

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=28/04/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3514965	196	80	3522646	3536664	3557686	3572718	3588533
Andalucía	549761	190	85	551038	553704	557520	560493	563357
Aragón	117958	243	111	118259	118879	119804	120575	121307
Asturias	50623	118	37	50697	50785	50900	50903	50934
Canarias	52415	91	33	52550	52795	53110	53333	53540
Cantabria	28632	220	92	28735	28939	29233	29489	29722
Castilla.y.León	222787	170	72	223188	223871	224942	225643	226446
Castilla.La.Mancha	184707	174	62	185011	185416	186018	186273	186631
Cataluña	583004	259	105	584659	587862	592599	596414	600116
Ceuta	5751	169	55	5756	5767	5784	5786	5795
Comunidad.Valenciana	390286	37	14	390650	390917	391629	391583	392074
Extremadura	73804	96	41	73904	74068	74345	74487	74688
Galicia	121767	86	36	121989	122357	122926	123292	123704
Islas.Baleares	59198	47	18	59265	59340	59483	59513	59608
La.Rioja	29548	228	86	29608	29701	29837	29921	30010
Madrid	680639	329	134	682433	686057	691670	696144	700850
Melilla	8695	305	119	8710	8740	8784	8808	8836
Murcia	110756	61	25	110883	111030	111321	111406	111610
Navarra	59728	303	126	59870	60167	60596	60919	61242
País.Vasco	184906	411	144	185439	186260	187145	187655	187937

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

Tabla Previsión Confirmados: Mod. Aditivo.

Last=28/04/2021

	Last	IA14	IA7	H1	H4	H8	H12	H15
España	3514965	196	80	3520471	3535192	3554235	3571488	3584715
Andalucía	549761	190	85	550757	553294	556692	559362	561008
Aragón	117958	243	111	118204	118848	119697	120535	121135
Asturias	50623	118	37	50665	50762	50842	50863	50813
Canarias	52415	91	33	52519	52759	53010	53199	53277
Cantabria	28632	220	92	28722	28942	29190	29462	29656
Castilla.y.León	222787	170	72	223067	223816	224867	225930	226816
Castilla.La.Mancha	184707	174	62	184874	185337	185856	186359	186715
Cataluña	583004	259	105	584405	587856	592059	596212	599281
Ceuta	5751	169	55	5755	5765	5787	5792	5792
Comunidad.Valenciana	390286	37	14	390413	390905	391634	392929	394236
Extremadura	73804	96	41	73862	74034	74295	74549	74751
Galicia	121767	86	36	121920	122329	122863	123418	123845
Islas.Baleares	59198	47	18	59230	59329	59476	59662	59837
La.Rioja	29548	228	86	29591	29696	29807	29922	29988
Madrid	680639	329	134	681958	685690	690928	695747	700290
Melilla	8695	305	119	8706	8735	8774	8791	8794
Murcia	110756	61	25	110822	111022	111312	111715	112078
Navarra	59728	303	126	59842	60131	60525	60808	61001
País.Vasco	184906	411	144	185468	186425	187123	187796	187628

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

Tabla Ratio Incr. Confirmados: Mod. Lineal.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0016	0.0022	0.0062	0.0122	0.0164	0.0209
Andalucía	0.0018	0.0023	0.0072	0.0141	0.0195	0.0247
Aragón	0.0018	0.0025	0.0078	0.0156	0.0222	0.0284
Asturias	0.0011	0.0015	0.0032	0.0055	0.0055	0.0062
Canarias	0.0021	0.0026	0.0072	0.0133	0.0175	0.0215
Cantabria	0.0027	0.0036	0.0107	0.0210	0.0299	0.0381
Castilla.y.León	0.0011	0.0018	0.0049	0.0097	0.0128	0.0164
Castilla.La.Mancha	0.0010	0.0016	0.0038	0.0071	0.0085	0.0104
Cataluña	0.0021	0.0028	0.0083	0.0165	0.0230	0.0294
Ceuta	0.0013	0.0008	0.0028	0.0058	0.0061	0.0077
Comunidad.Valenciana	0.0003	0.0009	0.0016	0.0034	0.0033	0.0046
Extremadura	0.0009	0.0014	0.0036	0.0073	0.0093	0.0120
Galicia	0.0012	0.0018	0.0048	0.0095	0.0125	0.0159
Islas.Baleares	0.0005	0.0011	0.0024	0.0048	0.0053	0.0069
La.Rioja	0.0014	0.0020	0.0052	0.0098	0.0126	0.0156
Madrid	0.0020	0.0026	0.0080	0.0162	0.0228	0.0297
Melilla	0.0017	0.0017	0.0052	0.0102	0.0130	0.0162
Murcia	0.0005	0.0011	0.0025	0.0051	0.0059	0.0077
Navarra	0.0020	0.0024	0.0074	0.0145	0.0199	0.0254
País.Vasco	0.0025	0.0029	0.0073	0.0121	0.0149	0.0164

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

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0016	0.0024	0.0088	0.0189	0.0293	0.0389
Andalucía	0.0018	0.0027	0.0100	0.0216	0.0331	0.0439
Aragón	0.0018	0.0024	0.0088	0.0191	0.0297	0.0396
Asturias	0.0011	0.0022	0.0083	0.0179	0.0276	0.0366
Canarias	0.0021	0.0034	0.0127	0.0268	0.0404	0.0531
Cantabria	0.0027	0.0038	0.0141	0.0296	0.0452	0.0600
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	0.0307
Cataluña	0.0021	0.0031	0.0112	0.0240	0.0369	0.0492
Ceuta	0.0013	0.0027	0.0100	0.0217	0.0327	0.0428
Comunidad.Valenciana	0.0003	0.0009	0.0037	0.0081	0.0132	0.0181
Extremadura	0.0009	0.0015	0.0057	0.0122	0.0193	0.0259
Galicia	0.0012	0.0017	0.0066	0.0143	0.0224	0.0300
Islas.Baleares	0.0005	0.0012	0.0046	0.0099	0.0158	0.0214
La.Rioja	0.0014	0.0021	0.0080	0.0173	0.0270	0.0360
Madrid	0.0020	0.0029	0.0107	0.0229	0.0352	0.0468
Melilla	0.0017	0.0030	0.0108	0.0232	0.0353	0.0467
Murcia	0.0005	0.0011	0.0043	0.0094	0.0150	0.0205
Navarra	0.0020	0.0031	0.0113	0.0242	0.0370	0.0489
País.Vasco	0.0025	0.0042	0.0158	0.0316	0.0476	0.0619

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

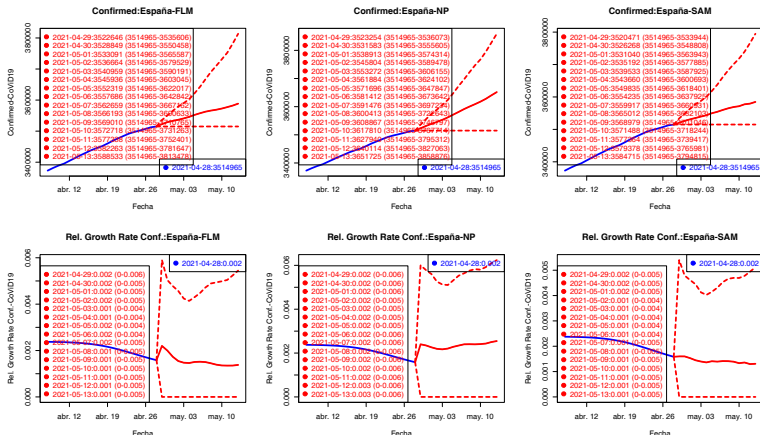
Tabla Ratio Incr. Confirmados: Mod. Aditivo.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0016	0.0016	0.0058	0.0112	0.0161	0.0198
Andalucía	0.0018	0.0018	0.0064	0.0126	0.0175	0.0205
Aragón	0.0018	0.0021	0.0075	0.0147	0.0218	0.0269
Asturias	0.0011	0.0008	0.0028	0.0043	0.0047	0.0037
Canarias	0.0021	0.0020	0.0066	0.0114	0.0150	0.0164
Cantabria	0.0027	0.0031	0.0108	0.0195	0.0290	0.0358
Castilla.y.León	0.0011	0.0013	0.0046	0.0093	0.0141	0.0181
Castilla.La.Mancha	0.0010	0.0009	0.0034	0.0062	0.0089	0.0109
Cataluña	0.0021	0.0024	0.0083	0.0155	0.0227	0.0279
Ceuta	0.0013	0.0006	0.0024	0.0062	0.0071	0.0072
Comunidad.Valenciana	0.0003	0.0003	0.0016	0.0035	0.0068	0.0101
Extremadura	0.0009	0.0008	0.0031	0.0067	0.0101	0.0128
Galicia	0.0012	0.0013	0.0046	0.0090	0.0136	0.0171
Islas.Baleares	0.0005	0.0005	0.0022	0.0047	0.0078	0.0108
La.Rioja	0.0014	0.0014	0.0050	0.0088	0.0127	0.0149
Madrid	0.0020	0.0019	0.0074	0.0151	0.0222	0.0289
Melilla	0.0017	0.0013	0.0046	0.0090	0.0110	0.0114
Murcia	0.0005	0.0006	0.0024	0.0050	0.0087	0.0119
Navarra	0.0020	0.0019	0.0068	0.0133	0.0181	0.0213
País.Vasco	0.0025	0.0030	0.0082	0.0120	0.0156	0.0147

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

Confirmados: España

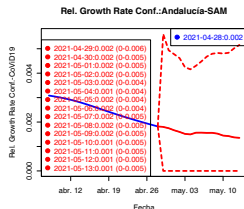
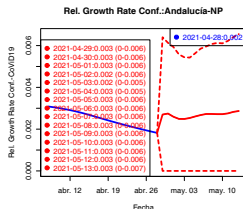
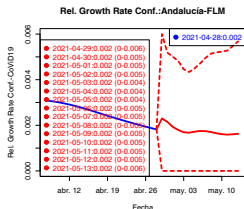
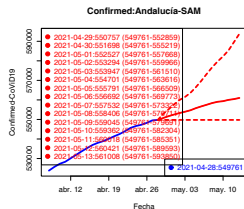
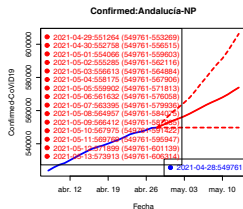
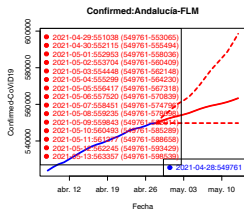


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Andalucía

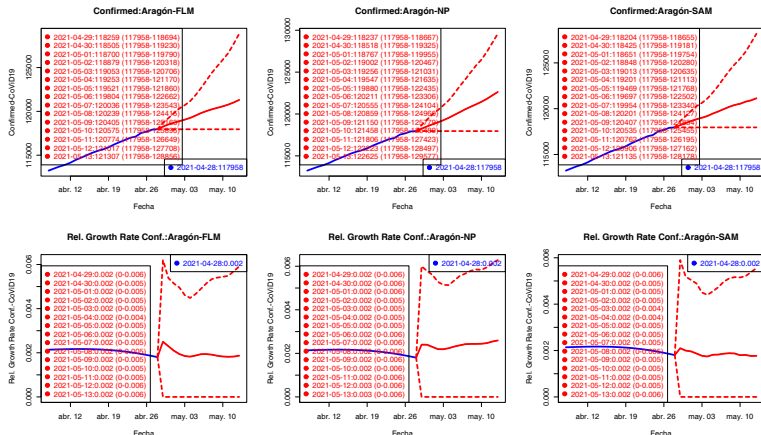


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

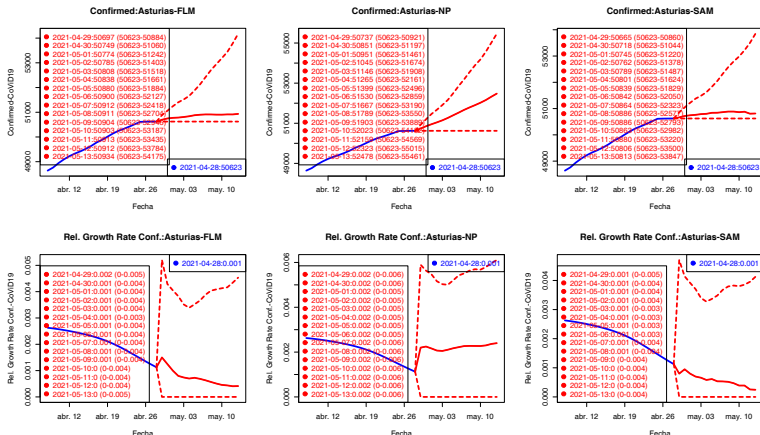
Confirmados: Aragón



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

◀ Confirmados ▶ Fallecidos

Confirmados: Asturias

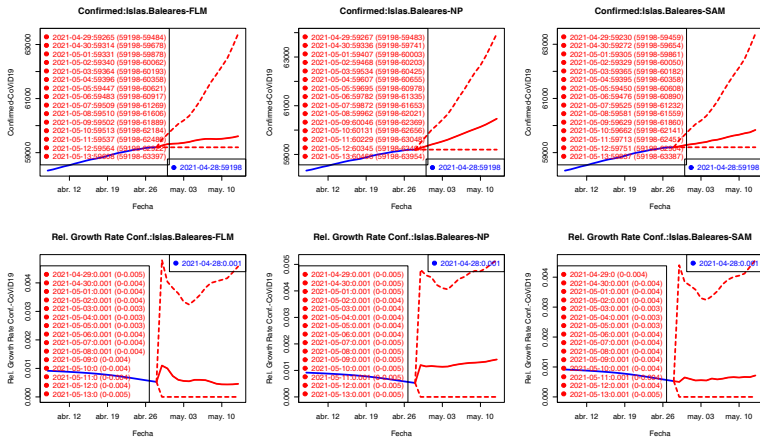


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

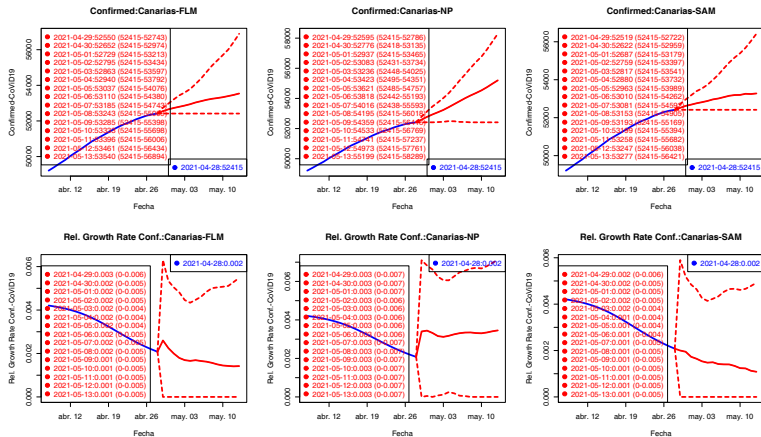
◀ Fallecidos

Confirmados: Islas Baleares



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

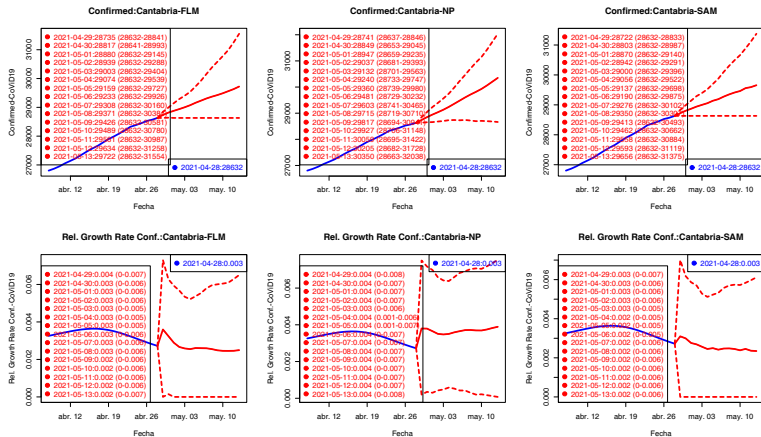
Confirmados: Canarias



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

◀ Confirmados ▶ Fallecidos

Confirmados: Cantabria



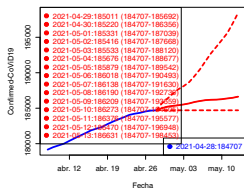
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

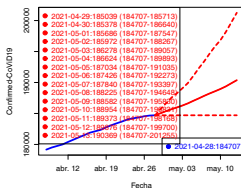
← Fallecidos

Confirmados: Castilla-La Mancha

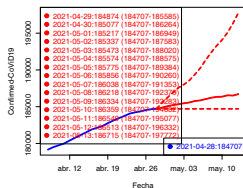
Confirmed:Castilla.La.Mancha-FLM



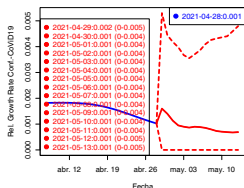
Confirmed:Castilla.La.Mancha-NP



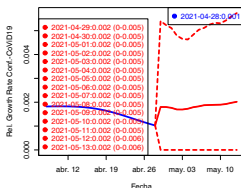
Confirmed:Castilla.La.Mancha-SAM



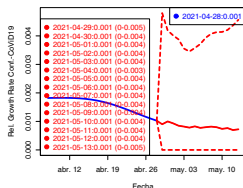
Rel. Growth Rate Conf.:Castilla.La.Mancha-FLM



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



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

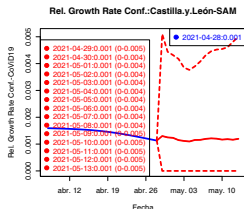
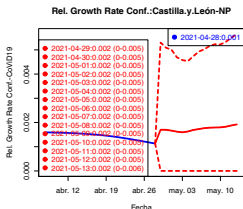
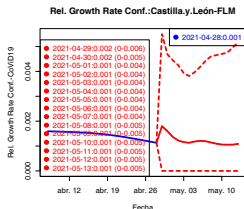
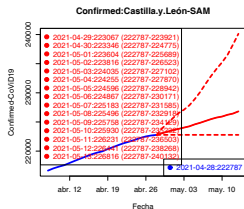
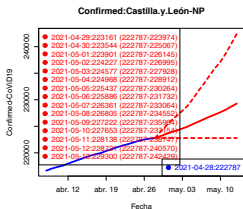
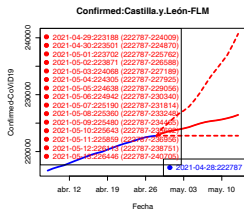


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

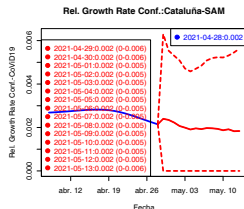
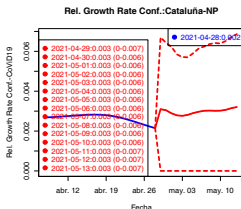
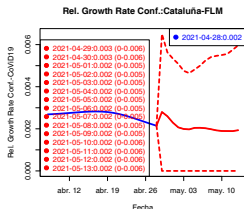
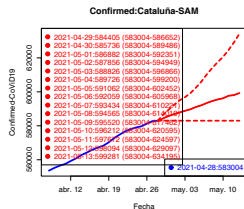
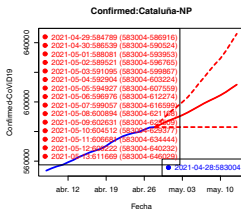
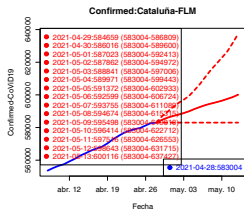


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

← Confirmados

← Fallecidos

Confirmados: Cataluña



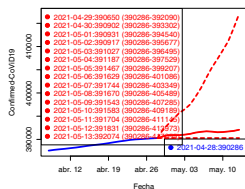
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

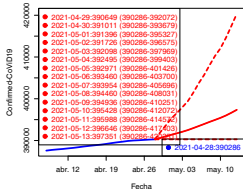
◀ Fallecidos

Confirmados: C. Valenciana

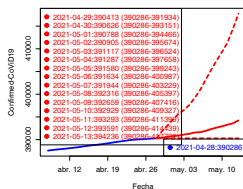
Confirmed:Comunidad.Valenciana-FLM



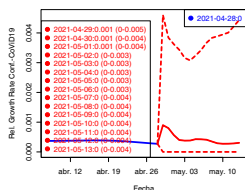
Confirmed:Comunidad.Valenciana-NP



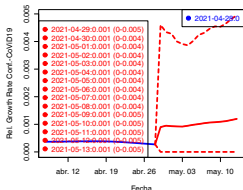
Confirmed:Comunidad.Valenciana-SAM



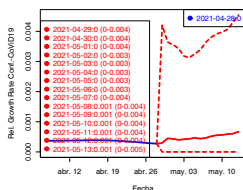
Rel. Growth Rate Conf.:Comunidad.Valenciana-FLM



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



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

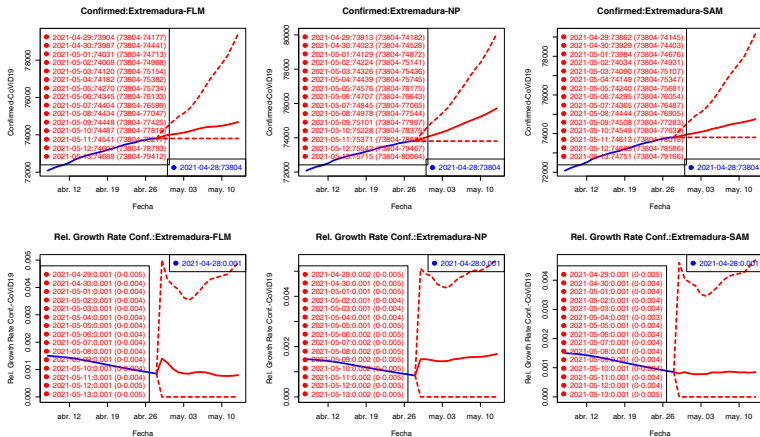


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Extremadura

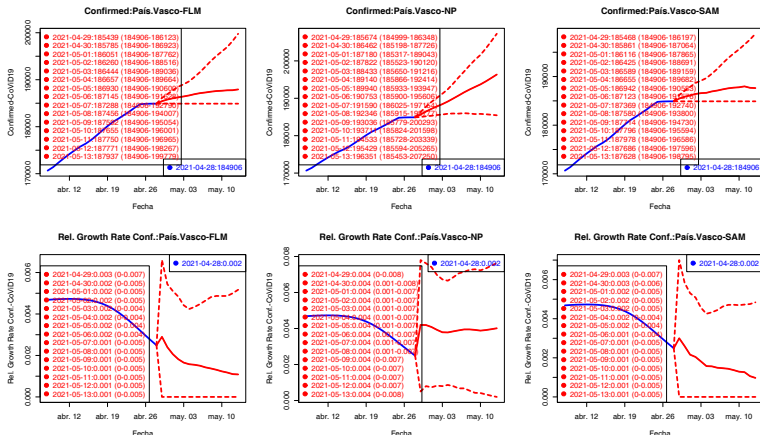


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: País Vasco



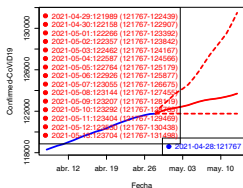
Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

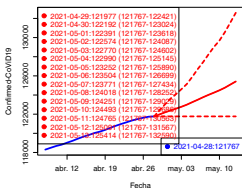
◀ Fallecidos

Confirmados: Galicia

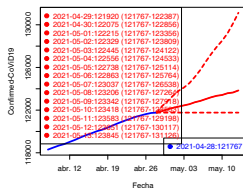
Confirmed:Galicia-FLM



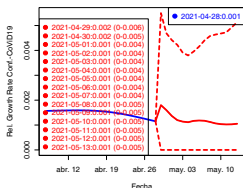
Confirmed:Galicia-NP



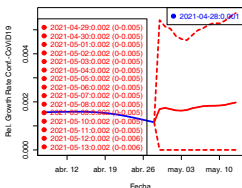
Confirmed:Galicia-SAM



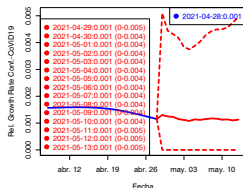
Rel. Growth Rate Conf.:Galicia-FLM



Rel. Growth Rate Conf.:Galicia-NP



Rel. Growth Rate Conf.:Galicia-SAM

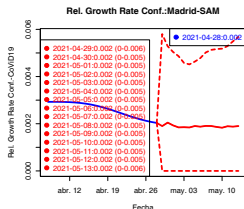
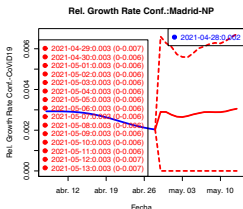
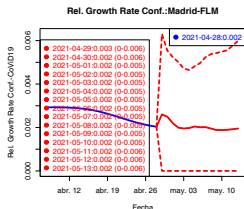
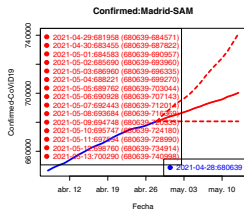
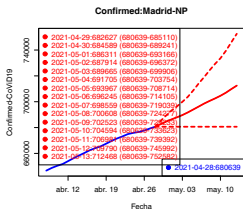
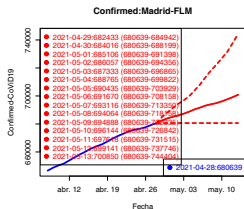


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

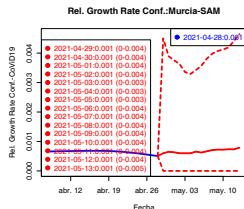
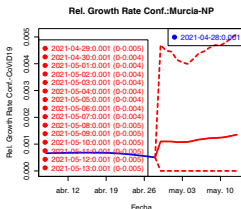
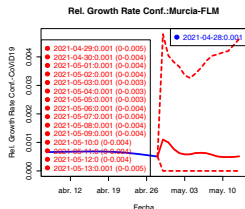
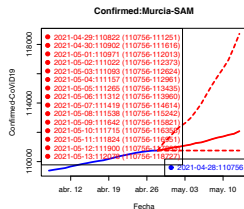
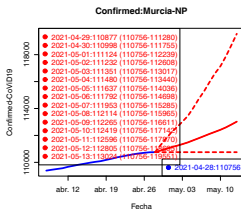
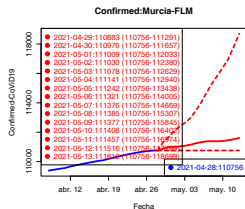


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

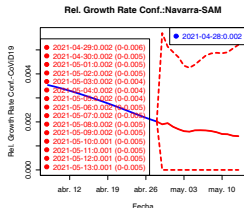
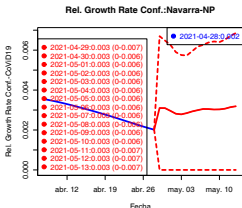
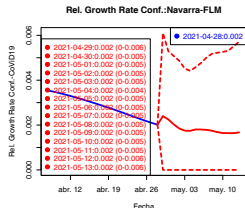
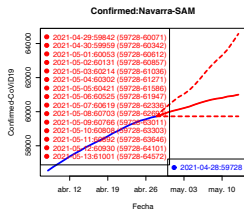
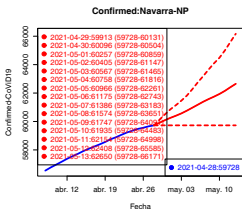
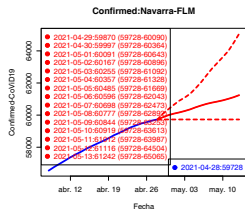


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

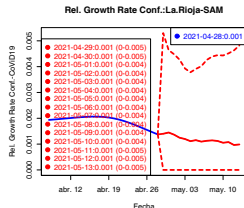
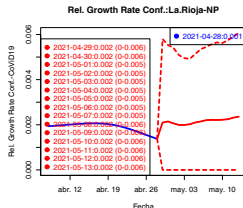
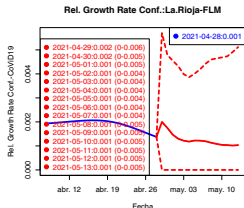
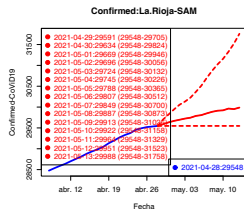
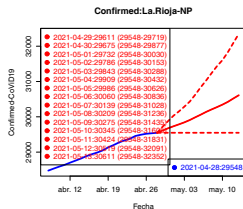
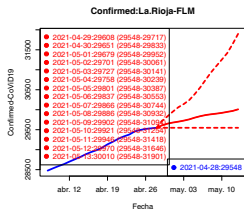


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



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

◀ Confirmados

◀ Fallecidos

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 - Predicciones
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- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Último dato: 28/04/2021 Fuente: https://cneccovid.isciii.es/covid19/resources/casos_hosp_uci_def_sexo_edad_provres.csv

Predicciones:

▶ España

► Andalucía

► Aragón

▶ Asturias

▶ I. Balears

▶ 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

	$10^2 \sigma_R^2$			$10^2 \sigma_R^2(\text{rob.})$			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	0.563	0.625	0.567
H4	0.018	0.017	0.017	0.008	0.009	0.007	0.819	0.832	0.831
H8	0.063	0.066	0.058	0.034	0.039	0.03	0.859	0.854	0.869
H12	0.134	0.144	0.119	0.092	0.098	0.075	0.864	0.858	0.879
H15	0.21	0.234	0.177	0.165	0.195	0.129	0.873	0.862	0.892

Tabla Previsión Fallecidos: Mod. Lineal.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	77686	77732	77784	77868	77813	77711
Andalucía	9536	9543	9553	9567	9563	9552
Aragón	3414	3417	3422	3429	3431	3431
Asturias	1943	1944	1945	1945	1943	1943
Canarias	717	718	720	724	725	725
Cantabria	556	556	557	558	558	558
Castilla.y.León	6696	6700	6702	6706	6700	6696
Castilla.La.Mancha	5819	5820	5819	5819	5819	5819
Cataluña	13904	13909	13913	13920	13904	13904
Ceuta	104	104	105	106	107	107
Comunidad.Valenciana	7262	7264	7262	7262	7262	7262
Extremadura	1772	1773	1774	1777	1776	1775
Galicia	2372	2373	2375	2377	2376	2373
Islas.Baleares	820	820	821	822	821	820
La.Rioja	759	759	760	762	761	761
Madrid	15024	15038	15060	15097	15108	15106
Melilla	89	89	89	90	90	89
Murcia	1587	1587	1587	1587	1587	1587
Navarra	1155	1157	1161	1167	1172	1175
País.Vasco	4157	4159	4164	4164	4157	4157

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

Tabla Previsión Fallecidos: Mod. Aditivo.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	77686	77713	77847	77994	78084	78125
Andalucía	9536	9542	9561	9592	9600	9611
Aragón	3414	3416	3424	3434	3442	3449
Asturias	1943	1943	1946	1948	1949	1946
Canarias	717	718	721	727	730	733
Cantabria	556	556	557	559	559	560
Castilla.y.León	6696	6698	6708	6719	6729	6734
Castilla.La.Mancha	5819	5819	5826	5836	5839	5845
Cataluña	13904	13905	13927	13924	13931	13916
Ceuta	104	104	105	106	107	107
Comunidad.Valenciana	7262	7262	7268	7271	7283	7286
Extremadura	1772	1773	1776	1781	1785	1789
Galicia	2372	2373	2376	2379	2384	2385
Islas.Baleares	820	820	821	823	824	825
La.Rioja	759	759	761	764	765	767
Madrid	15024	15034	15061	15107	15126	15137
Melilla	89	89	89	90	90	91
Murcia	1587	1587	1589	1591	1594	1596
Navarra	1155	1156	1159	1161	1166	1164
País.Vasco	4157	4159	4171	4176	4172	4157

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

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0006	0.0006	0.0013	0.0023	0.0016	0.0003
Andalucía	0.0008	0.0008	0.0018	0.0033	0.0028	0.0017
Aragón	0.0007	0.0009	0.0022	0.0043	0.0051	0.0049
Asturias	0.0005	0.0005	0.0008	0.0010	0.0000	0.0000
Canarias	0.0018	0.0014	0.0042	0.0095	0.0104	0.0116
Cantabria	0.0006	0.0006	0.0017	0.0039	0.0037	0.0038
Castilla.y.León	0.0004	0.0005	0.0008	0.0015	0.0006	0.0000
Castilla.La.Mancha	0.0003	0.0002	0.0000	0.0000	0.0000	0.0000
Cataluña	0.0003	0.0003	0.0007	0.0011	0.0000	0.0000
Ceuta	0.0028	0.0031	0.0086	0.0189	0.0258	0.0290
Comunidad.Valenciana	0.0001	0.0002	0.0000	0.0000	0.0000	0.0000
Extremadura	0.0006	0.0006	0.0013	0.0030	0.0024	0.0017
Galicia	0.0005	0.0006	0.0012	0.0022	0.0018	0.0005
Islas.Baleares	0.0004	0.0005	0.0008	0.0022	0.0015	0.0006
La.Rioja	0.0006	0.0006	0.0013	0.0034	0.0028	0.0023
Madrid	0.0008	0.0009	0.0024	0.0048	0.0056	0.0055
Melilla	0.0017	0.0012	0.0040	0.0059	0.0058	0.0044
Murcia	0.0002	0.0003	0.0000	0.0000	0.0000	0.0000
Navarra	0.0015	0.0017	0.0054	0.0106	0.0147	0.0171
País.Vasco	0.0008	0.0006	0.0017	0.0017	0.0000	0.0000

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0006	0.0011	0.0050	0.0108	0.0165	0.0218
Andalucía	0.0008	0.0014	0.0058	0.0128	0.0195	0.0260
Aragón	0.0007	0.0013	0.0053	0.0116	0.0177	0.0235
Asturias	0.0005	0.0011	0.0047	0.0103	0.0156	0.0207
Canarias	0.0018	0.0025	0.0090	0.0199	0.0299	0.0399
Cantabria	0.0006	0.0012	0.0053	0.0114	0.0174	0.0231
Castilla.y.León	0.0004	0.0010	0.0046	0.0100	0.0152	0.0202
Castilla.La.Mancha	0.0003	0.0010	0.0047	0.0101	0.0153	0.0203
Cataluña	0.0003	0.0010	0.0044	0.0096	0.0145	0.0192
Ceuta	0.0028	0.0029	0.0103	0.0231	0.0349	0.0467
Comunidad.Valenciana	0.0001	0.0009	0.0040	0.0087	0.0130	0.0172
Extremadura	0.0006	0.0012	0.0050	0.0109	0.0167	0.0221
Galicia	0.0005	0.0010	0.0045	0.0097	0.0148	0.0195
Islas.Baleares	0.0004	0.0009	0.0042	0.0092	0.0138	0.0183
La.Rioja	0.0006	0.0011	0.0047	0.0102	0.0155	0.0205
Madrid	0.0008	0.0013	0.0054	0.0119	0.0181	0.0241
Melilla	0.0017	0.0029	0.0101	0.0221	0.0330	0.0434
Murcia	0.0002	0.0009	0.0043	0.0093	0.0141	0.0186
Navarra	0.0015	0.0016	0.0062	0.0136	0.0208	0.0278
País.Vasco	0.0008	0.0015	0.0061	0.0133	0.0203	0.0271

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

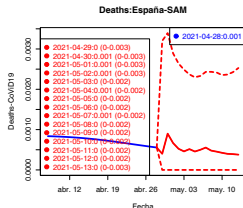
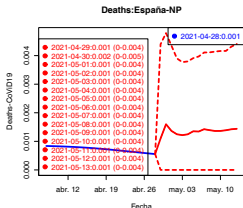
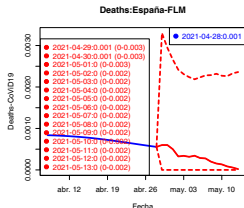
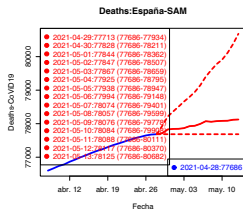
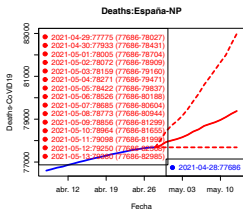
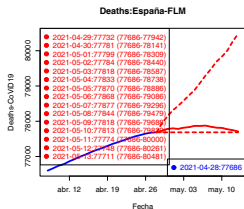
Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

Last=28/04/2021

	Last	H1	H4	H8	H12	H15
España	0.0006	0.0004	0.0021	0.0040	0.0051	0.0057
Andalucía	0.0008	0.0006	0.0026	0.0059	0.0067	0.0078
Aragón	0.0007	0.0006	0.0031	0.0057	0.0083	0.0101
Asturias	0.0005	0.0002	0.0017	0.0028	0.0031	0.0016
Canarias	0.0018	0.0015	0.0055	0.0145	0.0176	0.0222
Cantabria	0.0006	0.0005	0.0027	0.0054	0.0062	0.0072
Castilla.y.León	0.0004	0.0002	0.0018	0.0035	0.0050	0.0057
Castilla.La.Mancha	0.0003	0.0000	0.0013	0.0029	0.0035	0.0045
Cataluña	0.0003	0.0001	0.0016	0.0015	0.0019	0.0008
Ceuta	0.0028	0.0023	0.0071	0.0190	0.0253	0.0267
Comunidad.Valenciana	0.0001	0.0000	0.0008	0.0013	0.0028	0.0032
Extremadura	0.0006	0.0004	0.0021	0.0050	0.0072	0.0093
Galicia	0.0005	0.0002	0.0018	0.0031	0.0050	0.0054
Islas.Baleares	0.0004	0.0001	0.0015	0.0032	0.0055	0.0064
La.Rioja	0.0006	0.0004	0.0029	0.0060	0.0083	0.0104
Madrid	0.0008	0.0007	0.0025	0.0055	0.0068	0.0075
Melilla	0.0017	0.0010	0.0052	0.0097	0.0142	0.0182
Murcia	0.0002	0.0000	0.0013	0.0026	0.0043	0.0058
Navarra	0.0015	0.0011	0.0035	0.0052	0.0092	0.0080
País.Vasco	0.0008	0.0004	0.0033	0.0046	0.0036	0.0000

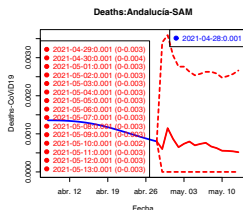
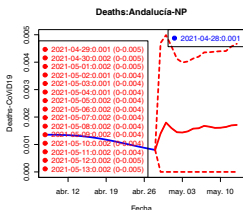
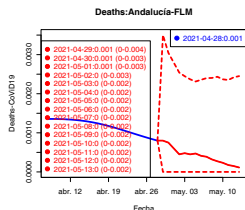
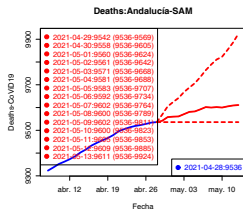
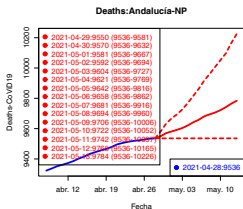
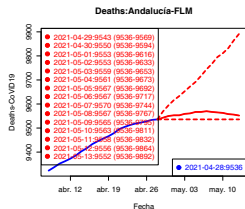
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Fallecidos: España



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

Fallecidos: Andalucía

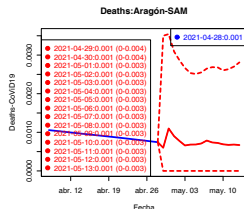
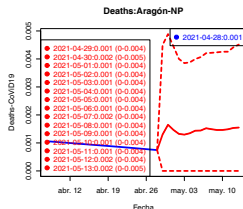
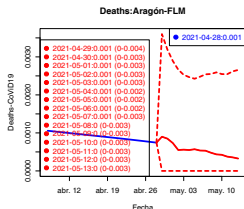
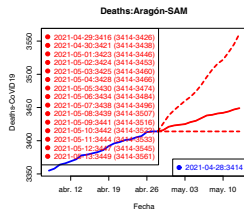
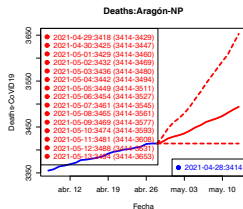
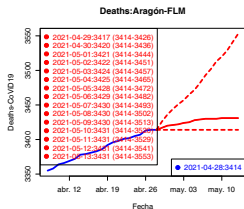


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

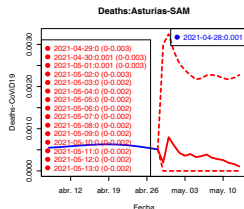
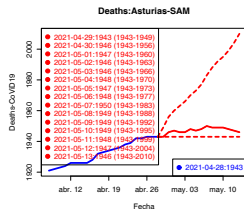
◀ Confirmados

◀ Fallecidos

Fallecidos: Aragón

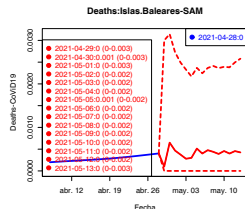
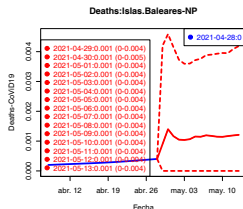
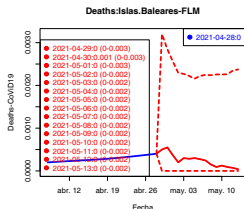
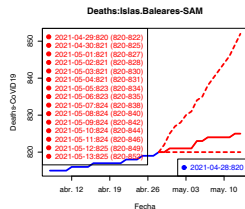
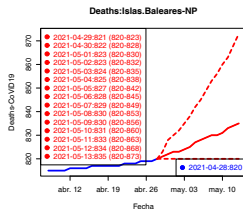
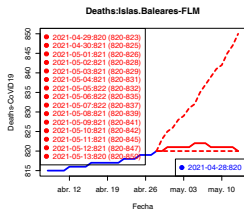


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.



◀ Confirmados ◀ Fallecidos

Fallecidos: Islas Baleares

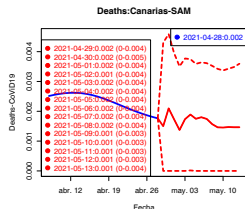
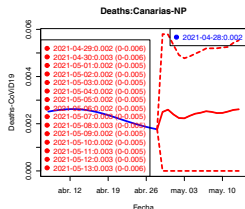
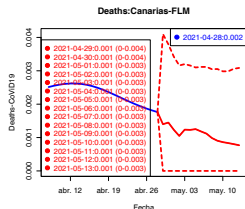
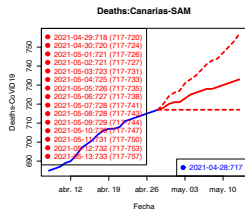
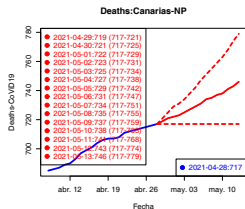
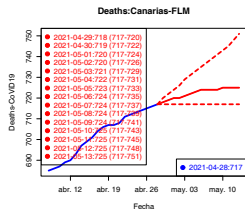


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

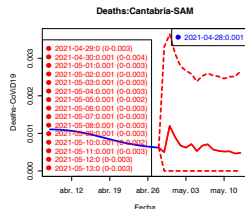
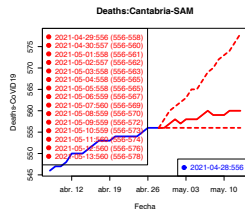
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Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

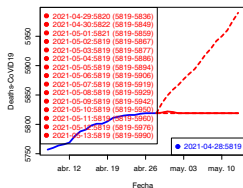
◀ Fallecidos



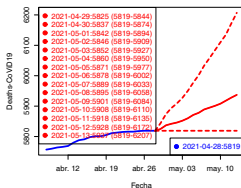
◀ Confirmados ▶ Fallecidos

Fallecidos: Castilla-La Mancha

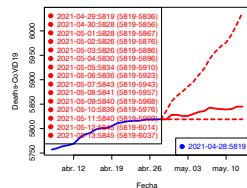
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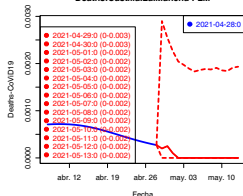
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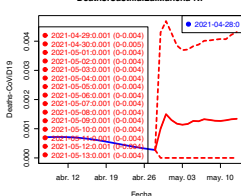
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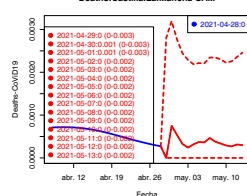
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Deaths:Castilla.La.Mancha-NP



Deaths:Castilla.La.Mancha-SAM

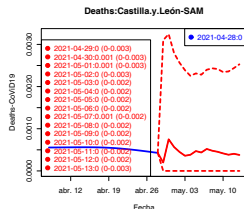
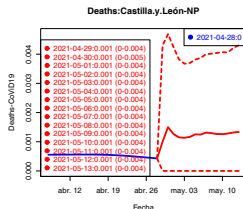
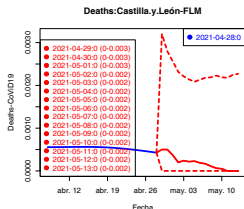
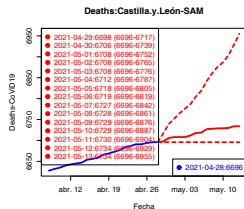
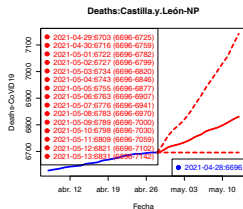
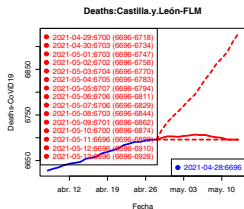


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

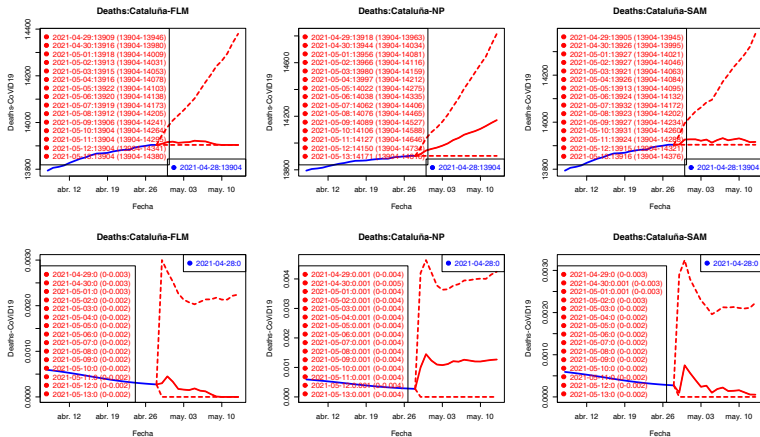
◀ Fallecidos

Fallecidos: Castilla y León



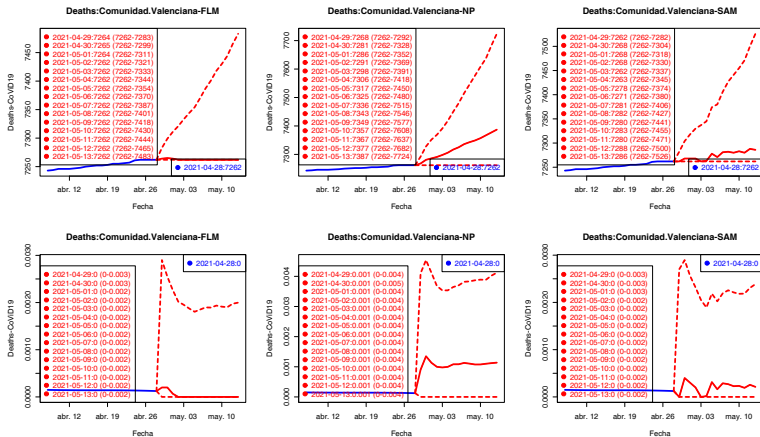
Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

Fallecidos: Cataluña



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

Fallecidos: C. Valenciana

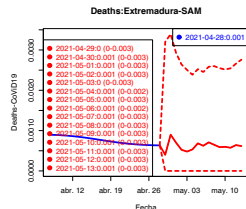
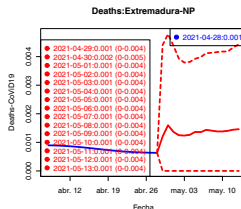
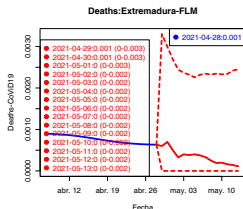
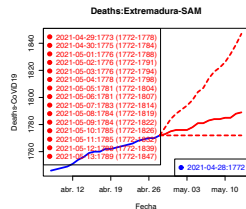
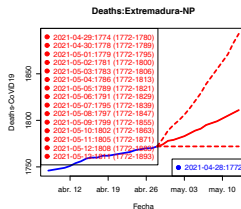
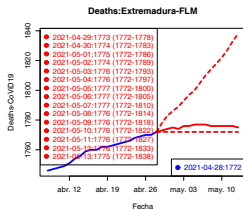


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Extremadura

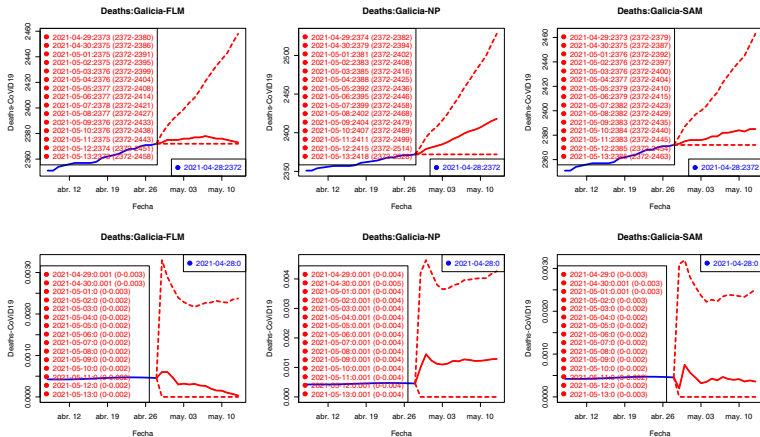


Los valores del Ratio de incremento de H2-H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Galicia

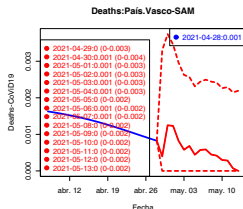
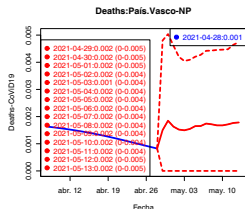
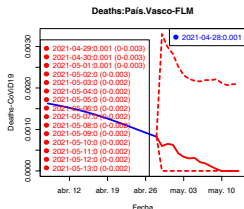
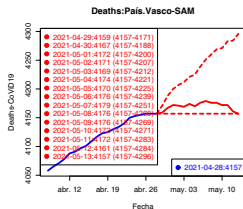
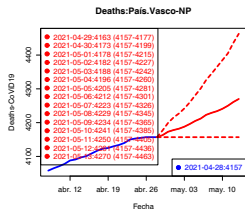
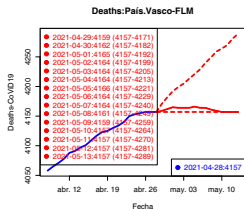


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◀ Confirmados

◀ Fallecidos

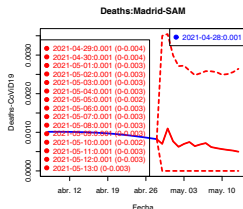
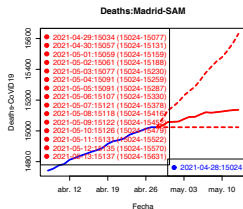
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Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

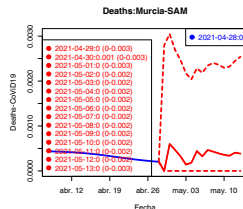
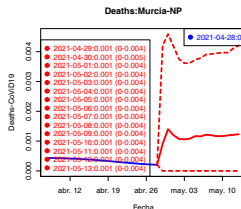
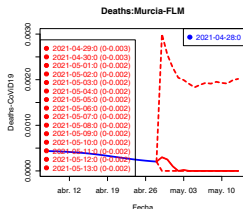
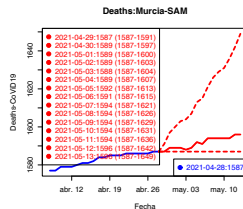
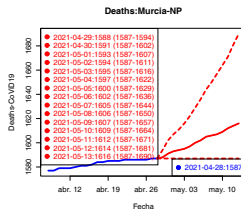
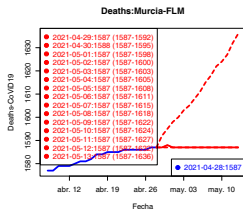
◀ Confirmados

◀ Fallecidos



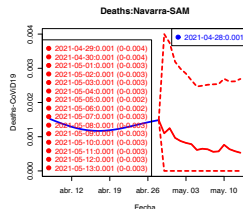
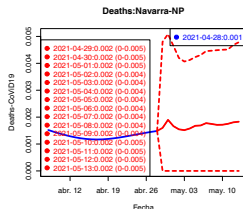
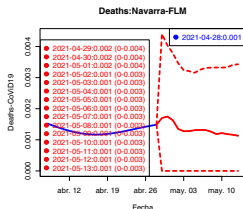
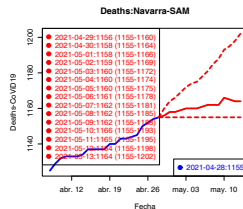
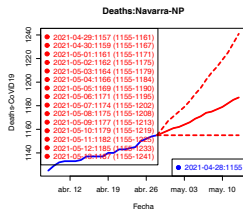
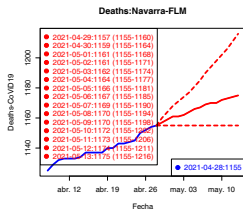
◀ Confirmados ▶ Fallecidos

Fallecidos: Murcia



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

Fallecidos: Navarra

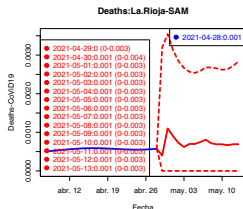
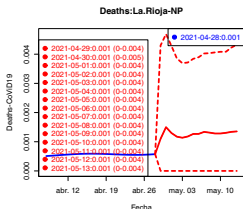
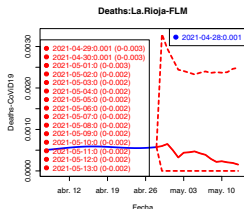
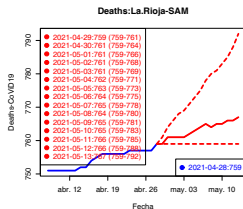
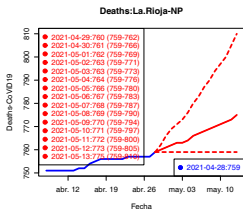
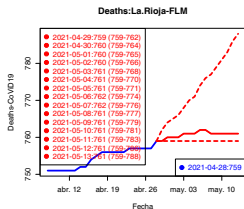


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: La Rioja

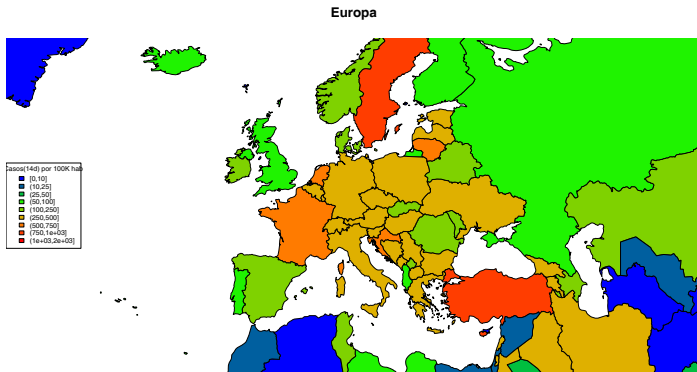


Los valores del Ratio de incremento de H2–H15 están rescalados a H1 para su comparación gráfica.

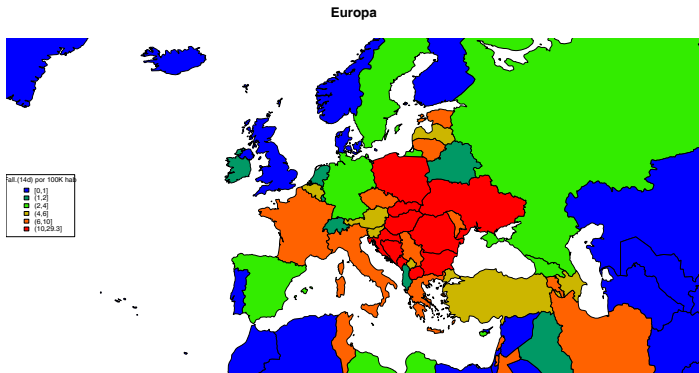
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- 3 Panorama internacional

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

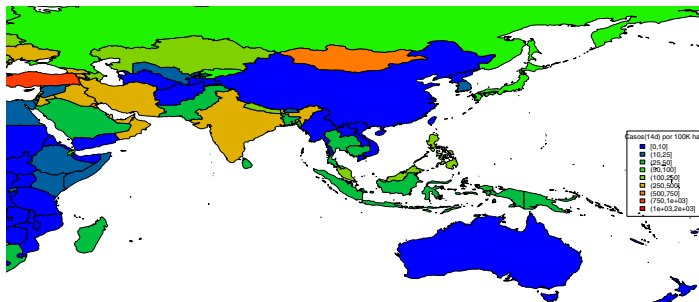


Europa: Fallecidos (14d) por 100K hab.



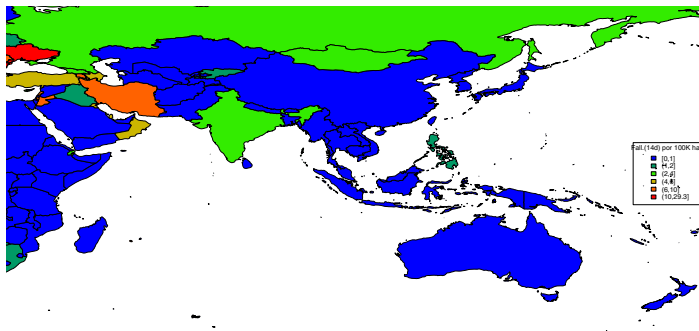
Asia y Oceanía: Incidencia acumulada (14d) por 100K hab.

Asia y Oceanía



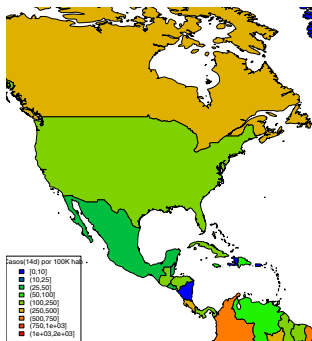
Asia y Oceanía: Fallecidos (14d) por 100K hab.

Asia y Oceanía

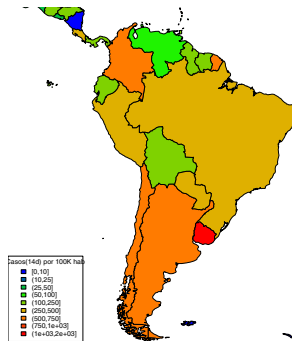


América: Incidencia acumulada (14d) por 100K hab.

América del Norte

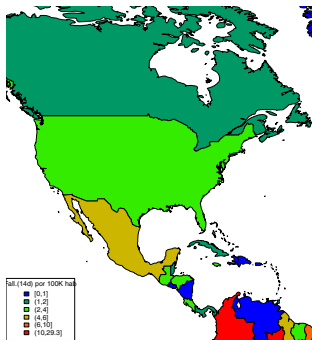


América del sur

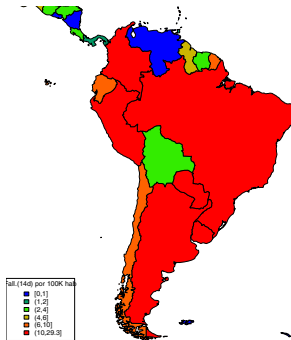


América: Fallecidos (14d) por 100K hab.

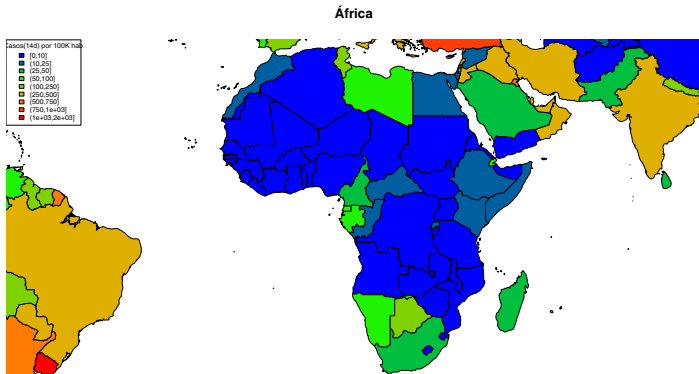
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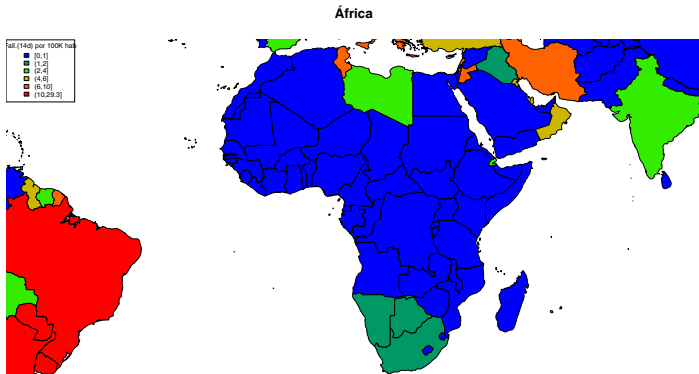
América del sur



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.