

Predicciones sobre CoViD-19

Manuel Febrero-Bande

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

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DEPARTAMENTO DE ESTATÍSTICA,
ANÁLISE MATEMÁTICA E OPTIMIZACIÓN



- Predicciones

- Predicciones Fallecidos

3 Panorama internacional

Datos

Aplicación Shiny disponible en

<http://modestya.securized.net/covid19prediction/>

Número de datos funcionales: 5867

Países/Regiones distintos incorporados: 163

Predicciones:

- ▶ España
- ▶ Andalucía
- ▶ Aragón
- ▶ Asturias
- ▶ I. Baleares
- ▶ Canarias
- ▶ Cantabria
- ▶ Cataluña
- ▶ Castilla-La Mancha
- ▶ Castilla y León
- ▶ C. Valenciana
- ▶ Extremadura
- ▶ País Vasco
- ▶ Galicia
- ▶ Madrid
- ▶ Murcia
- ▶ Navarra
- ▶ La Rioja
- ▶ Mod Lineal
- ▶ Mod NP
- ▶ Mod Aditivo

	σ_R^2			$\sigma_R^2(rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0.001	0.001	0.001	0.001	0	0.001	0.555	0.74	0.572
H2	0.002	0.001	0.002	0.002	0.001	0.002	0.677	0.823	0.693
H3	0.004	0.002	0.004	0.004	0.002	0.004	0.725	0.844	0.734
H4	0.007	0.004	0.007	0.007	0.005	0.007	0.745	0.855	0.753
H5	0.011	0.007	0.011	0.011	0.008	0.011	0.748	0.861	0.757

Último dato: 2020-05-13 21:00 que se publica 2020-05-14 12:00.

Tabla Previsión Confirmados: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	272646	274872	276820	278646	280170	281503
Andalucía	15823	15985	16134	16275	16399	16521
Aragón	6943	7015	7075	7124	7175	7224
Asturias	3266	3290	3311	3330	3346	3361
Islas.Baleares	2064	2073	2079	2085	2089	2091
Canarias	2275	2284	2292	2300	2305	2310
Cantabria	2739	2758	2774	2787	2800	2812
Castilla.La.Mancha	24331	24578	24801	25015	25192	25350
Castilla.y.León	24379	24618	24821	25006	25159	25288
Cataluña	57125	57711	58275	58841	59307	59662
Ceuta	175	177	178	178	179	180
Comunidad.Valenciana	14154	14282	14396	14503	14589	14668
Extremadura	3924	3945	3960	3973	3977	3977
Galicia	10832	10911	10974	11032	11078	11123
Madrid	70651	70942	71161	71358	71509	71640
Melilla	132	132	132	133	133	132
Murcia	2437	2473	2503	2531	2560	2592
Navarra	7891	8023	8138	8239	8336	8440
País.Vasco	18100	18270	18411	18531	18633	18726
La.Rioja	5405	5423	5436	5447	5453	5458

Cuadro: Previsión Confirmados: Mod. Lineal - Horizonte 1 – 5 días.

Tabla Previsión Confirmados: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	272646	274849	276202	277600	278935	279939
Andalucía	15823	15974	16081	16190	16284	16350
Aragón	6943	7014	7026	7055	7090	7108
Asturias	3266	3287	3298	3310	3323	3331
Islas.Baleares	2064	2070	2074	2077	2081	2083
Canarias	2275	2280	2287	2294	2300	2308
Cantabria	2739	2754	2759	2768	2777	2782
Castilla.La.Mancha	24331	24581	24748	24913	25057	25172
Castilla.y.León	24379	24650	24761	24890	25020	25100
Cataluña	57125	57840	58484	59091	59678	60272
Ceuta	175	176	176	176	176	176
Comunidad.Valenciana	14154	14271	14346	14415	14468	14502
Extremadura	3924	3944	3947	3949	3949	3943
Galicia	10832	10907	10934	10960	10989	10985
Madrid	70651	70826	70920	71030	71160	71228
Melilla	132	132	132	132	132	132
Murcia	2437	2474	2491	2508	2531	2539
Navarra	7891	8046	8102	8169	8244	8271
País.Vasco	18100	18283	18324	18389	18457	18474
La.Rioja	5405	5415	5418	5422	5428	5430

Cuadro: Previsión número de casos confirmados: Mod. Aditivo - Horizonte 1 – 5 días.

Tabla Ratio Incr. Confirmados: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.005	0.008	0.015	0.022	0.028	0.032
Andalucía	0.009	0.010	0.020	0.029	0.036	0.044
Aragón	0.010	0.010	0.019	0.026	0.033	0.041
Asturias	0.006	0.007	0.014	0.019	0.024	0.029
Islas.Baleares	0.001	0.004	0.007	0.010	0.012	0.013
Canarias	0.002	0.004	0.007	0.011	0.013	0.015
Cantabria	0.006	0.007	0.013	0.018	0.022	0.027
Castilla.La.Mancha	0.007	0.010	0.019	0.028	0.035	0.042
Castilla.y.León	0.006	0.010	0.018	0.026	0.032	0.037
Cataluña	0.005	0.010	0.020	0.030	0.038	0.044
Ceuta	0.009	0.009	0.014	0.018	0.024	0.029
Comunidad.Valenciana	0.007	0.009	0.017	0.025	0.031	0.036
Extremadura	0.001	0.005	0.009	0.012	0.013	0.013
Galicia	0.005	0.007	0.013	0.018	0.023	0.027
Madrid	0.002	0.004	0.007	0.010	0.012	0.014
Melilla	0.000	0.002	0.003	0.004	0.004	0.004
Murcia	0.015	0.015	0.027	0.039	0.051	0.064
Navarra	0.016	0.017	0.031	0.044	0.056	0.070
País.Vasco	0.007	0.009	0.017	0.024	0.029	0.035
La.Rioja	0.001	0.003	0.006	0.008	0.009	0.010

Cuadro: Previsión Ratio Incr. Confirmados: Mod. lineal - Horizonte 1 – 5 días.

Tabla Ratio Incr. Confirmados: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	0.005	0.005	0.009	0.014	0.018	0.023
Andalucía	0.009	0.006	0.011	0.017	0.022	0.027
Aragón	0.010	0.007	0.014	0.021	0.027	0.033
Asturias	0.006	0.004	0.009	0.013	0.017	0.021
Islas.Baleares	0.001	0.003	0.005	0.008	0.010	0.013
Canarias	0.002	0.002	0.004	0.006	0.009	0.011
Cantabria	0.006	0.004	0.008	0.011	0.015	0.019
Castilla.La.Mancha	0.007	0.008	0.016	0.023	0.030	0.037
Castilla.y.León	0.006	0.008	0.015	0.023	0.030	0.037
Cataluña	0.005	0.005	0.010	0.015	0.020	0.025
Ceuta	0.009	0.008	0.016	0.024	0.031	0.039
Comunidad.Valenciana	0.007	0.006	0.013	0.019	0.025	0.031
Extremadura	0.001	0.004	0.008	0.012	0.015	0.019
Galicia	0.005	0.005	0.009	0.014	0.018	0.023
Madrid	0.002	0.002	0.005	0.007	0.010	0.012
Melilla	0.000	0.003	0.005	0.008	0.010	0.013
Murcia	0.015	0.011	0.022	0.033	0.043	0.053
Navarra	0.016	0.012	0.023	0.034	0.045	0.055
País.Vasco	0.007	0.006	0.012	0.019	0.024	0.030
La.Rioja	0.001	0.002	0.005	0.007	0.009	0.012

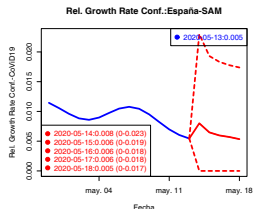
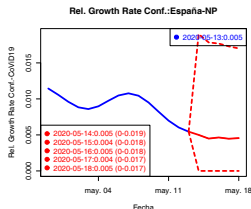
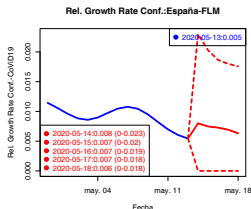
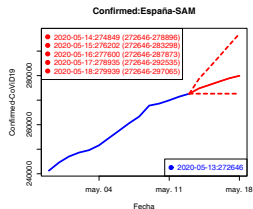
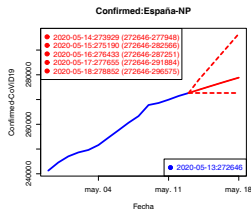
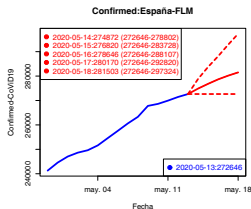
Cuadro: Previsión Ratio Incr. Confirmados: Mod. No Paramétrico - Horizonte 1
– 5 días.

Tabla Ratio Incr. Confirmados: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	0.005	0.008	0.013	0.018	0.023	0.027
Andalucía	0.009	0.010	0.016	0.023	0.029	0.033
Aragón	0.010	0.010	0.012	0.016	0.021	0.024
Asturias	0.006	0.007	0.010	0.014	0.017	0.020
Islas.Baleares	0.001	0.003	0.005	0.006	0.008	0.009
Canarias	0.002	0.002	0.005	0.008	0.011	0.014
Cantabria	0.006	0.005	0.007	0.011	0.014	0.016
Castilla.La.Mancha	0.007	0.010	0.017	0.024	0.030	0.035
Castilla.y.León	0.006	0.011	0.016	0.021	0.026	0.030
Cataluña	0.005	0.013	0.024	0.034	0.045	0.055
Ceuta	0.009	0.008	0.006	0.005	0.008	0.005
Comunidad.Valenciana	0.007	0.008	0.014	0.018	0.022	0.025
Extremadura	0.001	0.005	0.006	0.006	0.006	0.005
Galicia	0.005	0.007	0.009	0.012	0.015	0.014
Madrid	0.002	0.002	0.004	0.005	0.007	0.008
Melilla	0.000	0.000	0.000	0.001	0.001	0.000
Murcia	0.015	0.015	0.022	0.029	0.039	0.042
Navarra	0.016	0.020	0.027	0.035	0.045	0.048
País.Vasco	0.007	0.010	0.012	0.016	0.020	0.021
La.Rioja	0.001	0.002	0.002	0.003	0.004	0.005

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

Confirmados: España



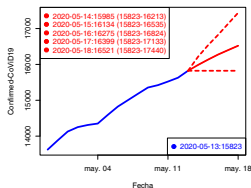
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

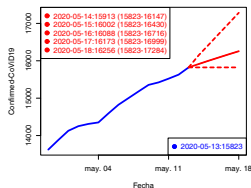
◀ Fallecidos

Confirmados: Andalucía

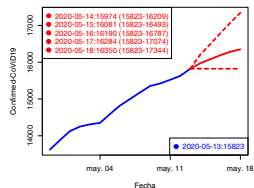
Confirmed:Andalucía-FLM



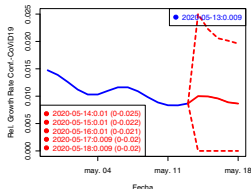
Confirmed:Andalucía-NP



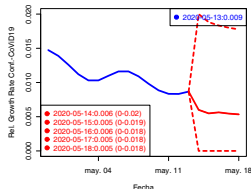
Confirmed:Andalucía-SAM



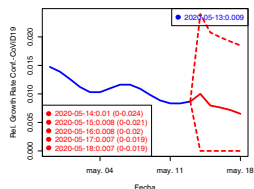
Rel. Growth Rate Conf.:Andalucia-FLM



Rel. Growth Rate Conf.:Andalucia-NP



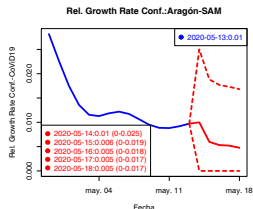
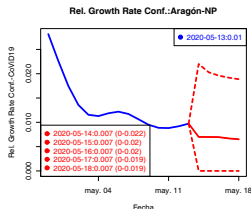
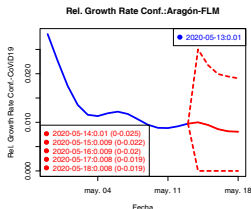
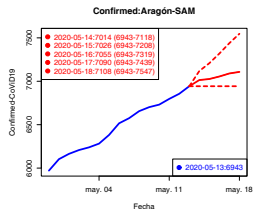
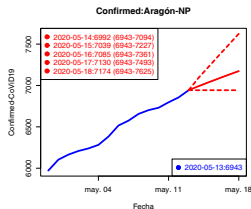
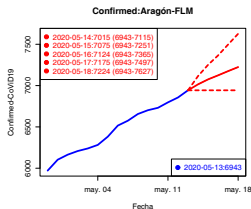
Rel. Growth Rate Conf.:Andalucia-SAM



Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

[← Confirmados](#)
[← Fallecidos](#)

Confirmados: Aragón

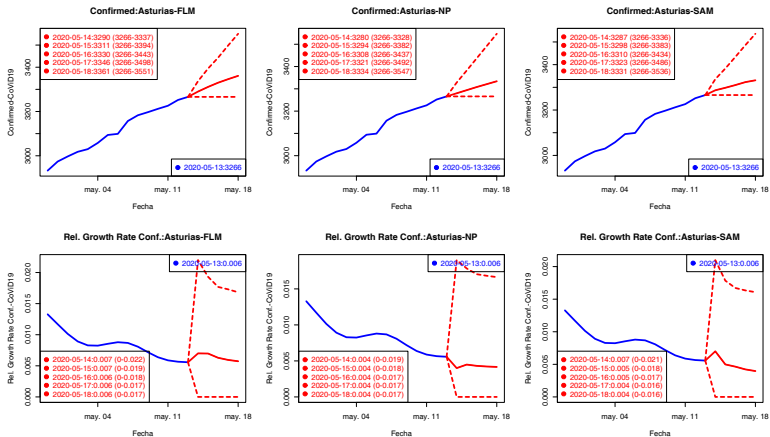


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Asturias

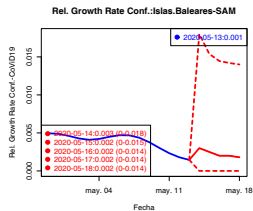
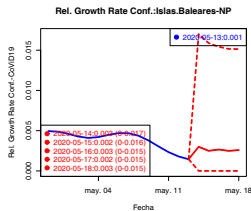
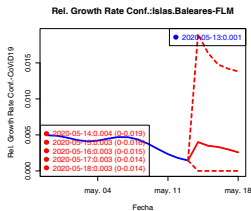
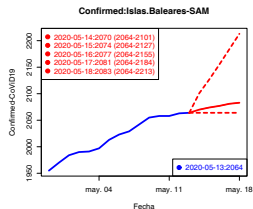
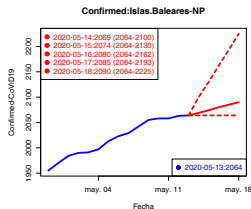
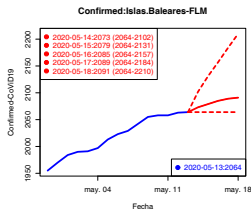


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Islas Baleares

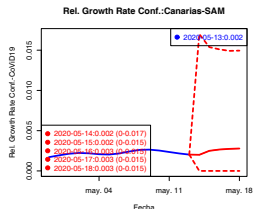
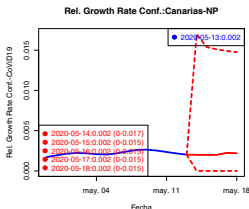
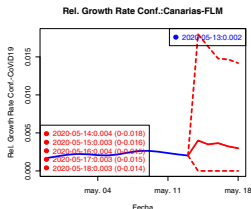
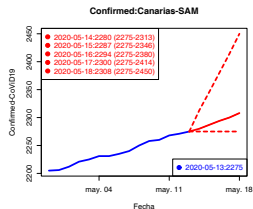
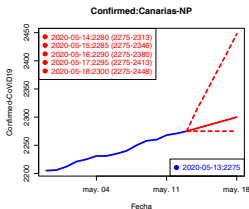
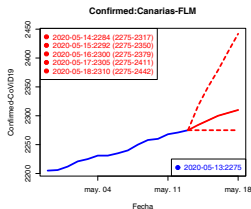


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Canarias

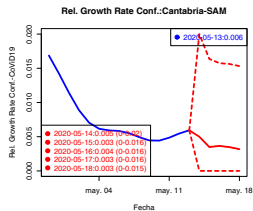
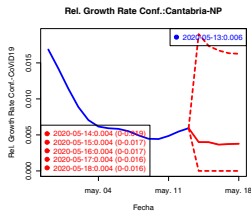
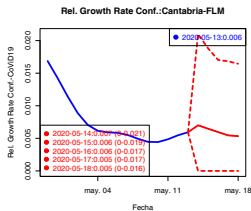
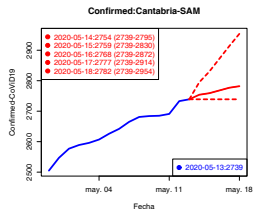
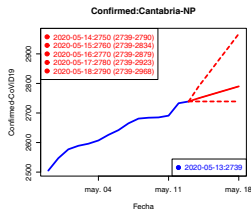
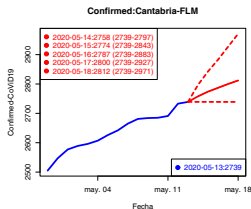


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cantabria



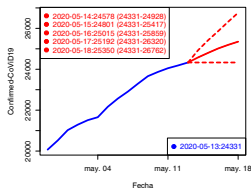
Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

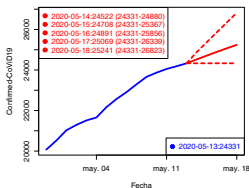
◀ Fallecidos

Confirmados: Castilla-La Mancha

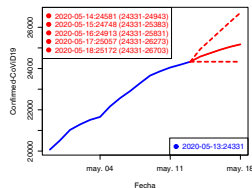
Confirmed:Castilla.La.Mancha-FLM



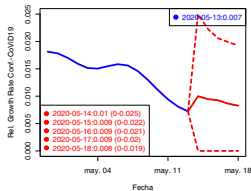
Confirmed:Castilla.La.Mancha-NP



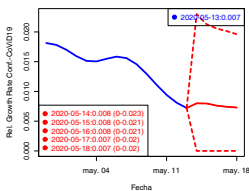
Confirmed:Castilla.La.Mancha-SAM



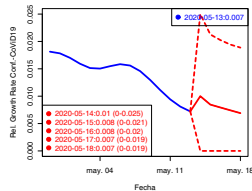
Rel. Growth Rate Conf.:Castilla.La.Mancha-FLM



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



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

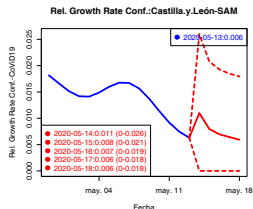
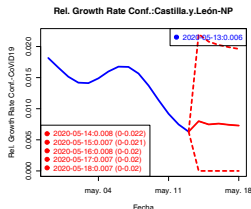
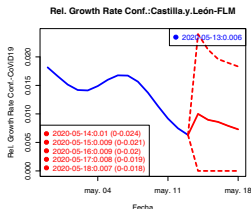
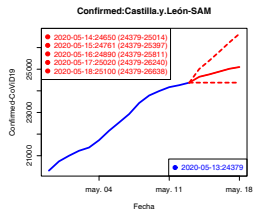
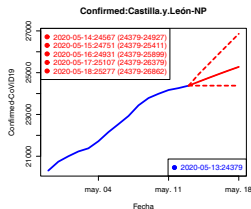
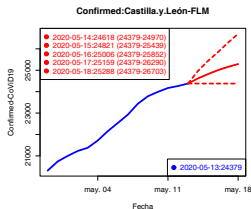


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Castilla y León

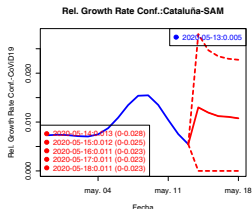
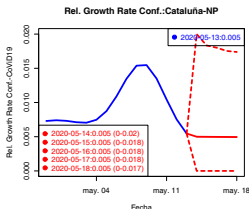
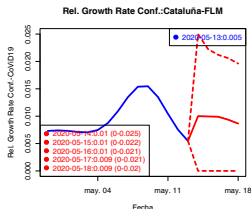
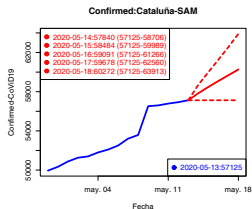
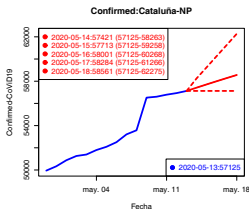
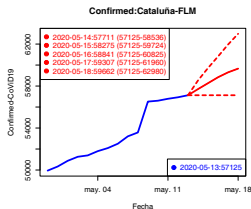


Los valores del Ratio de incremento de H2—H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Cataluña



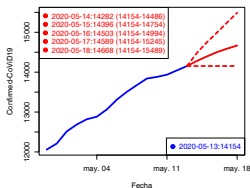
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

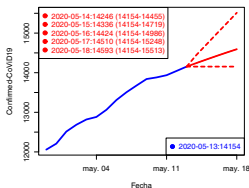
◀ Fallecidos

Confirmados: C. Valenciana

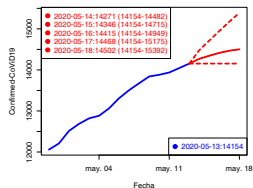
Confirmed:Comunidad.Valenciana-FLM



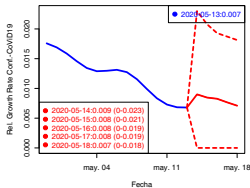
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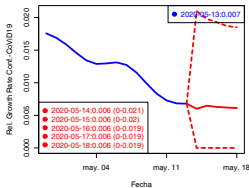
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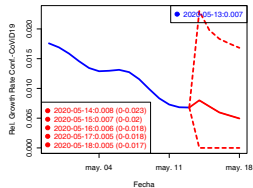
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Rel. Growth Rate Conf.:Comunidad.Valenciana-NP



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

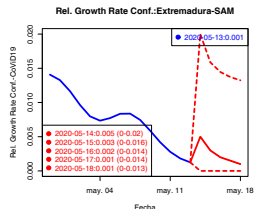
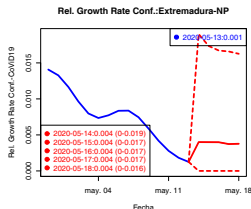
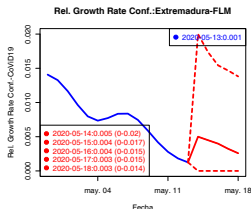
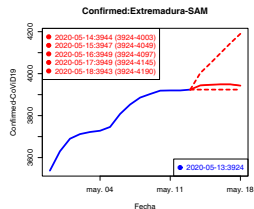
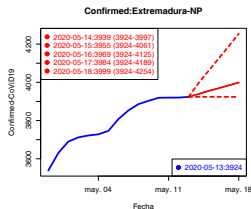
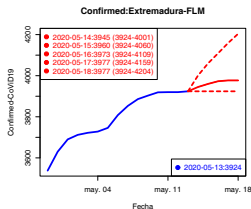


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Extremadura



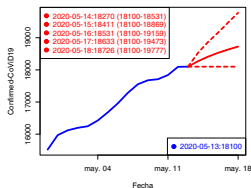
Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

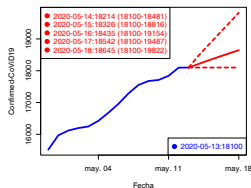
◀ Fallecidos

Confirmados: País Vasco

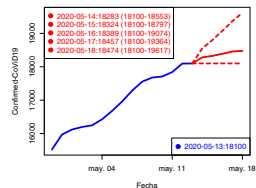
Confirmed:País.Vasco-FLM



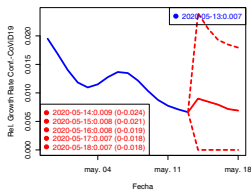
Confirmed:País.Vasco-NP



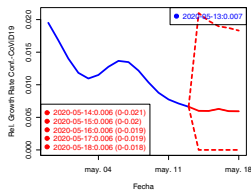
Confirmed:País.Vasco-SAM



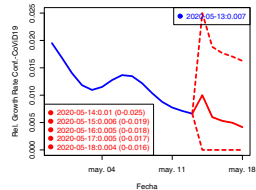
Rel. Growth Rate Conf.:País.Vasco-FLM



Rel. Growth Rate Conf.:País.Vasco-NP



Rel. Growth Rate Conf.:País.Vasco-SAM

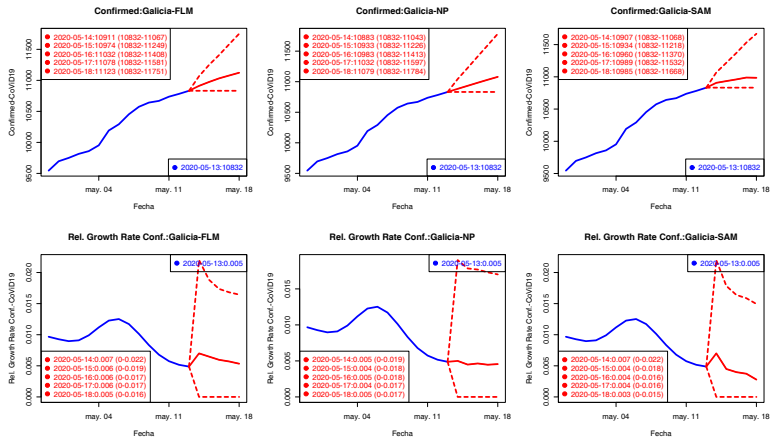


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Galicia

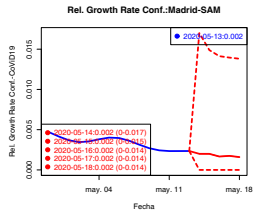
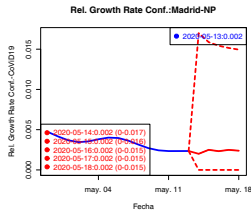
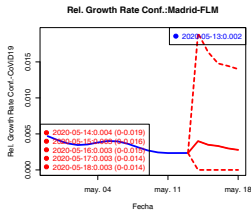
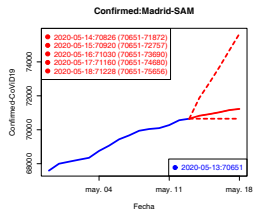
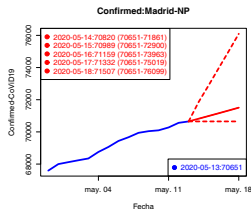
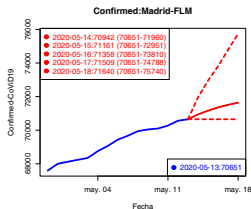


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Madrid

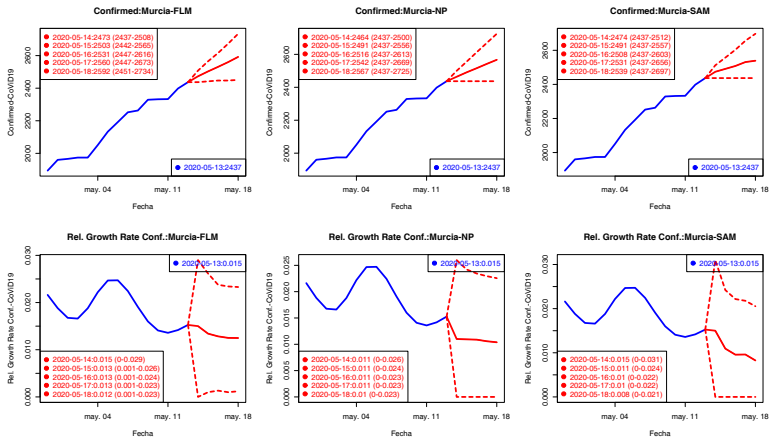


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Murcia

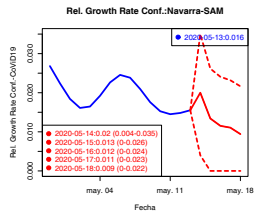
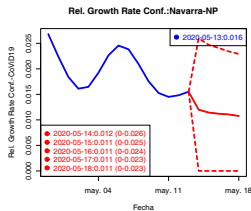
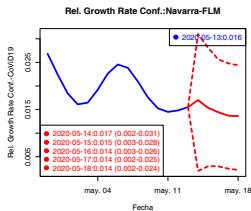
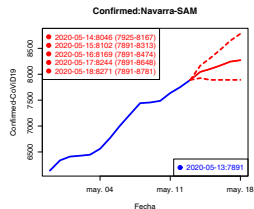
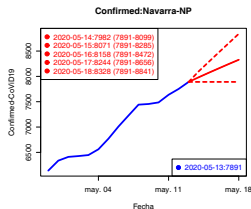
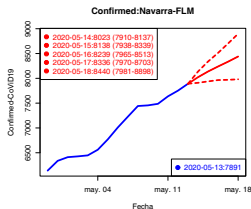


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: Navarra

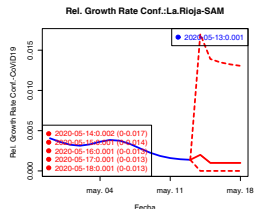
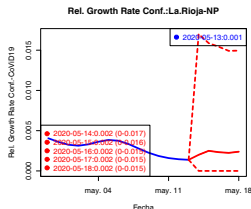
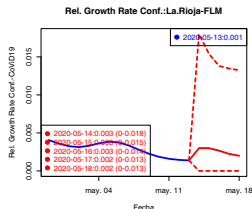
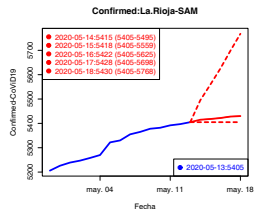
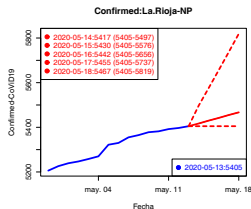
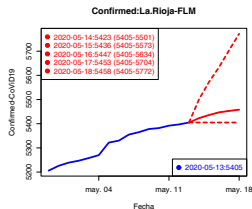


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Confirmados: La Rioja



Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

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- 1 Casos Confirmados
 - Predicciones
- 2 Fallecidos
 - Predicciones Fallecidos
- 3 Panorama internacional

Modelos para fallecidos por CoViD-19

Número de datos funcionales: 6845

Países/Regiones distintos incorporados: 83

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

	σ_R^2			$\sigma_R^2(rob.)$			r^2		
Horiz	FLM	NP	SAM	FLM	NP	SAM	FLM	NP	SAM
H1	0.001	0.001	0.001	0.001	0.001	0	0.541	0.528	0.577
H2	0.002	0.002	0.002	0.002	0.002	0.001	0.64	0.624	0.7
H3	0.004	0.004	0.003	0.004	0.004	0.003	0.698	0.676	0.761
H4	0.005	0.006	0.004	0.007	0.007	0.005	0.734	0.705	0.794
H5	0.008	0.009	0.006	0.011	0.011	0.008	0.753	0.717	0.811

Tabla Previsión Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	27321	27533	27715	27869	28006	28129
Andalucía	1336	1345	1352	1358	1362	1365
Aragón	836	842	848	853	857	860
Asturias	308	311	313	316	318	320
Islas Baleares	216	218	220	222	223	225
Canarias	151	152	153	154	155	155
Cantabria	205	206	207	208	209	209
Castilla La Mancha	2852	2879	2902	2923	2941	2959
Castilla y León	1925	1937	1948	1955	1961	1965
Cataluña	5823	5885	5940	5994	6046	6096
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1349	1358	1366	1371	1376	1380
Extremadura	492	496	499	502	504	506
Galicia	601	604	607	609	611	612
Madrid	8779	8833	8878	8913	8941	8966
Melilla	2	2	2	2	2	2
Murcia	142	143	144	144	145	145
Navarra	498	501	504	507	509	510
País Vasco	1454	1466	1477	1485	1493	1500
La Rioja	348	350	351	353	353	354

Cuadro: Previsión fallecidos: Mod. lineal - Horizonte 1 – 5 días.

Tabla Previsión Fallecidos: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	27321	27673	28007	28329	28641	28949
Andalucía	1336	1353	1370	1385	1401	1416
Aragón	836	847	857	867	877	887
Asturias	308	312	316	320	323	327
Islas Baleares	216	219	222	224	227	229
Canarias	151	153	155	157	158	160
Cantabria	205	208	210	212	215	217
Castilla La Mancha	2852	2890	2927	2962	2996	3030
Castilla y León	1925	1950	1973	1995	2017	2039
Cataluña	5823	5902	5976	6049	6118	6188
Ceuta	4	4	4	4	4	4
Comunidad Valenciana	1349	1366	1382	1398	1413	1428
Extremadura	492	498	504	510	516	521
Galicia	601	609	616	623	630	636
Madrid	8779	8888	8992	9092	9188	9284
Melilla	2	2	2	2	2	2
Murcia	142	144	145	147	149	150
Navarra	498	504	510	516	522	527
País Vasco	1454	1473	1491	1508	1525	1542
La Rioja	348	352	356	360	364	368

Cuadro: Previsión fallecidos: Mod. No Paramétrico - Horizonte 1 – 5 días.

Tabla Previsión Fallecidos: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	27321	27494	27699	27937	28214	28441
Andalucía	1336	1344	1353	1363	1373	1380
Aragón	836	841	846	851	857	863
Asturias	308	310	313	316	319	321
Islas.Baleares	216	218	219	222	224	225
Canarias	151	152	153	155	156	157
Cantabria	205	206	207	209	210	212
Castilla.La.Mancha	2852	2872	2893	2916	2945	2969
Castilla.y.León	1925	1934	1944	1956	1976	1991
Cataluña	5823	5873	5931	5997	6079	6142
Ceuta	4	4	4	4	4	4
Comunidad.Valenciana	1349	1356	1364	1373	1385	1394
Extremadura	492	495	497	501	505	508
Galicia	601	604	607	611	616	621
Madrid	8779	8825	8886	8964	9037	9102
Melilla	2	2	2	2	2	2
Murcia	142	143	144	145	147	148
Navarra	498	501	504	507	513	518
País.Vasco	1454	1463	1473	1484	1498	1510
La.Rioja	348	349	352	355	358	360

Cuadro: Previsión fallecidos: Mod. Aditivo - Horizonte 1 – 5 días.

Tabla Ratio Incr. Fallecidos: Mod. Lineal.

	Last	H1	H2	H3	H4	H5
España	0.007	0.008	0.014	0.020	0.025	0.030
Andalucía	0.003	0.007	0.012	0.016	0.019	0.022
Aragón	0.004	0.007	0.014	0.020	0.025	0.029
Asturias	0.009	0.009	0.018	0.025	0.032	0.039
Islas.Baleares	0.010	0.010	0.019	0.027	0.033	0.040
Canarias	0.004	0.007	0.014	0.019	0.023	0.027
Cantabria	0.005	0.006	0.010	0.014	0.018	0.021
Castilla.La.Mancha	0.008	0.009	0.018	0.025	0.031	0.037
Castilla.y.León	0.004	0.006	0.012	0.016	0.019	0.021
Cataluña	0.014	0.011	0.020	0.029	0.038	0.047
Ceuta	0.000	0.003	0.004	0.004	0.003	0.001
Comunidad.Valenciana	0.005	0.007	0.012	0.017	0.020	0.023
Extremadura	0.006	0.008	0.015	0.020	0.024	0.028
Galicia	0.004	0.006	0.010	0.014	0.016	0.019
Madrid	0.004	0.006	0.011	0.015	0.018	0.021
Melilla	0.000	0.003	0.004	0.004	0.004	0.003
Murcia	0.007	0.007	0.012	0.016	0.021	0.024
Navarra	0.005	0.007	0.013	0.017	0.021	0.024
País.Vasco	0.007	0.008	0.016	0.022	0.027	0.031
La.Rioja	0.002	0.005	0.010	0.013	0.015	0.017

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

Tabla Ratio Incr. Fallecidos: Mod. No Paramétrico.

	Last	H1	H2	H3	H4	H5
España	0.007	0.013	0.025	0.037	0.048	0.060
Andalucía	0.003	0.013	0.025	0.037	0.048	0.060
Aragón	0.004	0.013	0.025	0.037	0.049	0.060
Asturias	0.009	0.013	0.026	0.038	0.050	0.061
Islas.Baleares	0.010	0.013	0.026	0.038	0.050	0.062
Canarias	0.004	0.013	0.025	0.037	0.049	0.060
Cantabria	0.005	0.012	0.024	0.035	0.046	0.057
Castilla.La.Mancha	0.008	0.013	0.026	0.039	0.051	0.062
Castilla.y.León	0.004	0.013	0.025	0.037	0.048	0.059
Cataluña	0.014	0.013	0.026	0.039	0.051	0.063
Ceuta	0.000	0.012	0.023	0.033	0.043	0.054
Comunidad.Valenciana	0.005	0.013	0.025	0.036	0.048	0.059
Extremadura	0.006	0.013	0.025	0.037	0.048	0.059
Galicia	0.004	0.013	0.025	0.036	0.047	0.058
Madrid	0.004	0.012	0.024	0.036	0.047	0.057
Melilla	0.000	0.012	0.023	0.033	0.043	0.054
Murcia	0.007	0.013	0.024	0.036	0.047	0.058
Navarra	0.005	0.013	0.025	0.037	0.048	0.059
País.Vasco	0.007	0.013	0.025	0.037	0.049	0.060
La.Rioja	0.002	0.012	0.024	0.035	0.045	0.056

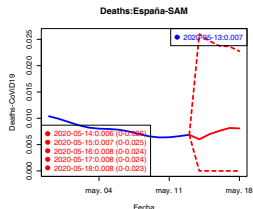
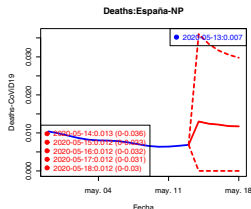
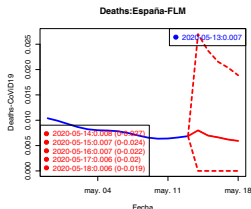
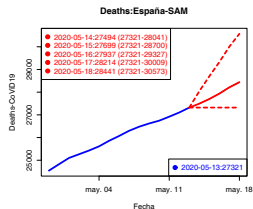
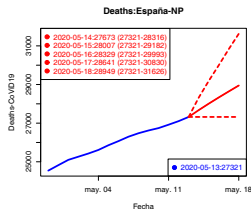
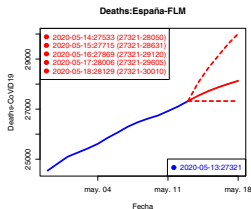
Cuadro: Previsión Ratio Incr. Fallecidos: Mod. No Paramétrico - Horizonte 1 – 5 días.

Tabla Ratio Incr. Fallecidos: Mod. Aditivo.

	Last	H1	H2	H3	H4	H5
España	0.007	0.006	0.014	0.023	0.033	0.041
Andalucía	0.003	0.006	0.013	0.020	0.027	0.033
Aragón	0.004	0.006	0.012	0.018	0.025	0.032
Asturias	0.009	0.008	0.016	0.025	0.035	0.043
Islas.Baleares	0.010	0.007	0.016	0.027	0.036	0.041
Canarias	0.004	0.006	0.014	0.024	0.030	0.038
Cantabria	0.005	0.006	0.012	0.017	0.025	0.034
Castilla.La.Mancha	0.008	0.007	0.014	0.023	0.033	0.041
Castilla.y.León	0.004	0.005	0.010	0.016	0.026	0.034
Cataluña	0.014	0.009	0.019	0.030	0.044	0.055
Ceuta	0.000	0.002	0.004	0.008	0.018	0.024
Comunidad.Valenciana	0.005	0.005	0.011	0.018	0.026	0.033
Extremadura	0.006	0.005	0.011	0.019	0.027	0.033
Galicia	0.004	0.004	0.010	0.016	0.026	0.034
Madrid	0.004	0.005	0.012	0.021	0.029	0.037
Melilla	0.000	0.002	0.006	0.012	0.018	0.023
Murcia	0.007	0.005	0.011	0.019	0.032	0.042
Navarra	0.005	0.006	0.011	0.018	0.031	0.040
País.Vasco	0.007	0.006	0.013	0.020	0.030	0.038
La.Rioja	0.002	0.004	0.010	0.020	0.028	0.036

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

Fallecidos: España

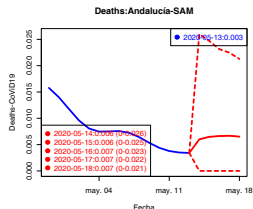
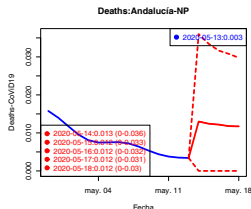
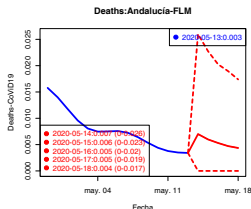
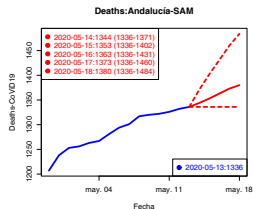
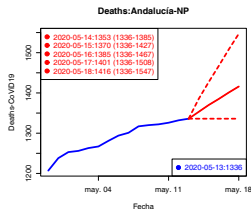
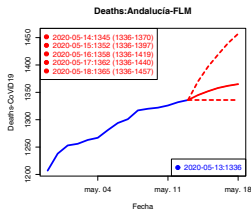


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Andalucía

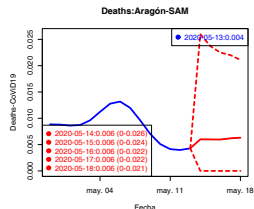
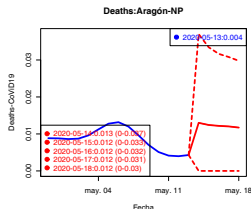
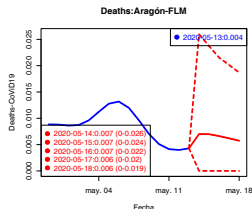
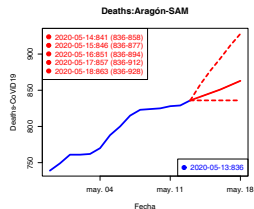
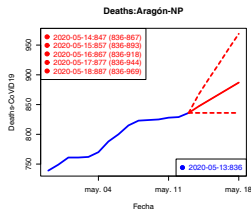
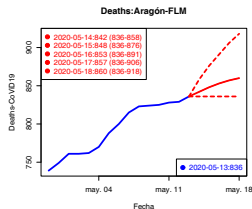


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Aragón

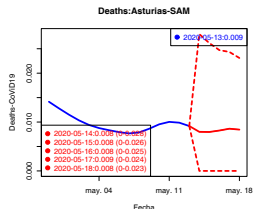
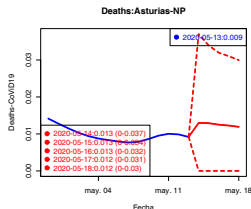
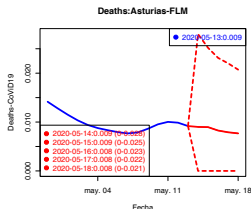
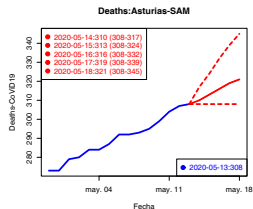
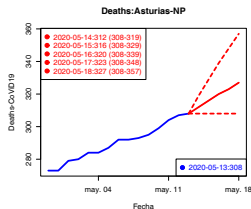
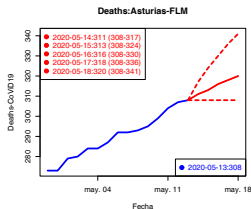


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Asturias

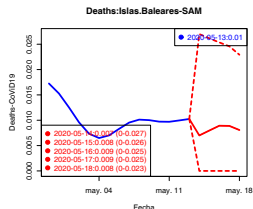
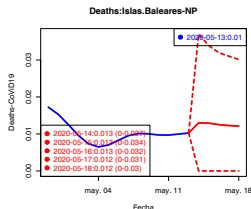
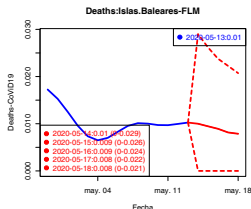
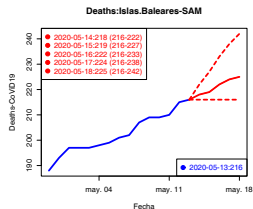
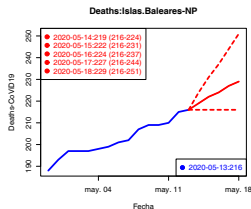
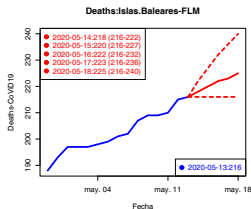


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Islas Baleares

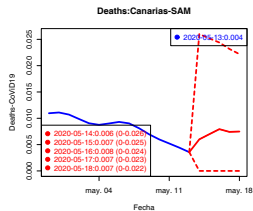
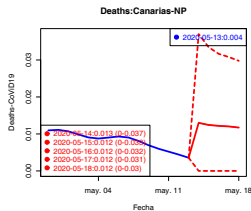
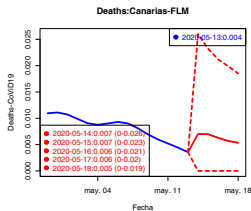
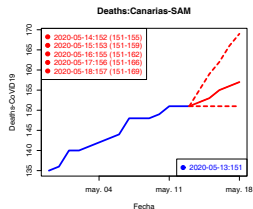
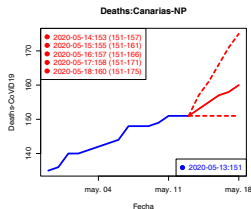
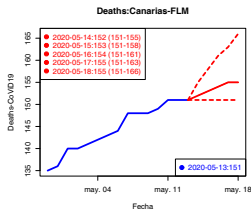


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Canarias

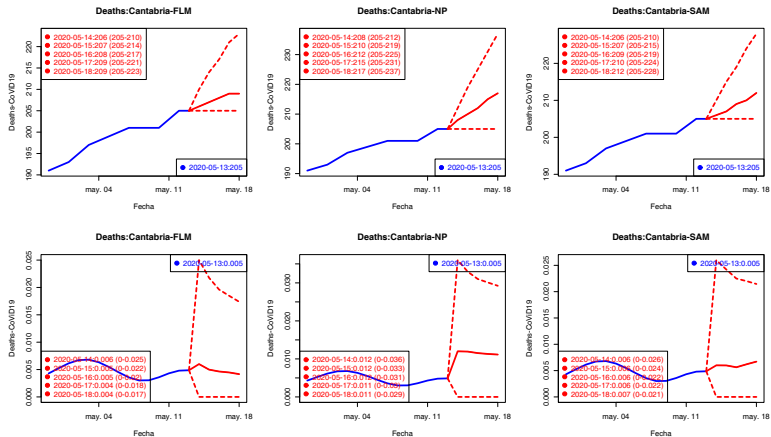


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cantabria

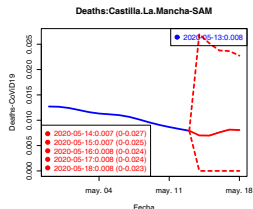
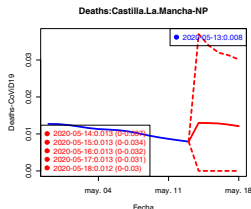
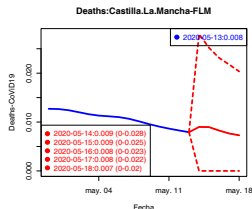
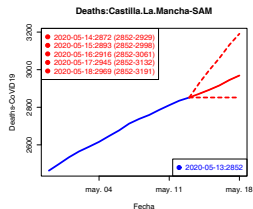
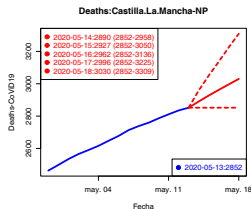
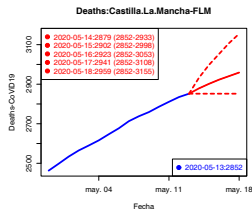


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla-La Mancha

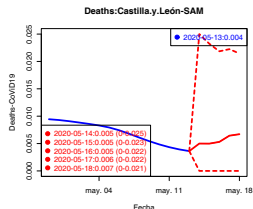
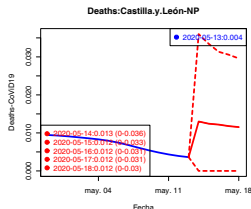
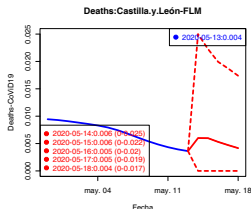
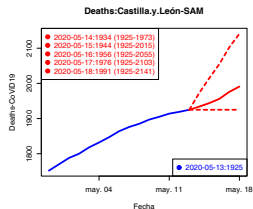
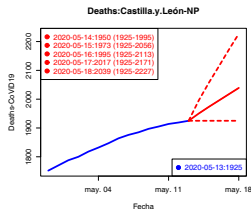
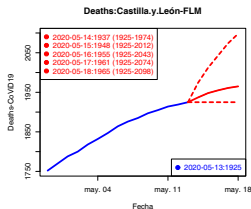


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Castilla y León

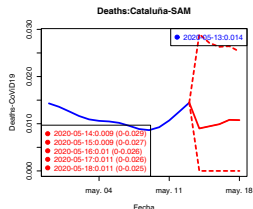
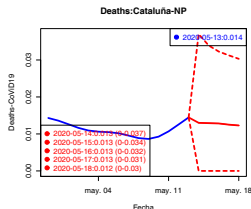
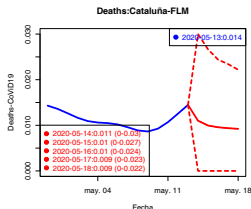
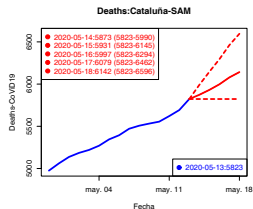
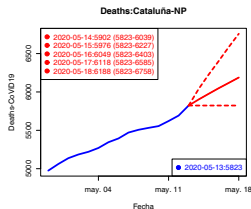
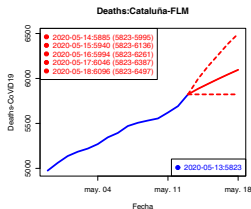


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Cataluña

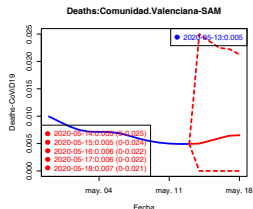
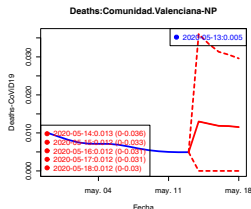
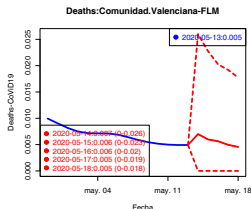
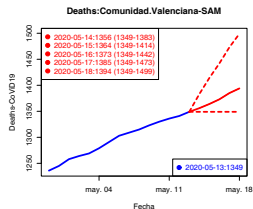
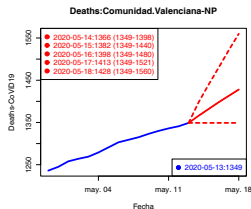
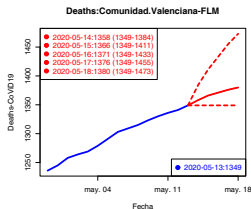


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: C. Valenciana

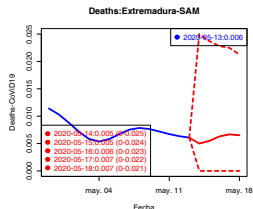
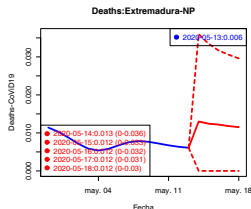
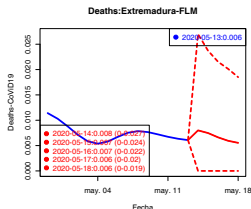
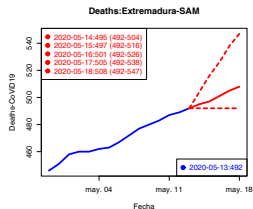
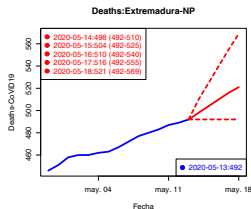
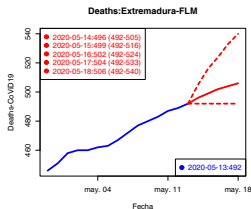


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Extremadura

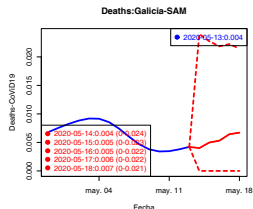
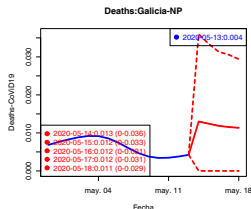
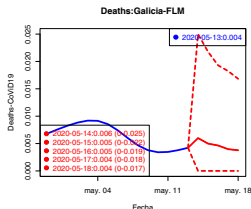
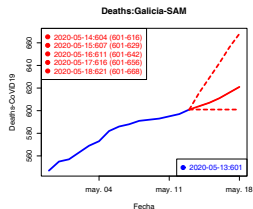
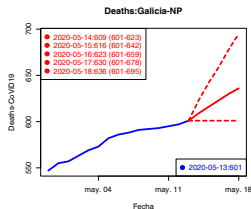
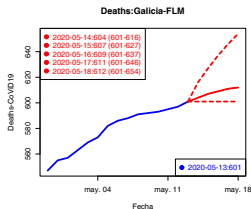


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

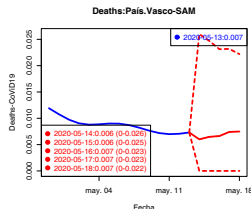
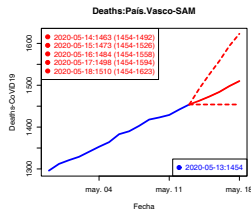
◀ Confirmados

◀ Fallecidos

Fallecidos: Galicia

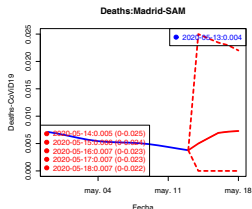
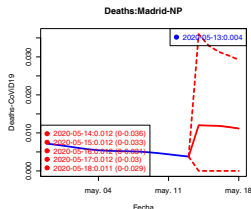
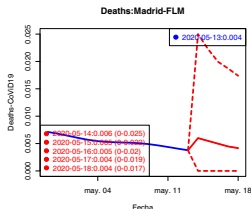
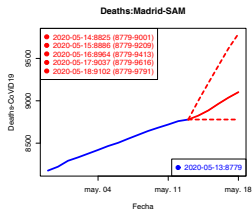
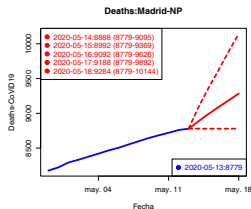
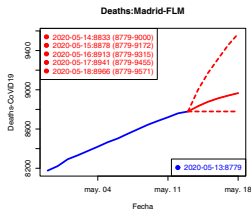


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.



◀ Confirmados ◀ Fallecidos

Fallecidos: Madrid

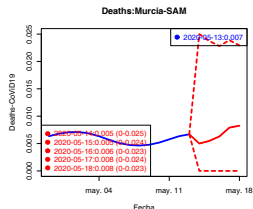
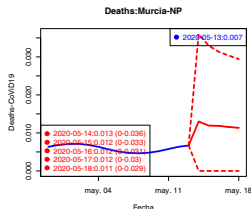
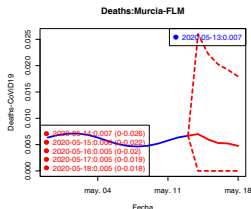
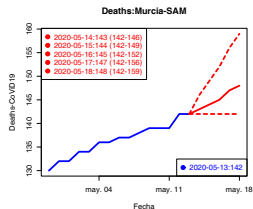
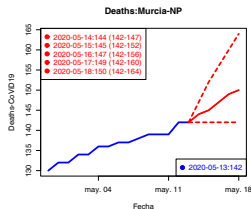
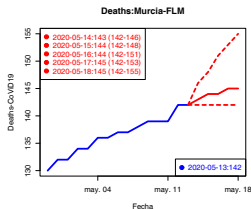


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Murcia

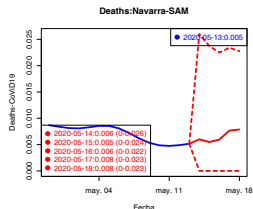
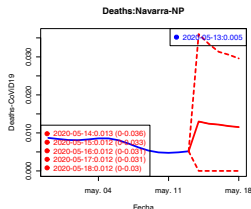
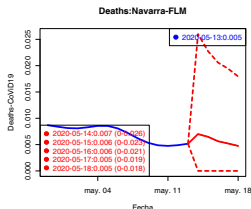
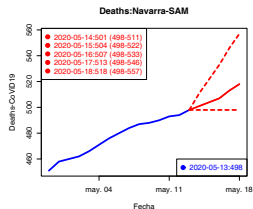
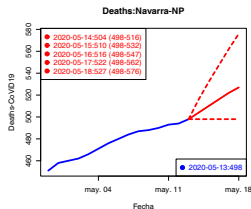
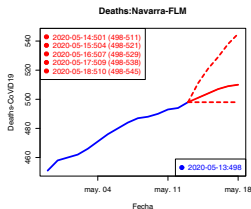


Los valores del Ratio de incremento de H2–H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: Navarra

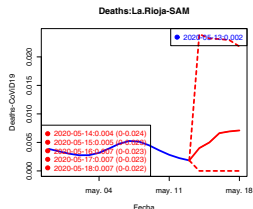
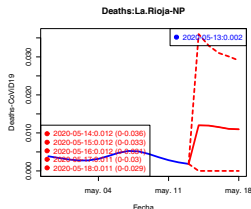
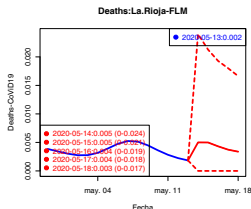
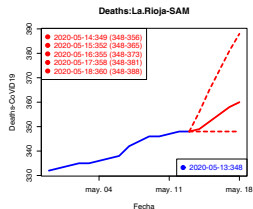
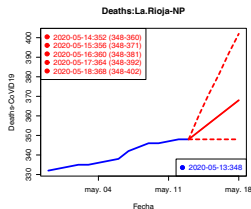
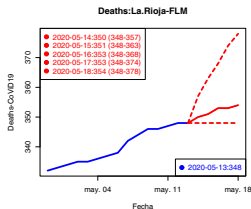


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

◀ Confirmados

◀ Fallecidos

Fallecidos: La Rioja

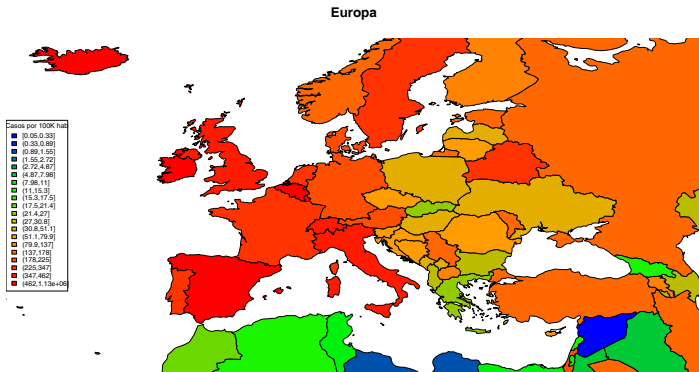


Los valores del Ratio de incremento de H2-H5 están rescalados a H1 para su comparación gráfica.

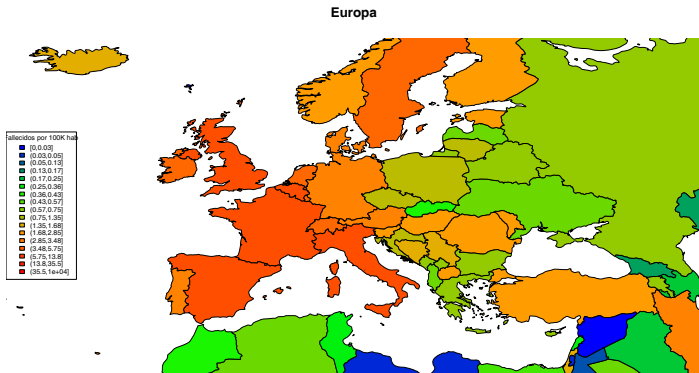
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- 3 Panorama internacional

Europa: Confirmados por 100K hab.

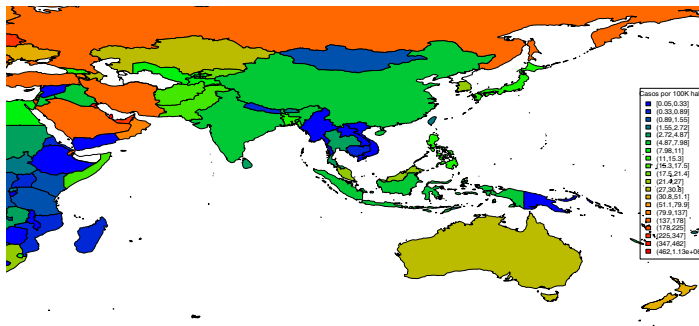


Europa: Fallecidos por 100K hab.



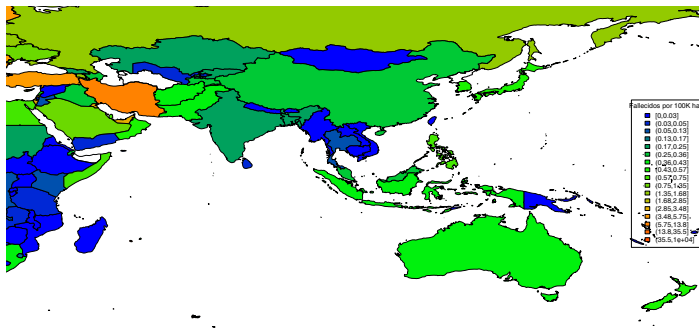
Asia y Oceanía: Casos por 100K hab.

Asia y Oceanía



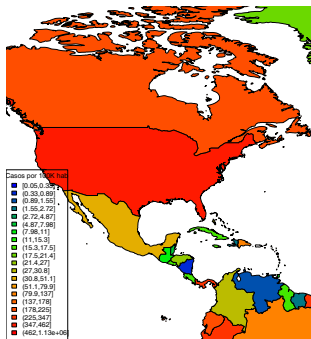
Asia y Oceanía: Fallecidos por 100K hab.

Asia y Oceanía

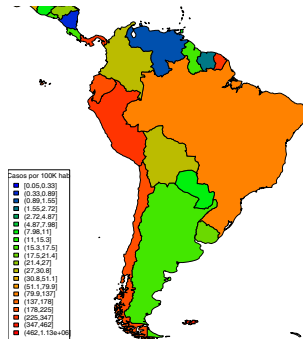


América: Casos por 100K hab.

América del Norte

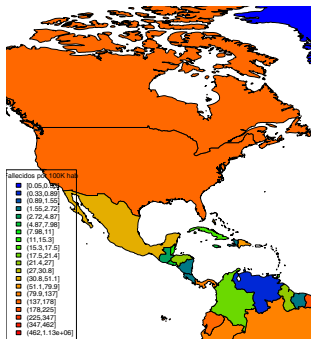


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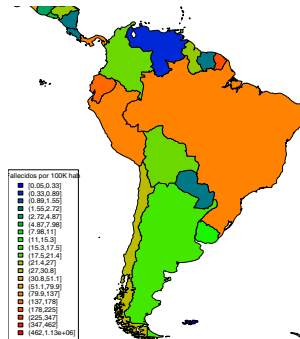


América: Fallecidos por 100K hab.

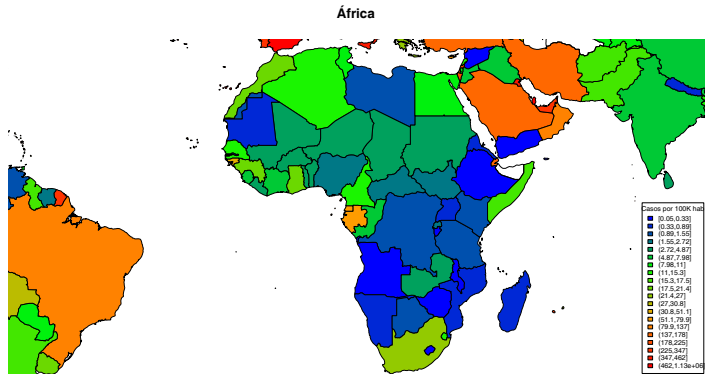
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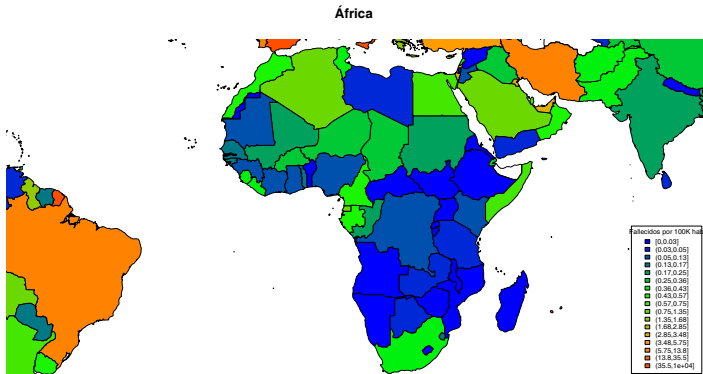
América del sur



África: Casos por 100K hab.



África: Fallecidos por 100K hab.



Breve descripción del Modelo de predicción

Objetivo: Predecir ratio de incremento de casos confirmados a 1, 2, o 3 días: $r^{(k)}(t) = \frac{x_{t+k} - x_t}{x_t + 1}$

Información usada: Pasado de esta variable suavizado (retardo 1) durante los últimos 15 días: $R^{(1)} = \{r^{(1)}(-14), \dots, r^{(1)}(0)\}$.

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 anormalmente valores 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: $f(R^{(1)}) = \int_{-14}^0 R^{(1)}(t)\beta(t)dt$
- 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.