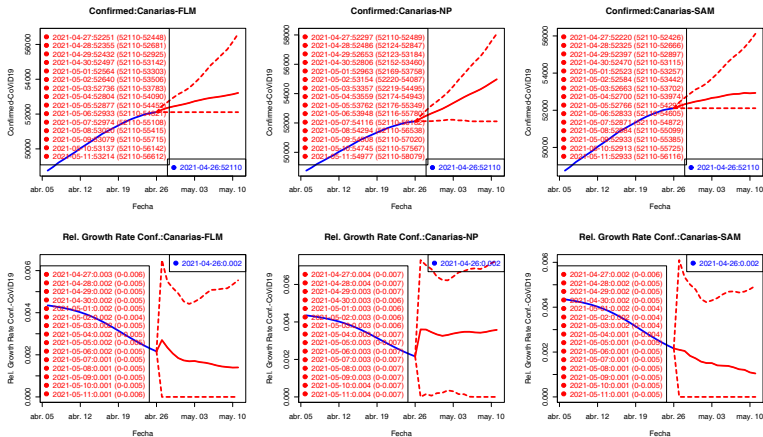


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

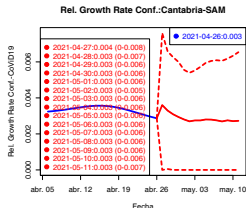
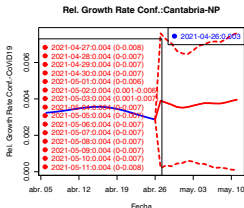
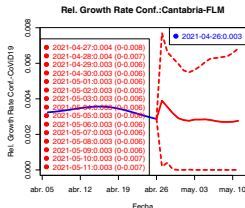
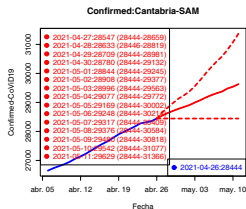
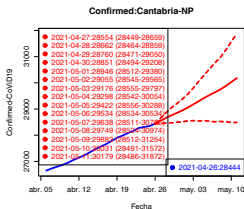
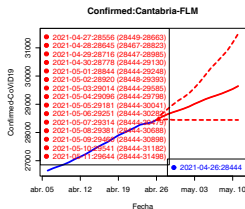
Confirmados: Canarias



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

◀ Confirmados ▶ Fallecidos

Confirmados: Cantabria

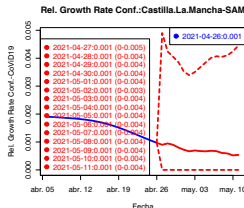
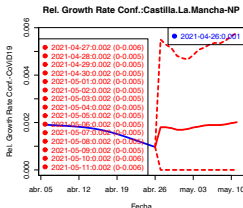
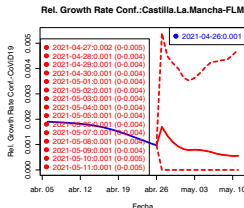
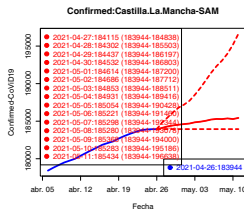
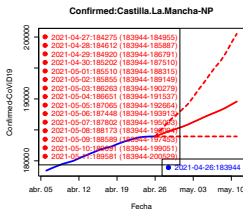
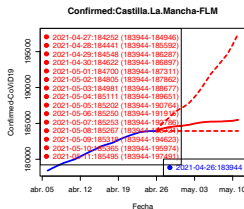


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

Confirmados

Fallecidos

Confirmados: Castilla-La Mancha

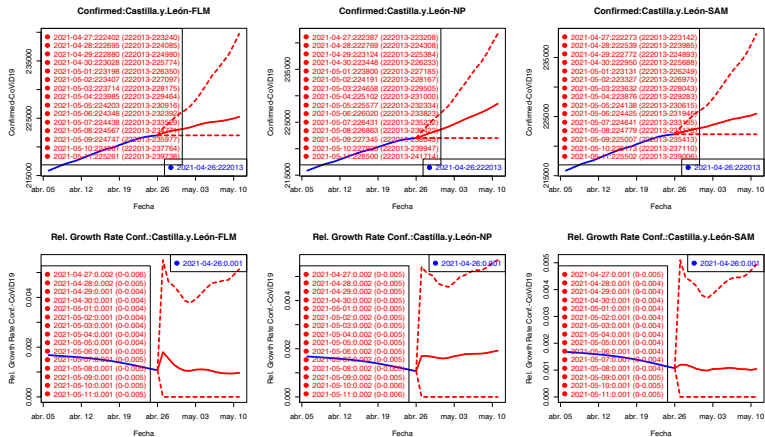


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

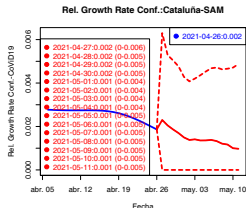
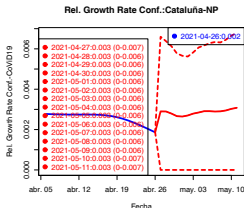
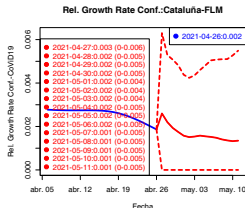
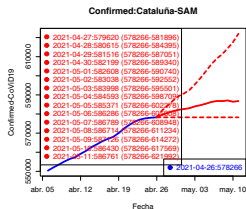
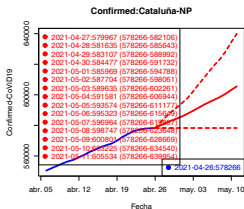
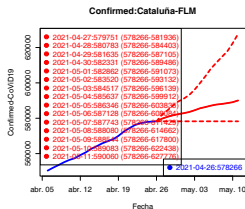
◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León



Confirmados: Cataluña

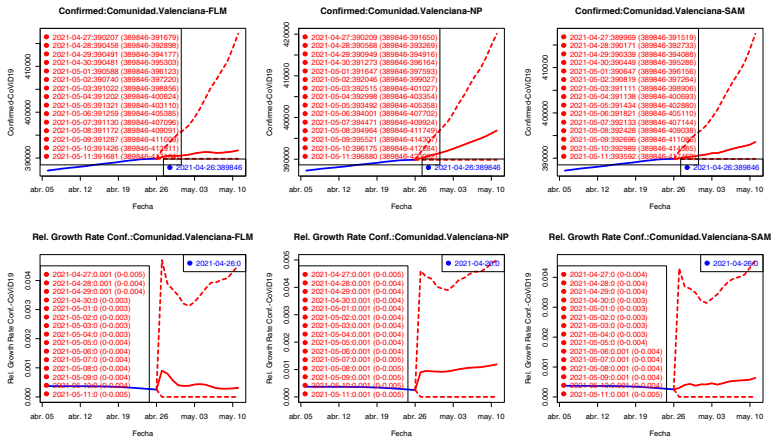


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

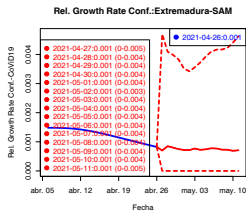
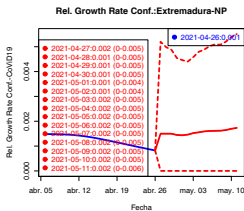
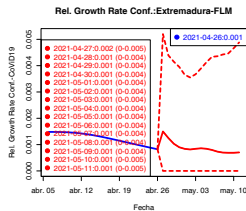
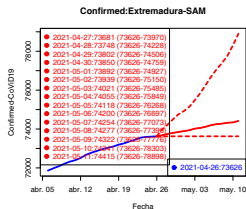
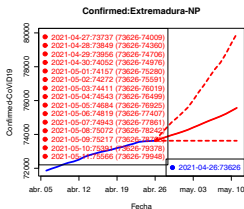
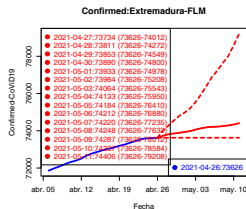
← Fallecidos

Confirmados: C. Valenciana



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

Confirmados: Extremadura



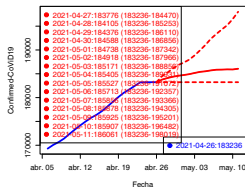
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

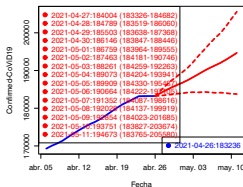
◀ Fallecidos

Confirmados: País Vasco

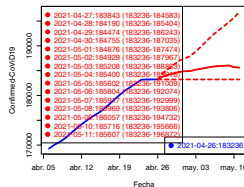
Confirmed:País.Vasco-FLM



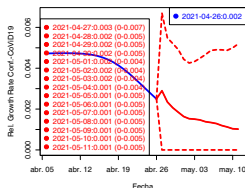
Confirmed:País.Vasco-NP



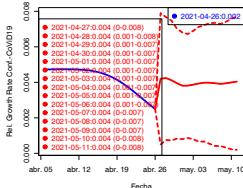
Confirmed:País.Vasco-SAM



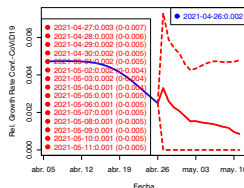
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



Rel. Growth Rate Conf.:País.Vasco-SAM

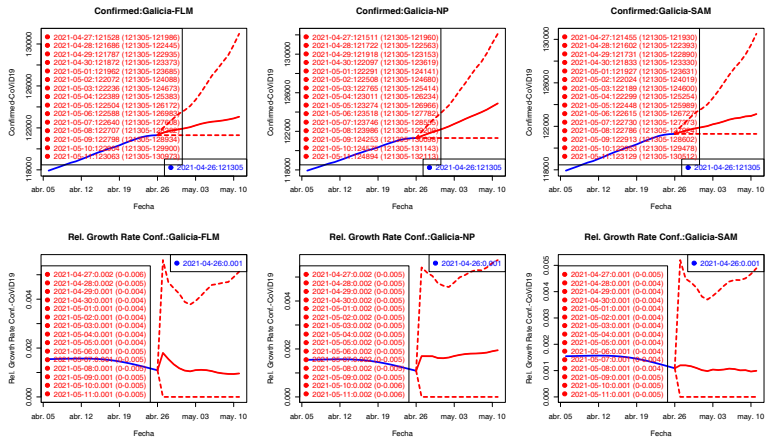


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

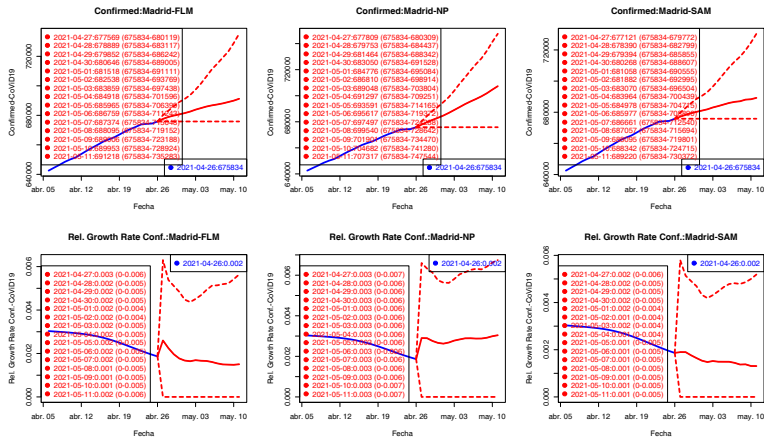
◀ Confirmados

◀ Fallecidos

Confirmados: Galicia



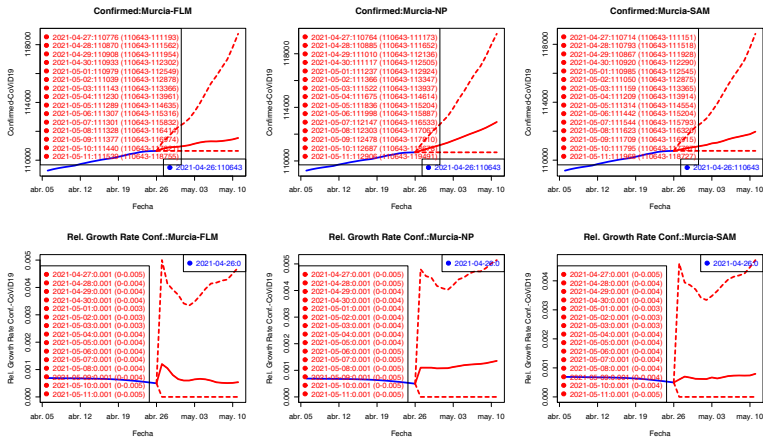
Confirmados: Madrid



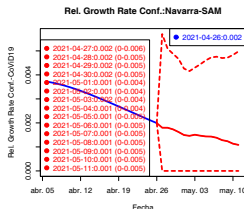
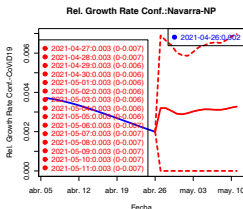
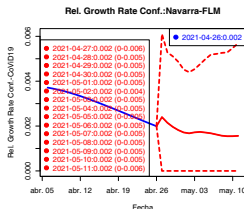
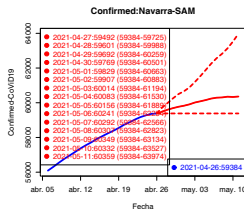
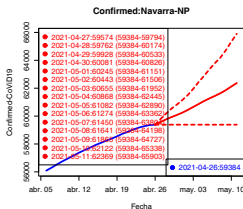
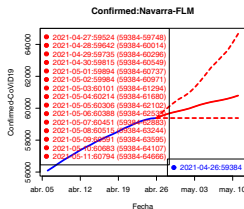
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados ▶ Fallecidos

Confirmados: Murcia



Confirmados: Navarra

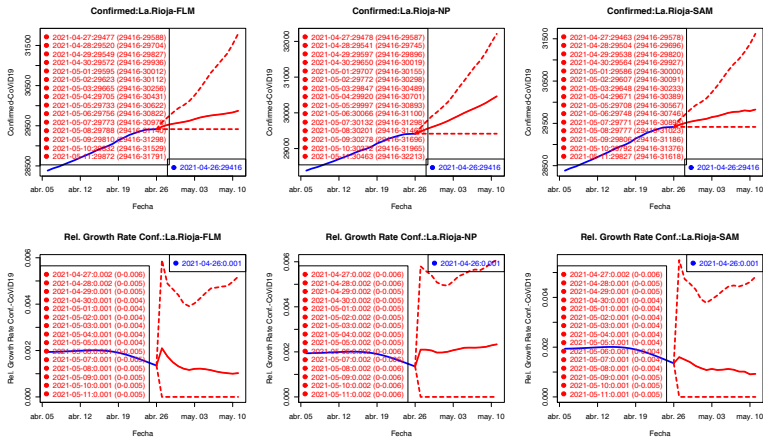


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



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

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 - Predicciones
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- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Último dato: 26/04/2021 Fuente: https://cnecovid.isciii.es/covid19/resources/casos_hosp_uci_def_sexo_edad_provres.csv

Predicciones:

▶ España

▶ Andalucía

▶ Aragón

▶ Asturias

▶ I. Baleares

▶ Canarias

▶ Cantabria

▶ Castilla-La Mancha

▶ Castilla y León

▶ Cataluña

▶ C. Valenciana

▶ Extremadura

▶ País Vasco

▶ Galicia

▶ Madrid

▶ Murcia

▶ Navarra

▶ La Rioja

▶ Mod Lineal

▶ Mod NP

▶ Mod Aditivo

	$10^2 \sigma_R^2$			$10^2 \sigma_R^2(rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0.005	0.004	0.005	0.001	0.001	0.001	0.559	0.621	0.564
H4	0.019	0.018	0.018	0.009	0.009	0.008	0.818	0.831	0.829
H8	0.064	0.068	0.059	0.035	0.04	0.031	0.858	0.853	0.868
H12	0.137	0.148	0.121	0.092	0.099	0.077	0.864	0.857	0.879
H15	0.214	0.239	0.18	0.166	0.204	0.125	0.873	0.862	0.893

Tabla Previsión Fallecidos: Mod. Lineal.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	77460	77503	77545	77607	77522	77460
Andalucía	9502	9510	9521	9536	9533	9518
Aragón	3404	3406	3409	3413	3412	3408
Asturias	1943	1944	1946	1947	1946	1943
Canarias	714	715	717	721	723	723
Cantabria	555	555	556	557	557	557
Castilla.y.León	6690	6694	6696	6702	6697	6690
Castilla.La.Mancha	5817	5819	5817	5817	5817	5817
Cataluña	13835	13838	13839	13835	13835	13835
Ceuta	104	104	105	107	108	109
Comunidad.Valenciana	7234	7236	7234	7234	7234	7234
Extremadura	1770	1771	1772	1776	1775	1774
Galicia	2369	2371	2372	2375	2374	2372
Islas.Baleares	819	819	819	820	819	819
La.Rioja	758	758	758	758	758	758
Madrid	14988	15000	15019	15046	15045	15029
Melilla	89	89	90	90	90	90
Murcia	1586	1586	1586	1586	1586	1586
Navarra	1152	1154	1158	1165	1169	1173
País.Vasco	4131	4131	4132	4131	4131	4131

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

Tabla Previsión Fallecidos: Mod. No Paramétrico.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	77460	77548	77848	78303	78741	79158
Andalucía	9502	9515	9557	9622	9685	9746
Aragón	3404	3408	3422	3443	3464	3484
Asturias	1943	1945	1953	1964	1976	1986
Canarias	714	716	721	728	736	743
Cantabria	555	556	558	561	565	568
Castilla.y.León	6690	6697	6721	6758	6793	6826
Castilla.La.Mancha	5817	5823	5845	5877	5908	5938
Cataluña	13835	13849	13898	13970	14039	14104
Ceuta	104	104	105	107	108	109
Comunidad.Valenciana	7234	7240	7264	7298	7329	7360
Extremadura	1770	1772	1779	1789	1799	1809
Galicia	2369	2371	2380	2393	2406	2417
Islas.Baleares	819	820	822	826	830	834
La.Rioja	758	759	762	766	770	774
Madrid	14988	15007	15070	15166	15260	15349
Melilla	89	89	90	91	92	93
Murcia	1586	1587	1593	1601	1608	1615
Navarra	1152	1154	1159	1168	1176	1184
País.Vasco	4131	4137	4155	4183	4210	4237

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	77460	77480	77619	77741	77821	77806
Andalucía	9502	9507	9525	9555	9559	9554
Aragón	3404	3405	3412	3418	3425	3429
Asturias	1943	1943	1947	1946	1949	1944
Canarias	714	715	718	725	728	730
Cantabria	555	555	557	559	559	560
Castilla.y.León	6690	6691	6702	6713	6722	6724
Castilla.La.Mancha	5817	5817	5826	5838	5841	5844
Cataluña	13835	13835	13859	13847	13854	13835
Ceuta	104	104	105	106	107	107
Comunidad.Valenciana	7234	7234	7241	7245	7256	7260
Extremadura	1770	1771	1774	1782	1786	1791
Galicia	2369	2370	2374	2374	2380	2380
Islas.Baleares	819	819	820	821	822	823
La.Rioja	758	758	760	761	762	762
Madrid	14988	14996	15027	15066	15083	15082
Melilla	89	89	90	90	91	92
Murcia	1586	1586	1588	1591	1593	1595
Navarra	1152	1153	1156	1160	1165	1165
País.Vasco	4131	4131	4140	4141	4135	4131

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0006	0.0011	0.0019	0.0008	0.0000
Andalucía	0.0009	0.0008	0.0020	0.0035	0.0032	0.0017
Aragón	0.0007	0.0007	0.0016	0.0028	0.0023	0.0013
Asturias	0.0007	0.0007	0.0016	0.0023	0.0015	0.0000
Canarias	0.0019	0.0016	0.0047	0.0104	0.0120	0.0130
Cantabria	0.0006	0.0006	0.0015	0.0036	0.0032	0.0033
Castilla.y.León	0.0005	0.0006	0.0010	0.0018	0.0010	0.0000
Castilla.La.Mancha	0.0004	0.0003	0.0000	0.0000	0.0000	0.0000
Cataluña	0.0002	0.0002	0.0003	0.0000	0.0000	0.0000
Ceuta	0.0037	0.0041	0.0130	0.0275	0.0398	0.0477
Comunidad.Valenciana	0.0001	0.0003	0.0000	0.0000	0.0000	0.0000
Extremadura	0.0007	0.0007	0.0013	0.0034	0.0028	0.0022
Galicia	0.0005	0.0006	0.0015	0.0026	0.0023	0.0012
Islas.Baleares	0.0003	0.0005	0.0004	0.0014	0.0002	0.0000
La.Rioja	0.0004	0.0004	0.0004	0.0002	0.0000	0.0000
Madrid	0.0008	0.0008	0.0020	0.0039	0.0038	0.0028
Melilla	0.0023	0.0017	0.0060	0.0120	0.0139	0.0165
Murcia	0.0002	0.0003	0.0000	0.0000	0.0000	0.0000
Navarra	0.0014	0.0015	0.0050	0.0111	0.0145	0.0179
País.Vasco	0.0005	0.0001	0.0002	0.0000	0.0000	0.0000

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0011	0.0050	0.0109	0.0165	0.0219
Andalucía	0.0009	0.0014	0.0058	0.0126	0.0193	0.0257
Aragón	0.0007	0.0012	0.0053	0.0116	0.0176	0.0234
Asturias	0.0007	0.0012	0.0051	0.0110	0.0168	0.0222
Canarias	0.0019	0.0026	0.0091	0.0202	0.0305	0.0407
Cantabria	0.0006	0.0012	0.0053	0.0116	0.0176	0.0234
Castilla.y.León	0.0005	0.0010	0.0047	0.0101	0.0153	0.0203
Castilla.La.Mancha	0.0004	0.0011	0.0048	0.0104	0.0157	0.0208
Cataluña	0.0002	0.0010	0.0045	0.0097	0.0147	0.0194
Ceuta	0.0037	0.0032	0.0113	0.0254	0.0384	0.0512
Comunidad.Valenciana	0.0001	0.0009	0.0041	0.0088	0.0132	0.0174
Extremadura	0.0007	0.0011	0.0050	0.0109	0.0166	0.0220
Galicia	0.0005	0.0010	0.0047	0.0102	0.0155	0.0204
Islas.Baleares	0.0003	0.0009	0.0042	0.0090	0.0136	0.0179
La.Rioja	0.0004	0.0011	0.0049	0.0106	0.0161	0.0213
Madrid	0.0008	0.0013	0.0054	0.0119	0.0181	0.0241
Melilla	0.0023	0.0034	0.0118	0.0256	0.0379	0.0494
Murcia	0.0002	0.0009	0.0043	0.0093	0.0141	0.0186
Navarra	0.0014	0.0015	0.0061	0.0135	0.0206	0.0276
País.Vasco	0.0005	0.0014	0.0058	0.0126	0.0192	0.0256

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

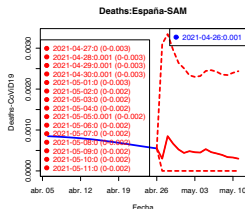
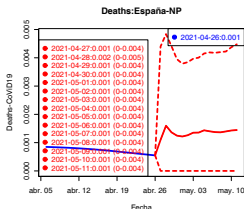
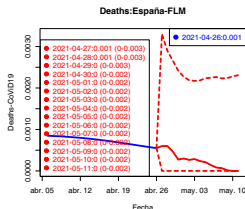
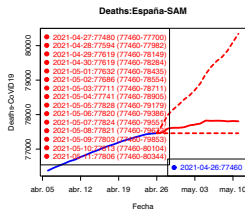
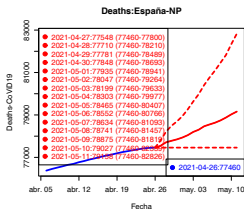
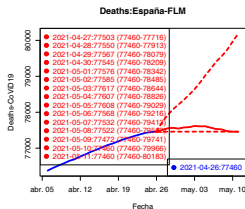
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=26/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0005	0.0003	0.0021	0.0036	0.0047	0.0045
Andalucía	0.0009	0.0006	0.0024	0.0056	0.0060	0.0055
Aragón	0.0007	0.0004	0.0024	0.0042	0.0062	0.0072
Asturias	0.0007	0.0002	0.0018	0.0015	0.0030	0.0007
Canarias	0.0019	0.0016	0.0061	0.0155	0.0190	0.0228
Cantabria	0.0006	0.0005	0.0031	0.0065	0.0077	0.0098
Castilla.y.León	0.0005	0.0002	0.0018	0.0034	0.0048	0.0051
Castilla.La.Mancha	0.0004	0.0000	0.0016	0.0036	0.0041	0.0046
Cataluña	0.0002	0.0000	0.0017	0.0009	0.0014	0.0000
Ceuta	0.0037	0.0029	0.0071	0.0175	0.0263	0.0257
Comunidad.Valenciana	0.0001	0.0000	0.0009	0.0015	0.0030	0.0035
Extremadura	0.0007	0.0004	0.0025	0.0067	0.0089	0.0116
Galicia	0.0005	0.0002	0.0019	0.0022	0.0047	0.0046
Islas.Baleares	0.0003	0.0000	0.0012	0.0027	0.0042	0.0046
La.Rioja	0.0004	0.0001	0.0023	0.0039	0.0052	0.0056
Madrid	0.0008	0.0005	0.0026	0.0052	0.0064	0.0062
Melilla	0.0023	0.0013	0.0068	0.0149	0.0214	0.0283
Murcia	0.0002	0.0000	0.0014	0.0031	0.0043	0.0056
Navarra	0.0014	0.0011	0.0039	0.0069	0.0111	0.0116
País.Vasco	0.0005	0.0000	0.0022	0.0024	0.0010	0.0000

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

Fallecidos: España

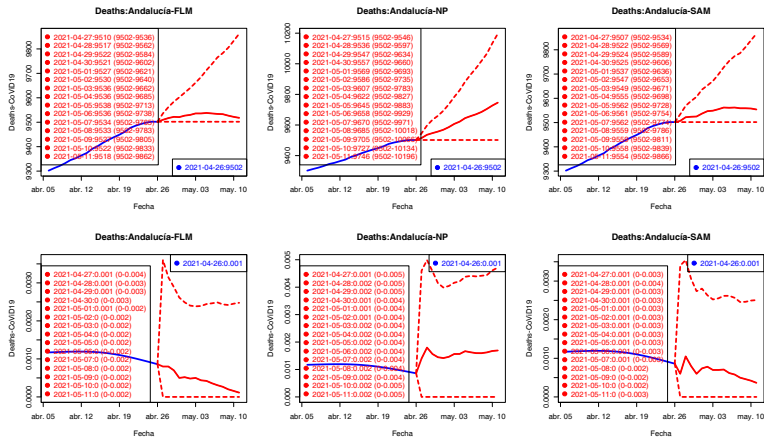


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

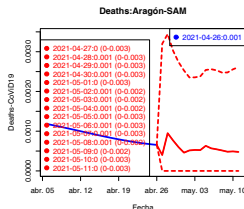
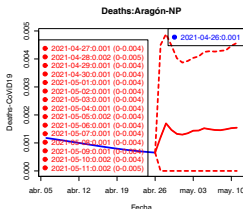
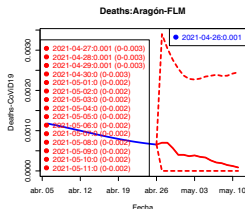
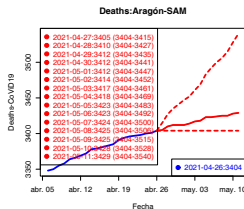
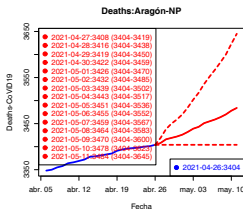
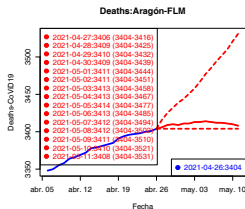
Fallecidos: Andalucía



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

◀ Confirmados ▶ Fallecidos

Fallecidos: Aragón

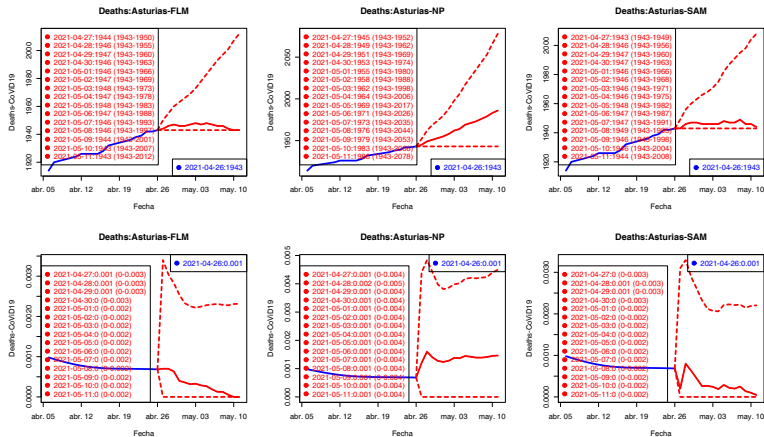


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

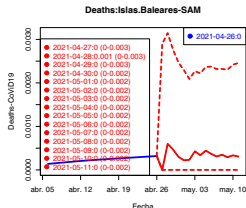
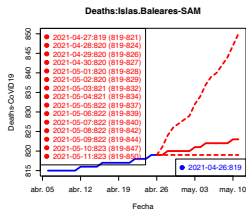
Fallecidos: Asturias



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

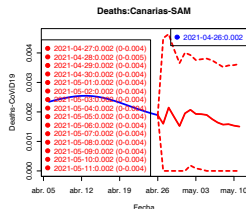
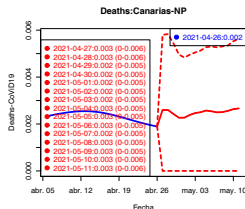
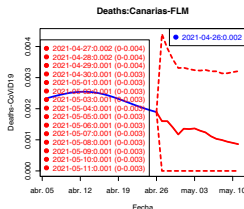
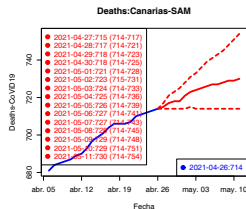
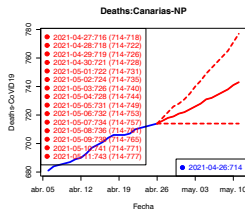
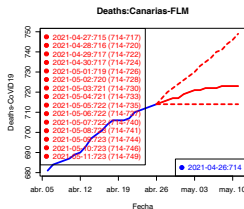
◀ Confirmados

◀ Fallecidos



◀ Confirmados ▶ Fallecidos

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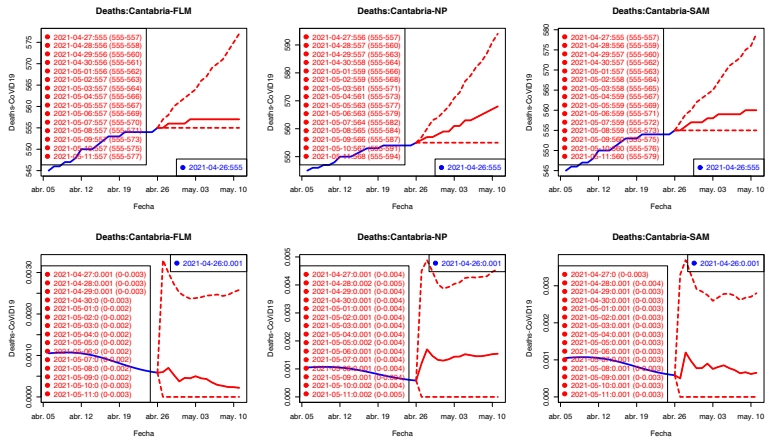


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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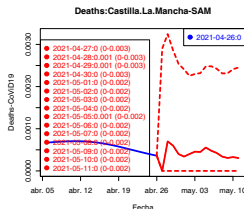
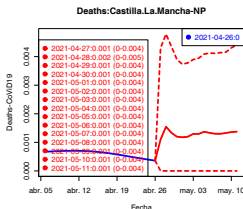
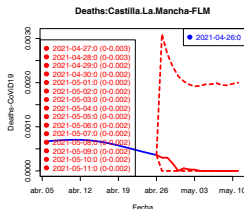
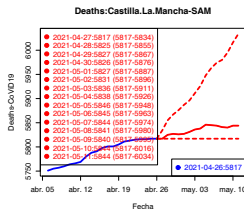
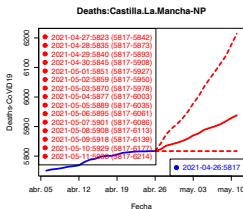
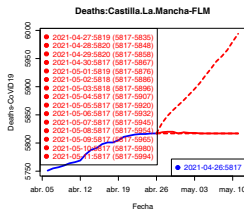


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

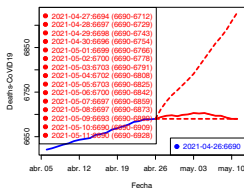
Fallecidos: Castilla-La Mancha



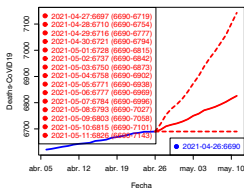
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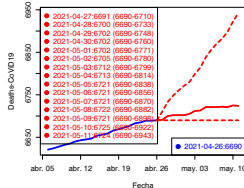
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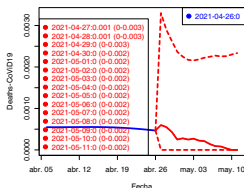
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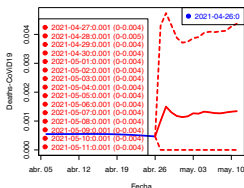
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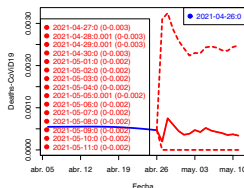
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Deaths:Castilla y León-NP



Deaths:Castilla y León-SAM

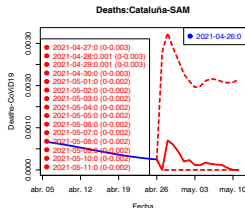
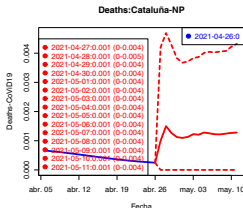
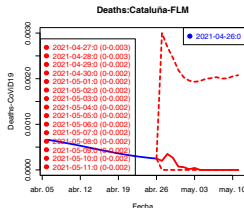
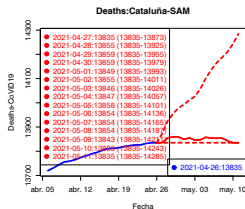
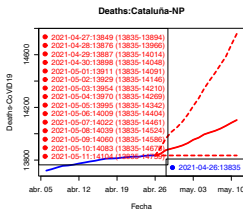
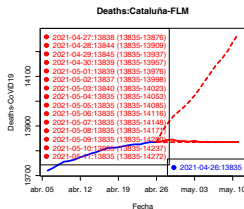


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

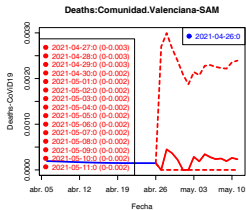
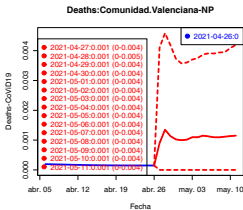
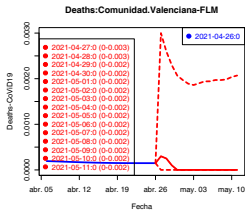
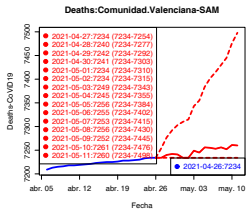
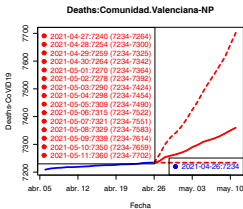
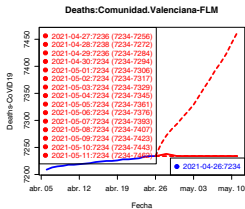
◀ Fallecidos

Fallecidos: Cataluña



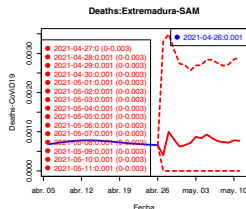
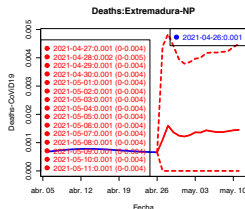
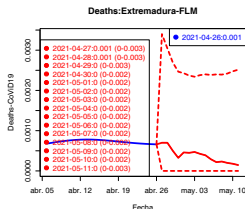
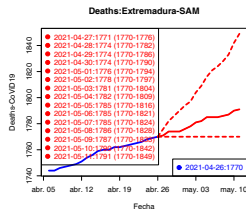
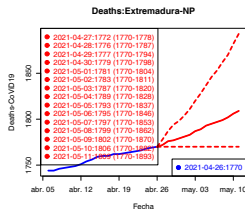
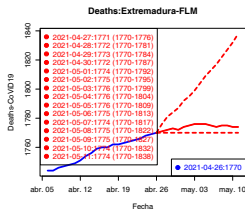
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: C. Valenciana



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

Fallecidos: Extremadura

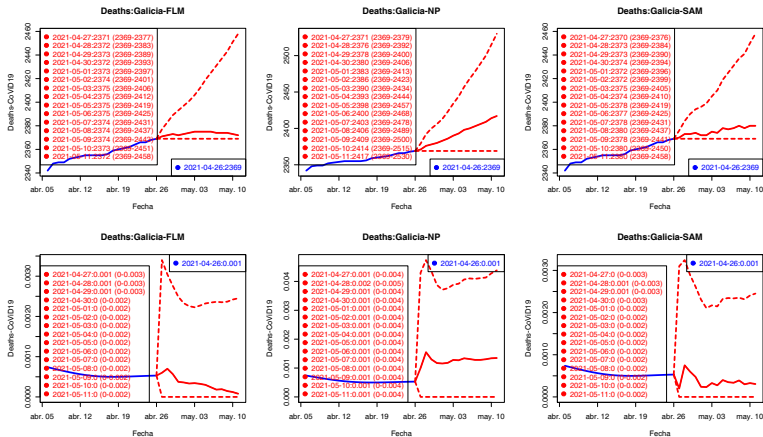


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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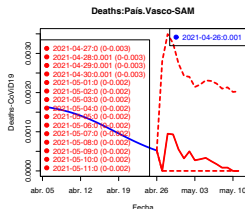
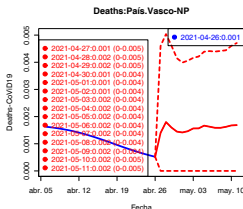
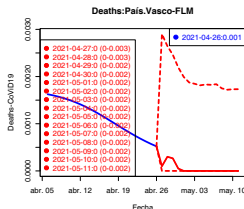
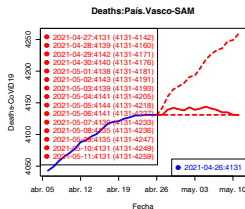
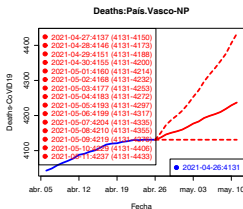
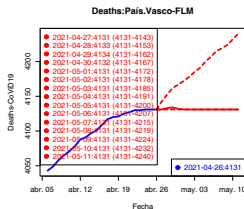


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

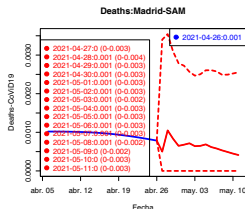
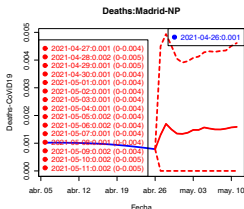
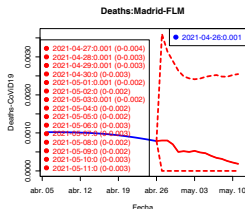
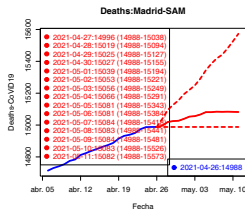
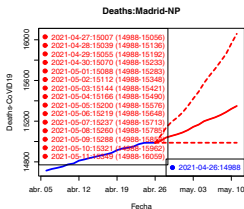
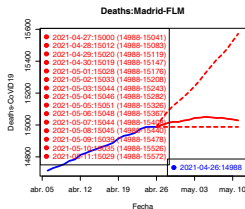
◀ Fallecidos

Fallecidos: País Vasco



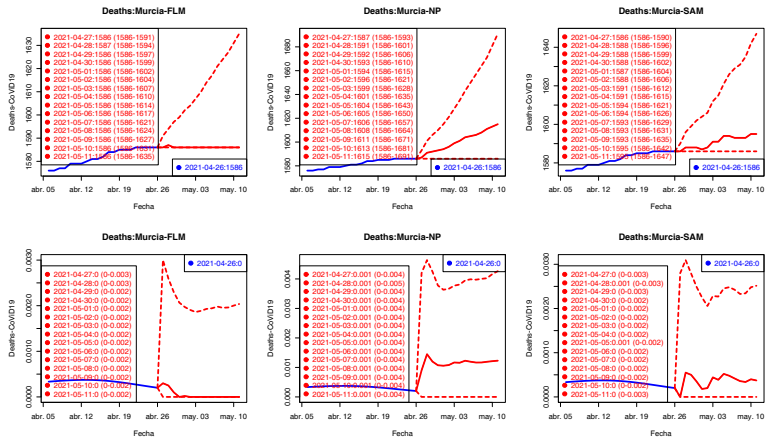
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Madrid



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

Fallecidos: Murcia

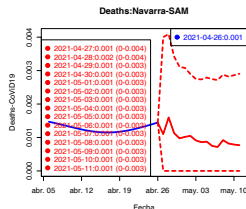
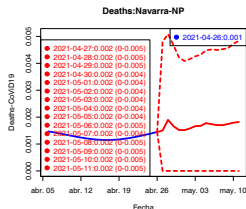
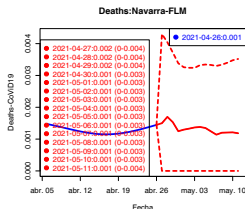
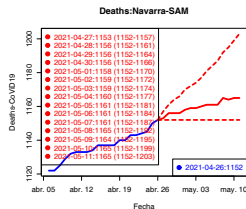
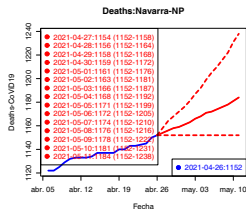
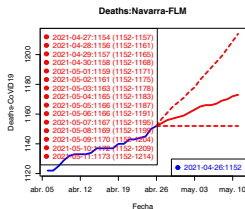


Los valores del Ratio de incremento de H2—H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Navarra

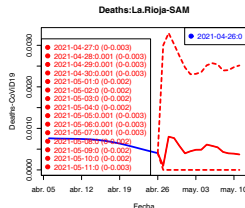
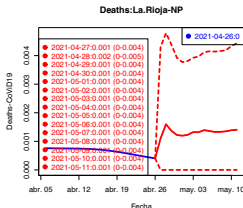
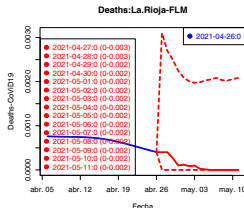
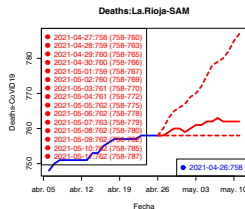
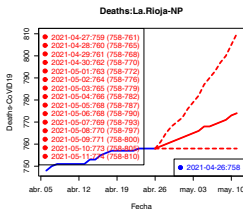
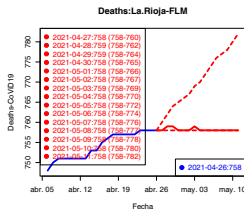


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: La Rioja



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

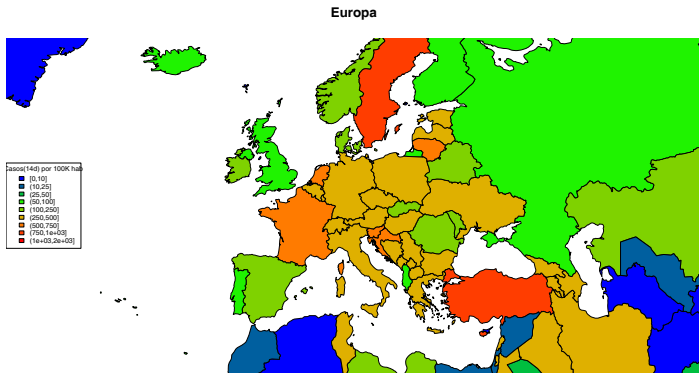
◀ Confirmados

◀ Fallecidos

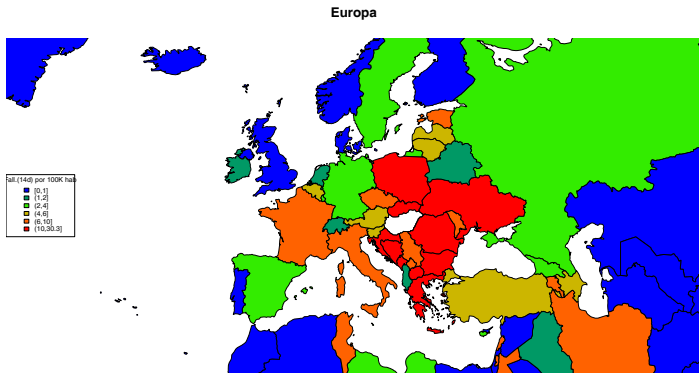
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Europa: Incidencia Acumulada (14d) por 100K hab.

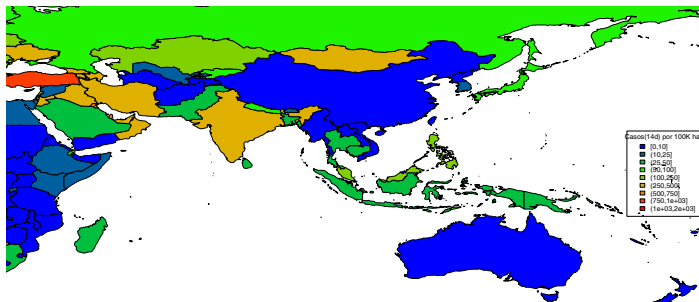


Europa: Fallecidos (14d) por 100K hab.



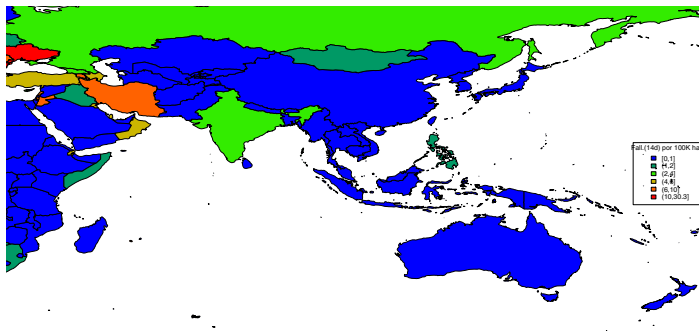
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



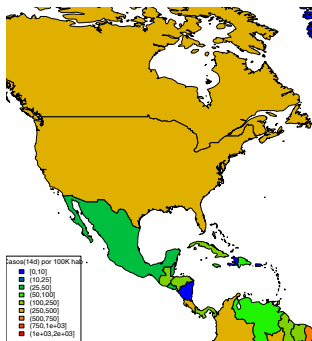
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

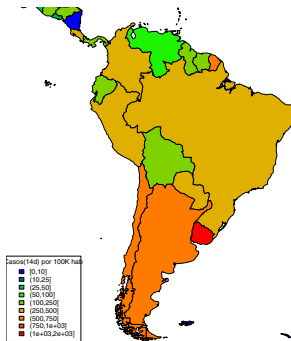


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

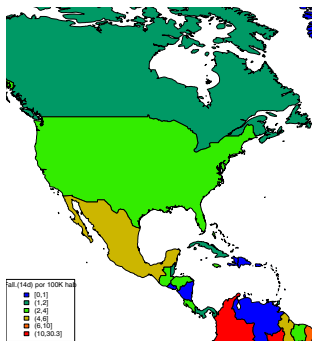


América del sur

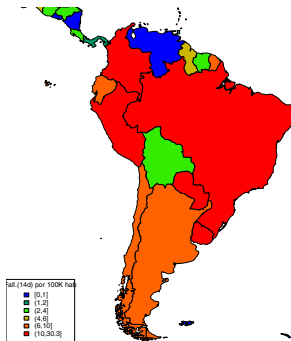


América: Fallecidos (14d) por 100K hab.

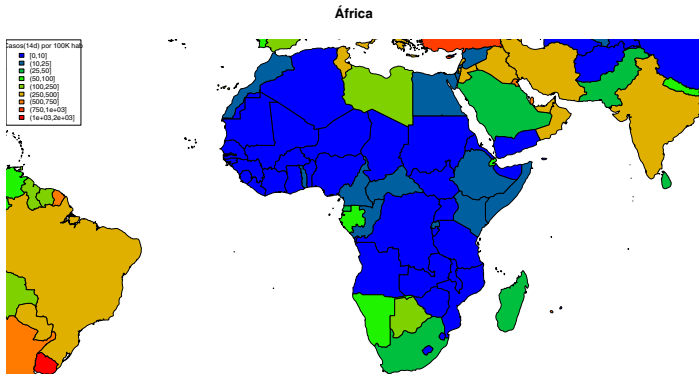
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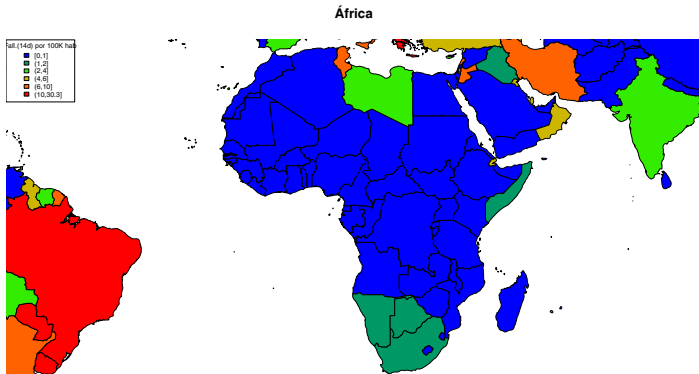
América del sur



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.