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Script que ilustra lectura de datos y su despliegue grafico.

<http://www.cru.uea.ac.uk>

```
clear all
clc
% Se importan los datos 'hadcrut3vgl.txt'
```

Se da nombre a una variable que contenga los datos:

TemperaturaGlobal = importdata('hadcrut3vgl.txt');

```
load hadcrut3vgl.txt

% Despliega el contenido del archivo 'hadcrut3vgl.txt'
type hadcrut3vgl.txt
```

```
1850 -0.675 -0.359 -0.742 -0.572 -0.410 -0.316 -0.257 -0.336 -0.487 -0.459 -0.282 -
1851 -0.308 -0.344 -0.436 -0.419 -0.368 -0.296 -0.282 -0.222 -0.269 -0.184 -0.250 -
1852 -0.385 -0.446 -0.508 -0.553 -0.265 -0.194 -0.147 -0.252 -0.257 -0.329 -0.271 -
1853 -0.232 -0.416 -0.399 -0.394 -0.340 -0.279 -0.220 -0.261 -0.418 -0.387 -0.281 -
1854 -0.376 -0.310 -0.291 -0.376 -0.263 -0.268 -0.267 -0.244 -0.204 -0.250 -0.420 -
1855 -0.271 -0.437 -0.372 -0.272 -0.364 -0.280 -0.332 -0.242 -0.375 -0.278 -0.284 -
1856 -0.257 -0.421 -0.535 -0.353 -0.246 -0.345 -0.351 -0.366 -0.473 -0.450 -0.631 -
1857 -0.566 -0.345 -0.468 -0.641 -0.548 -0.363 -0.528 -0.369 -0.421 -0.498 -0.648 -
1858 -0.468 -0.727 -0.568 -0.509 -0.632 -0.535 -0.384 -0.342 -0.407 -0.261 -0.643 -
1859 -0.350 -0.255 -0.376 -0.308 -0.338 -0.286 -0.358 -0.190 -0.591 -0.353 -0.371 -
1860 -0.245 -0.463 -0.584 -0.390 -0.352 -0.322 -0.222 -0.272 -0.299 -0.272 -0.499 -
1861 -0.791 -0.432 -0.450 -0.422 -0.705 -0.197 -0.302 -0.213 -0.390 -0.408 -0.401 -
1862 -0.697 -0.774 -0.438 -0.287 -0.259 -0.380 -0.417 -0.666 -0.426 -0.442 -0.733 -
1863 0.136 -0.076 -0.391 -0.274 -0.343 -0.440 -0.441 -0.383 -0.401 -0.454 -0.385 -
1864 -0.850 -0.571 -0.539 -0.554 -0.405 -0.266 -0.187 -0.364 -0.436 -0.692 -0.479 -
1865 -0.215 -0.590 -0.600 -0.192 -0.238 -0.267 -0.184 -0.269 -0.094 -0.347 -0.224 -
1866 -0.066 -0.212 -0.596 -0.256 -0.545 -0.042 -0.085 -0.315 -0.296 -0.409 -0.366 -
1867 -0.345 0.033 -0.652 -0.230 -0.485 -0.285 -0.312 -0.256 -0.137 -0.240 -0.319 -
1868 -0.685 -0.429 -0.064 -0.383 -0.092 -0.217 0.058 -0.149 -0.275 -0.294 -0.511 -
1869 -0.162 0.161 -0.571 -0.247 -0.276 -0.391 -0.303 -0.173 -0.233 -0.500 -0.422 -
1870 -0.079 -0.397 -0.458 -0.208 -0.178 -0.218 -0.048 -0.244 -0.298 -0.362 -0.201 -
1871 -0.448 -0.510 -0.036 -0.155 -0.273 -0.219 -0.085 -0.234 -0.421 -0.487 -0.569 -
1872 -0.317 -0.405 -0.489 -0.211 -0.113 -0.221 -0.175 -0.138 -0.208 -0.292 -0.329 -
1873 -0.106 -0.410 -0.314 -0.505 -0.402 -0.256 -0.186 -0.210 -0.366 -0.459 -0.480 -
1874 -0.026 -0.464 -0.564 -0.498 -0.434 -0.366 -0.179 -0.361 -0.236 -0.445 -0.543 -
```

1875	-0.576	-0.616	-0.605	-0.442	-0.195	-0.249	-0.290	-0.236	-0.330	-0.400	-0.518	-
1876	-0.280	-0.272	-0.410	-0.307	-0.470	-0.268	-0.168	-0.273	-0.431	-0.406	-0.565	-
1877	-0.299	0.011	-0.324	-0.311	-0.433	-0.113	-0.075	0.030	-0.050	-0.075	-0.014	-
1878	0.087	0.269	0.236	0.228	-0.122	-0.043	-0.083	-0.074	-0.059	-0.133	-0.141	-
1879	-0.220	-0.180	-0.197	-0.237	-0.181	-0.215	-0.218	-0.236	-0.232	-0.205	-0.463	-
1880	-0.005	-0.248	-0.189	-0.157	-0.243	-0.313	-0.256	-0.144	-0.241	-0.390	-0.455	-
1881	-0.389	-0.272	-0.262	-0.200	-0.076	-0.252	-0.143	-0.159	-0.296	-0.346	-0.417	-
1882	0.016	-0.081	-0.082	-0.301	-0.374	-0.350	-0.254	-0.273	-0.177	-0.336	-0.377	-
1883	-0.448	-0.350	-0.342	-0.361	-0.309	-0.109	-0.207	-0.225	-0.332	-0.390	-0.321	-
1884	-0.344	-0.257	-0.379	-0.482	-0.361	-0.369	-0.357	-0.347	-0.302	-0.301	-0.562	-
1885	-0.515	-0.476	-0.407	-0.418	-0.426	-0.464	-0.308	-0.367	-0.280	-0.297	-0.260	-
1886	-0.372	-0.475	-0.394	-0.186	-0.115	-0.284	-0.197	-0.202	-0.262	-0.309	-0.393	-
1887	-0.403	-0.479	-0.355	-0.376	-0.276	-0.377	-0.231	-0.353	-0.301	-0.490	-0.424	-
1888	-0.609	-0.502	-0.558	-0.260	-0.341	-0.265	-0.334	-0.302	-0.254	-0.182	-0.247	-
1889	-0.186	-0.172	-0.124	-0.069	-0.127	-0.185	-0.250	-0.279	-0.379	-0.331	-0.421	-
1890	-0.297	-0.352	-0.431	-0.331	-0.437	-0.410	-0.428	-0.451	-0.470	-0.504	-0.558	-
1891	-0.513	-0.506	-0.442	-0.373	-0.265	-0.369	-0.404	-0.375	-0.247	-0.361	-0.581	-
1892	-0.447	-0.182	-0.479	-0.500	-0.460	-0.451	-0.518	-0.463	-0.379	-0.481	-0.620	-
1893	-0.956	-0.761	-0.429	-0.572	-0.579	-0.470	-0.318	-0.348	-0.453	-0.337	-0.457	-
1894	-0.447	-0.423	-0.401	-0.423	-0.455	-0.491	-0.365	-0.376	-0.502	-0.482	-0.457	-
1895	-0.513	-0.714	-0.542	-0.432	-0.416	-0.355	-0.403	-0.309	-0.268	-0.374	-0.338	-
1896	-0.269	-0.251	-0.423	-0.372	-0.248	-0.169	-0.185	-0.148	-0.185	-0.187	-0.321	-
1897	-0.288	-0.211	-0.347	-0.137	-0.110	-0.195	-0.202	-0.215	-0.179	-0.281	-0.477	-
1898	-0.128	-0.371	-0.692	-0.518	-0.448	-0.316	-0.367	-0.321	-0.323	-0.519	-0.456	-
1899	-0.238	-0.527	-0.550	-0.363	-0.339	-0.381	-0.325	-0.232	-0.203	-0.232	-0.024	-
1900	-0.273	-0.258	-0.336	-0.308	-0.287	-0.206	-0.248	-0.247	-0.275	-0.148	-0.322	-
1901	-0.229	-0.328	-0.312	-0.273	-0.253	-0.237	-0.236	-0.267	-0.391	-0.354	-0.455	-
1902	-0.242	-0.314	-0.410	-0.477	-0.427	-0.476	-0.428	-0.414	-0.416	-0.490	-0.519	-
1903	-0.298	-0.228	-0.382	-0.491	-0.502	-0.560	-0.494	-0.598	-0.549	-0.626	-0.598	-
1904	-0.667	-0.609	-0.637	-0.577	-0.565	-0.534	-0.552	-0.505	-0.492	-0.492	-0.405	-
1905	-0.517	-0.711	-0.500	-0.577	-0.400	-0.383	-0.356	-0.342	-0.351	-0.402	-0.289	-
1906	-0.191	-0.313	-0.365	-0.194	-0.370	-0.358	-0.372	-0.366	-0.399	-0.416	-0.508	-
1907	-0.486	-0.541	-0.407	-0.563	-0.606	-0.586	-0.462	-0.507	-0.467	-0.426	-0.604	-
1908	-0.478	-0.502	-0.646	-0.567	-0.545	-0.507	-0.529	-0.552	-0.489	-0.621	-0.622	-
1909	-0.580	-0.582	-0.686	-0.651	-0.620	-0.549	-0.596	-0.400	-0.402	-0.500	-0.470	-
1910	-0.424	-0.586	-0.482	-0.482	-0.558	-0.561	-0.486	-0.514	-0.494	-0.546	-0.695	-
1911	-0.586	-0.750	-0.701	-0.732	-0.626	-0.574	-0.539	-0.525	-0.512	-0.518	-0.452	-
1912	-0.422	-0.401	-0.464	-0.395	-0.438	-0.392	-0.502	-0.592	-0.596	-0.678	-0.563	-
1913	-0.518	-0.563	-0.576	-0.500	-0.562	-0.558	-0.498	-0.443	-0.472	-0.491	-0.347	-
1914	-0.162	-0.326	-0.385	-0.426	-0.349	-0.335	-0.375	-0.285	-0.348	-0.243	-0.271	-
1915	-0.223	-0.128	-0.333	-0.159	-0.325	-0.312	-0.201	-0.192	-0.222	-0.312	-0.226	-
1916	-0.314	-0.280	-0.472	-0.407	-0.429	-0.512	-0.414	-0.390	-0.381	-0.412	-0.557	-
1917	-0.650	-0.744	-0.792	-0.531	-0.674	-0.377	-0.180	-0.278	-0.210	-0.427	-0.406	-
1918	-0.548	-0.543	-0.465	-0.515	-0.479	-0.342	-0.372	-0.397	-0.344	-0.189	-0.176	-
1919	-0.202	-0.155	-0.370	-0.200	-0.335	-0.291	-0.365	-0.362	-0.275	-0.366	-0.584	-
1920	-0.321	-0.499	-0.200	-0.354	-0.258	-0.293	-0.349	-0.310	-0.245	-0.337	-0.369	-
1921	-0.221	-0.291	-0.314	-0.293	-0.218	-0.175	-0.206	-0.342	-0.232	-0.228	-0.407	-
1922	-0.445	-0.399	-0.365	-0.337	-0.415	-0.373	-0.336	-0.377	-0.360	-0.379	-0.362	-
1923	-0.312	-0.484	-0.442	-0.443	-0.364	-0.307	-0.428	-0.419	-0.370	-0.346	-0.133	-
1924	-0.354	-0.257	-0.346	-0.362	-0.340	-0.301	-0.354	-0.308	-0.365	-0.331	-0.396	-
1925	-0.444	-0.309	-0.291	-0.284	-0.324	-0.309	-0.277	-0.210	-0.227	-0.365	-0.171	-
1926	-0.024	-0.114	-0.100	-0.239	-0.255	-0.187	-0.305	-0.127	-0.182	-0.165	-0.192	-
1927	-0.283	-0.220	-0.355	-0.300	-0.293	-0.260	-0.219	-0.195	-0.176	-0.112	-0.243	-
1928	-0.166	-0.248	-0.388	-0.315	-0.285	-0.362	-0.200	-0.226	-0.236	-0.200	-0.180	-
1929	-0.435	-0.639	-0.426	-0.369	-0.380	-0.357	-0.375	-0.235	-0.286	-0.199	-0.141	-
1930	-0.362	-0.235	-0.199	-0.209	-0.229	-0.190	-0.166	-0.097	-0.113	-0.117	0.001	-

1931	-0.048	-0.196	-0.147	-0.202	-0.223	-0.099	-0.081	-0.106	-0.115	-0.093	-0.204	-
1932	0.073	-0.213	-0.273	-0.135	-0.205	-0.195	-0.141	-0.185	-0.069	-0.139	-0.235	-
1933	-0.288	-0.359	-0.344	-0.257	-0.246	-0.243	-0.207	-0.198	-0.218	-0.204	-0.316	-
1934	-0.249	-0.210	-0.390	-0.271	-0.131	-0.061	-0.081	-0.071	-0.123	-0.119	-0.057	-
1935	-0.244	0.046	-0.237	-0.270	-0.251	-0.184	-0.136	-0.154	-0.153	-0.087	-0.284	-
1936	-0.273	-0.345	-0.254	-0.220	-0.148	-0.154	-0.031	-0.055	-0.099	-0.045	-0.115	-
1937	-0.191	-0.016	-0.248	-0.132	-0.092	-0.009	0.046	0.084	0.107	0.092	-0.026	-
1938	-0.006	0.021	0.067	0.056	-0.061	-0.031	-0.023	0.036	0.068	0.127	0.016	-
1939	-0.061	-0.062	-0.200	-0.060	0.004	0.090	0.079	0.084	-0.009	-0.150	-0.015	-
1940	-0.209	-0.055	-0.085	0.016	0.009	0.023	0.109	0.056	0.121	0.017	-0.044	-
1941	-0.033	0.075	-0.064	0.123	0.003	0.130	0.146	0.080	-0.062	0.224	0.090	-
1942	0.171	-0.096	-0.045	-0.039	0.013	0.058	-0.065	-0.033	-0.007	-0.041	-0.085	-
1943	-0.207	0.003	-0.189	-0.035	0.004	-0.095	0.029	-0.058	-0.013	0.191	0.001	-
1944	0.245	0.110	0.081	-0.024	0.030	0.115	0.175	0.184	0.216	0.168	-0.013	-
1945	-0.039	-0.092	-0.061	0.080	-0.155	-0.031	-0.099	0.306	0.083	0.069	-0.069	-
1946	-0.018	-0.030	-0.223	-0.069	-0.248	-0.326	-0.154	-0.247	-0.114	-0.178	-0.226	-
1947	-0.247	-0.297	-0.214	-0.100	-0.215	-0.134	-0.149	-0.181	-0.224	-0.104	-0.161	-
1948	-0.060	-0.266	-0.330	-0.201	-0.092	-0.097	-0.237	-0.160	-0.194	-0.161	-0.237	-
1949	-0.017	-0.258	-0.300	-0.183	-0.182	-0.293	-0.212	-0.158	-0.196	-0.177	-0.190	-
1950	-0.469	-0.349	-0.291	-0.284	-0.209	-0.210	-0.206	-0.236	-0.209	-0.247	-0.493	-
1951	-0.426	-0.535	-0.366	-0.223	-0.142	-0.081	-0.079	0.004	-0.026	-0.041	-0.143	-
1952	0.050	-0.012	-0.232	-0.086	-0.103	-0.096	-0.059	-0.040	-0.017	-0.112	-0.288	-
1953	-0.059	0.009	0.003	0.019	-0.040	-0.018	-0.097	-0.042	-0.045	-0.050	-0.183	-
1954	-0.338	-0.193	-0.257	-0.305	-0.332	-0.246	-0.305	-0.200	-0.182	-0.162	-0.100	-
1955	-0.028	-0.237	-0.453	-0.333	-0.309	-0.264	-0.276	-0.160	-0.195	-0.228	-0.365	-
1956	-0.322	-0.417	-0.376	-0.385	-0.357	-0.307	-0.294	-0.305	-0.336	-0.273	-0.335	-
1957	-0.260	-0.209	-0.216	-0.137	-0.056	-0.018	-0.080	-0.001	-0.041	-0.087	-0.011	-
1958	0.193	0.102	-0.059	-0.038	-0.056	-0.068	-0.042	-0.065	-0.109	-0.041	-0.038	-
1959	-0.012	-0.041	-0.013	-0.042	-0.103	-0.028	-0.079	-0.052	-0.036	-0.123	-0.233	-
1960	-0.102	0.050	-0.366	-0.221	-0.229	-0.104	-0.100	-0.076	-0.031	-0.092	-0.197	-
1961	-0.006	0.084	0.012	-0.018	0.013	0.033	-0.065	-0.005	-0.095	-0.085	-0.091	-
1962	-0.034	0.064	-0.064	-0.076	-0.096	-0.071	-0.019	-0.031	-0.022	0.009	-0.039	-
1963	-0.117	0.106	-0.151	-0.131	-0.058	-0.073	0.058	0.059	0.034	0.140	0.057	-
1964	-0.082	-0.234	-0.329	-0.292	-0.226	-0.224	-0.226	-0.314	-0.329	-0.326	-0.324	-
1965	-0.195	-0.315	-0.299	-0.302	-0.215	-0.168	-0.236	-0.194	-0.174	-0.103	-0.195	-
1966	-0.169	-0.130	-0.123	-0.182	-0.205	-0.076	-0.062	-0.114	-0.116	-0.169	-0.189	-
1967	-0.211	-0.278	-0.155	-0.129	-0.032	-0.169	-0.151	-0.113	-0.158	-0.020	-0.156	-
1968	-0.293	-0.284	-0.043	-0.231	-0.249	-0.144	-0.117	-0.115	-0.127	-0.079	-0.091	-
1969	-0.251	-0.186	-0.028	0.061	0.042	-0.038	-0.019	-0.003	-0.027	-0.028	0.056	-
1970	0.001	0.093	-0.119	0.019	-0.080	-0.078	-0.102	-0.113	-0.097	-0.122	-0.093	-
1971	-0.087	-0.294	-0.289	-0.228	-0.207	-0.230	-0.121	-0.162	-0.124	-0.153	-0.074	-
1972	-0.350	-0.310	-0.149	-0.064	-0.063	0.005	-0.016	0.007	-0.058	0.010	0.035	-
1973	0.157	0.263	0.225	0.134	0.087	0.084	0.005	-0.005	-0.047	-0.029	-0.086	-
1974	-0.361	-0.372	-0.238	-0.183	-0.180	-0.155	-0.129	-0.110	-0.162	-0.190	-0.181	-
1975	-0.072	-0.114	-0.067	-0.102	-0.104	-0.119	-0.140	-0.183	-0.156	-0.241	-0.314	-
1976	-0.240	-0.302	-0.434	-0.210	-0.287	-0.257	-0.207	-0.196	-0.171	-0.291	-0.188	-
1977	-0.173	0.051	0.099	0.055	0.025	0.063	-0.007	-0.044	0.013	-0.022	0.087	-
1978	0.015	-0.006	0.008	-0.064	-0.121	-0.117	-0.061	-0.163	-0.063	-0.105	0.018	-
1979	-0.041	-0.093	0.024	-0.057	-0.036	0.032	0.044	0.066	0.086	0.099	0.119	-
1980	0.096	0.148	0.035	0.127	0.111	0.069	0.039	0.010	0.015	-0.003	0.134	-
1981	0.250	0.158	0.185	0.098	0.067	0.101	0.073	0.078	0.060	0.000	0.032	-
1982	-0.028	-0.025	-0.104	0.031	0.041	-0.034	-0.019	-0.005	0.068	0.021	0.016	-
1983	0.362	0.306	0.181	0.113	0.109	0.118	0.137	0.176	0.149	0.093	0.232	-
1984	0.089	0.013	0.049	-0.019	0.065	-0.016	-0.024	0.034	0.025	-0.035	-0.123	-
1985	-0.001	-0.155	-0.032	-0.042	0.001	-0.049	-0.042	0.013	-0.035	-0.008	-0.093	-
1986	0.121	0.065	0.049	0.045	0.023	0.055	0.004	-0.001	0.016	0.043	-0.033	-

1987	0.116	0.266	0.021	0.084	0.145	0.121	0.238	0.219	0.250	0.174	0.186
1988	0.334	0.189	0.248	0.224	0.175	0.200	0.168	0.154	0.149	0.120	0.027
1989	0.019	0.094	0.088	0.083	0.073	0.094	0.167	0.168	0.135	0.145	0.067
1990	0.187	0.242	0.442	0.285	0.231	0.233	0.196	0.227	0.179	0.271	0.278
1991	0.224	0.272	0.161	0.299	0.249	0.269	0.271	0.225	0.176	0.133	0.079
1992	0.266	0.250	0.199	0.132	0.125	0.118	-0.008	-0.007	-0.062	-0.072	-0.097
1993	0.204	0.161	0.202	0.121	0.158	0.122	0.088	0.060	0.013	0.061	-0.041
1994	0.160	-0.072	0.176	0.173	0.218	0.191	0.141	0.175	0.156	0.230	0.248
1995	0.349	0.449	0.286	0.229	0.176	0.283	0.276	0.305	0.210	0.241	0.266
1996	0.069	0.246	0.130	0.097	0.177	0.159	0.177	0.178	0.093	0.089	0.077
1997	0.156	0.247	0.262	0.201	0.254	0.367	0.372	0.406	0.457	0.485	0.449
1998	0.486	0.739	0.520	0.608	0.570	0.579	0.651	0.616	0.400	0.409	0.342
1999	0.366	0.540	0.290	0.322	0.248	0.266	0.282	0.253	0.274	0.241	0.223
2000	0.212	0.363	0.334	0.446	0.271	0.252	0.261	0.338	0.309	0.213	0.159
2001	0.329	0.289	0.475	0.426	0.399	0.416	0.452	0.498	0.405	0.378	0.491
2002	0.568	0.593	0.586	0.443	0.432	0.455	0.462	0.417	0.413	0.362	0.397
2003	0.514	0.427	0.418	0.408	0.439	0.437	0.457	0.514	0.499	0.550	0.419
2004	0.496	0.560	0.501	0.484	0.323	0.350	0.380	0.418	0.442	0.468	0.521
2005	0.452	0.364	0.493	0.530	0.476	0.506	0.532	0.502	0.498	0.495	0.478
2006	0.320	0.435	0.380	0.378	0.352	0.442	0.456	0.482	0.425	0.472	0.440
2007	0.601	0.498	0.435	0.466	0.372	0.382	0.394	0.358	0.402	0.362	0.266
2008	0.074	0.198	0.447	0.278	0.283	0.315	0.406	0.407	0.378	0.440	0.394
2009	0.376	0.374	0.369	0.409	0.402	0.499	0.504	0.531	0.462	0.442	0.446
2010	0.477	0.462	0.568	0.558	0.512	0.530	0.536	0.487	0.392	0.397	0.452
2011	0.204	0.269	0.326	0.405	0.339	0.426	0.451	0.432	0.362	0.356	0.265
2012	0.231	0.208	0.308	0.470	0.470	0.477	0.453	0.519	0.509	0.477	0.459

Se asignan variables a las columnas de los datos:

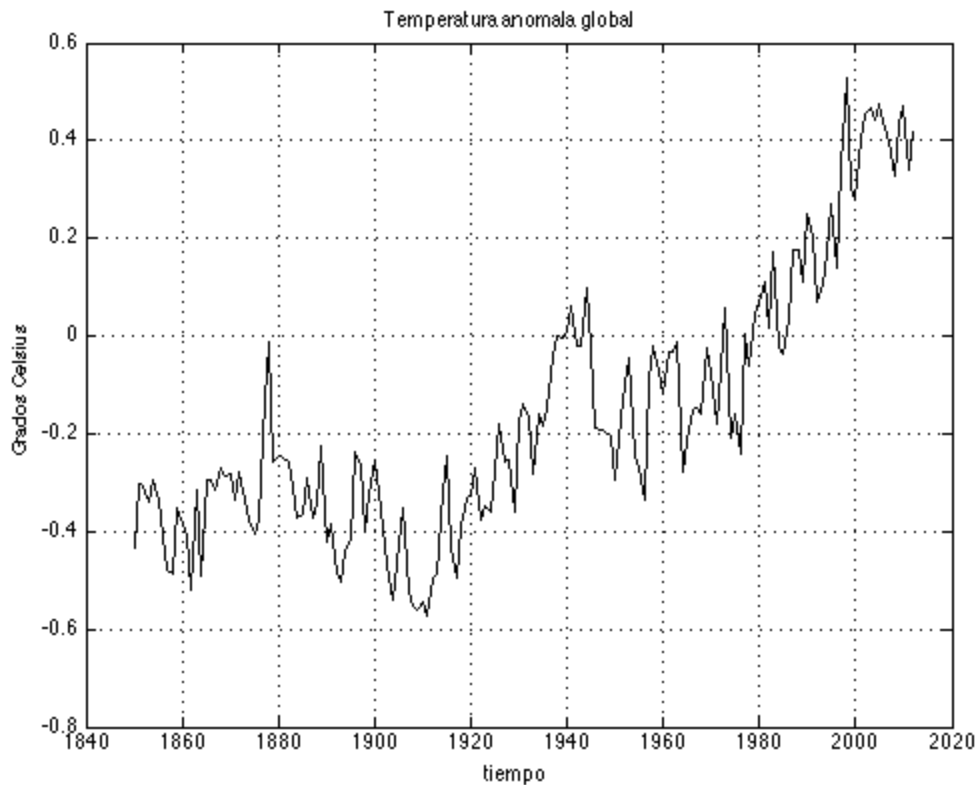
```
tiempo = TemperaturaGlobal(:,1); aT = TemperaturaGlobal(:,14);
```

Se asignan variables a las columnas de los datos:

```
tiempo = hadcrut3vgl(:,1);
aT = hadcrut3vgl(:,14);
```

Se despliegan en un grafico ambas variables:

```
figure(1)
plot(tiempo,aT,'.-k')
title('Temperatura anomala global')
xlabel('tiempo')
ylabel('Grados Celsius')
grid on
```

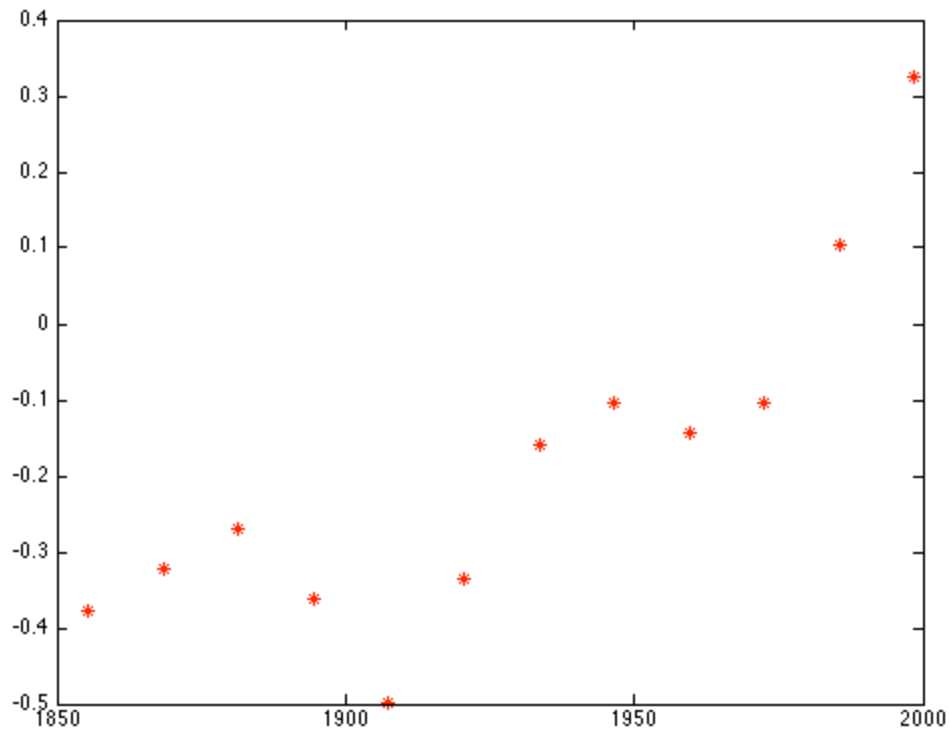


Promedios temporales de datos de concentracion

longitud de los datos a promediar

```
N = length(aT);
% Numero de datos a promediar
M = 12;
% numero maximo de datos del total que se
% pueden considerar segun la particion
maxD = N-M+1;
```

```
for k=1:M+1:maxD
    mt = mean(tiempo(k:k+M-1));
    meanTP = mean(aT(k:k+M-1));
    figure(2)
    plot(mt,meanTP,'*r')
    hold on
    % save('muestreo5.txt',[mt meanTP],'-ASCII','-append')
    % hold on
    dlmwrite('muestreo12.txt',[mt meanTP],'delimiter','\t','-append')
end
```



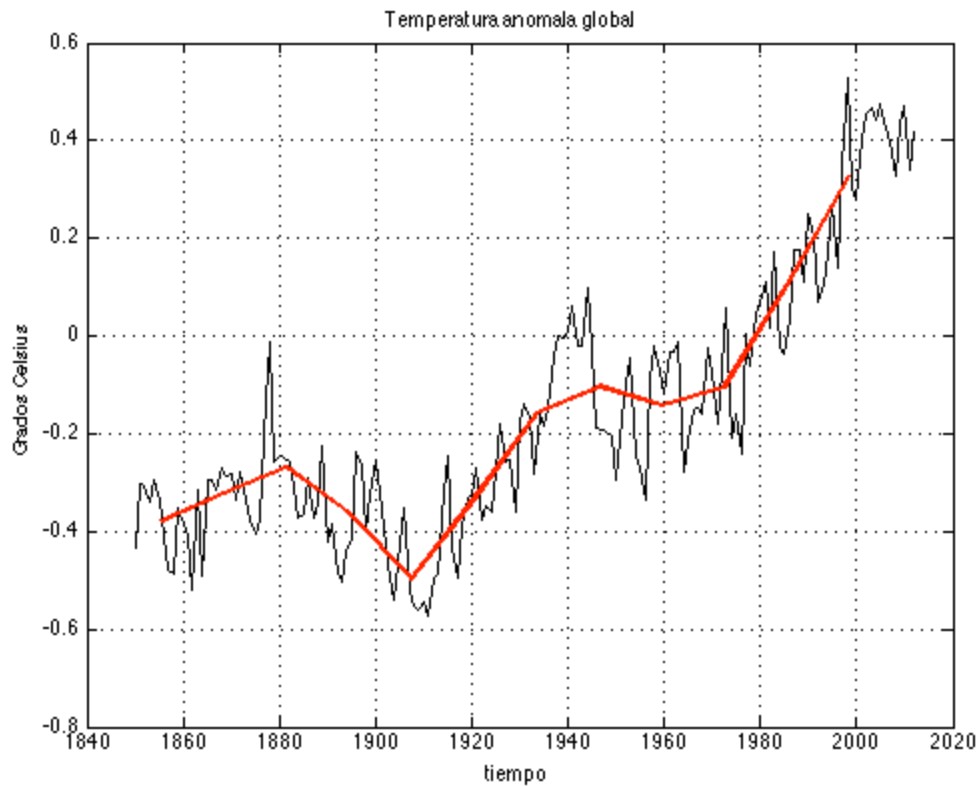
```
load muestrero12.txt
tm = muestrero12(:,1);
aT5 = muestrero12(:,2);
```

```
figure(3)
plot(tiempo,aT,'.-k')
hold on
plot(tm,aT5,'.-r','LineWidth',2)
title('Temperatura anomala global')
xlabel('tiempo')
ylabel('Grados Celsius')
grid on
```

```
type muestrero12.txt
```

```
1855.5 -0.37825
1868.5 -0.32275
1881.5 -0.26933
1894.5 -0.36225
1907.5 -0.4975
1920.5 -0.33533
1933.5 -0.15825
1946.5 -0.10367
1959.5 -0.14292
1972.5 -0.10492
1985.5 0.10467
```

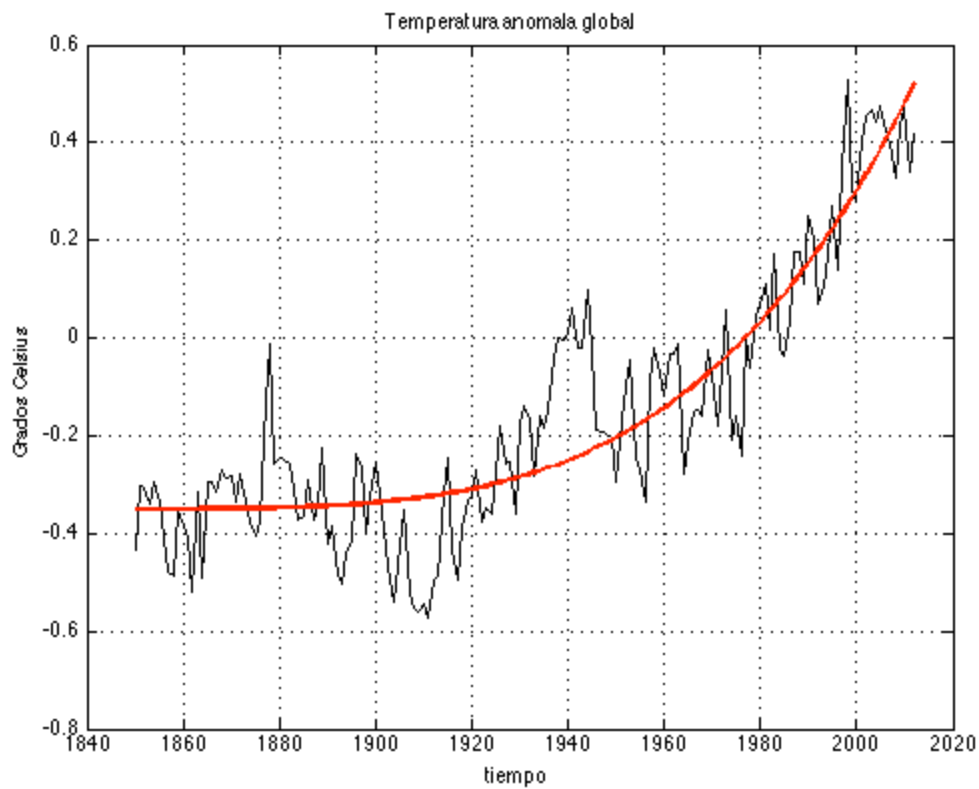
1998.5 0.32625



Modelo de potencia

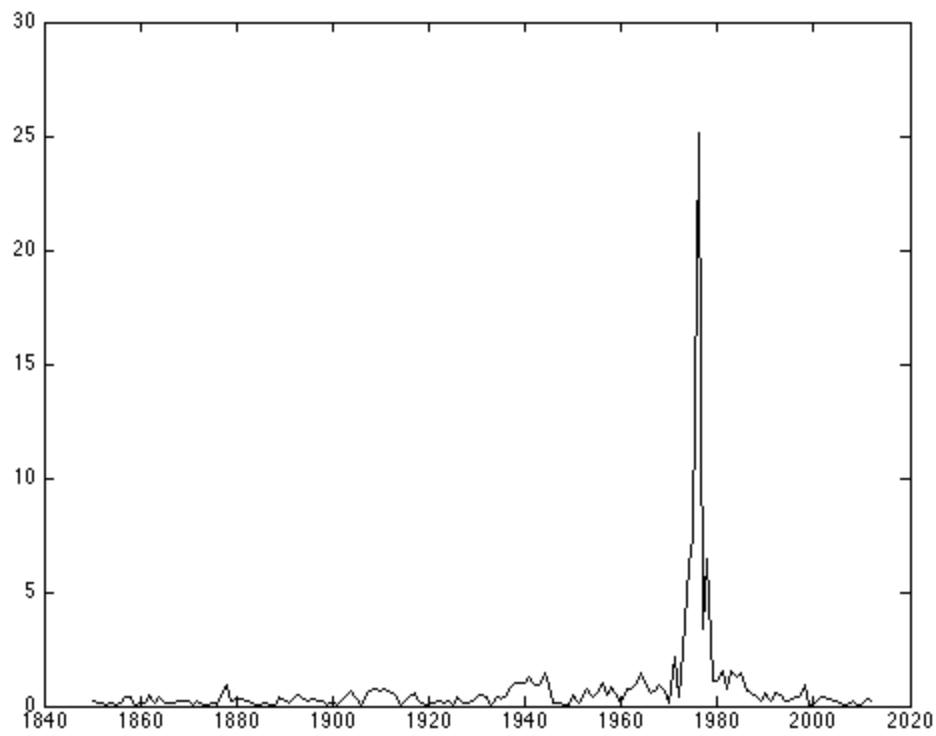
```
modeloT = -0.35 + ((tiempo - 1840)/178.0).^4.0;
```

```
figure(4)
plot(tiempo,aT,'.-k')
hold on
plot(tiempo,modeloT,'.-r','LineWidth',2)
title('Temperatura anomala global')
xlabel('tiempo')
ylabel('Grados Celsius')
grid on
```



Error

```
error = abs((aT - modeloT)./modeloT);  
figure(5)  
plot(tiempo, error, 'k')
```

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