**TOTAL ORGANIC CARBON AND STABLE ISOTOPE ANALYSIS ON BULK ORGANIC CARBON**

About 0.3 g of freeze-dried and powdered sediment sample was decalcified using HCl. Subsequently Total Organic Carbon (TOC) and δ13Corg concentrations were measured using a Fisons Instruments CNS NA 1500 analyzer coupled to a Thermo Delta Plus isotope ratio spectrometer. Results were normalized to international standards. Average analytical uncertainty based on duplicate analyses of sediment samples was 0.03 wt. % for TOC and 0.12 ‰ for δ13Corg.

**BULK SEDIMENT ELEMENTAL COMPOSITION**

Approximately 125 mg of freeze-dried and powdered sediment sample was dissolved in 2.5 ml mix acid (HClO4:HNO3; 3:2) and 2.5 ml 40% HF, heated to 90°C and left overnight. The acids were evaporated at 160°C after which the residue was dissolved in 25 ml 4.5% HNO3. Bulk sediment elemental compositions were measured using Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES; Perkin Elmer Optima 3000); the error calculated from standards and duplicates for aluminum (Al), titanium (Ti) and phosphorus (P) was generally <5% and never exceeded 15%.

**PALYNOLOGICAL TREATMENT**

Palynological processing followed standardized quantitative methods used at the Laboratory of Palaeobotany and Palynology, Utrecht University, the Netherlands. Between 3 and 13 g of freeze-dried sediment sample was slightly crushed (<5 mm), and a known amount of *Lycopodium* marker spores was added to enable palynomorph quantification per gram of sediment (Stockmar, 1971). HCl (~30%) and HF (~38%) was added to dissolve carbonates, and silicates, respectively. Residues were sieved over a 15 µm nylon mesh and the >15 um fraction mounted on microscope. Samples were counted to a minimum of 200 dinocysts, which were identified to genus, or species level at 500x magnification, following the taxonomy of Fensome and Williams (2004). All samples and slides are stored in the collection of the Laboratory of Palaeobotany and Palynology, Utrecht University, the Netherlands.

**TEX86 PALEOTHERMOMETRY**

Between 10 and 13 g of freeze-dried sediment sample was powdered using pestle and mortar. The sediments were extracted with a dichloromethane (DCM) : methanol (MeOH) solvent mixture (9:1, v/v, 3 times for 5 minutes each) using an Accelerated Solvent Extractor (ASE 200, DIONEX) at 100°C and ca. 7.6 x 106 Pa. Total Lipid Extracts (TLE) were evaporated to near dryness using rotary evaporation under near vacuum, remaining solvents were subsequently removed under a nitrogen flow. TLEs were separated, using Al2O3 column chromatography, into apolar fractions (hexane:DCM, 9:1, v/v), ketone fractions (ethyl acetate (EtOAc), v), glycerol dialkyl glycerol tetraether (GDGT) fractions (DCM:MeOH, 95:5, v/v) and polar fractions (DCM:MeOH, 1:1, v/v). The GDGT fractions were dried under a nitrogen flow after which 250 ng of the C46 GDGT internal standard was added. The GDGT fractions were ultrasonically dissolved in hexane:propanol (99:1, v/v) and filtered over a 0.45 µm mesh PTFE filter (ø 4mm) prior to analysis. GDGTs were analyzed using high performance liquid chromatography / atmospheric pressure positive ion chemical ionization mass spectrometry (HPLC/APCI-MS). HPLC/APCI-MS analyses were performed according to Schouten et al. (2007) on an Agilent 1100 series/Hewlett-Packard 1100 MSD SL series instrument, equipped with auto-injection system and HP-Chemstation software. Separation was achieved on a Prevail Cyano column (150 mm x 2.1 mm, 3 μm; Alltech). The flow rate of the hexane:propanol (90:10, v/v) eluent was 0.2 ml min-1, isocratically for the first 5 min, thereafter with a linear gradient to 18% propanol in 45 min. Injection volume of the samples was 10 µl. To increase sensitivity, selective ion monitoring (SIM) of the protonated molecular ions of the GDGTs was used. TEX86 values (Schouten et al. ,2002) were used to estimate mean annual sea surface temperatures (SSTs) using the TEX86H calibration by Kim et al. (2010).

All data are listed in tables DR1 and DR2.

**UPDATED AGE MODEL**

Sugarman et al., 1999, presented a bio-chemostratigraphic framework for the Cenomanian/Turonian boundary (CTB) sediments of the Bass River core, based on calcareous nannofossil and planktonic foraminifera zonation and the δ13C of two benthic foraminifera genera, *Gavelinella* spp. and *Epistomina* spp. The δ13C profiles exhibit the characteristic positive carbon isotope excursion and the encountered species and genera of nannofossils and planktonic foraminifera support the presence of OAE2. However, the typical CTB marker species, notably the planktonic foraminifer *Rotaliphora cushmani* and the nannofossil *Microstaurus Chiastius*, were not recorded. The CTB itself was placed at 589.9 mbs based on the last occurrence of the foraminiferal genus *Rotalipora* and the contact of nannofossil *Microstaurus chiastius* and *Eiffellithus eximius*, subzones of the *Parhabdolithus asper* Zone. Bowman and Bralower, 2005 published a high-resolution bulk organic carbon δ13Corg curve, which after expansion (broadened interval) in this study, was used to correlate as reliable as possible to global reference sections (Fig. DR1). Based on the correlation of the new high-resolution δ13Corg data set (Bowman and Bralower, 2005 and this study) to global reference sections with a more robust biostratigraphic framework, we suggest modifying the placement of the CTB, to 581.5 mbs.



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**Table DR1.** Bulk geochemical, TEX86 and BIT data for the Bass River borehole ODP leg 174AX. Ftbs = feet below surface, mbs = meters below surface, n.d. = not determined, ppm = parts per million

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth** **(ftbs)** | **Depth (mbs)** | **TOC****(%)** | **δ13CTOC (‰VPDB)** | **TOC/Ptot** **(mol/mol)** | **TEX86** | **SST****(°C)\*** | **BIT-index** | **Al** **(%)** | **Ti** **(ppm)** | **Ti/Al-ratio** |
| 1849.35 | 563.68 | n.d. | n.d. | n.d. | 0.896 | 35.3 | 0.08 | 7.87 | 5248 | 0.067 |
| 1850.15 | 563.93 | 0.63 | -24.28 | 42 | 0.895 | 35.3 | 0.08 | 7.72 | 5728 | 0.074 |
| 1854.15 | 565.14 | 0.86 | -23.94 | 59 | 0.912 | 35.8 | 0.07 | 8.37 | 5463 | 0.065 |
| 1860.65 | 567.13 | 1.10 | -23.97 | 76 | 0.909 | 35.8 | 0.08 | 10.35 | 5607 | 0.054 |
| 1864.65 | 568.35 | 0.47 | -23.69 | 33 | 0.910 | 35.8 | 0.06 | 6.85 | 5116 | 0.075 |
| 1868.65 | 569.56 | 1.28 | -23.93 | 95 | 0.900 | 35.5 | 0.08 | 10.56 | 5710 | 0.054 |
| 1870.65 | 570.17 | 0.43 | -23.65 | 16 | n.d. | n.d. | n.d. | 5.33 | 3725 | 0.070 |
| 1872.05 | 570.60 | 0.65 | -23.73 | 35 | 0.908 | 35.7 | 0.06 | 8.50 | 5509 | 0.065 |
| 1873.35 | 571.00 | 0.63 | -23.63 | 39 | 0.923 | 36.2 | 0.04 | 8.12 | 5434 | 0.067 |
| 1874.65 | 571.39 | 1.10 | -24.00 | 91 | 0.929 | 36.4 | 0.05 | 10.36 | 5498 | 0.053 |
| 1876.65 | 572.00 | 0.66 | -23.59 | 47 | n.d. | n.d. | n.d. | 7.79 | 4758 | 0.061 |
| 1877.35 | 572.22 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d | n.d. |
| 1879.35 | 572.83 | 0.84 | -23.70 | 67 | 0.928 | 36.4 | 0.05 | 10.18 | 5501 | 0.054 |
| 1881.35 | 573.44 | 0.67 | -23.58 | 48 | n.d. | n.d. | n.d. | 8.21 | 5021 | 0.061 |
| 1882.65 | 573.83 | 1.01 | -23.83 | 68 | n.d. | n.d. | n.d. | 9.92 | 5159 | 0.052 |
| 1884.05 | 574.26 | 0.88 | -23.60 | 66 | 0.929 | 36.4 | 0.05 | 10.18 | 5672 | 0.056 |
| 1885.35 | 574.65 | 1.04 | -23.94 | 76 | n.d. | n.d. | n.d. | 9.77 | 4893 | 0.050 |
| 1886.65 | 575.05 | 0.70 | -23.86 | 29 | 0.922 | 36.2 | 0.07 | 8.41 | 5047 | 0.060 |
| 1888.05 | 575.48 | 0.83 | -23.98 | 77 | n.d. | n.d. | n.d. | 9.52 | 4818 | 0.051 |
| 1889.35 | 575.87 | 0.72 | -23.38 | 55 | n.d. | n.d. | n.d. | 8.27 | 4661 | 0.056 |
| 1890.65 | 576.27 | 0.88 | -23.60 | 64 | 0.926 | 36.3 | 0.04 | 10.00 | 5429 | 0.054 |
| 1891.35 | 576.48 | 1.02 | -23.75 | 70 | 0.928 | 36.4 | 0.04 | 10.19 | 5041 | 0.049 |
| 1892.65 | 576.88 | 0.75 | -23.60 | 53 | 0.924 | 36.2 | 0.04 | 10.04 | 5110 | 0.051 |
| 1896.05 | 577.92 | 0.59 | -23.41 | 51 | n.d. | n.d. | n.d. | 8.29 | 4728 | 0.057 |
| 1897.35 | 578.31 | 0.86 | -24.00 | 69 | 0.945 | 36.9 | 0.04 | 10.06 | 5369 | 0.053 |
| 1898.35 | 578.62 | 1.06 | -23.76 | 94 | n.d. | n.d. | n.d. | 11.27 | 5369 | 0.048 |
| 1900.1 | 579.15 | 0.93 | -23.94 | 64 | 0.941 | 36.8 | 0.04 | 9.76 | 5318 | 0.054 |
| 1901.35 | 579.53 | n.d. | n.d. | n.d. | 0.945 | 36.9 | 0.04 | 10.39 | 5273 | 0.051 |
| 1904.05 | 580.35 | n.d. | n.d. | n.d. | 0.926 | 36.3 | 0.05 | 11.32 | 5647 | 0.050 |
| 1906.05 | 580.96 | n.d. | n.d. | n.d. | 0.947 | 37.0 | 0.04 | 10.61 | 4796 | 0.045 |
| 1907.35 | 581.36 | n.d. | n.d. | n.d. | 0.922 | 36.2 | 0.04 | 8.95 | 5004 | 0.056 |
| 1908.05 | 581.57 | 1.13 | -23.18 | 102 | n.d. | n.d. | n.d. | 9.75 | 5197 | 0.053 |
| 1909.35 | 581.97 | n.d. | n.d. | n.d. | 0.926 | 36.3 | 0.05 | 10.34 | 5184 | 0.050 |
| 1912.65 | 582.98 | 0.97 | -22.85 | 104 | 0.916 | 36.0 | 0.05 | 8.46 | 4500 | 0.053 |
| 1914.65 | 583.59 | 1.22 | -22.86 | 132 | n.d. | n.d. | n.d. | 10.03 | 4737 | 0.047 |
| 1915.35 | 583.80 | n.d. | n.d. | n.d. | 0.932 | 36.5 | 0.04 | 8.45 | 4438 | 0.053 |
| 1916.65 | 584.19 | 0.88 | -23.10 | 99 | 0.911 | 35.8 | 0.05 | 8.94 | 4784 | 0.054 |
| 1918.05 | 584.62 | 1.09 | -22.63 | 75 | 0.919 | 36.1 | 0.04 | 8.44 | 4415 | 0.052 |
| 1918.65 | 584.80 | n.d. | n.d. | n.d. | 0.903 | 35.6 | 0.05 | 6.14 | 3230 | 0.053 |
| 1919.35 | 585.02 | n.d. | n.d. | n.d. | 0.924 | 36.2 | 0.04 | 8.66 | 4231 | 0.049 |
| 1920.05 | 585.23 | 1.29 | -22.60 | 138 | 0.917 | 36.0 | 0.05 | 9.67 | 5290 | 0.055 |
| 1920.65 | 585.41 | n.d. | n.d. | n.d. | 0.926 | 36.3 | 0.04 | 9.73 | 5518 | 0.057 |
| 1921.35 | 585.63 | n.d. | n.d. | n.d. | 0.902 | 35.5 | 0.04 | 8.13 | 4148 | 0.051 |
| 1922.05 | 585.84 | n.d. | n.d. | n.d. | 0.911 | 35.8 | 0.05 | 9.56 | 5362 | 0.056 |
| 1922.65 | 586.02 | 1.13 | -22.63 | 82 | 0.910 | 35.8 | 0.05 | 9.24 | 5204 | 0.056 |
| 1923.35 | 586.24 | n.d. | n.d. | n.d. | 0.908 | 35.7 | 0.05 | 9.40 | 4737 | 0.050 |
| 1924.05 | 586.45 | n.d. | n.d. | n.d. | 0.907 | 35.7 | 0.05 | 9.38 | 4568 | 0.049 |
| 1924.65 | 586.63 | n.d. | n.d. | n.d. | 0.920 | 36.1 | 0.05 | 8.64 | 4238 | 0.049 |
| 1925.35 | 586.85 | n.d. | n.d. | n.d. | 0.908 | 35.7 | 0.05 | 9.01 | 4716 | 0.052 |
| 1926.15 | 587.09 | n.d. | n.d. | n.d. | 0.922 | 36.2 | 0.04 | 8.82 | 4547 | 0.052 |
| 1926.65 | 587.24 | n.d. | n.d. | n.d. | 0.907 | 35.7 | 0.04 | 8.58 | 4543 | 0.053 |
| 1927.35 | 587.46 | n.d. | n.d. | n.d. | 0.911 | 35.8 | 0.04 | 8.38 | 4666 | 0.056 |
| 1928.1 | 587.68 | 1.07 | -23.36 | 109 | 0.942 | 36.8 | 0.04 | 9.78 | 5643 | 0.058 |
| 1928.65 | 587.85 | n.d. | n.d. | n.d. | 0.944 | 36.9 | 0.04 | 10.91 | 5645 | 0.052 |
| 1929.35 | 588.07 | n.d. | n.d. | n.d. | 0.930 | 36.4 | 0.04 | 10.60 | 5306 | 0.050 |
| 1930.15 | 588.31 | n.d. | n.d. | n.d. | 0.935 | 36.6 | 0.04 | 14.83 | 8059 | 0.054 |
| 1931.05 | 588.58 | n.d. | n.d. | n.d. | 0.931 | 36.5 | 0.03 | 9.99 | 5394 | 0.054 |
| 1932.35 | 588.98 | n.d. | n.d. | n.d. | 0.930 | 36.4 | 0.04 | 14.05 | 7386 | 0.053 |
| 1934.05 | 589.50 | 1.41 | -22.70 | 128 | 0.927 | 36.4 | 0.03 | 10.13 | 4949 | 0.049 |
| 1934.65 | 589.68 | n.d. | n.d. | n.d. | 0.925 | 36.3 | 0.03 | 10.14 | 4833 | 0.048 |
| 1935.35 | 589.89 | n.d. | n.d. | n.d. | 0.946 | 36.9 | 0.05 | 9.57 | 4448 | 0.046 |
| 1935.95 | 590.08 | 1.12 | -22.54 | 101 | 0.844 | 33.6 | 0.04 | 8.81 | 4877 | 0.055 |
| 1936.65 | 590.29 | 1.51 | -22.76 | 146 | 0.912 | 35.8 | 0.03 | 8.38 | 3953 | 0.047 |
| 1937.35 | 590.50 | n.d. | n.d. | n.d. | 0.853 | 33.9 | 0.05 | 7.52 | 4119 | 0.055 |
| 1937.95 | 590.69 | n.d. | n.d. | n.d. | 0.902 | 35.6 | 0.04 | 6.61 | 3536 | 0.054 |
| 1938.55 | 590.87 | n.d. | n.d. | n.d. | 0.867 | 34.4 | 0.04 | 7.04 | 4205 | 0.060 |
| 1939.35 | 591.11 | 0.61 | -23.27 | 56 | 0.841 | 33.4 | 0.06 | 5.96 | 3523 | 0.059 |
| 1940.05 | 591.33 | n.d. | n.d. | n.d. | 0.875 | 34.6 | 0.04 | 7.18 | 4597 | 0.064 |
| 1940.65 | 591.51 | n.d. | n.d. | n.d. | 0.887 | 35.0 | 0.06 | 8.63 | 4911 | 0.057 |
| 1941.25 | 591.69 | n.d. | n.d. | n.d. | 0.902 | 35.5 | 0.06 | 9.23 | 5471 | 0.059 |
| 1942.05 | 591.94 | 1.06 | -25.00 | 97 | 0.883 | 34.9 | 0.05 | 10.23 | 5178 | 0.051 |
| 1942.65 | 592.12 | n.d. | n.d. | n.d. | 0.907 | 35.7 | 0.05 | 9.36 | 5022 | 0.054 |
| 1943.35 | 592.33 | n.d. | n.d. | n.d. | 0.912 | 35.9 | 0.05 | 8.48 | 4697 | 0.055 |
| 1944.05 | 592.55 | n.d. | n.d. | n.d. | 0.925 | 36.3 | 0.05 | 10.18 | 5366 | 0.053 |
| 1944.55 | 592.70 | 1.14 | -24.73 | 84 | 0.927 | 36.3 | 0.04 | 10.07 | 5350 | 0.053 |
| 1945.25 | 592.91 | 1.04 | -24.88 | 76 | 0.938 | 36.7 | 0.04 | 10.96 | 5533 | 0.050 |
| 1946.05 | 593.16 | 1.10 | -25.33 | 80 | 0.925 | 36.3 | 0.04 | 11.19 | 5665 | 0.051 |
| 1946.65 | 593.34 | n.d. | n.d. | n.d. | 0.922 | 36.2 | 0.03 | 9.60 | 5436 | 0.057 |
| 1947.35 | 593.55 | n.d. | n.d. | n.d. | 0.928 | 36.4 | 0.03 | 9.84 | 5615 | 0.057 |
| 1948.15 | 593.80 | 0.83 | -25.16 | 74 | 0.928 | 36.4 | 0.03 | 9.99 | 5817 | 0.058 |
| 1948.65 | 593.95 | n.d. | n.d. | n.d. | 0.919 | 36.1 | 0.04 | 10.05 | 5632 | 0.056 |
| 1949.35 | 594.16 | n.d. | n.d. | n.d. | 0.919 | 36.1 | 0.04 | 10.04 | 5281 | 0.053 |
| 1950.05 | 594.38 | 0.98 | -24.69 | 68 | 0.921 | 36.2 | 0.04 | 9.70 | 5016 | 0.052 |
| 1951.35 | 594.77 | 0.79 | -25.17 | 69 | 0.886 | 35.0 | 0.04 | 8.32 | 4996 | 0.060 |
| 1952.05 | 594.98 | 0.76 | -25.39 | 60 | 0.926 | 36.3 | 0.05 | 8.83 | 5467 | 0.062 |
| 1952.55 | 595.14 | 0.88 | -25.16 | 70 | 0.909 | 35.8 | 0.04 | 9.65 | 5695 | 0.059 |
| 1953.35 | 595.38 | 0.86 | -25.22 | 69 | 0.917 | 36.0 | 0.04 | 9.67 | 5810 | 0.060 |
| 1954.05 | 595.59 | 0.76 | -25.02 | 60 | 0.906 | 35.7 | 0.04 | 8.61 | 5116 | 0.059 |
| 1954.65 | 595.78 | 0.68 | -25.15 | 63 | 0.851 | 33.8 | 0.06 | 7.54 | 4782 | 0.063 |

\* Calibration according to Kim et al., 2010

**Table DR2.** Summarized palynological results for the Bass River borehole ODP leg 174AX. *P. hys*t. = *Paleohystrichophora infusorioides*, cpg = cysts per dry gram of sediment, ppg = palynomorphs per dry gram of sediment

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Depth (ftbs)** | **Depth (mbs)** | **Total dinocysts (cpg)** | ***C. comp.-******C. memb. complex* (cpg)** | ***P. hyst.* (cpg )** | **Total** **ter.** **pal.****(ppg)** | **Saccate gymnosperm pollen****(ppg)** | **T/M-ratio** | **T/M-ratio****T = saccate****gymnosperms exclusively** |
| 1849.35 | 563.68 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1850.15 | 563.93 | 2966 | 0 | 990 | 1951 | 347 | 0.37 | 0.06 |
| 1854.15 | 565.14 | 3147 | 0 | 986 | 2659 | 1674 | 0.44 | 0.28 |
| 1860.65 | 567.13 | 5199 | 0 | 878 | 4181 | 2881 | 0.43 | 0.3 |
| 1864.65 | 568.35 | 3337 | 0 | 1059 | 1223 | 551 | 0.26 | 0.12 |
| 1868.65 | 569.56 | 6973 | 0 | 1978 | 4244 | 2719 | 0.37 | 0.24 |
| 1870.65 | 570.17 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1872.05 | 570.60 | 2062 | 0 | 635 | 1211 | 831 | 0.36 | 0.25 |
| 1873.35 | 571.00 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1874.65 | 571.39 | 10085 | 0 | 3437 | 1809 | 1628 | n.d. | n.d. |
| 1876.65 | 572.00 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1877.35 | 572.22 | 10037 | 0 | 3990 | 2095 | 898 | 0.17 | 0.07 |
| 1879.35 | 572.83 | 8780 | 0 | 3477 | 1391 | 77 | 0.14 | 0.01 |
| 1881.35 | 573.44 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1882.65 | 573.83 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1884.05 | 574.26 | 4304 | 0 | 1428 | 1281 | 672 | 0.23 | 0.12 |
| 1885.35 | 574.65 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1886.65 | 575.05 | 2323 | 0 | 663 | 358 | 144 | 0.13 | 0.05 |
| 1888.05 | 575.48 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1889.35 | 575.87 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1890.65 | 576.27 | 7931 | 0 | 2585 | 1125 | 755 | 0.12 | 0.08 |
| 1891.35 | 576.48 | 8123 | 0 | 1841 | 1261 | 989 | 0.13 | 0.1 |
| 1892.65 | 576.88 | 6276 | 0 | 1402 | 1094 | 673 | 0.15 | 0.09 |
| 1896.05 | 577.92 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1897.35 | 578.31 | 9326 | 0 | 2447 | 414 | 217 | 0.04 | 0.02 |
| 1898.35 | 578.62 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1900.1 | 579.15 | 9718 | 0 | 2302 | 575 | 234 | 0.06 | 0.02 |
| 1901.35 | 579.53 | 8768 | 0 | 2628 | 719 | 513 | 0.08 | 0.05 |
| 1904.05 | 580.35 | 23277 | 0 | 6070 | 2521 | 772 | 0.1 | 0.03 |
| 1906.05 | 580.96 | 14850 | 0 | 4680 | 2371 | 2059 | 0.14 | 0.12 |
| 1907.35 | 581.36 | 12396 | 0 | 4468 | 1635 | 1308 | 0.12 | 0.09 |
| 1908.05 | 581.57 | 23380 | 0 | 9235 | 1410 | 1021 | 0.06 | 0.04 |
| 1909.35 | 581.97 | 10430 | 0 | 3675 | 1340 | 908 | 0.11 | 0.08 |
| 1912.65 | 582.98 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1914.65 | 583.59 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1915.35 | 583.80 | 13590 | 0 | 5180 | 2066 | 1368 | 0.13 | 0.09 |
| 1916.65 | 584.19 | 13011 | 0 | 4451 | 2390 | 1912 | 0.15 | 0.12 |
| 1918.05 | 584.62 | 24327 | 0 | 5098 | 5041 | 4248 | 0.17 | 0.14 |
| 1918.65 | 584.80 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1919.35 | 585.02 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1920.05 | 585.23 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1920.65 | 585.41 | 17865 | 0 | 4222 | 3864 | 1713 | 0.18 | 0.08 |
| 1921.35 | 585.63 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1922.05 | 585.84 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1922.65 | 586.02 | 11791 | 0 | 2099 | 1967 | 1285 | 0.14 | 0.09 |
| 1923.35 | 586.24 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1924.05 | 586.45 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1924.65 | 586.63 | 12209 | 0 | 2468 | 1186 | 799 | 0.09 | 0.06 |
| 1925.35 | 586.85 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1926.15 | 587.09 | 16202 | 0 | 4553 | 1707 | 1306 | 0.09 | 0.07 |
| 1926.65 | 587.24 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1927.35 | 587.46 | 10232 | 0 | 2846 | 2898 | 1604 | 0.22 | 0.12 |
| 1928.1 | 587.68 | 14706 | 0 | 3602 | 1832 | 253 | 0.11 | 0.02 |
| 1928.65 | 587.85 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1929.35 | 588.07 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1930.15 | 588.31 | 15598 | 0 | 4593 | 2402 | 1343 | 0.13 | 0.07 |
| 1931.05 | 588.58 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1932.35 | 588.98 | 10351 | 0 | 2969 | 454 | 206 | 0.04 | 0.02 |
| 1934.05 | 589.50 | 29472 | 0 | 7575 | 8745 | 6679 | 0.23 | 0.17 |
| 1934.65 | 589.68 | 18387 | 89 | 4175 | 5152 | 3997 | 0.21 | 0.16 |
| 1935.35 | 589.89 | 21690 | 124 | 2606 | 11171 | 7695 | 0.34 | 0.23 |
| 1935.95 | 590.08 | 14870 | 932 | 1935 | 3583 | 2293 | 0.19 | 0.12 |
| 1936.65 | 590.29 | 8109 | 474 | 947 | 7281 | 5742 | 0.46 | 0.36 |
| 1937.35 | 590.50 | 4959 | 102 | 741 | 1587 | 1086 | 0.26 | 0.16 |
| 1937.95 | 590.69 | 7042 | 1421 | 490 | 1585 | 1029 | 0.18 | 0.12 |
| 1938.55 | 590.87 | 8574 | 1357 | 679 | 3869 | 2013 | 0.31 | 0.16 |
| 1939.35 | 591.11 | 5079 | 112 | 1310 | 3497 | 2986 | 0.4 | 0.35 |
| 1940.05 | 591.33 | 8635 | 0 | 1439 | 2693 | 1460 | 0.23 | 0.13 |
| 1940.65 | 591.51 | 9539 | 0 | 1698 | 2703 | 1318 | 0.22 | 0.11 |
| 1941.25 | 591.69 | 16776 | 0 | 1352 | 2099 | 1316 | 0.11 | 0.07 |
| 1942.05 | 591.94 | 13079 | 0 | 2138 | 2588 | 1519 | 0.16 | 0.1 |
| 1942.65 | 592.12 | 12235 | 0 | 1670 | 2533 | 1382 | 0.17 | 0.09 |
| 1943.35 | 592.33 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1944.05 | 592.55 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1944.55 | 592.70 | 12668 | 0 | 2749 | 6158 | 2062 | 0.19 | 0.13 |
| 1945.25 | 592.91 | 15217 | 0 | 4976 | 1163 | 775 | 0.07 | 0.05 |
| 1946.05 | 593.16 | 16866 | 0 | 4739 | 706 | 1150 | 0.09 | 0.06 |
| 1946.65 | 593.34 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1947.35 | 593.55 | 10362 | 0 | 1961 | 914 | 245 | 0.08 | 0.02 |
| 1948.15 | 593.80 | 15576 | 0 | 3092 | 1338 | 149 | 0.08 | 0.01 |
| 1948.65 | 593.95 | 17164 | 0 | 3691 | 997 | 406 | 0.05 | 0.02 |
| 1949.35 | 594.16 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| 1950.05 | 594.38 | 27540 | 0 | 4105 | 3763 | 1482 | 0.12 | 0.05 |
| 1951.35 | 594.77 | 9749 | 0 | 2029 | 2489 | 1957 | 0.2 | 0.16 |
| 1952.05 | 594.98 | 5621 | 0 | 1207 | 924 | 677 | 0.14 | 0.1 |
| 1952.55 | 595.14 | 13069 | 0 | 3144 | 1320 | 758 | 0.09 | 0.05 |
| 1953.35 | 595.38 | 10053 | 0 | 1104 | 2116 | 1058 | 0.16 | 0.08 |
| 1954.05 | 595.59 | 15280 | 0 | 2867 | 1792 | 684 | 0.1 | 0.04 |
| 1954.65 | 595.78 | 6645 | 0 | 2732 | 2041 | 1197 | 0.23 | 0.13 |