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Low-frequency patterns in late Holocene tree-ring records from northern Fennoscandia

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Abstract:	<p>Northern Fennoscandia is a cradle of tree-ring based climate reconstructions. These late Holocene data come from several types of tree-ring proxies and are typically used for discussing the extent of past climate excursions such as the Medieval Climate Anomaly and Little Ice Age, relative to the modern temperatures. This article compares tree-ring records published from the region over the past two decades with those produced here by recalculations, focussing on their low-frequency temperature patterns. Paleoclimate evidence fully independent of trees (sedimentary chironomid data) was used to assess the dendroclimatic records. Chironomid record correlated best with anatomy (maximum latewood radial-cell-wall thickness) data averaged over the region (A-FEN) when the latewood (maximum) anatomy was not tuned by earlywood (minimum) anatomy values. While all the examined tree-ring records are highly sensitive to high-frequency summer temperature variability, non-temperature factors likely play a role in modifying their low-frequency patterns. As a result, the subsets of A-FEN (representing NW and NE Fennoscandian sites i.e., Torneträsk region and Finnish Lapland) did not correlate, unlike the subsets of the maximum density data, for which reason the regionally averaged A-FEN seems to underestimate the temperature amplitudes during the Medieval Climate Anomaly. The findings contribute to the discussion on low-frequency patterns in millennia-long tree-ring chronologies.</p>

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3 Published and new records
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8 The characterisation of late Holocene temperature variability is of importance for science and
9 society as reconstructions of current and past climates are needed to faithfully track the
10 recent extremes in the context of natural and anthropogenic forcings. Tree-ring proxies are
11 often employed for this task but also referred to as a type of data not fully recording the
12 extent of long-term climatic changes (Hughes, 2011; Klippel et al., 2020; Lücke et al., 2021). A
13 possible solution to overcome these drawbacks is to develop novel tree-ring proxies. Such
14 work has been long active in northern Fennoscandia to the extent that the region seems to
15 have become a natural laboratory for paleoclimatic tree-ring studies (Figure 1a).
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30 Dendroclimatic research started in northern Fennoscandia a century ago (Boman, 1927;
31 Erlandsson, 1936; Hustich, 1947). More recent work has become known especially from
32 millennia-long tree-ring chronologies composed of subfossil *Pinus sylvestris* samples (Sirén,
33 1961; Bartholin and Karlén, 1983; Eronen et al., 1999, 2002; Grudd et al., 2002; Helama et al.,
34 2008, 2022). This work includes ~1500-year-long X-ray based latewood maximum density
35 (MXD) chronology for the Torneträsk region in northern Sweden (Schweingruber et al., 1988;
36 Briffa et al., 1990, 1992; Grudd, 2008; Melvin et al., 2013) that has become a cornerstone of
37 late Holocene paleoclimatic studies (Esper et al., 2002; Jones and Mann, 2004; Shi et al., 2013;
38 Luterbacher et al., 2016). The first tree-ring records of latewood blue intensity reflection (BI)
39 were developed as temperature-sensitive proxy data in northern Finland (McCarroll et al.,
40 2002; Campbell et al., 2007, 2011), where also tree-ring $\delta^{13}\text{C}$ data were used to reconstruct
41 summer temperatures (Gagen et al., 2007), although currently these isotopic data are
42 considered a proxy for irradiance and/or cloud cover (Young et al., 2010, 2012; Loader et al.,
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3 2013; Helama et al., 2018). Moreover, ~1200-year multiproxy tree growth (composite of tree-
4 ring and tree height growth; McCarroll et al., 2013) and ~2000-year MXD records ("N-Scan";
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6 Esper et al., 2012) have been built from samples representing a larger area in the same
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8 region, in addition to a ~7500-year composite BI-MXD record that likewise originates from
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10 northern Finland (Helama et al., 2022).
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18 These studies demonstrate the general evolution of dendroclimatic temperature
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20 reconstructions that have been traditionally produced for high-altitude and latitude sites,
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22 where MXD data commonly proves superior to ring widths (Briffa et al. 1988; McCarroll et al.,
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24 2003), BI reflectance providing a surrogate for MXD (McCarroll et al., 2011; Björklund et al.,
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26 2014, 2021; Vyukhina and Gurskaya, 2022). In northern Fennoscandia, the MXD, BI and
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28 multiproxy records are expectedly comparable as they have all been used for reconstructions
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30 of spring-summer temperatures (from April, May or June through August) (Briffa et al., 1992;
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32 Esper et al., 2012; McCarroll et al., 2013; Melvin et al., 2013; Helama et al., 2022). Relying on
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34 tree-ring methods of regional-curve-standardization (RCS; Briffa et al., 1992; Esper et al.,
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36 2002; Helama et al., 2018) that remove biological noise from the data while supposedly
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38 preserving their long-term and period (i.e., low-frequency) climatic variations, the
39
40 Fennoscandian studies have strongly contributed to the discussion on temperature history
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42 due to the Medieval Climate Anomaly (MCA), the Little Ice Age (LIA) and modern warming
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44 which have characterised the long-term climatic development of the past millennium, at least
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46 in the North Atlantic sector (Lamb, 1982; Grove, 2004; Drinkwater, 2006).
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57 The newest contribution to this tree-ring proxy collections is a ~1300-year-long summer
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59 temperature record based on quantitative wood anatomy (Björklund et al., 2023). Among
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3 several anatomy variables, radial-cell-wall thickness was used for a reconstruction of
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5 northern Fennoscandian temperatures (A-FEN) and compared with the MXD data produced
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7 previously as a regionally averaged mean record over the same region (X-FEN; Wilson et al.,
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9 2016). Contributing to the long-lasting discussion, A-FEN resulted in modern temperatures
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11 warmer than those during the MCA (AD 850–1100; Björklund et al., 2023), in contrast with
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13 the previous studies where MXD records from the region had not indicated unprecedently
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15 warm modern temperatures (Esper et al., 2014; Matskovsky and Helama, 2014, 2016).
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22 Obviously, more detailed comparisons are needed to assess the anatomy and density
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24 records, their subsets, and other tree-ring based summer temperature records for the region
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26 (Esper et al., 2012; McCarroll et al., 2013; Melvin et al., 2013; Helama et al., 2022), to throw
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28 more light on the described disparities and offsets. Considering the rule “one method is no
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30 method” in empirical data analysis (Tölg, 1987) and addressing the worries that tree-ring
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32 records may be prone to low-frequency noise (Klippel et al., 2020; Lücke et al., 2021), the
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34 evaluations should be ideally augmented with paleoclimate evidence fully independent of
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36 trees (i.e., non-dendrochronological and non-pollen data). Statistically, various proxy data
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38 representing trees are interrelated (McCarroll et al., 2003; Jalkanen et al., 2008) and it cannot
39
40 be ruled out that the linkages represent not only climatic but also biological processes.
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50 Such an analysis is carried out in this paper. In addition to comparisons between the
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52 dendroclimatic records (since AD 850), another type of proxy data originates from taxonomic
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54 assemblages of sedimentary chironomids (Sundqvist et al., 2014). This reconstruction was not
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56 considered more truthful than dendroclimatic estimates and it is acknowledged that
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58 sedimentary records may be additionally biased by their age-depth models (Telford et al.,
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3 2004). Despite the shortcomings, chironomid data is included to portray summer
4 temperature variations independent of indications inferred from tree-growth data.
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6 Additionally, this dataset represents multiple sites around northern Fennoscandia, as
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8 previously extracted and averaged (Helama et al., 2022) from the circumpolar collection of
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10 Arctic proxy sites with Holocene paleoclimate data of Sundqvist et al. (2014). The main body
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12 of this article focuses on the enigmatic warm–cool–warm cycle of the past millennium, for
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14 which reason the analyses were restricted to low-frequency temperature patterns. Focus on
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16 long-term variations means that the significance testing of Pearson correlations took account
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18 of the spectral properties of the time series (Ebisuzaki, 1997; Macias-Fauria et al., 2012). In
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20 what follows, the analyses of the proxy records and their particularly low-frequency patterns
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22 are preceded by a short demonstration of hitherto undiscussed peculiarities in the anatomy-
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24 based A-FEN record. The paper closes with recommendations for future research that would
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26 accelerate the evaluation of proxy data available on similar subjects.
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38 Earlywood versus latewood signals

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42 Unlike X-FEN, the A-FEN record was not built only from latewood data points. Instead, A-FEN
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44 was derived as a 'delta radial-cell-wall thickness parameter' that represents difference
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46 between latewood maximum and earlywood minimum cell wall thicknesses of each ring (see
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48 Methods in Björklund et al., 2023). It appears that this new 'delta' parameter may be more
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50 problematic than it appears at first sight. Here, this is revealed by a new anatomy-based
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52 record built using only latewood anatomy values from northern Fennoscandia (LA-FEN). That
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54 is, the regional LA-FEN chronology was computed from RCS-detrended latewood maxima of
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56 cell wall thickness series, adopting the previously used approach (Björklund et al., 2023)
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3 except that the 'Hugershoff' function (Briffa et al., 2001) was fitted to raw data instead of
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5 splines, and calibrated/verified against the May-August temperatures (65–70° N, 15–30° E)
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8 (Morice et al., 2021) (see Tables S2 and S3). Moreover, to ensure comparability, the A-FEN
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10 chronology was recomputed using a 'Hugershoff' -based RCS method, and
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13 calibrated/verified against the May-August temperatures, for the purpose of this study.

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15 These calculations show (Figures 1b–d) that the detrending methods do not alter the
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17 conclusions, but rather the delta-based A-FEN results in less warm MCA and warmer current
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19 temperatures, compared to the simple latewood maxima of the cell wall thickness (LA-FEN).
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25 The deviations between A-FEN and LA-FEN can be explained by long-term trends observed
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27 in the earlywood anatomy data (Figure 1e) differing markedly from those observed for
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29 latewood anatomy. Thus, these long-term trends in earlywood production seem to modify
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31 the delta-based A-FEN. It appears the earlywood anatomy represents positive and negative
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33 influences from a repertoire of temperature factors (Figure 1f). When a mixture of such
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35 properties is subtracted from latewood anatomy data, expected to represent May–August
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37 temperatures, to calculate the 'delta' values, an uncertain amount of noise is unavoidably
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42 added to proxy indications.
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47 It is noteworthy that a similar 'delta' parameter has been previously used for evaluations of
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49 cross-sectional reflectance images of tree rings, where the use of delta values may diminish
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51 the effects of discolouration of wood by fungi (Björklund et al., 2014). This may work given
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53 that such discolouration has some constant earlywood/latewood ratio. For the anatomy data,
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55 the necessity for using delta calculations remains obviously more questionable. In what
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59 follows, multiproxy comparisons were performed to throw more light on the problem.
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Anatomy and density records

The two anatomy-based records (A-FEN and LA-FEN) were compared with a previously constructed X-ray based wood density record averaged over the northern Fennoscandian sites (X-FEN; Wilson et al., 2016), which was produced originally from virtually the same set of subfossil *P. sylvestris* wood specimens (Esper et al., 2012; Melvin et al., 2013). Comparing these records also with sedimentary proxy evidence fully independent of trees (i.e., chironomid data) from northern Fennoscandia showed correlations in favour of anatomy rather than density-based tree-ring records (Figures 2a–b). Similarly to the tree rings, the chironomid record exhibited warm temperatures during the MCA period over the eleventh and twelfth centuries and LIA cooling that peaked in the seventeenth century. Further, here LA-FEN shows a higher correlation with the independent temperature record than A-FEN (Figure 2c), suggesting the veracity of its long-term climatic signals. In this regard, the delta value calculation appears to have added noise to the series, instead of denoising the latewood anatomy data.

Interestingly, LA-FEN shows show stronger (and statistically significant) correlations also with X-FEN and BI-MXD records than A-FEN (Figures 2d–g). These linkages are logical since LA-FEN shows modern temperatures that are less warm relative to MCA, which is similar to X-FEN and BI-MXD records. In contrast, A-FEN is more clearly connected with the multiproxy tree-growth record than LA-FEN (Table S1). Again, this appears to result from MCA temperatures that were less distinctive in both the multiproxy and A-FEN records. Although

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3 these results are interesting, they also show the difficulty of assessing climate histories that
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5 simply reflect different aspects of the trees' responses to climate.
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10 In this regard one way to prioritise the findings is to highlight the highest correlation
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12 between the independent temperature and non-anatomy ($r = 0.788$ for BI-MXD) records,
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14 which again would re-emphasise the value of the relationship between the LA-FEN and BI-
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16 MXD (see Table S1). To provide more detail on the relationships, both the anatomy and
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18 density datasets were next divided into two groups.
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25 Focussing on sub-regions

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30 Comparisons were made between the biogeographically separated subsets of the
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32 Fennoscandian sites, those belonging either to Torneträsk (Melvin et al., 2013) or Finnish
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34 Lapland/N-Scan (Esper et al., 2012) sub-regions (see Figure 1a). To do so, sub-regional
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36 averages were computed from the RCS-detrended latewood maxima of the cell wall
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38 thickness series and calibrated/verified against the May-August temperatures (Morice et al.,
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40 2021) (see Tables S2 and S3). As a result, the two subsets exhibited surprisingly different
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42 wood production patterns over much of the study period. Statistically, the comparison of LA-
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44 FEN records between the sub-regions results in a near-zero correlation (Figure 3a).
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51 It appears the LA-FEN/Torneträsk correlates more strongly with the independent
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53 temperature data than LA-FEN/Finland (Figures 3b–c), implying that the data from Finnish
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55 Lapland may be more sensitive to non-temperature related variations on timescales relevant
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57 to this study. However, the LA-FEN/Finland do show statistically significant relationships with
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3 all the X-FEN records and multiproxy tree-growth record (Table S1). That the LA-
4
5 FEN/Torneträsk is so poorly related to other tree-ring records can be partly explained by a
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7 warm phase it displays after, not during, the MCA, from AD 1150 to 1450. That A-FEN does
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9 not display as warm an MCA as X-FEN does is thus not only related to delta calculations but
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11 also to differing patterns of wood production between the Torneträsk and N-Scan regions. In
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13 general, averaging uncorrelated values tends to result in muted departures, which here
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15 means a deflation of the MCA temperature estimates (this effect concerns both A-FEN and
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17 LA-FEN), the deviating long-term patterns illustrating the problem with series that contain
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19 low-frequency noise.
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28 Importantly, the sample replication of anatomy data from the Torneträsk region remain
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30 slightly higher than those of N-Scan, suggesting that the quantity of the data should not be
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32 the reason behind its peculiar temperature indications (Figure S1). Moreover, the replications
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34 of the anatomy and density chronologies are very similar over the study period (except the
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36 most recent ~200 years when the density data is covered by higher number of living trees)
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38 (see Figure 2b in Björklund et al., 2023), for which reason this factor is not expected to
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40 contribute to this issue.
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47 In comparison, the X-FEN/Torneträsk and X-FEN/N-Scan data are more comparable and
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49 show statistically significant correlations (Figure 3d). Both subsets illustrate warm
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51 temperatures especially around AD 1000 and cooling since AD 1100, this agreement is in
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53 contrast with the mismatch in the anatomy (A-FEN and LA-FEN) data during the MCA and
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55 until c. AD 1450. It follows that the MCA is well manifested in the regionally averaged X-FEN.
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Tree growth as a holistic proxy

Apart from previously highlighted relationships, the multiproxy tree-growth record (McCarroll et al., 2013) correlates statistically significantly with X-FEN, X-FEN/Torneträsk and BI-MXD records (Figure 3e; Table S1). This may not be surprising considering that the multiproxy record contains data from both sub-regions and includes MXD and BI data. It is also notable that the multiproxy record does not exhibit as vigorous low-frequency variations as most of the other records. Again, this may result from the fact that different tree-ring variables reflect different aspects of the trees' responses to climate, for which reason the mean of multiple proxies may exhibit muted departures in comparison to single proxy records. On the other hand, the trendless low-frequency variability the multiproxy record displays is likely to result in statistical significance reached with relatively low coefficients, as low as $r \sim 0.45$, when the spectral properties are being taken into account when determining the significance with the Monte Carlo assessments (see Ebisuzaki, 1997; Macias-Fauria et al., 2012).

Discussion and conclusions

It seems necessary to delve into the factors possibly leading to the deviations between the wood density and anatomy patterns and between the sub-regions. What needs to be stressed about the underlying data is the dramatic heterogeneity in the sample origins (see the discussion in Matskovsky and Helama, 2014). Approximately half of the tree-ring samples forming both the wood density and anatomy data originate from densely forested sites of northeast Fennoscandia (N-Scan) where the subfossils representing ancient lakeshore trees

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3 were sampled from lacustrine sediments by Eronen et al. (2002), the other half originating
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5 from sites where subfossil specimens have been preserved in subaerial conditions of more
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7 northern mountainous dry terrains near the treeline of the Torneträsk region in northwest
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9 Fennoscandia (Bartholin and Karlén, 1983).
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15 This distinction likely forms the basis for understanding why the subsets differ so
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17 substantially in their low-frequency patterns, especially given that considerable late Holocene
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19 changes are known to have occurred both in hydroclimate and treeline stand density.
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21 Changes topical to this study show tree-ring indications of a dry period in north-central
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23 Europe between AD 1000 and 1200 (Cook et al., 2015). Sedimentary proxy records from
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25 central and southern Finland indicate coinciding long-lasting drought to have started even
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27 some centuries earlier with low lake levels/peatland water tables (Linderholm et al., 2018).
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29 These perturbations overlap with the temperature-indicated MCA discussed here between
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31 AD 850 and 1100. Moreover, the MCA-LIA change may represent lake level rise of more than
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33 one metre (Nevalainen and Luoto, 2012), suggesting that hydroclimatic relationships cannot
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35 be fully ignored when riparian sites are concerned. Coeval to these changes, the treeline
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37 stands were likely becoming denser in northern Fennoscandia over the first millennium AD,
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39 peaking during the MCA (around AD 1000), and becoming relatively sparser with the
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41 progression of the LIA conditions (Helama et al., 2005, 2010).
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52 The essential question remains whether these changes can be related to low-frequency
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54 patterns in wood density and anatomy. Previously no such statement has been made
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56 (Björklund et al., 2023). However, it has been shown that the latewood density of *P. sylvestris*
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58 increases in dry sites (Düthorn et al., 2016) and when stands are thinned (Peltola et al., 2007).
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3 Possibly, these non-temperature relationships could help explain why during the MCA, when
4 precipitation and lake levels fell but treeline stands became denser, the wood production
5 improved on the forested lakeshore (N-Scan) and weakened in treeline (Torneträsk)
6 conditions, and why the former sites show lower post-MCA values (until c. AD 1450) when
7 the climate became wetter, while the latter sites exhibit a coeval phase of ameliorated wood
8 production shortly after the stand density dropped. In any case, new hydroclimatic proxy
9 records are needed, such as those based on sedimentary Cladocera (Korhola et al., 2005) but
10 to be produced at a higher temporal resolution, to reexamine these indications. Even so, the
11 importance of this interpretation, if true, is not restricted to Fennoscandian sites. Similarly to
12 northern Fennoscandia, millennia-long tree-ring chronologies are usually built from more
13 than one site (e.g. Büntgen et al., 2011; Lara et al., 2020; Yang et al., 2021; Hantemirov et al.,
14 2022). Given that site conditions are not fully homogenous, the biogeographical spread of
15 the sites may result in hidden subsets of data which may, if the data are simply averaged
16 over the sites, lead to unexpected perturbations in climatic reconstructions.

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40 Previous tree-ring studies have produced summer temperature reconstructions for northern
41 Fennoscandia by either separating, combining, or mixing the data from western and eastern
42 sites. The interpretation shown here suggests that the deviations and offsets between these
43 regions are too large to represent random patterns. Averaging over both regions improved
44 correlations with independent temperature data for both density and anatomy but resulted
45 in underestimated anatomy-based low-frequency temperature anomalies, which explained
46 the less warm MCA in the latter record. Generally, the findings contribute to the discussion
47 on low-frequency noise in millennia-long tree-ring chronologies, emphasising the value of
48 paleoclimate evidence fully independent of trees for evaluations of similar proxy evidence.
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For Peer Review

Table 1. A list of tree-ring proxy records discussed in this article, characterised by their abbreviated name, proxy type, spatial extent of sampling sites, and reference to literature.

See Figure 1a for site locations.

Name	Proxy	Spatial extent	Reference
X-FEN	Maximum latewood density	Full region	Wilson et al. (2016)
X-FEN/TO	Maximum latewood density	Torneträsk	Melvin et al. (2013)
X-FEN/NS	Maximum latewood density	"N-Scan"	Esper et al. (2012)
A-FEN	Delta radial-cell-wall thickness	Full region	Björklund et al. (2023)
LA-FEN	Maximum latewood radial-cell-wall thickness	Full region	This study
LA-FEN/TO	Maximum latewood radial-cell-wall thickness	Torneträsk	This study
LA-FEN/FI	Maximum latewood radial-cell-wall thickness	Finnish Lapland	This study
BI-MXD	Latewood blue intensity reflection and maximum latewood radial-cell-wall thickness	Finnish Lapland	Helama et al. (2022)
MTG	Multiple tree-ring and height growth data	Full region	McCarroll et al. (2013)

FIGURE CAPTIONS

Figure 1. Tree-ring sites in northern Fennoscandia. (a) Sampling sites of tree-ring records discussed and this study, demonstrating markedly heterogenous distributions in northern Fennoscandia. See Table 1 for different records. (b) A-FEN and recalculated delta radial-cell-wall thickness record show high comparability between the data, quantified using Pearson correlations (r), suggesting no issues with data analyses. (c) The same as (b) but for records that are low-pass filtered using 100-year splines. (d) A comparison of the delta and maximum radial-cell-wall thickness records shows a colder medieval climate anomaly and warmer current period when delta values are used. (e) Variations of the minimum radial-cell-wall thickness. All the records are normalised to zero mean and unit variance and are shown and analysed over the AD 850–2019 period. The Medieval Climate Anomaly (AD 850–1100) and modern period (AD 1850–2019) are highlighted with shading. (f) Pearson correlations and p-values between the mean records of detrended and pre-whitened minimum radial-cell-wall thickness record pre-whitened series and the monthly mean temperatures (AD 1901–2019) (65–70° N, 15–30° E) extracted from the CRU TS4.07 dataset (Harris et al., 2020).

Figure 2. Multiproxy evidence from northern Fennoscandia. (a) A-FEN (Björklund et al., 2023) and temperatures based on sedimentary chironomid assemblages from 13 Fennoscandian sites (Sundqvist et al., 2014), each chironomid series normalised to zero mean and unit variance and averaged (Helama et al., 2022) and 100-year spline functions were applied to mean records illustrating the temperature history on centennial and longer scales, (b) X-FEN and chironomid-temperature records, (c) LA-FEN (this study) and chironomid-temperature records, (d) LA-FEN and X-FEN (Wilson et al., 2016) records, (e) LA-FEN and BI-MXD (Helama

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3 et al., 2022) records, (f) A-FEN and X-FEN records, (g) and A-FEN and BI-MXD records. The
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5 Medieval Climate Anomaly (AD 850–1100) and Little Ice Age (AD 1450–1850) are highlighted
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17 shading. Records are shown and analysed for AD 850–2001 period which is covered by
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19 chironomid data. See Table 1 for the proxy characteristics and Table S1 for all the
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21 correlations calculated for this article.
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30 Figure 3. Multiproxy evidence from northern Fennoscandia. (a) LA-FEN records from
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32 Torneträsk (LA-FEN/Torneträsk) and Finnish subregions (LA-FEN/FI) calculated in this study,
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34 (b) LA-FEN/TO (c) and LA-FEN/FI with chironomid-temperature records, (d) X-FEN records
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36 from Torneträsk (X-FEN/Torneträsk) (Melvin et al., 2013) and “N-Scan” subregions (X-
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38 FEN/NS) (Esper et al. 2012), and (e) X-FEN (Wilson et al., 2016), X-FEN/TO, multiproxy tree-
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40 growth (MTG) (McCarroll et al., 2013) and BI-MXD records (Helama et al., 2022). See Figure 2
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42 caption for a complete description, Table 1 for the proxy characteristics and Table S1 for all
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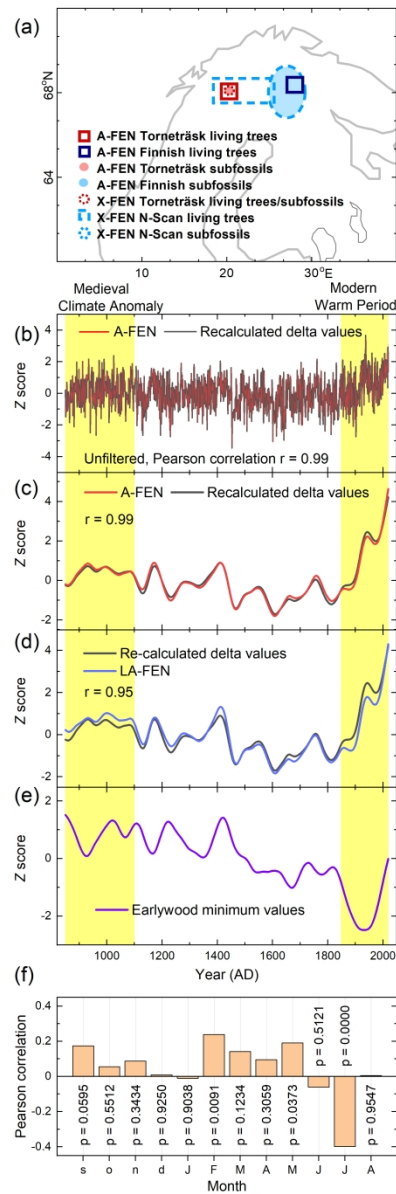


Figure 1. Tree-ring sites in northern Fennoscandia. (a) Sampling sites of tree-ring records discussed and this study, demonstrating markedly heterogeneous distributions in northern Fennoscandia. See Table 1 for different records. (b) A-FEN and recalculated delta radial-cell-wall thickness record show high comparability between the data, quantified using Pearson correlations (r), suggesting no issues with data analyses. (c) The same as (b) but for records that are low-pass filtered using 100-year splines. (d) A comparison of the delta and maximum radial-cell-wall thickness records shows a colder medieval climate anomaly and warmer current period when delta values are used. (e) Variations of the minimum radial-cell-wall thickness. All the records are normalised to zero mean and unit variance and are shown and analysed over the AD 850–2019 period. The Medieval Climate Anomaly (AD 850–1100) and modern period (AD 1850–2019) are highlighted with shading. (f) Pearson correlations and p-values between the mean records of detrended and pre-whitened minimum radial-cell-wall thickness record pre-whitened series and the monthly mean temperatures (AD 1901–2019) ($65\text{--}70^\circ\text{N}$, $15\text{--}30^\circ\text{E}$) extracted from the CRU TS4.07 dataset (Harris et al., 2020).

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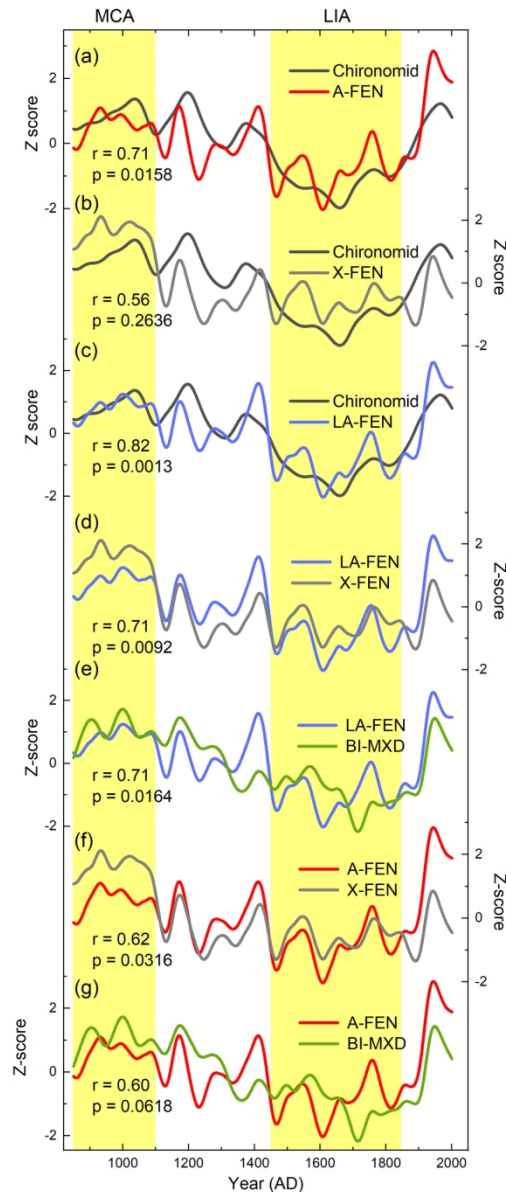


Figure 2. Multiproxy evidence from northern Fennoscandia. (a) A-FEN (Björklund et al., 2023) and temperatures based on sedimentary chironomid assemblages from 13 Fennoscandian sites (Sundqvist et al., 2014), each chironomid series normalised to zero mean and unit variance and averaged (Helama et al., 2022) and 100-year spline functions were applied to mean records illustrating the temperature history on centennial and longer scales, (b) X-FEN and chironomid-temperature records, (c) LA-FEN (this study) and chironomid-temperature records, (d) LA-FEN and X-FEN (Wilson et al., 2016) records, (e) LA-FEN and BI-MXD (Helama et al., 2022) records, (f) A-FEN and X-FEN records, (g) and A-FEN and BI-MXD records. The Medieval Climate Anomaly (AD 850–1100) and Little Ice Age (AD 1450–1850) are highlighted with shading.

All the records have been filtered using 100-year spline functions and normalised to zero mean and unit variance over their common periods. Pearson correlations (r) were used to quantify the relationships, with p -values estimated taking into account the autocorrelation (Ebisuzaki, 1997) with Monte Carlo simulations ($n = 10000$) (Macias-Fauria et al., 2012). The Medieval Climate Anomaly and Current Warm Period are highlighted with shading. Records are shown and analysed for AD 850–2001 period which is covered by chironomid data. See Table 1 for the proxy characteristics and Table S1 for all the correlations calculated for

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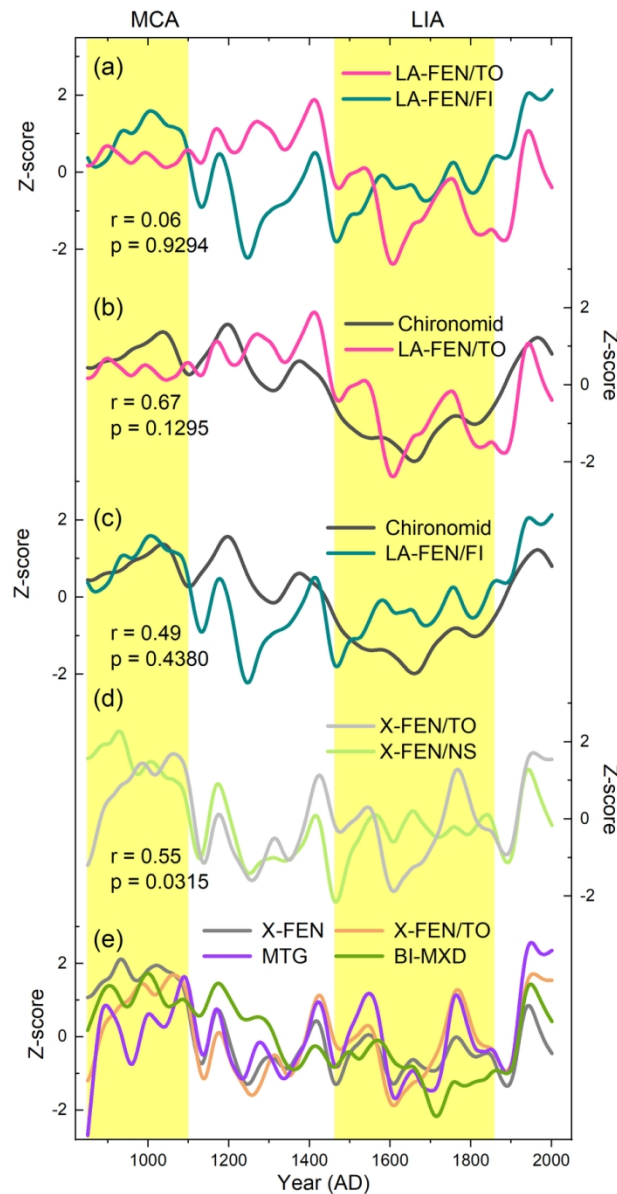


Figure 3. Multiproxy evidence from northern Fennoscandia. (a) LA-FEN records from Torneträsk (LA-FEN/Torneträsk) and Finnish subregions (LA-FEN/FI) calculated in this study, (b) LA-FEN/TO (c) and LA-FEN/FI with chironomid-temperature records, (d) X-FEN records from Torneträsk (X-FEN/Torneträsk) (Melvin et al., 2013) and “N-Scan” subregions (X-FEN/NS) (Esper et al. 2012), and (e) X-FEN (Wilson et al., 2016), X-FEN/TO, multiproxy tree-growth (MTG) (McCarroll et al., 2013) and BI-MXD records (Helama et al., 2022). See Figure 2 caption for a complete description, Table 1 for the proxy characteristics and Table S1 for all the correlations calculated for this article.

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3 Low-frequency patterns in late Holocene tree-ring records from northern Fennoscandia
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13 Content:
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15 Table S1. Correlations

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20 Figure S1. Sample size
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Table S1. Pearson correlations between the studied tree-ring proxy records. Pearson correlations (a) were used to quantify the relationships, with p-values (b) estimated taking into account the autocorrelation (Ebisuzaki, 1997) using Monte Carlo simulations (n = 10000) (Macias-Fauria et al., 2012). Temperature history on centennial and longer scales were extracted from unfiltered data by applying 100-year spline functions to records. Records are analysed for AD 850–2001 (n = 1152) period which is covered by chironomid data. Records as: independent temperature data based on chironomids (CHI) (Sundqvist et al., 2014; Helama et al., 2022), regionally averaged delta radial-cell-wall thickness (A-FEN) (Björklund et al., 2023), regionally averaged latewood maximum radial-cell-wall thickness (LA-FEN) of this study), latewood maximum radial-cell-wall thickness for Torneträsk (LA-FEN/Torneträsk), latewood maximum radial-cell-wall thickness for the Finnish Lapland (LA-FEN/FI), regionally averaged maximum latewood density (X-FEN; Wilson et al., 2016), maximum latewood density for N-Scan (X-FEN/NS) (Esper et al., 2012), maximum latewood density for Torneträsk (X-FEN/TO) (Melvin et al., 2013), regionally averaged blue intensity and maximum latewood density record (BI-MXD) (Helama et al., 2022), and regionally averaged multiproxy tree-growth record (MTG) (McCarroll et al., 2013). See Table 1 for a list of proxy characteristics.

(a)	CHI	A-FEN	LA-FEN	LA-FEN/FI	LA-FEN/TO	X-FEN	X-FEN/NS	X-FEN/TO	BI-MXD	MTG
CHI	1.000									
A-FEN	0.713	1.000								
LA-FEN	0.821	0.951	1.000							
LA-FEN/FI	0.494	0.780	0.709	1.000						
LA-FEN/TO	0.675	0.584	0.739	0.061	1.000					
X-FEN	0.564	0.624	0.707	0.693	0.398	1.000				
X-FEN/NS	0.410	0.573	0.577	0.748	0.147	0.898	1.000			
X-FEN/TO	0.446	0.725	0.712	0.735	0.326	0.723	0.552	1.000		
BI-MXD	0.788	0.604	0.710	0.466	0.566	0.699	0.601	0.399	1.000	
MTG	0.367	0.742	0.677	0.592	0.370	0.475	0.382	0.790	0.458	1.000
(b)	CHI	A-FEN	LA-FEN	LA-FEN/FI	LA-FEN/TO	X-FEN	X-FEN/NS	X-FEN/TO	BI-MXD	MTG
CHI										
A-FEN	0.0158									
LA-FEN	0.0013	<0.0001								
LA-FEN/FI	0.4380	0.0020	0.0176							
LA-FEN/TO	0.1295	0.0576	0.0082	0.9294						
X-FEN	0.2636	0.0316	0.0092	0.0131	0.4093					
X-FEN/NS	0.5510	0.0632	0.0948	0.0010	0.8151	<0.0001				
X-FEN/TO	0.1863	<0.0001	0.0003	0.0001	0.3292	0.0002	0.0315			
BI-MXD	0.0795	0.0618	0.0164	0.4601	0.2751	0.0615	0.1872	0.2647		
MTG	0.0883	<0.0001	<0.0001	<0.0001	0.0777	0.0135	0.0666	<0.0001	0.018	

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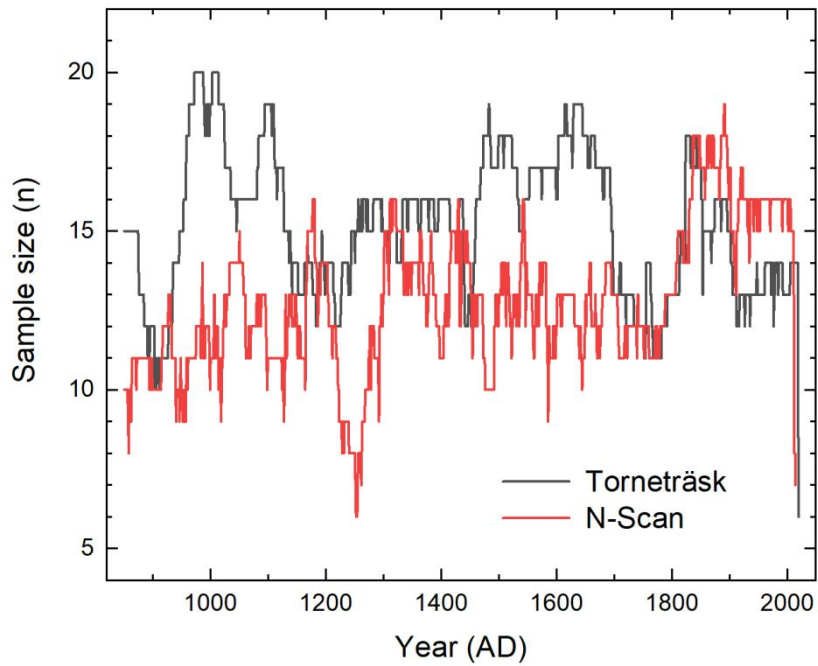


Figure S1. Sample size (n) of the tree-ring anatomy data since AD 850.

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For Peer Review

Table S2. Calibration and verification statistics for May-August temperature reconstructions based on LA-FEN (a), LA-FEN/Finnish Lapland (b), and LA-FEN/Torneträsk (c) records. All the presented statistics (R^2 , r^2 , Reduction of error and coefficient of efficiency; detailed in Briffa et al. (1988)) show $p < 0.0001$ when p-values were estimated taking into account the autocorrelation (Ebisuzaki, 1997) in the timeseries with Monte Carlo simulations ($n = 10000$) (Macias-Fauria et al., 2012).

(a) LA-FEN			
Calibration period	1850-1932	1933-2014	1850-2014
Verification period	1933-2014	1850-1932	
Calibration			
R^2	0.728	0.664	0.741
Verification			
r^2	0.664	0.728	
Reduction of error	0.782	0.817	
Coefficient of efficiency	0.550	0.639	
(b) LA-FEN/Finnish Lapland			
Calibration period	1850-1932	1933-2014	1850-2014
Verification period	1933-2014	1850-1932	
Calibration			
R^2	0.687	0.608	
Verification			
r^2	0.608	0.687	
Reduction of error	0.770	0.779	
Coefficient of efficiency	0.527	0.563	
(c) LA-FEN/Torneträsk			
Calibration period	1850-1932	1933-2014	1850-2014
Verification period	1933-2014	1850-1932	
Calibration			
R^2	0.641	0.557	
Verification			
r^2	0.557	0.641	
Reduction of error	0.663	0.725	
Coefficient of efficiency	0.304	0.456	

Table S3. Reconstructions of May-August temperature reconstructions based on LA-FEN (a), LA-FEN/Finnish Lapland (b), and LA-FEN/Torneträsk (c) records, Monte Carlo based with 95% and 99% confidence intervals (CI) given as lower (L) and upper (U) bounds. For the Monte Carlo algorithms, Macias-Fauria et al. (2012).

(a)	LA-FEN					
850	0.013	0.008	0.018	0.007	0.019	
851	-1.026	-1.140	-0.909	-1.172	-0.878	
852	-0.745	-0.827	-0.662	-0.850	-0.639	
853	-1.132	-1.259	-1.004	-1.294	-0.969	
854	-0.336	-0.372	-0.301	-0.382	-0.291	
855	0.238	0.207	0.269	0.199	0.277	
856	-0.193	-0.212	-0.174	-0.217	-0.169	
857	-0.861	-0.957	-0.764	-0.983	-0.738	
858	-0.820	-0.911	-0.728	-0.936	-0.703	
859	-0.658	-0.731	-0.585	-0.751	-0.565	
860	-0.161	-0.176	-0.145	-0.180	-0.141	
861	-0.613	-0.680	-0.545	-0.698	-0.526	
862	-0.692	-0.768	-0.615	-0.789	-0.594	
863	-0.586	-0.650	-0.521	-0.667	-0.503	
864	-0.352	-0.389	-0.314	-0.399	-0.304	
865	-1.478	-1.645	-1.309	-1.690	-1.264	
866	-0.402	-0.444	-0.358	-0.456	-0.346	
867	-0.281	-0.310	-0.252	-0.318	-0.244	
868	0.210	0.183	0.238	0.175	0.245	
869	0.376	0.329	0.422	0.316	0.435	
870	-0.628	-0.697	-0.558	-0.716	-0.539	
871	-0.041	-0.042	-0.039	-0.042	-0.039	
872	-0.516	-0.572	-0.459	-0.588	-0.444	
873	-0.148	-0.161	-0.134	-0.165	-0.130	
874	-0.614	-0.681	-0.545	-0.699	-0.527	
875	0.183	0.158	0.207	0.152	0.214	
876	0.700	0.616	0.784	0.593	0.807	
877	-1.304	-1.451	-1.155	-1.491	-1.115	
878	0.377	0.330	0.423	0.317	0.436	
879	-0.536	-0.595	-0.477	-0.611	-0.461	
880	0.022	0.017	0.028	0.015	0.030	
881	-1.779	-1.980	-1.575	-2.035	-1.520	
882	-0.183	-0.201	-0.165	-0.205	-0.160	
883	0.168	0.145	0.191	0.139	0.197	
884	-0.100	-0.108	-0.091	-0.110	-0.089	
885	0.221	0.192	0.249	0.184	0.257	
886	0.139	0.119	0.158	0.114	0.163	
887	0.619	0.544	0.693	0.523	0.714	
888	-0.194	-0.213	-0.175	-0.218	-0.169	
889	-0.250	-0.275	-0.224	-0.282	-0.217	

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3	890	0.365	0.319	0.410	0.307	0.422
4	891	1.200	1.057	1.341	1.018	1.380
5	892	-0.739	-0.821	-0.656	-0.843	-0.634
6	893	-0.110	-0.120	-0.101	-0.122	-0.098
7	894	0.334	0.292	0.375	0.280	0.387
8	895	0.004	0.000	0.008	-0.001	0.009
9	896	0.068	0.057	0.079	0.054	0.082
10	897	-0.096	-0.104	-0.088	-0.106	-0.086
11	898	-0.666	-0.739	-0.592	-0.760	-0.572
12	899	0.808	0.710	0.904	0.684	0.930
13	900	-0.925	-1.028	-0.820	-1.056	-0.792
14	901	-0.248	-0.274	-0.223	-0.281	-0.216
15	902	-0.848	-0.942	-0.752	-0.967	-0.726
16	903	-0.661	-0.734	-0.587	-0.754	-0.568
17	904	0.017	0.012	0.022	0.010	0.023
18	905	0.086	0.073	0.099	0.069	0.103
19	906	0.379	0.332	0.426	0.319	0.439
20	907	-1.174	-1.305	-1.040	-1.342	-1.005
21	908	-0.040	-0.041	-0.039	-0.042	-0.038
22	909	-0.089	-0.095	-0.081	-0.097	-0.080
23	910	-0.461	-0.511	-0.411	-0.525	-0.397
24	911	-0.887	-0.986	-0.787	-1.013	-0.760
25	912	1.072	0.944	1.198	0.909	1.233
26	913	-0.372	-0.411	-0.332	-0.422	-0.321
27	914	-0.787	-0.874	-0.699	-0.898	-0.675
28	915	0.489	0.429	0.549	0.413	0.565
29	916	-0.116	-0.126	-0.106	-0.129	-0.103
30	917	-1.106	-1.229	-0.980	-1.263	-0.946
31	918	-0.241	-0.265	-0.216	-0.272	-0.209
32	919	0.355	0.311	0.399	0.299	0.411
33	920	-0.135	-0.148	-0.123	-0.151	-0.119
34	921	-1.371	-1.525	-1.215	-1.568	-1.173
35	922	0.317	0.277	0.356	0.266	0.367
36	923	-0.675	-0.749	-0.600	-0.770	-0.579
37	924	0.453	0.397	0.508	0.382	0.524
38	925	0.141	0.121	0.161	0.116	0.166
39	926	0.551	0.484	0.618	0.466	0.636
40	927	-0.594	-0.659	-0.528	-0.677	-0.510
41	928	0.474	0.416	0.532	0.400	0.548
42	929	0.215	0.187	0.243	0.179	0.251
43	930	0.587	0.515	0.658	0.496	0.677
44	931	0.168	0.145	0.191	0.139	0.197
45	932	0.653	0.574	0.731	0.552	0.753
46	933	0.364	0.318	0.409	0.306	0.421
47	934	1.146	1.009	1.280	0.972	1.317
48	935	0.662	0.582	0.742	0.560	0.763
49	936	-0.495	-0.548	-0.440	-0.563	-0.426
50	937	-0.591	-0.656	-0.525	-0.673	-0.508

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3	938	-0.569	-0.631	-0.506	-0.648	-0.489
4	939	0.193	0.168	0.219	0.161	0.226
5	940	-2.181	-2.428	-1.930	-2.496	-1.862
6	941	0.020	0.014	0.025	0.013	0.027
7	942	-0.089	-0.096	-0.082	-0.098	-0.080
8	943	0.397	0.348	0.446	0.334	0.459
9	944	0.754	0.662	0.843	0.638	0.868
10	945	0.781	0.687	0.874	0.661	0.899
11	946	0.868	0.763	0.971	0.735	0.999
12	947	0.467	0.409	0.524	0.394	0.540
13	948	-0.684	-0.759	-0.608	-0.780	-0.587
14	949	-0.314	-0.347	-0.281	-0.356	-0.272
15	950	-0.477	-0.529	-0.425	-0.543	-0.411
16	951	0.743	0.653	0.831	0.629	0.855
17	952	-0.623	-0.692	-0.554	-0.711	-0.535
18	953	-0.349	-0.385	-0.311	-0.396	-0.301
19	954	-0.802	-0.891	-0.712	-0.916	-0.688
20	955	-0.313	-0.346	-0.280	-0.355	-0.271
21	956	-0.640	-0.710	-0.569	-0.729	-0.549
22	957	-0.157	-0.172	-0.142	-0.176	-0.138
23	958	-0.963	-1.070	-0.854	-1.100	-0.825
24	959	0.025	0.018	0.031	0.017	0.032
25	960	0.108	0.092	0.124	0.088	0.128
26	961	-2.075	-2.310	-1.837	-2.375	-1.773
27	962	-0.098	-0.106	-0.090	-0.108	-0.088
28	963	-0.081	-0.087	-0.075	-0.089	-0.073
29	964	0.466	0.409	0.523	0.393	0.539
30	965	-0.707	-0.785	-0.628	-0.807	-0.607
31	966	-0.694	-0.771	-0.616	-0.792	-0.596
32	967	-0.142	-0.155	-0.128	-0.158	-0.125
33	968	-0.317	-0.350	-0.283	-0.359	-0.274
34	969	0.337	0.294	0.378	0.283	0.390
35	970	-0.595	-0.660	-0.529	-0.678	-0.511
36	971	0.326	0.285	0.367	0.274	0.378
37	972	1.276	1.124	1.426	1.083	1.467
38	973	0.190	0.164	0.215	0.157	0.222
39	974	-0.766	-0.851	-0.680	-0.874	-0.657
40	975	-0.099	-0.108	-0.091	-0.110	-0.089
41	976	-0.870	-0.967	-0.772	-0.993	-0.745
42	977	0.227	0.197	0.256	0.189	0.264
43	978	0.402	0.351	0.451	0.338	0.464
44	979	-1.374	-1.529	-1.217	-1.571	-1.175
45	980	-0.251	-0.277	-0.225	-0.284	-0.218
46	981	-0.650	-0.722	-0.578	-0.741	-0.558
47	982	1.188	1.046	1.327	1.008	1.366
48	983	0.483	0.423	0.541	0.407	0.557
49	984	-0.377	-0.417	-0.337	-0.428	-0.326
50	985	-0.565	-0.626	-0.502	-0.643	-0.485

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3	986	0.661	0.581	0.740	0.559	0.762
4	987	0.290	0.253	0.327	0.243	0.337
5	988	0.092	0.078	0.105	0.074	0.109
6	989	-0.798	-0.886	-0.708	-0.910	-0.684
7	990	1.175	1.035	1.313	0.997	1.351
8	991	-0.090	-0.097	-0.083	-0.099	-0.081
9	992	0.508	0.446	0.570	0.429	0.587
10	993	0.048	0.040	0.057	0.037	0.060
11	994	-0.016	-0.018	-0.015	-0.018	-0.015
12	995	0.482	0.423	0.541	0.407	0.557
13	996	-0.227	-0.249	-0.203	-0.256	-0.197
14	997	0.284	0.247	0.320	0.238	0.329
15	998	-0.390	-0.431	-0.348	-0.443	-0.336
16	999	-0.266	-0.293	-0.238	-0.300	-0.230
17	1000	0.748	0.658	0.837	0.633	0.861
18	1001	0.153	0.132	0.174	0.126	0.179
19	1002	0.650	0.571	0.728	0.550	0.749
20	1003	-0.129	-0.141	-0.117	-0.144	-0.114
21	1004	0.013	0.009	0.018	0.007	0.019
22	1005	-0.199	-0.219	-0.179	-0.224	-0.174
23	1006	0.534	0.469	0.599	0.451	0.616
24	1007	0.187	0.162	0.212	0.155	0.219
25	1008	-1.635	-1.819	-1.448	-1.870	-1.397
26	1009	0.061	0.051	0.072	0.048	0.074
27	1010	-0.257	-0.283	-0.230	-0.290	-0.223
28	1011	0.363	0.317	0.408	0.305	0.420
29	1012	-0.079	-0.085	-0.073	-0.086	-0.071
30	1013	-0.463	-0.513	-0.412	-0.527	-0.399
31	1014	0.094	0.080	0.108	0.076	0.112
32	1015	-0.734	-0.815	-0.651	-0.837	-0.629
33	1016	0.028	0.022	0.035	0.020	0.036
34	1017	-0.995	-1.106	-0.882	-1.136	-0.852
35	1018	0.536	0.470	0.600	0.452	0.618
36	1019	0.874	0.768	0.977	0.740	1.005
37	1020	0.452	0.396	0.507	0.381	0.523
38	1021	0.452	0.396	0.507	0.381	0.522
39	1022	-0.181	-0.199	-0.163	-0.203	-0.158
40	1023	-0.586	-0.650	-0.521	-0.667	-0.503
41	1024	-0.258	-0.284	-0.231	-0.292	-0.224
42	1025	1.350	1.189	1.508	1.146	1.551
43	1026	-0.333	-0.368	-0.297	-0.378	-0.288
44	1027	-0.028	-0.028	-0.028	-0.028	-0.028
45	1028	0.028	0.021	0.034	0.020	0.036
46	1029	-0.078	-0.084	-0.072	-0.085	-0.071
47	1030	0.125	0.107	0.142	0.102	0.147
48	1031	-0.998	-1.109	-0.885	-1.140	-0.854
49	1032	-0.763	-0.847	-0.677	-0.870	-0.654
50	1033	-0.019	-0.020	-0.018	-0.021	-0.018

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3	1034	0.377	0.330	0.423	0.317	0.436
4	1035	-0.337	-0.373	-0.301	-0.382	-0.291
5	1036	0.093	0.079	0.106	0.075	0.110
6	1037	0.994	0.875	1.111	0.843	1.143
7	1038	-0.114	-0.124	-0.104	-0.127	-0.102
8	1039	0.143	0.123	0.162	0.118	0.168
9	1040	0.725	0.637	0.811	0.614	0.835
10	1041	-0.877	-0.975	-0.778	-1.002	-0.752
11	1042	-1.005	-1.117	-0.891	-1.148	-0.860
12	1043	-0.380	-0.420	-0.339	-0.431	-0.328
13	1044	-0.675	-0.749	-0.600	-0.770	-0.579
14	1045	-0.552	-0.613	-0.491	-0.629	-0.475
15	1046	-0.349	-0.386	-0.312	-0.396	-0.302
16	1047	-1.261	-1.403	-1.118	-1.442	-1.079
17	1048	0.657	0.577	0.735	0.555	0.757
18	1049	-0.275	-0.304	-0.247	-0.312	-0.239
19	1050	-1.275	-1.418	-1.129	-1.457	-1.090
20	1051	0.871	0.766	0.974	0.738	1.002
21	1052	0.501	0.439	0.561	0.422	0.578
22	1053	-0.967	-1.075	-0.858	-1.105	-0.828
23	1054	-0.152	-0.166	-0.137	-0.170	-0.134
24	1055	-0.107	-0.116	-0.097	-0.118	-0.095
25	1056	-0.115	-0.125	-0.105	-0.128	-0.102
26	1057	0.812	0.714	0.908	0.687	0.934
27	1058	0.938	0.825	1.049	0.795	1.079
28	1059	-0.340	-0.375	-0.303	-0.385	-0.293
29	1060	0.250	0.217	0.282	0.209	0.290
30	1061	0.802	0.705	0.897	0.679	0.924
31	1062	0.649	0.570	0.727	0.549	0.748
32	1063	-0.352	-0.389	-0.314	-0.399	-0.304
33	1064	0.378	0.331	0.424	0.318	0.437
34	1065	0.319	0.279	0.359	0.268	0.370
35	1066	-0.245	-0.270	-0.220	-0.277	-0.213
36	1067	-0.480	-0.532	-0.427	-0.546	-0.413
37	1068	-1.499	-1.667	-1.327	-1.714	-1.281
38	1069	-0.928	-1.032	-0.824	-1.060	-0.795
39	1070	-0.779	-0.866	-0.692	-0.889	-0.668
40	1071	-0.212	-0.233	-0.190	-0.239	-0.185
41	1072	-0.404	-0.448	-0.361	-0.459	-0.349
42	1073	-0.217	-0.238	-0.195	-0.244	-0.189
43	1074	-0.243	-0.267	-0.218	-0.274	-0.211
44	1075	-0.556	-0.617	-0.495	-0.634	-0.478
45	1076	-0.309	-0.341	-0.276	-0.350	-0.267
46	1077	-0.644	-0.714	-0.572	-0.734	-0.553
47	1078	-0.681	-0.755	-0.605	-0.776	-0.584
48	1079	0.374	0.327	0.420	0.314	0.433
49	1080	0.319	0.278	0.359	0.267	0.369
50	1081	-0.205	-0.225	-0.184	-0.231	-0.179

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2						
3	1082	-0.297	-0.328	-0.266	-0.336	-0.257
4	1083	-0.729	-0.810	-0.648	-0.832	-0.626
5	1084	0.382	0.334	0.429	0.321	0.442
6	1085	-0.250	-0.276	-0.224	-0.283	-0.217
7	1086	0.987	0.869	1.103	0.837	1.135
8	1087	0.040	0.032	0.047	0.030	0.050
9	1088	0.571	0.501	0.640	0.482	0.659
10	1089	0.375	0.328	0.422	0.316	0.434
11	1090	0.487	0.427	0.546	0.410	0.562
12	1091	0.670	0.589	0.751	0.567	0.773
13	1092	1.153	1.015	1.288	0.978	1.325
14	1093	0.080	0.067	0.092	0.064	0.096
15	1094	0.069	0.058	0.081	0.055	0.084
16	1095	-0.806	-0.895	-0.715	-0.920	-0.691
17	1096	-0.950	-1.056	-0.843	-1.085	-0.814
18	1097	0.085	0.072	0.098	0.068	0.101
19	1098	0.027	0.020	0.033	0.019	0.035
20	1099	-0.028	-0.028	-0.028	-0.028	-0.028
21	1100	-0.147	-0.160	-0.133	-0.164	-0.129
22	1101	0.356	0.311	0.400	0.299	0.412
23	1102	0.400	0.351	0.450	0.337	0.463
24	1103	0.550	0.482	0.616	0.464	0.634
25	1104	0.660	0.579	0.739	0.558	0.760
26	1105	0.271	0.237	0.306	0.227	0.315
27	1106	1.145	1.008	1.279	0.971	1.316
28	1107	-0.584	-0.648	-0.519	-0.665	-0.502
29	1108	-0.053	-0.056	-0.050	-0.057	-0.049
30	1109	-1.805	-2.009	-1.598	-2.065	-1.542
31	1110	-0.721	-0.800	-0.640	-0.822	-0.618
32	1111	-1.332	-1.482	-1.180	-1.523	-1.139
33	1112	-0.545	-0.604	-0.485	-0.620	-0.468
34	1113	0.743	0.653	0.831	0.629	0.856
35	1114	0.228	0.198	0.257	0.190	0.265
36	1115	-0.630	-0.699	-0.560	-0.718	-0.541
37	1116	-0.248	-0.273	-0.222	-0.280	-0.215
38	1117	-0.682	-0.757	-0.606	-0.778	-0.585
39	1118	0.282	0.246	0.318	0.236	0.328
40	1119	-0.492	-0.545	-0.438	-0.560	-0.423
41	1120	0.098	0.083	0.112	0.079	0.116
42	1121	-0.546	-0.606	-0.486	-0.622	-0.470
43	1122	0.508	0.446	0.570	0.429	0.587
44	1123	0.287	0.250	0.323	0.240	0.333
45	1124	-0.373	-0.412	-0.333	-0.423	-0.322
46	1125	-0.615	-0.682	-0.547	-0.701	-0.528
47	1126	0.405	0.355	0.455	0.341	0.469
48	1127	-2.096	-2.333	-1.855	-2.398	-1.790
49	1128	-0.868	-0.965	-0.770	-0.991	-0.744
50	1129	-1.337	-1.487	-1.184	-1.528	-1.143

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3	1130	-2.158	-2.403	-1.910	-2.470	-1.843
4	1131	-0.500	-0.554	-0.445	-0.569	-0.430
5	1132	-0.328	-0.363	-0.293	-0.372	-0.284
6	1133	-1.208	-1.343	-1.070	-1.381	-1.034
7	1134	-0.760	-0.844	-0.675	-0.867	-0.652
8	1135	0.385	0.337	0.433	0.324	0.446
9	1136	-1.377	-1.532	-1.220	-1.574	-1.178
10	1137	-0.628	-0.697	-0.558	-0.716	-0.539
11	1138	-0.849	-0.944	-0.754	-0.970	-0.728
12	1139	-1.053	-1.171	-0.934	-1.203	-0.902
13	1140	-0.372	-0.411	-0.331	-0.422	-0.321
14	1141	-0.917	-1.019	-0.813	-1.047	-0.785
15	1142	-1.527	-1.699	-1.352	-1.746	-1.305
16	1143	-0.397	-0.440	-0.354	-0.451	-0.343
17	1144	-0.781	-0.867	-0.693	-0.891	-0.670
18	1145	-0.448	-0.496	-0.399	-0.509	-0.386
19	1146	-0.975	-1.083	-0.864	-1.113	-0.835
20	1147	-0.326	-0.361	-0.292	-0.370	-0.282
21	1148	-0.297	-0.327	-0.265	-0.336	-0.257
22	1149	0.017	0.011	0.022	0.010	0.023
23	1150	-0.795	-0.883	-0.706	-0.907	-0.682
24	1151	-0.371	-0.410	-0.331	-0.421	-0.320
25	1152	0.237	0.206	0.267	0.198	0.276
26	1153	0.012	0.007	0.016	0.006	0.017
27	1154	0.093	0.079	0.107	0.075	0.111
28	1155	0.473	0.414	0.530	0.399	0.546
29	1156	-0.092	-0.100	-0.085	-0.102	-0.083
30	1157	-0.607	-0.674	-0.540	-0.692	-0.522
31	1158	-0.111	-0.121	-0.102	-0.124	-0.099
32	1159	0.009	0.005	0.014	0.004	0.015
33	1160	0.139	0.119	0.158	0.114	0.163
34	1161	0.854	0.751	0.955	0.723	0.983
35	1162	0.376	0.329	0.422	0.316	0.435
36	1163	0.064	0.053	0.074	0.050	0.077
37	1164	0.510	0.447	0.572	0.430	0.589
38	1165	0.476	0.417	0.534	0.401	0.549
39	1166	0.427	0.374	0.480	0.360	0.494
40	1167	0.523	0.459	0.586	0.442	0.604
41	1168	0.777	0.683	0.869	0.658	0.895
42	1169	-0.481	-0.533	-0.428	-0.547	-0.414
43	1170	0.516	0.453	0.579	0.436	0.596
44	1171	-0.479	-0.531	-0.427	-0.545	-0.413
45	1172	0.879	0.774	0.984	0.745	1.012
46	1173	-0.280	-0.309	-0.251	-0.317	-0.243
47	1174	0.340	0.297	0.383	0.286	0.394
48	1175	0.621	0.546	0.696	0.525	0.716
49	1176	-0.568	-0.630	-0.505	-0.647	-0.488
50	1177	-0.361	-0.400	-0.323	-0.410	-0.312

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3	1178	0.384	0.336	0.431	0.323	0.444
4	1179	-0.499	-0.553	-0.444	-0.568	-0.429
5	1180	0.265	0.230	0.298	0.221	0.307
6	1181	-0.282	-0.311	-0.252	-0.319	-0.244
7	1182	-0.753	-0.837	-0.669	-0.859	-0.646
8	1183	0.218	0.190	0.247	0.182	0.255
9	1184	0.740	0.651	0.828	0.626	0.852
10	1185	0.806	0.709	0.901	0.682	0.928
11	1186	0.038	0.030	0.046	0.028	0.048
12	1187	-0.133	-0.145	-0.121	-0.148	-0.117
13	1188	0.399	0.349	0.448	0.336	0.462
14	1189	-0.744	-0.826	-0.661	-0.849	-0.638
15	1190	0.174	0.150	0.197	0.144	0.203
16	1191	-0.121	-0.132	-0.110	-0.135	-0.107
17	1192	-1.413	-1.572	-1.252	-1.616	-1.208
18	1193	0.696	0.612	0.779	0.589	0.802
19	1194	-2.331	-2.595	-2.063	-2.668	-1.990
20	1195	0.110	0.094	0.126	0.090	0.131
21	1196	-0.291	-0.321	-0.260	-0.329	-0.252
22	1197	-1.703	-1.896	-1.508	-1.948	-1.456
23	1198	-0.412	-0.456	-0.367	-0.468	-0.355
24	1199	0.412	0.361	0.462	0.347	0.476
25	1200	-0.067	-0.072	-0.063	-0.073	-0.062
26	1201	-0.386	-0.428	-0.345	-0.439	-0.333
27	1202	-1.167	-1.297	-1.034	-1.333	-0.998
28	1203	0.525	0.461	0.589	0.443	0.606
29	1204	0.826	0.727	0.924	0.700	0.951
30	1205	0.322	0.282	0.363	0.271	0.374
31	1206	-0.746	-0.828	-0.662	-0.851	-0.640
32	1207	-0.466	-0.516	-0.415	-0.530	-0.401
33	1208	-1.002	-1.114	-0.889	-1.145	-0.858
34	1209	0.494	0.433	0.554	0.417	0.571
35	1210	-0.729	-0.809	-0.647	-0.831	-0.625
36	1211	-0.248	-0.273	-0.222	-0.280	-0.215
37	1212	-0.449	-0.498	-0.400	-0.511	-0.387
38	1213	-0.365	-0.404	-0.326	-0.414	-0.315
39	1214	-0.431	-0.478	-0.384	-0.491	-0.372
40	1215	-1.041	-1.157	-0.923	-1.189	-0.891
41	1216	-0.128	-0.140	-0.117	-0.143	-0.114
42	1217	0.802	0.705	0.897	0.679	0.923
43	1218	0.227	0.198	0.257	0.190	0.265
44	1219	0.048	0.039	0.056	0.036	0.059
45	1220	-0.779	-0.865	-0.691	-0.888	-0.668
46	1221	0.683	0.600	0.765	0.578	0.787
47	1222	-0.387	-0.428	-0.345	-0.440	-0.334
48	1223	-0.370	-0.409	-0.330	-0.420	-0.319
49	1224	-0.207	-0.228	-0.187	-0.234	-0.181
50	1225	-0.838	-0.931	-0.743	-0.956	-0.718

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3	1226	-1.469	-1.634	-1.301	-1.679	-1.256
4	1227	0.767	0.674	0.858	0.649	0.883
5	1228	-2.142	-2.384	-1.895	-2.451	-1.829
6	1229	-0.733	-0.814	-0.651	-0.836	-0.629
7	1230	-2.297	-2.557	-2.032	-2.628	-1.961
8	1231	-0.622	-0.690	-0.553	-0.709	-0.534
9	1232	-1.761	-1.960	-1.559	-2.015	-1.505
10	1233	-0.078	-0.083	-0.072	-0.085	-0.070
11	1234	-0.035	-0.035	-0.034	-0.036	-0.034
12	1235	-0.200	-0.220	-0.180	-0.225	-0.175
13	1236	-0.206	-0.227	-0.186	-0.232	-0.180
14	1237	0.379	0.332	0.426	0.319	0.439
15	1238	-1.584	-1.762	-1.402	-1.811	-1.354
16	1239	-0.281	-0.310	-0.251	-0.318	-0.243
17	1240	-0.149	-0.163	-0.135	-0.167	-0.131
18	1241	0.075	0.063	0.087	0.060	0.091
19	1242	-0.655	-0.727	-0.582	-0.747	-0.563
20	1243	-0.355	-0.393	-0.317	-0.403	-0.307
21	1244	-0.925	-1.028	-0.821	-1.057	-0.793
22	1245	-0.120	-0.131	-0.110	-0.134	-0.107
23	1246	-0.971	-1.080	-0.861	-1.109	-0.832
24	1247	-0.598	-0.664	-0.532	-0.682	-0.514
25	1248	-0.496	-0.550	-0.441	-0.564	-0.427
26	1249	-0.025	-0.025	-0.025	-0.025	-0.025
27	1250	0.029	0.023	0.036	0.021	0.038
28	1251	-0.759	-0.843	-0.674	-0.866	-0.651
29	1252	-0.456	-0.505	-0.406	-0.519	-0.393
30	1253	-0.031	-0.032	-0.031	-0.032	-0.031
31	1254	-0.233	-0.257	-0.209	-0.263	-0.203
32	1255	-0.089	-0.096	-0.082	-0.097	-0.080
33	1256	-0.650	-0.721	-0.577	-0.741	-0.558
34	1257	0.702	0.617	0.785	0.594	0.808
35	1258	-0.540	-0.598	-0.480	-0.614	-0.464
36	1259	-1.057	-1.175	-0.937	-1.208	-0.905
37	1260	-0.665	-0.738	-0.591	-0.758	-0.571
38	1261	-0.238	-0.262	-0.214	-0.269	-0.207
39	1262	-0.647	-0.718	-0.575	-0.737	-0.555
40	1263	-0.722	-0.802	-0.641	-0.823	-0.619
41	1264	-1.107	-1.231	-0.981	-1.265	-0.947
42	1265	-0.328	-0.363	-0.293	-0.372	-0.284
43	1266	0.119	0.101	0.135	0.097	0.140
44	1267	-0.108	-0.117	-0.099	-0.120	-0.096
45	1268	0.518	0.455	0.581	0.438	0.598
46	1269	1.158	1.020	1.294	0.983	1.332
47	1270	0.498	0.436	0.558	0.420	0.575
48	1271	0.080	0.068	0.093	0.064	0.096
49	1272	0.552	0.485	0.619	0.466	0.637
50	1273	0.382	0.334	0.429	0.322	0.442

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3	1274	-0.832	-0.925	-0.739	-0.950	-0.713
4	1275	0.382	0.334	0.429	0.321	0.442
5	1276	-0.700	-0.777	-0.622	-0.798	-0.601
6	1277	-0.856	-0.951	-0.759	-0.977	-0.733
7	1278	-0.970	-1.078	-0.860	-1.108	-0.831
8	1279	-0.423	-0.468	-0.377	-0.481	-0.365
9	1280	-0.105	-0.114	-0.096	-0.116	-0.094
10	1281	-0.511	-0.567	-0.455	-0.582	-0.440
11	1282	-0.634	-0.703	-0.563	-0.723	-0.544
12	1283	0.106	0.091	0.122	0.086	0.126
13	1284	-0.121	-0.131	-0.110	-0.134	-0.107
14	1285	0.267	0.232	0.301	0.223	0.310
15	1286	-0.096	-0.104	-0.088	-0.106	-0.086
16	1287	0.111	0.095	0.127	0.091	0.132
17	1288	-0.383	-0.424	-0.342	-0.435	-0.331
18	1289	-0.048	-0.050	-0.045	-0.051	-0.045
19	1290	-0.440	-0.487	-0.392	-0.500	-0.379
20	1291	-0.234	-0.258	-0.210	-0.264	-0.204
21	1292	-0.872	-0.969	-0.773	-0.995	-0.747
22	1293	-0.435	-0.482	-0.388	-0.495	-0.375
23	1294	-0.994	-1.105	-0.881	-1.135	-0.851
24	1295	0.133	0.115	0.152	0.110	0.157
25	1296	-1.585	-1.764	-1.404	-1.813	-1.355
26	1297	-0.435	-0.482	-0.388	-0.495	-0.375
27	1298	-0.588	-0.652	-0.523	-0.670	-0.505
28	1299	-0.023	-0.023	-0.022	-0.024	-0.022
29	1300	0.168	0.145	0.191	0.139	0.197
30	1301	-0.747	-0.829	-0.663	-0.852	-0.640
31	1302	-0.003	-0.006	0.000	-0.007	0.001
32	1303	-0.078	-0.084	-0.072	-0.085	-0.070
33	1304	-0.502	-0.556	-0.446	-0.571	-0.432
34	1305	0.021	0.015	0.027	0.014	0.028
35	1306	0.664	0.584	0.744	0.562	0.766
36	1307	-0.301	-0.333	-0.270	-0.341	-0.261
37	1308	-0.306	-0.337	-0.273	-0.346	-0.265
38	1309	-1.465	-1.630	-1.298	-1.675	-1.253
39	1310	0.332	0.290	0.373	0.278	0.384
40	1311	-0.148	-0.161	-0.134	-0.165	-0.130
41	1312	-0.287	-0.317	-0.257	-0.325	-0.249
42	1313	-0.816	-0.907	-0.724	-0.931	-0.700
43	1314	-0.948	-1.053	-0.841	-1.082	-0.812
44	1315	0.667	0.586	0.747	0.565	0.769
45	1316	0.812	0.714	0.908	0.688	0.935
46	1317	-0.660	-0.733	-0.586	-0.752	-0.567
47	1318	0.464	0.407	0.520	0.391	0.536
48	1319	-0.239	-0.263	-0.215	-0.270	-0.208
49	1320	0.136	0.117	0.155	0.112	0.160
50	1321	-0.882	-0.980	-0.782	-1.007	-0.755

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3	1322	-0.395	-0.437	-0.352	-0.448	-0.340
4	1323	-0.804	-0.894	-0.714	-0.918	-0.690
5	1324	-0.744	-0.826	-0.661	-0.849	-0.638
6	1325	0.067	0.056	0.078	0.053	0.081
7	1326	-0.373	-0.412	-0.332	-0.423	-0.322
8	1327	0.544	0.477	0.609	0.459	0.627
9	1328	-1.613	-1.795	-1.429	-1.845	-1.379
10	1329	-0.722	-0.802	-0.641	-0.824	-0.620
11	1330	-1.246	-1.386	-1.104	-1.424	-1.066
12	1331	0.153	0.132	0.174	0.126	0.180
13	1332	-0.818	-0.909	-0.726	-0.934	-0.702
14	1333	-1.118	-1.243	-0.991	-1.277	-0.957
15	1334	0.392	0.343	0.440	0.330	0.453
16	1335	-0.028	-0.028	-0.028	-0.028	-0.028
17	1336	-0.457	-0.506	-0.407	-0.520	-0.394
18	1337	-0.948	-1.053	-0.841	-1.082	-0.812
19	1338	-0.576	-0.639	-0.512	-0.657	-0.495
20	1339	0.007	0.003	0.011	0.002	0.013
21	1340	0.235	0.204	0.265	0.196	0.273
22	1341	-1.058	-1.176	-0.938	-1.208	-0.905
23	1342	0.149	0.128	0.169	0.123	0.175
24	1343	0.522	0.458	0.585	0.441	0.603
25	1344	-0.357	-0.395	-0.319	-0.405	-0.308
26	1345	-0.392	-0.434	-0.349	-0.445	-0.338
27	1346	-1.553	-1.729	-1.376	-1.777	-1.328
28	1347	0.012	0.008	0.017	0.006	0.018
29	1348	-1.093	-1.216	-0.969	-1.249	-0.936
30	1349	-1.516	-1.687	-1.342	-1.733	-1.296
31	1350	-0.495	-0.549	-0.441	-0.564	-0.426
32	1351	0.517	0.454	0.580	0.437	0.597
33	1352	-0.540	-0.598	-0.480	-0.614	-0.464
34	1353	-0.819	-0.910	-0.727	-0.935	-0.702
35	1354	0.446	0.391	0.501	0.376	0.516
36	1355	-0.044	-0.046	-0.042	-0.047	-0.042
37	1356	0.368	0.322	0.414	0.310	0.426
38	1357	-0.124	-0.135	-0.113	-0.138	-0.110
39	1358	-0.884	-0.983	-0.785	-1.010	-0.758
40	1359	-0.009	-0.011	-0.007	-0.012	-0.006
41	1360	-0.575	-0.638	-0.511	-0.655	-0.494
42	1361	0.125	0.107	0.143	0.102	0.147
43	1362	-0.114	-0.124	-0.104	-0.127	-0.101
44	1363	-1.967	-2.190	-1.741	-2.251	-1.680
45	1364	0.152	0.131	0.173	0.126	0.179
46	1365	0.432	0.378	0.484	0.364	0.499
47	1366	0.693	0.609	0.776	0.586	0.798
48	1367	-1.048	-1.165	-0.929	-1.197	-0.897
49	1368	0.783	0.689	0.876	0.663	0.902
50	1369	-0.486	-0.539	-0.433	-0.553	-0.418

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3	1370	-0.830	-0.922	-0.737	-0.947	-0.712
4	1371	0.586	0.514	0.656	0.495	0.675
5	1372	0.804	0.707	0.900	0.681	0.926
6	1373	-0.514	-0.569	-0.457	-0.585	-0.442
7	1374	0.856	0.753	0.957	0.725	0.985
8	1375	-1.165	-1.296	-1.033	-1.332	-0.997
9	1376	-0.194	-0.213	-0.175	-0.218	-0.169
10	1377	-0.994	-1.104	-0.881	-1.135	-0.851
11	1378	-0.835	-0.928	-0.741	-0.953	-0.716
12	1379	0.366	0.320	0.411	0.308	0.424
13	1380	-0.164	-0.180	-0.148	-0.184	-0.144
14	1381	0.138	0.118	0.157	0.113	0.162
15	1382	-0.064	-0.068	-0.060	-0.069	-0.059
16	1383	0.467	0.409	0.524	0.394	0.539
17	1384	0.286	0.249	0.322	0.239	0.332
18	1385	-0.953	-1.060	-0.845	-1.089	-0.816
19	1386	0.127	0.109	0.145	0.104	0.150
20	1387	-0.237	-0.260	-0.212	-0.267	-0.206
21	1388	-0.251	-0.276	-0.225	-0.283	-0.218
22	1389	-0.931	-1.035	-0.826	-1.063	-0.797
23	1390	-0.370	-0.409	-0.330	-0.420	-0.319
24	1391	0.397	0.348	0.446	0.334	0.459
25	1392	-0.139	-0.152	-0.126	-0.156	-0.123
26	1393	-0.611	-0.678	-0.543	-0.696	-0.525
27	1394	-1.230	-1.368	-1.090	-1.406	-1.053
28	1395	-0.703	-0.781	-0.625	-0.802	-0.604
29	1396	-0.135	-0.147	-0.122	-0.150	-0.119
30	1397	-0.781	-0.867	-0.693	-0.891	-0.669
31	1398	-0.329	-0.364	-0.294	-0.373	-0.285
32	1399	-0.241	-0.265	-0.216	-0.272	-0.209
33	1400	-0.267	-0.294	-0.239	-0.302	-0.231
34	1401	0.370	0.323	0.415	0.311	0.428
35	1402	0.513	0.450	0.575	0.433	0.592
36	1403	0.143	0.123	0.163	0.118	0.168
37	1404	0.801	0.704	0.896	0.678	0.922
38	1405	0.046	0.038	0.055	0.035	0.057
39	1406	0.490	0.430	0.550	0.414	0.566
40	1407	0.382	0.334	0.429	0.321	0.442
41	1408	0.136	0.117	0.154	0.111	0.160
42	1409	0.178	0.154	0.201	0.147	0.208
43	1410	0.103	0.088	0.118	0.084	0.122
44	1411	1.419	1.250	1.585	1.205	1.631
45	1412	-0.309	-0.341	-0.276	-0.350	-0.267
46	1413	0.688	0.605	0.770	0.582	0.793
47	1414	-0.127	-0.138	-0.115	-0.141	-0.112
48	1415	0.777	0.683	0.869	0.658	0.895
49	1416	0.491	0.430	0.550	0.414	0.566
50	1417	-0.171	-0.187	-0.154	-0.192	-0.150

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3	1418	0.453	0.397	0.508	0.382	0.523
4	1419	-0.231	-0.254	-0.207	-0.261	-0.201
5	1420	-0.342	-0.378	-0.305	-0.388	-0.295
6	1421	0.466	0.409	0.523	0.393	0.538
7	1422	-0.554	-0.614	-0.493	-0.631	-0.476
8	1423	-0.231	-0.254	-0.207	-0.260	-0.201
9	1424	0.743	0.653	0.831	0.629	0.855
10	1425	0.809	0.712	0.905	0.686	0.932
11	1426	0.322	0.281	0.362	0.270	0.373
12	1427	0.661	0.581	0.740	0.559	0.762
13	1428	-0.225	-0.247	-0.202	-0.253	-0.195
14	1429	0.592	0.520	0.664	0.501	0.683
15	1430	-0.344	-0.380	-0.307	-0.390	-0.297
16	1431	0.200	0.174	0.226	0.166	0.234
17	1432	0.483	0.423	0.541	0.407	0.557
18	1433	0.207	0.179	0.234	0.172	0.241
19	1434	0.872	0.767	0.975	0.739	1.004
20	1435	0.938	0.826	1.049	0.795	1.080
21	1436	0.008	0.004	0.012	0.003	0.013
22	1437	0.056	0.046	0.066	0.044	0.069
23	1438	-0.995	-1.106	-0.882	-1.136	-0.852
24	1439	-0.318	-0.351	-0.284	-0.360	-0.275
25	1440	-0.716	-0.795	-0.636	-0.817	-0.614
26	1441	0.295	0.257	0.332	0.247	0.342
27	1442	-0.513	-0.569	-0.456	-0.584	-0.441
28	1443	-0.557	-0.617	-0.495	-0.634	-0.478
29	1444	-0.547	-0.607	-0.487	-0.623	-0.470
30	1445	-0.109	-0.118	-0.099	-0.120	-0.097
31	1446	-0.418	-0.463	-0.373	-0.475	-0.361
32	1447	-0.676	-0.751	-0.601	-0.771	-0.580
33	1448	0.053	0.044	0.062	0.041	0.065
34	1449	-0.381	-0.422	-0.340	-0.433	-0.329
35	1450	0.894	0.786	0.999	0.757	1.028
36	1451	-0.046	-0.048	-0.044	-0.048	-0.043
37	1452	-0.258	-0.285	-0.232	-0.292	-0.224
38	1453	-3.068	-3.417	-2.714	-3.513	-2.619
39	1454	-1.240	-1.379	-1.098	-1.417	-1.060
40	1455	-1.339	-1.489	-1.186	-1.530	-1.145
41	1456	-1.200	-1.335	-1.064	-1.372	-1.027
42	1457	-1.307	-1.454	-1.158	-1.494	-1.118
43	1458	-1.573	-1.751	-1.393	-1.799	-1.345
44	1459	-1.271	-1.414	-1.126	-1.453	-1.087
45	1460	-1.014	-1.128	-0.899	-1.159	-0.868
46	1461	-1.155	-1.284	-1.023	-1.320	-0.988
47	1462	-1.558	-1.733	-1.380	-1.782	-1.332
48	1463	-1.563	-1.739	-1.384	-1.788	-1.336
49	1464	-1.109	-1.233	-0.983	-1.267	-0.949
50	1465	-0.463	-0.513	-0.412	-0.526	-0.399

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3	1466	-1.153	-1.283	-1.022	-1.318	-0.987
4	1467	-0.791	-0.878	-0.702	-0.902	-0.678
5	1468	0.243	0.211	0.274	0.203	0.282
6	1469	-0.330	-0.364	-0.294	-0.374	-0.285
7	1470	0.130	0.111	0.148	0.107	0.153
8	1471	-0.879	-0.976	-0.780	-1.003	-0.753
9	1472	-0.760	-0.844	-0.675	-0.867	-0.652
10	1473	-1.367	-1.520	-1.211	-1.563	-1.169
11	1474	-0.591	-0.656	-0.526	-0.674	-0.508
12	1475	-0.610	-0.677	-0.542	-0.695	-0.524
13	1476	-1.421	-1.581	-1.259	-1.625	-1.215
14	1477	-0.938	-1.042	-0.832	-1.071	-0.803
15	1478	-1.406	-1.564	-1.245	-1.608	-1.202
16	1479	-0.417	-0.461	-0.371	-0.473	-0.359
17	1480	-0.823	-0.914	-0.730	-0.939	-0.705
18	1481	-0.489	-0.542	-0.436	-0.557	-0.421
19	1482	-0.633	-0.702	-0.563	-0.722	-0.544
20	1483	-1.578	-1.756	-1.397	-1.805	-1.349
21	1484	-0.159	-0.174	-0.143	-0.178	-0.139
22	1485	0.422	0.369	0.474	0.355	0.488
23	1486	-0.576	-0.639	-0.512	-0.656	-0.495
24	1487	-0.459	-0.509	-0.409	-0.522	-0.395
25	1488	-0.616	-0.684	-0.548	-0.702	-0.529
26	1489	-0.245	-0.270	-0.220	-0.277	-0.213
27	1490	0.713	0.627	0.798	0.604	0.822
28	1491	0.278	0.243	0.313	0.233	0.323
29	1492	0.353	0.308	0.396	0.296	0.408
30	1493	-0.370	-0.409	-0.330	-0.420	-0.319
31	1494	0.675	0.593	0.756	0.571	0.778
32	1495	-0.183	-0.201	-0.165	-0.206	-0.160
33	1496	0.576	0.505	0.645	0.487	0.664
34	1497	-1.694	-1.885	-1.500	-1.937	-1.447
35	1498	-0.724	-0.803	-0.643	-0.825	-0.621
36	1499	-0.437	-0.484	-0.389	-0.496	-0.376
37	1500	0.004	0.000	0.008	-0.001	0.009
38	1501	-0.360	-0.398	-0.321	-0.408	-0.311
39	1502	-0.195	-0.214	-0.176	-0.220	-0.170
40	1503	-0.293	-0.324	-0.263	-0.332	-0.254
41	1504	-0.432	-0.478	-0.385	-0.491	-0.372
42	1505	0.159	0.138	0.181	0.132	0.187
43	1506	0.155	0.134	0.176	0.128	0.182
44	1507	-2.086	-2.322	-1.846	-2.387	-1.782
45	1508	0.209	0.181	0.236	0.174	0.243
46	1509	-0.774	-0.860	-0.687	-0.883	-0.664
47	1510	-0.632	-0.702	-0.562	-0.721	-0.543
48	1511	-0.125	-0.136	-0.114	-0.140	-0.111
49	1512	-0.803	-0.892	-0.713	-0.917	-0.689
50	1513	0.093	0.079	0.107	0.075	0.111

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3	1514	-0.840	-0.933	-0.745	-0.958	-0.720
4	1515	0.436	0.382	0.489	0.367	0.504
5	1516	-1.203	-1.337	-1.066	-1.374	-1.029
6	1517	-0.836	-0.929	-0.742	-0.954	-0.717
7	1518	-0.052	-0.054	-0.049	-0.055	-0.048
8	1519	-0.480	-0.532	-0.428	-0.547	-0.414
9	1520	-1.193	-1.327	-1.057	-1.363	-1.021
10	1521	-0.534	-0.592	-0.475	-0.608	-0.459
11	1522	-0.919	-1.022	-0.816	-1.050	-0.788
12	1523	-0.945	-1.051	-0.838	-1.079	-0.810
13	1524	-1.613	-1.795	-1.428	-1.844	-1.378
14	1525	-0.357	-0.394	-0.318	-0.405	-0.308
15	1526	-1.370	-1.524	-1.214	-1.567	-1.172
16	1527	-0.647	-0.718	-0.575	-0.737	-0.555
17	1528	-1.067	-1.186	-0.946	-1.218	-0.913
18	1529	-0.351	-0.388	-0.314	-0.399	-0.303
19	1530	-1.134	-1.261	-1.006	-1.296	-0.971
20	1531	-0.406	-0.450	-0.362	-0.462	-0.350
21	1532	0.435	0.381	0.488	0.366	0.502
22	1533	0.488	0.428	0.547	0.412	0.563
23	1534	0.192	0.167	0.218	0.160	0.225
24	1535	-0.755	-0.838	-0.670	-0.861	-0.647
25	1536	-0.905	-1.006	-0.803	-1.033	-0.775
26	1537	0.026	0.019	0.032	0.018	0.033
27	1538	0.001	-0.002	0.004	-0.003	0.005
28	1539	0.136	0.117	0.155	0.112	0.160
29	1540	-0.571	-0.633	-0.507	-0.650	-0.490
30	1541	-0.108	-0.117	-0.099	-0.120	-0.096
31	1542	-1.000	-1.111	-0.887	-1.142	-0.856
32	1543	-0.764	-0.848	-0.678	-0.871	-0.655
33	1544	-1.288	-1.432	-1.141	-1.472	-1.102
34	1545	0.730	0.642	0.817	0.618	0.841
35	1546	-0.630	-0.699	-0.560	-0.718	-0.541
36	1547	-0.291	-0.321	-0.261	-0.330	-0.252
37	1548	-0.496	-0.550	-0.442	-0.565	-0.427
38	1549	-0.629	-0.698	-0.559	-0.717	-0.540
39	1550	-1.096	-1.219	-0.972	-1.253	-0.938
40	1551	-0.198	-0.217	-0.178	-0.223	-0.173
41	1552	-0.169	-0.185	-0.153	-0.190	-0.148
42	1553	-0.036	-0.037	-0.035	-0.037	-0.035
43	1554	-0.436	-0.482	-0.388	-0.495	-0.375
44	1555	-0.398	-0.441	-0.355	-0.452	-0.343
45	1556	-0.428	-0.473	-0.381	-0.486	-0.369
46	1557	-1.042	-1.159	-0.924	-1.191	-0.892
47	1558	0.684	0.601	0.765	0.579	0.788
48	1559	-0.771	-0.856	-0.684	-0.880	-0.661
49	1560	-0.660	-0.732	-0.586	-0.752	-0.566
50	1561	0.101	0.086	0.116	0.082	0.120

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3	1562	-0.955	-1.061	-0.847	-1.091	-0.818
4	1563	0.703	0.618	0.787	0.595	0.810
5	1564	0.942	0.829	1.053	0.798	1.084
6	1565	0.286	0.249	0.322	0.239	0.332
7	1566	-0.272	-0.300	-0.243	-0.307	-0.236
8	1567	-1.710	-1.903	-1.514	-1.956	-1.461
9	1568	-0.633	-0.703	-0.563	-0.722	-0.544
10	1569	0.751	0.660	0.841	0.636	0.865
11	1570	-0.489	-0.542	-0.435	-0.557	-0.421
12	1571	-0.456	-0.505	-0.406	-0.518	-0.392
13	1572	-0.008	-0.010	-0.006	-0.011	-0.005
14	1573	-1.153	-1.282	-1.022	-1.318	-0.987
15	1574	-0.812	-0.902	-0.721	-0.927	-0.696
16	1575	-0.428	-0.474	-0.382	-0.487	-0.369
17	1576	-0.481	-0.533	-0.428	-0.547	-0.414
18	1577	-0.385	-0.426	-0.344	-0.437	-0.332
19	1578	-0.620	-0.688	-0.551	-0.707	-0.533
20	1579	-0.689	-0.765	-0.612	-0.786	-0.591
21	1580	-1.433	-1.595	-1.270	-1.639	-1.226
22	1581	-0.889	-0.988	-0.789	-1.015	-0.762
23	1582	-0.374	-0.414	-0.334	-0.425	-0.323
24	1583	-0.307	-0.339	-0.275	-0.348	-0.266
25	1584	-0.627	-0.696	-0.557	-0.715	-0.538
26	1585	-0.501	-0.555	-0.446	-0.570	-0.431
27	1586	-0.200	-0.219	-0.180	-0.225	-0.174
28	1587	-1.577	-1.755	-1.397	-1.804	-1.348
29	1588	-0.216	-0.238	-0.194	-0.244	-0.188
30	1589	-1.109	-1.233	-0.983	-1.267	-0.949
31	1590	-0.897	-0.996	-0.795	-1.024	-0.768
32	1591	-0.466	-0.516	-0.415	-0.530	-0.401
33	1592	-0.419	-0.464	-0.373	-0.476	-0.361
34	1593	-0.509	-0.565	-0.453	-0.580	-0.438
35	1594	-0.722	-0.802	-0.641	-0.824	-0.619
36	1595	-0.686	-0.762	-0.609	-0.782	-0.589
37	1596	-0.780	-0.867	-0.693	-0.891	-0.669
38	1597	-0.677	-0.751	-0.601	-0.772	-0.581
39	1598	0.325	0.284	0.366	0.273	0.377
40	1599	-0.106	-0.115	-0.097	-0.117	-0.094
41	1600	-0.396	-0.438	-0.353	-0.450	-0.342
42	1601	-2.078	-2.313	-1.839	-2.377	-1.775
43	1602	-0.765	-0.849	-0.679	-0.873	-0.656
44	1603	-0.793	-0.881	-0.704	-0.905	-0.680
45	1604	-1.209	-1.345	-1.071	-1.382	-1.034
46	1605	-1.432	-1.593	-1.268	-1.637	-1.224
47	1606	-1.453	-1.617	-1.287	-1.661	-1.242
48	1607	-1.520	-1.691	-1.346	-1.738	-1.299
49	1608	-1.691	-1.882	-1.497	-1.934	-1.445
50	1609	-1.297	-1.443	-1.149	-1.483	-1.110

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3	1610	-0.963	-1.071	-0.854	-1.100	-0.825
4	1611	-0.715	-0.793	-0.635	-0.815	-0.613
5	1612	-0.883	-0.981	-0.783	-1.008	-0.756
6	1613	-0.154	-0.168	-0.139	-0.172	-0.135
7	1614	-2.290	-2.549	-2.026	-2.621	-1.955
8	1615	-1.528	-1.700	-1.353	-1.747	-1.306
9	1616	-1.365	-1.518	-1.209	-1.560	-1.167
10	1617	-0.442	-0.490	-0.394	-0.503	-0.381
11	1618	-1.400	-1.557	-1.240	-1.601	-1.197
12	1619	0.111	0.095	0.127	0.090	0.131
13	1620	-0.966	-1.073	-0.856	-1.103	-0.827
14	1621	-0.516	-0.572	-0.459	-0.587	-0.444
15	1622	0.031	0.024	0.038	0.022	0.040
16	1623	-0.283	-0.313	-0.254	-0.321	-0.246
17	1624	-0.168	-0.184	-0.152	-0.189	-0.148
18	1625	-0.841	-0.935	-0.747	-0.960	-0.721
19	1626	0.368	0.322	0.414	0.310	0.426
20	1627	0.030	0.023	0.036	0.021	0.038
21	1628	0.353	0.308	0.396	0.296	0.408
22	1629	0.444	0.389	0.498	0.374	0.513
23	1630	-0.902	-1.002	-0.800	-1.030	-0.773
24	1631	0.131	0.113	0.150	0.108	0.155
25	1632	-1.925	-2.143	-1.704	-2.203	-1.645
26	1633	-2.075	-2.310	-1.836	-2.374	-1.772
27	1634	-0.211	-0.232	-0.190	-0.238	-0.184
28	1635	-0.981	-1.091	-0.870	-1.121	-0.840
29	1636	0.353	0.309	0.397	0.297	0.409
30	1637	-0.739	-0.820	-0.656	-0.843	-0.634
31	1638	-1.956	-2.178	-1.732	-2.239	-1.671
32	1639	-0.505	-0.560	-0.450	-0.575	-0.435
33	1640	0.590	0.518	0.661	0.498	0.680
34	1641	-2.327	-2.591	-2.059	-2.664	-1.987
35	1642	-0.824	-0.916	-0.732	-0.941	-0.707
36	1643	-1.962	-2.184	-1.736	-2.245	-1.676
37	1644	-1.160	-1.289	-1.028	-1.325	-0.992
38	1645	-1.377	-1.532	-1.220	-1.574	-1.178
39	1646	-0.927	-1.030	-0.822	-1.059	-0.794
40	1647	-2.056	-2.289	-1.820	-2.353	-1.756
41	1648	0.000	-0.003	0.003	-0.004	0.004
42	1649	0.302	0.264	0.340	0.253	0.350
43	1650	-0.018	-0.019	-0.017	-0.019	-0.016
44	1651	0.029	0.022	0.035	0.020	0.037
45	1652	-0.081	-0.088	-0.075	-0.089	-0.074
46	1653	-1.060	-1.178	-0.939	-1.211	-0.907
47	1654	-0.473	-0.524	-0.421	-0.538	-0.407
48	1655	0.521	0.457	0.584	0.440	0.601
49	1656	-0.025	-0.025	-0.024	-0.025	-0.024
50	1657	0.061	0.051	0.072	0.048	0.074

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3	1658	0.513	0.450	0.575	0.433	0.592
4	1659	0.123	0.106	0.141	0.101	0.146
5	1660	0.061	0.051	0.072	0.048	0.075
6	1661	-0.128	-0.139	-0.116	-0.142	-0.113
7	1662	-0.601	-0.667	-0.534	-0.685	-0.516
8	1663	-1.110	-1.234	-0.984	-1.268	-0.950
9	1664	0.398	0.348	0.447	0.335	0.460
10	1665	0.321	0.280	0.361	0.269	0.372
11	1666	-0.461	-0.511	-0.411	-0.525	-0.397
12	1667	-0.829	-0.921	-0.735	-0.946	-0.710
13	1668	-1.064	-1.183	-0.944	-1.216	-0.911
14	1669	-1.408	-1.567	-1.247	-1.610	-1.204
15	1670	-1.081	-1.202	-0.959	-1.235	-0.926
16	1671	-0.463	-0.513	-0.412	-0.526	-0.398
17	1672	-1.287	-1.432	-1.140	-1.471	-1.101
18	1673	-1.629	-1.812	-1.442	-1.863	-1.392
19	1674	-1.095	-1.218	-0.971	-1.251	-0.937
20	1675	-1.642	-1.827	-1.454	-1.878	-1.403
21	1676	-0.708	-0.786	-0.629	-0.808	-0.608
22	1677	-0.130	-0.142	-0.118	-0.145	-0.115
23	1678	-0.697	-0.774	-0.619	-0.795	-0.598
24	1679	-1.166	-1.296	-1.033	-1.332	-0.998
25	1680	-1.163	-1.293	-1.030	-1.328	-0.995
26	1681	-0.655	-0.727	-0.582	-0.747	-0.563
27	1682	-1.187	-1.320	-1.052	-1.357	-1.016
28	1683	-0.284	-0.314	-0.255	-0.322	-0.246
29	1684	-0.344	-0.381	-0.308	-0.391	-0.298
30	1685	-0.434	-0.481	-0.387	-0.494	-0.374
31	1686	-1.171	-1.302	-1.038	-1.338	-1.002
32	1687	-1.242	-1.381	-1.100	-1.419	-1.062
33	1688	-1.134	-1.260	-1.005	-1.295	-0.970
34	1689	0.611	0.537	0.685	0.517	0.705
35	1690	-0.522	-0.578	-0.464	-0.594	-0.449
36	1691	-0.463	-0.513	-0.412	-0.527	-0.399
37	1692	0.278	0.242	0.313	0.233	0.323
38	1693	-0.158	-0.173	-0.143	-0.177	-0.139
39	1694	-0.593	-0.658	-0.527	-0.676	-0.510
40	1695	-1.599	-1.780	-1.416	-1.829	-1.367
41	1696	-1.153	-1.282	-1.022	-1.318	-0.987
42	1697	-1.016	-1.130	-0.901	-1.161	-0.870
43	1698	0.189	0.164	0.214	0.157	0.221
44	1699	-0.680	-0.755	-0.604	-0.776	-0.584
45	1700	0.196	0.170	0.222	0.163	0.229
46	1701	-1.064	-1.183	-0.943	-1.215	-0.911
47	1702	0.146	0.126	0.166	0.120	0.171
48	1703	1.142	1.006	1.276	0.969	1.313
49	1704	-1.033	-1.148	-0.916	-1.180	-0.884
50	1705	-1.630	-1.814	-1.444	-1.865	-1.394

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3	1706	-1.773	-1.974	-1.570	-2.029	-1.515
4	1707	0.455	0.398	0.510	0.383	0.525
5	1708	-1.653	-1.840	-1.464	-1.891	-1.413
6	1709	-0.984	-1.094	-0.873	-1.124	-0.843
7	1710	-0.680	-0.754	-0.604	-0.775	-0.583
8	1711	0.837	0.736	0.937	0.709	0.964
9	1712	-0.075	-0.080	-0.069	-0.082	-0.068
10	1713	0.028	0.022	0.035	0.020	0.037
11	1714	0.153	0.132	0.174	0.126	0.180
12	1715	0.334	0.292	0.376	0.280	0.387
13	1716	-0.644	-0.714	-0.572	-0.734	-0.553
14	1717	-0.529	-0.586	-0.471	-0.602	-0.455
15	1718	-1.230	-1.368	-1.090	-1.406	-1.052
16	1719	-1.379	-1.534	-1.222	-1.577	-1.179
17	1720	-1.078	-1.199	-0.956	-1.232	-0.923
18	1721	-0.514	-0.570	-0.458	-0.586	-0.442
19	1722	-0.603	-0.669	-0.536	-0.687	-0.518
20	1723	-0.603	-0.669	-0.536	-0.687	-0.518
21	1724	-0.556	-0.616	-0.494	-0.633	-0.478
22	1725	0.016	0.011	0.021	0.010	0.023
23	1726	-0.013	-0.014	-0.011	-0.015	-0.010
24	1727	-0.116	-0.126	-0.105	-0.128	-0.103
25	1728	-1.499	-1.667	-1.327	-1.714	-1.281
26	1729	-0.567	-0.629	-0.504	-0.646	-0.487
27	1730	0.253	0.221	0.286	0.212	0.295
28	1731	-0.956	-1.063	-0.848	-1.092	-0.819
29	1732	0.082	0.069	0.094	0.065	0.098
30	1733	-0.878	-0.976	-0.779	-1.002	-0.752
31	1734	-0.538	-0.597	-0.479	-0.613	-0.463
32	1735	-0.071	-0.076	-0.066	-0.078	-0.065
33	1736	0.631	0.554	0.706	0.533	0.727
34	1737	-0.755	-0.838	-0.670	-0.861	-0.647
35	1738	-0.037	-0.038	-0.036	-0.039	-0.036
36	1739	-1.027	-1.142	-0.911	-1.174	-0.880
37	1740	-0.539	-0.598	-0.480	-0.614	-0.463
38	1741	-1.087	-1.209	-0.964	-1.242	-0.930
39	1742	-1.168	-1.299	-1.035	-1.335	-0.999
40	1743	-0.595	-0.660	-0.529	-0.677	-0.511
41	1744	-0.005	-0.008	-0.003	-0.009	-0.002
42	1745	-0.294	-0.324	-0.263	-0.332	-0.254
43	1746	-0.330	-0.365	-0.295	-0.374	-0.285
44	1747	-0.542	-0.601	-0.482	-0.617	-0.466
45	1748	-0.904	-1.005	-0.802	-1.032	-0.775
46	1749	-0.027	-0.027	-0.027	-0.027	-0.027
47	1750	-0.324	-0.358	-0.290	-0.368	-0.281
48	1751	-0.163	-0.179	-0.147	-0.183	-0.143
49	1752	0.490	0.430	0.550	0.413	0.566
50	1753	-0.230	-0.254	-0.207	-0.260	-0.200

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3	1754	0.217	0.189	0.246	0.181	0.253
4	1755	0.344	0.301	0.387	0.289	0.398
5	1756	-0.649	-0.720	-0.576	-0.739	-0.557
6	1757	0.536	0.470	0.600	0.452	0.618
7	1758	0.088	0.075	0.102	0.071	0.105
8	1759	-0.037	-0.038	-0.036	-0.038	-0.036
9	1760	0.569	0.499	0.637	0.481	0.656
10	1761	1.230	1.084	1.375	1.044	1.414
11	1762	0.199	0.173	0.225	0.166	0.232
12	1763	0.058	0.048	0.068	0.045	0.071
13	1764	-0.318	-0.352	-0.285	-0.361	-0.276
14	1765	-0.637	-0.707	-0.566	-0.726	-0.547
15	1766	0.561	0.493	0.629	0.474	0.647
16	1767	-0.098	-0.106	-0.090	-0.108	-0.087
17	1768	-1.400	-1.557	-1.240	-1.600	-1.197
18	1769	-0.916	-1.018	-0.812	-1.046	-0.784
19	1770	-0.418	-0.463	-0.373	-0.475	-0.360
20	1771	-0.563	-0.624	-0.500	-0.641	-0.483
21	1772	-2.029	-2.259	-1.796	-2.322	-1.733
22	1773	0.276	0.240	0.311	0.231	0.320
23	1774	-0.190	-0.208	-0.171	-0.213	-0.166
24	1775	0.344	0.300	0.386	0.289	0.398
25	1776	0.759	0.667	0.849	0.643	0.874
26	1777	-0.720	-0.799	-0.639	-0.821	-0.618
27	1778	-0.835	-0.927	-0.741	-0.953	-0.715
28	1779	-0.162	-0.177	-0.146	-0.181	-0.142
29	1780	-0.354	-0.392	-0.316	-0.402	-0.306
30	1781	-1.104	-1.227	-0.978	-1.261	-0.945
31	1782	-0.768	-0.852	-0.681	-0.876	-0.658
32	1783	-1.729	-1.924	-1.531	-1.978	-1.477
33	1784	-1.183	-1.315	-1.048	-1.351	-1.012
34	1785	-0.971	-1.079	-0.861	-1.109	-0.832
35	1786	-0.180	-0.197	-0.162	-0.202	-0.158
36	1787	-1.338	-1.488	-1.185	-1.530	-1.144
37	1788	-0.327	-0.361	-0.292	-0.370	-0.282
38	1789	0.546	0.479	0.612	0.461	0.630
39	1790	-2.055	-2.288	-1.819	-2.352	-1.755
40	1791	-0.571	-0.633	-0.508	-0.650	-0.491
41	1792	-0.742	-0.823	-0.658	-0.846	-0.636
42	1793	-0.587	-0.651	-0.522	-0.668	-0.504
43	1794	-0.295	-0.325	-0.264	-0.334	-0.255
44	1795	-0.430	-0.476	-0.383	-0.489	-0.371
45	1796	-0.146	-0.159	-0.132	-0.163	-0.128
46	1797	-0.772	-0.857	-0.685	-0.880	-0.662
47	1798	0.118	0.101	0.135	0.096	0.139
48	1799	-0.075	-0.081	-0.070	-0.082	-0.068
49	1800	-1.270	-1.413	-1.125	-1.452	-1.086
50	1801	-0.325	-0.359	-0.290	-0.368	-0.281

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3	1802	-1.352	-1.504	-1.197	-1.545	-1.156
4	1803	-0.602	-0.668	-0.536	-0.687	-0.518
5	1804	0.364	0.318	0.409	0.306	0.421
6	1805	-0.985	-1.095	-0.874	-1.125	-0.844
7	1806	-0.572	-0.634	-0.508	-0.651	-0.491
8	1807	-0.894	-0.994	-0.793	-1.021	-0.766
9	1808	-0.131	-0.143	-0.119	-0.146	-0.116
10	1809	-0.699	-0.776	-0.621	-0.797	-0.600
11	1810	-1.140	-1.268	-1.010	-1.303	-0.975
12	1811	-0.570	-0.633	-0.507	-0.650	-0.490
13	1812	-2.148	-2.392	-1.901	-2.459	-1.835
14	1813	-0.738	-0.819	-0.655	-0.841	-0.633
15	1814	-0.470	-0.520	-0.418	-0.534	-0.404
16	1815	-0.699	-0.776	-0.621	-0.797	-0.600
17	1816	-1.015	-1.128	-0.900	-1.159	-0.869
18	1817	-1.138	-1.266	-1.009	-1.300	-0.974
19	1818	-0.930	-1.034	-0.825	-1.062	-0.797
20	1819	0.674	0.592	0.755	0.570	0.777
21	1820	0.028	0.022	0.035	0.020	0.036
22	1821	-1.678	-1.867	-1.486	-1.919	-1.434
23	1822	-0.267	-0.295	-0.240	-0.302	-0.232
24	1823	0.007	0.003	0.011	0.002	0.013
25	1824	-0.470	-0.520	-0.418	-0.534	-0.404
26	1825	-1.320	-1.468	-1.169	-1.508	-1.129
27	1826	0.316	0.276	0.355	0.265	0.366
28	1827	-0.606	-0.672	-0.538	-0.690	-0.520
29	1828	-0.451	-0.499	-0.401	-0.512	-0.388
30	1829	-0.880	-0.978	-0.781	-1.005	-0.754
31	1830	-0.951	-1.057	-0.843	-1.086	-0.814
32	1831	1.017	0.895	1.137	0.862	1.170
33	1832	-0.920	-1.022	-0.816	-1.050	-0.788
34	1833	-1.115	-1.239	-0.988	-1.274	-0.954
35	1834	-0.819	-0.910	-0.727	-0.935	-0.702
36	1835	-1.016	-1.129	-0.900	-1.160	-0.870
37	1836	-1.633	-1.818	-1.446	-1.868	-1.396
38	1837	-1.261	-1.402	-1.117	-1.441	-1.079
39	1838	-1.497	-1.666	-1.326	-1.712	-1.280
40	1839	-1.689	-1.879	-1.495	-1.931	-1.443
41	1840	-0.808	-0.898	-0.717	-0.922	-0.693
42	1841	-0.943	-1.048	-0.836	-1.077	-0.808
43	1842	-0.035	-0.036	-0.035	-0.037	-0.034
44	1843	-0.432	-0.479	-0.385	-0.491	-0.372
45	1844	0.380	0.332	0.426	0.319	0.439
46	1845	-0.089	-0.096	-0.082	-0.098	-0.080
47	1846	0.424	0.371	0.476	0.357	0.490
48	1847	0.500	0.438	0.560	0.422	0.577
49	1848	-0.306	-0.337	-0.273	-0.346	-0.265
50	1849	-1.106	-1.229	-0.980	-1.263	-0.946

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3	1850	0.160	0.138	0.182	0.132	0.188
4	1851	-0.841	-0.935	-0.747	-0.960	-0.721
5	1852	0.459	0.402	0.515	0.387	0.530
6	1853	0.406	0.355	0.455	0.341	0.469
7	1854	1.089	0.959	1.217	0.924	1.252
8	1855	-0.149	-0.163	-0.135	-0.167	-0.132
9	1856	-1.531	-1.704	-1.356	-1.751	-1.309
10	1857	-0.669	-0.742	-0.594	-0.763	-0.574
11	1858	0.626	0.549	0.701	0.529	0.721
12	1859	-0.749	-0.831	-0.665	-0.854	-0.642
13	1860	0.562	0.493	0.630	0.475	0.649
14	1861	0.805	0.708	0.900	0.681	0.926
15	1862	-0.876	-0.973	-0.777	-1.000	-0.751
16	1863	-0.356	-0.393	-0.318	-0.404	-0.307
17	1864	-1.242	-1.382	-1.101	-1.420	-1.063
18	1865	-0.825	-0.917	-0.732	-0.942	-0.707
19	1866	-0.396	-0.438	-0.353	-0.450	-0.342
20	1867	-1.520	-1.692	-1.346	-1.739	-1.300
21	1868	-0.005	-0.007	-0.002	-0.008	-0.001
22	1869	-0.974	-1.082	-0.863	-1.112	-0.834
23	1870	-0.162	-0.177	-0.146	-0.181	-0.142
24	1871	-1.192	-1.326	-1.057	-1.363	-1.020
25	1872	-0.313	-0.345	-0.279	-0.354	-0.270
26	1873	0.574	0.504	0.644	0.485	0.662
27	1874	-1.322	-1.471	-1.172	-1.512	-1.131
28	1875	-0.178	-0.195	-0.160	-0.200	-0.156
29	1876	0.005	0.001	0.008	0.000	0.009
30	1877	-1.749	-1.946	-1.548	-2.000	-1.494
31	1878	-0.260	-0.287	-0.233	-0.294	-0.226
32	1879	0.481	0.421	0.539	0.405	0.555
33	1880	-0.721	-0.800	-0.640	-0.822	-0.618
34	1881	-1.421	-1.581	-1.259	-1.625	-1.215
35	1882	0.023	0.017	0.029	0.015	0.030
36	1883	1.024	0.902	1.145	0.869	1.178
37	1884	-0.083	-0.089	-0.077	-0.091	-0.075
38	1885	-1.175	-1.307	-1.041	-1.343	-1.005
39	1886	0.341	0.298	0.383	0.286	0.395
40	1887	-0.793	-0.881	-0.704	-0.905	-0.680
41	1888	-0.829	-0.921	-0.736	-0.946	-0.711
42	1889	-0.276	-0.304	-0.247	-0.312	-0.239
43	1890	-0.031	-0.032	-0.031	-0.032	-0.031
44	1891	-1.513	-1.683	-1.340	-1.730	-1.293
45	1892	-1.919	-2.136	-1.699	-2.196	-1.640
46	1893	-1.328	-1.477	-1.176	-1.518	-1.136
47	1894	0.391	0.342	0.439	0.329	0.452
48	1895	0.100	0.085	0.114	0.081	0.118
49	1896	-0.191	-0.210	-0.172	-0.215	-0.167
50	1897	0.679	0.597	0.761	0.575	0.783

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3	1898	-0.216	-0.238	-0.194	-0.244	-0.188
4	1899	-1.761	-1.960	-1.559	-2.015	-1.505
5	1900	-1.065	-1.184	-0.944	-1.217	-0.912
6	1901	0.750	0.660	0.840	0.635	0.864
7	1902	-2.617	-2.914	-2.315	-2.995	-2.234
8	1903	-1.109	-1.233	-0.983	-1.267	-0.949
9	1904	-1.571	-1.749	-1.392	-1.797	-1.343
10	1905	-0.573	-0.636	-0.510	-0.653	-0.493
11	1906	-1.109	-1.233	-0.983	-1.268	-0.949
12	1907	-1.022	-1.137	-0.907	-1.168	-0.875
13	1908	-0.809	-0.898	-0.718	-0.923	-0.693
14	1909	-1.051	-1.168	-0.931	-1.200	-0.899
15	1910	-0.291	-0.321	-0.260	-0.330	-0.252
16	1911	-0.186	-0.204	-0.168	-0.209	-0.163
17	1912	-0.555	-0.615	-0.493	-0.632	-0.477
18	1913	-0.196	-0.216	-0.177	-0.221	-0.172
19	1914	-0.341	-0.377	-0.305	-0.387	-0.295
20	1915	-1.188	-1.321	-1.052	-1.357	-1.016
21	1916	-0.890	-0.989	-0.790	-1.016	-0.763
22	1917	0.268	0.233	0.301	0.224	0.311
23	1918	0.439	0.385	0.493	0.370	0.508
24	1919	-0.148	-0.162	-0.134	-0.165	-0.130
25	1920	0.745	0.654	0.833	0.630	0.858
26	1921	0.350	0.306	0.393	0.294	0.405
27	1922	1.001	0.881	1.119	0.849	1.152
28	1923	-1.485	-1.653	-1.315	-1.698	-1.270
29	1924	0.940	0.827	1.051	0.797	1.082
30	1925	0.801	0.705	0.897	0.679	0.923
31	1926	0.967	0.851	1.081	0.820	1.112
32	1927	0.897	0.789	1.003	0.760	1.032
33	1928	-0.043	-0.045	-0.041	-0.045	-0.041
34	1929	-0.010	-0.012	-0.008	-0.012	-0.007
35	1930	1.031	0.908	1.153	0.874	1.186
36	1931	-1.163	-1.293	-1.031	-1.329	-0.995
37	1932	-0.053	-0.056	-0.051	-0.057	-0.050
38	1933	0.940	0.827	1.051	0.797	1.082
39	1934	1.415	1.247	1.581	1.202	1.626
40	1935	0.000	-0.003	0.003	-0.004	0.004
41	1936	0.846	0.744	0.946	0.716	0.974
42	1937	2.136	1.884	2.384	1.816	2.453
43	1938	1.239	1.091	1.385	1.052	1.424
44	1939	0.968	0.852	1.083	0.821	1.114
45	1940	0.735	0.646	0.822	0.622	0.846
46	1941	-0.144	-0.157	-0.130	-0.161	-0.127
47	1942	0.528	0.463	0.592	0.446	0.610
48	1943	0.259	0.226	0.292	0.217	0.301
49	1944	-0.413	-0.457	-0.368	-0.469	-0.356
50	1945	0.794	0.698	0.888	0.672	0.914

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3	1946	0.846	0.744	0.946	0.717	0.974
4	1947	1.001	0.881	1.119	0.849	1.151
5	1948	-0.189	-0.207	-0.170	-0.212	-0.165
6	1949	-0.819	-0.910	-0.727	-0.935	-0.702
7	1950	0.909	0.800	1.016	0.770	1.046
8	1951	-0.296	-0.327	-0.265	-0.336	-0.257
9	1952	-0.448	-0.497	-0.399	-0.510	-0.386
10	1953	0.670	0.589	0.750	0.567	0.772
11	1954	-0.015	-0.017	-0.014	-0.017	-0.014
12	1955	0.334	0.292	0.376	0.281	0.387
13	1956	-0.357	-0.395	-0.319	-0.405	-0.308
14	1957	-0.308	-0.340	-0.275	-0.349	-0.267
15	1958	0.276	0.240	0.310	0.231	0.320
16	1959	0.600	0.527	0.673	0.507	0.692
17	1960	1.336	1.177	1.492	1.134	1.535
18	1961	0.272	0.237	0.306	0.227	0.315
19	1962	-1.009	-1.122	-0.895	-1.152	-0.864
20	1963	0.052	0.043	0.061	0.040	0.064
21	1964	-0.795	-0.883	-0.706	-0.907	-0.682
22	1965	-1.293	-1.438	-1.145	-1.478	-1.106
23	1966	-0.128	-0.139	-0.116	-0.142	-0.113
24	1967	-0.040	-0.041	-0.039	-0.042	-0.038
25	1968	-1.281	-1.425	-1.135	-1.464	-1.096
26	1969	0.801	0.704	0.896	0.678	0.922
27	1970	0.895	0.788	1.001	0.759	1.030
28	1971	-0.234	-0.258	-0.210	-0.265	-0.204
29	1972	0.904	0.795	1.011	0.766	1.040
30	1973	0.332	0.290	0.374	0.279	0.385
31	1974	0.456	0.400	0.512	0.385	0.527
32	1975	-0.681	-0.756	-0.605	-0.777	-0.585
33	1976	0.374	0.327	0.420	0.314	0.432
34	1977	-0.164	-0.180	-0.149	-0.184	-0.144
35	1978	-0.232	-0.255	-0.208	-0.261	-0.202
36	1979	0.299	0.261	0.337	0.251	0.347
37	1980	0.987	0.868	1.103	0.837	1.135
38	1981	-1.006	-1.118	-0.892	-1.149	-0.862
39	1982	-0.818	-0.909	-0.726	-0.933	-0.701
40	1983	0.006	0.002	0.010	0.001	0.011
41	1984	-0.742	-0.824	-0.659	-0.846	-0.636
42	1985	-0.179	-0.196	-0.161	-0.201	-0.156
43	1986	0.410	0.359	0.460	0.345	0.474
44	1987	-0.942	-1.047	-0.835	-1.075	-0.807
45	1988	0.003	-0.001	0.006	-0.002	0.007
46	1989	0.820	0.721	0.918	0.695	0.944
47	1990	0.580	0.509	0.650	0.490	0.669
48	1991	0.265	0.231	0.299	0.222	0.308
49	1992	-0.108	-0.117	-0.098	-0.119	-0.096
50	1993	-0.639	-0.710	-0.568	-0.729	-0.549

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3	1994	1.028	0.905	1.150	0.872	1.183
4	1995	-0.394	-0.436	-0.352	-0.448	-0.340
5	1996	0.145	0.125	0.165	0.120	0.171
6	1997	1.208	1.064	1.350	1.026	1.389
7	1998	-0.581	-0.644	-0.517	-0.662	-0.499
8	1999	-0.226	-0.249	-0.203	-0.255	-0.197
9	2000	0.656	0.576	0.735	0.555	0.756
10	2001	0.082	0.069	0.094	0.066	0.098
11	2002	1.205	1.061	1.346	1.022	1.385
12	2003	1.212	1.067	1.354	1.029	1.393
13	2004	0.985	0.867	1.101	0.835	1.133
14	2005	0.309	0.270	0.348	0.259	0.358
15	2006	1.644	1.450	1.836	1.397	1.889
16	2007	1.082	0.952	1.209	0.918	1.244
17	2008	0.210	0.182	0.237	0.175	0.245
18	2009	1.337	1.178	1.493	1.135	1.536
19	2010	0.471	0.413	0.529	0.397	0.544
20	2011	1.246	1.098	1.393	1.058	1.433
21	2012	0.407	0.356	0.457	0.343	0.471
22	2013	1.415	1.247	1.581	1.202	1.626
23	2014	1.054	0.928	1.178	0.894	1.212

(b)	LA-FEN/Finnish Lapland					
31	850	0.235	0.205	0.265	0.196	0.273
32	851	-1.422	-1.581	-1.265	-1.623	-1.215
33	852	-1.234	-1.371	-1.098	-1.408	-1.055
34	853	-1.147	-1.275	-1.021	-1.309	-0.981
35	854	-0.561	-0.621	-0.500	-0.637	-0.481
36	855	0.281	0.246	0.316	0.235	0.326
37	856	-1.200	-1.333	-1.067	-1.369	-1.026
38	857	-0.768	-0.853	-0.685	-0.875	-0.658
39	858	-1.462	-1.626	-1.300	-1.669	-1.249
40	859	-1.441	-1.601	-1.281	-1.644	-1.231
41	860	-0.121	-0.132	-0.111	-0.135	-0.108
42	861	-1.167	-1.297	-1.039	-1.332	-0.998
43	862	-1.271	-1.413	-1.131	-1.451	-1.087
44	863	-0.869	-0.965	-0.774	-0.991	-0.744
45	864	-0.263	-0.290	-0.237	-0.297	-0.228
46	865	-1.986	-2.209	-1.765	-2.269	-1.695
47	866	-1.051	-1.167	-0.935	-1.198	-0.899
48	867	-0.745	-0.827	-0.664	-0.848	-0.638
49	868	-0.052	-0.055	-0.049	-0.055	-0.048
50	869	-0.228	-0.251	-0.206	-0.257	-0.199
51	870	-0.824	-0.915	-0.735	-0.939	-0.706
52	871	-0.174	-0.190	-0.157	-0.195	-0.152
53	872	-0.758	-0.841	-0.675	-0.863	-0.649
54	873	-0.347	-0.384	-0.311	-0.393	-0.300
55	874	-0.915	-1.017	-0.815	-1.044	-0.784

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3	875	-0.010	-0.012	-0.008	-0.013	-0.007
4	876	0.284	0.249	0.320	0.238	0.329
5	877	-0.315	-0.347	-0.282	-0.356	-0.272
6	878	-0.029	-0.029	-0.029	-0.029	-0.029
7	879	-1.171	-1.302	-1.042	-1.336	-1.002
8	880	0.196	0.171	0.222	0.163	0.229
9	881	-1.937	-2.154	-1.722	-2.212	-1.653
10	882	-0.645	-0.716	-0.576	-0.734	-0.554
11	883	0.055	0.045	0.064	0.042	0.067
12	884	-0.597	-0.661	-0.533	-0.679	-0.512
13	885	0.389	0.342	0.437	0.327	0.450
14	886	-0.544	-0.603	-0.486	-0.619	-0.467
15	887	0.113	0.097	0.129	0.092	0.134
16	888	-0.862	-0.956	-0.768	-0.982	-0.738
17	889	-0.450	-0.498	-0.403	-0.511	-0.388
18	890	-0.244	-0.268	-0.219	-0.275	-0.212
19	891	0.743	0.656	0.830	0.628	0.854
20	892	-0.829	-0.920	-0.738	-0.944	-0.710
21	893	-0.487	-0.539	-0.435	-0.553	-0.419
22	894	0.210	0.183	0.237	0.175	0.244
23	895	-0.354	-0.392	-0.318	-0.402	-0.306
24	896	-0.366	-0.405	-0.328	-0.415	-0.316
25	897	-0.426	-0.472	-0.381	-0.484	-0.367
26	898	-1.161	-1.290	-1.033	-1.325	-0.993
27	899	0.478	0.421	0.536	0.403	0.551
28	900	-1.361	-1.512	-1.210	-1.553	-1.163
29	901	-1.052	-1.169	-0.937	-1.200	-0.900
30	902	-1.717	-1.910	-1.527	-1.961	-1.466
31	903	-1.291	-1.434	-1.148	-1.473	-1.103
32	904	-0.448	-0.496	-0.401	-0.509	-0.386
33	905	-0.733	-0.813	-0.653	-0.834	-0.628
34	906	-0.023	-0.024	-0.023	-0.024	-0.023
35	907	-1.521	-1.691	-1.352	-1.736	-1.299
36	908	-0.251	-0.276	-0.225	-0.283	-0.218
37	909	-0.634	-0.703	-0.566	-0.721	-0.544
38	910	-0.639	-0.709	-0.570	-0.727	-0.548
39	911	-1.144	-1.271	-1.018	-1.305	-0.978
40	912	0.930	0.822	1.039	0.787	1.068
41	913	-0.791	-0.878	-0.705	-0.901	-0.678
42	914	-1.378	-1.532	-1.226	-1.573	-1.177
43	915	0.447	0.393	0.501	0.376	0.515
44	916	-0.091	-0.098	-0.084	-0.100	-0.082
45	917	-1.492	-1.659	-1.327	-1.704	-1.275
46	918	-0.518	-0.574	-0.463	-0.589	-0.445
47	919	0.336	0.295	0.377	0.282	0.388
48	920	-0.172	-0.189	-0.156	-0.193	-0.151
49	921	-1.686	-1.875	-1.499	-1.925	-1.440
50	922	0.448	0.394	0.502	0.377	0.516

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3	923	-0.545	-0.604	-0.487	-0.620	-0.469
4	924	0.282	0.247	0.318	0.236	0.327
5	925	0.051	0.042	0.060	0.039	0.062
6	926	0.237	0.207	0.267	0.198	0.275
7	927	-0.574	-0.636	-0.512	-0.653	-0.493
8	928	0.492	0.433	0.551	0.415	0.567
9	929	0.029	0.023	0.036	0.021	0.038
10	930	0.492	0.433	0.551	0.415	0.567
11	931	0.402	0.353	0.451	0.338	0.464
12	932	0.627	0.553	0.702	0.530	0.722
13	933	0.533	0.470	0.597	0.450	0.614
14	934	1.084	0.959	1.211	0.919	1.245
15	935	0.636	0.561	0.712	0.538	0.732
16	936	0.283	0.248	0.318	0.237	0.328
17	937	-0.600	-0.665	-0.535	-0.682	-0.515
18	938	-0.860	-0.954	-0.766	-0.980	-0.736
19	939	0.176	0.153	0.199	0.146	0.206
20	940	-2.682	-2.984	-2.382	-3.065	-2.288
21	941	-0.146	-0.160	-0.133	-0.164	-0.129
22	942	0.209	0.183	0.237	0.174	0.244
23	943	0.162	0.141	0.184	0.134	0.190
24	944	0.567	0.500	0.634	0.478	0.653
25	945	0.754	0.666	0.843	0.638	0.867
26	946	0.843	0.745	0.942	0.713	0.968
27	947	0.689	0.608	0.770	0.582	0.792
28	948	-1.054	-1.170	-0.938	-1.201	-0.901
29	949	-0.215	-0.237	-0.194	-0.242	-0.187
30	950	-0.234	-0.258	-0.211	-0.264	-0.204
31	951	0.950	0.839	1.061	0.804	1.091
32	952	-0.530	-0.588	-0.474	-0.603	-0.456
33	953	0.004	0.001	0.008	0.000	0.009
34	954	-1.435	-1.595	-1.276	-1.638	-1.226
35	955	-1.099	-1.221	-0.978	-1.253	-0.940
36	956	-1.162	-1.291	-1.034	-1.325	-0.993
37	957	-0.166	-0.182	-0.150	-0.186	-0.145
38	958	-1.734	-1.928	-1.542	-1.980	-1.481
39	959	-0.309	-0.340	-0.277	-0.349	-0.267
40	960	-0.353	-0.390	-0.317	-0.400	-0.305
41	961	-2.026	-2.253	-1.800	-2.314	-1.729
42	962	0.028	0.022	0.034	0.020	0.036
43	963	0.071	0.060	0.082	0.056	0.085
44	964	0.205	0.179	0.232	0.171	0.239
45	965	-0.846	-0.939	-0.754	-0.964	-0.724
46	966	-0.983	-1.092	-0.875	-1.121	-0.841
47	967	0.016	0.011	0.021	0.009	0.022
48	968	-0.579	-0.641	-0.516	-0.658	-0.497
49	969	0.414	0.364	0.464	0.348	0.477
50	970	-0.363	-0.401	-0.325	-0.411	-0.313

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3	971	0.409	0.360	0.459	0.344	0.472
4	972	1.055	0.933	1.179	0.894	1.212
5	973	0.331	0.291	0.372	0.278	0.383
6	974	-0.864	-0.959	-0.769	-0.984	-0.739
7	975	-0.058	-0.061	-0.054	-0.062	-0.053
8	976	-1.313	-1.459	-1.168	-1.499	-1.122
9	977	-0.118	-0.129	-0.108	-0.131	-0.105
10	978	0.112	0.097	0.128	0.092	0.133
11	979	-1.757	-1.954	-1.562	-2.007	-1.500
12	980	-0.685	-0.759	-0.611	-0.779	-0.587
13	981	-0.431	-0.477	-0.386	-0.490	-0.372
14	982	0.894	0.790	0.999	0.757	1.027
15	983	0.250	0.218	0.281	0.209	0.290
16	984	-0.320	-0.353	-0.287	-0.362	-0.276
17	985	-0.870	-0.966	-0.775	-0.991	-0.745
18	986	0.268	0.235	0.302	0.224	0.311
19	987	0.358	0.315	0.402	0.301	0.414
20	988	-0.229	-0.252	-0.206	-0.258	-0.199
21	989	-1.061	-1.178	-0.944	-1.210	-0.907
22	990	1.063	0.940	1.187	0.901	1.221
23	991	0.250	0.219	0.282	0.209	0.290
24	992	0.029	0.023	0.036	0.021	0.038
25	993	0.198	0.172	0.224	0.164	0.231
26	994	0.396	0.349	0.445	0.333	0.458
27	995	0.714	0.630	0.799	0.604	0.821
28	996	-0.179	-0.197	-0.162	-0.201	-0.157
29	997	0.604	0.532	0.676	0.510	0.695
30	998	-0.550	-0.609	-0.491	-0.625	-0.472
31	999	0.400	0.352	0.449	0.336	0.462
32	1000	0.525	0.463	0.588	0.443	0.605
33	1001	0.521	0.459	0.584	0.439	0.600
34	1002	0.716	0.632	0.800	0.605	0.823
35	1003	0.417	0.367	0.468	0.351	0.482
36	1004	0.059	0.049	0.069	0.046	0.071
37	1005	-0.150	-0.164	-0.136	-0.168	-0.132
38	1006	0.761	0.672	0.850	0.643	0.874
39	1007	0.242	0.212	0.273	0.202	0.281
40	1008	-1.567	-1.742	-1.393	-1.789	-1.338
41	1009	-0.429	-0.475	-0.384	-0.487	-0.370
42	1010	-0.102	-0.111	-0.094	-0.113	-0.091
43	1011	-0.042	-0.043	-0.040	-0.044	-0.040
44	1012	0.177	0.154	0.200	0.147	0.207
45	1013	-1.117	-1.241	-0.994	-1.274	-0.955
46	1014	-0.125	-0.136	-0.114	-0.139	-0.111
47	1015	-0.683	-0.757	-0.609	-0.777	-0.586
48	1016	0.485	0.427	0.544	0.409	0.559
49	1017	-0.771	-0.856	-0.687	-0.878	-0.661
50	1018	0.768	0.678	0.858	0.649	0.882

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3	1019	1.446	1.280	1.614	1.227	1.659
4	1020	0.764	0.675	0.854	0.646	0.878
5	1021	0.304	0.266	0.341	0.254	0.352
6	1022	-0.260	-0.286	-0.234	-0.293	-0.225
7	1023	-1.147	-1.274	-1.021	-1.308	-0.981
8	1024	-0.123	-0.134	-0.113	-0.137	-0.109
9	1025	1.228	1.086	1.371	1.041	1.409
10	1026	-0.228	-0.251	-0.206	-0.257	-0.198
11	1027	-0.413	-0.457	-0.370	-0.469	-0.356
12	1028	-0.187	-0.205	-0.169	-0.210	-0.163
13	1029	0.112	0.096	0.128	0.091	0.133
14	1030	0.360	0.316	0.404	0.302	0.416
15	1031	-0.919	-1.020	-0.818	-1.047	-0.786
16	1032	-0.982	-1.090	-0.874	-1.119	-0.840
17	1033	0.671	0.592	0.751	0.567	0.772
18	1034	0.453	0.399	0.508	0.382	0.523
19	1035	-0.397	-0.439	-0.355	-0.450	-0.342
20	1036	-0.043	-0.045	-0.042	-0.045	-0.041
21	1037	0.804	0.710	0.898	0.680	0.923
22	1038	0.022	0.017	0.028	0.015	0.030
23	1039	0.242	0.212	0.273	0.202	0.281
24	1040	0.713	0.630	0.798	0.603	0.820
25	1041	-0.696	-0.772	-0.621	-0.793	-0.597
26	1042	-1.045	-1.161	-0.930	-1.192	-0.894
27	1043	-0.254	-0.279	-0.228	-0.286	-0.220
28	1044	-0.928	-1.030	-0.826	-1.058	-0.794
29	1045	-0.982	-1.091	-0.875	-1.120	-0.840
30	1046	-0.675	-0.749	-0.602	-0.769	-0.579
31	1047	-1.121	-1.245	-0.997	-1.278	-0.958
32	1048	0.072	0.061	0.083	0.057	0.087
33	1049	-0.309	-0.341	-0.277	-0.350	-0.267
34	1050	-1.576	-1.752	-1.401	-1.799	-1.346
35	1051	0.522	0.460	0.584	0.440	0.601
36	1052	0.397	0.349	0.445	0.334	0.458
37	1053	-1.501	-1.669	-1.335	-1.714	-1.282
38	1054	-0.200	-0.220	-0.181	-0.225	-0.175
39	1055	-0.191	-0.210	-0.173	-0.215	-0.167
40	1056	-0.081	-0.087	-0.075	-0.088	-0.073
41	1057	0.693	0.611	0.775	0.585	0.796
42	1058	0.769	0.679	0.860	0.651	0.884
43	1059	-0.215	-0.236	-0.194	-0.242	-0.187
44	1060	0.048	0.039	0.056	0.036	0.059
45	1061	0.709	0.626	0.793	0.599	0.815
46	1062	1.164	1.029	1.300	0.987	1.336
47	1063	-0.296	-0.327	-0.266	-0.335	-0.256
48	1064	0.433	0.381	0.486	0.365	0.500
49	1065	0.088	0.075	0.101	0.071	0.104
50	1066	-0.333	-0.368	-0.299	-0.377	-0.288

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3	1067	-0.674	-0.748	-0.601	-0.767	-0.578
4	1068	-1.178	-1.309	-1.049	-1.344	-1.008
5	1069	-0.795	-0.882	-0.708	-0.906	-0.681
6	1070	-0.970	-1.078	-0.864	-1.106	-0.830
7	1071	-0.550	-0.609	-0.491	-0.625	-0.472
8	1072	-0.792	-0.879	-0.706	-0.902	-0.678
9	1073	-0.680	-0.755	-0.607	-0.774	-0.583
10	1074	-0.714	-0.792	-0.637	-0.813	-0.612
11	1075	-0.858	-0.953	-0.764	-0.978	-0.735
12	1076	-0.493	-0.546	-0.440	-0.560	-0.424
13	1077	-0.549	-0.608	-0.490	-0.624	-0.471
14	1078	-0.296	-0.326	-0.266	-0.334	-0.256
15	1079	0.352	0.309	0.395	0.295	0.407
16	1080	0.207	0.180	0.234	0.172	0.241
17	1081	0.210	0.183	0.237	0.174	0.244
18	1082	-0.057	-0.061	-0.054	-0.062	-0.053
19	1083	-0.283	-0.312	-0.254	-0.319	-0.245
20	1084	0.083	0.071	0.096	0.067	0.099
21	1085	0.369	0.324	0.414	0.310	0.426
22	1086	0.954	0.843	1.066	0.808	1.096
23	1087	0.233	0.204	0.263	0.195	0.271
24	1088	0.639	0.564	0.715	0.540	0.735
25	1089	0.691	0.610	0.773	0.584	0.795
26	1090	0.293	0.257	0.330	0.245	0.339
27	1091	0.760	0.671	0.849	0.643	0.873
28	1092	1.012	0.894	1.130	0.857	1.162
29	1093	0.159	0.138	0.180	0.131	0.186
30	1094	0.051	0.042	0.060	0.040	0.063
31	1095	-1.361	-1.512	-1.210	-1.553	-1.163
32	1096	-1.528	-1.699	-1.359	-1.745	-1.305
33	1097	-0.239	-0.264	-0.216	-0.270	-0.208
34	1098	-0.201	-0.221	-0.181	-0.226	-0.175
35	1099	-0.813	-0.902	-0.724	-0.926	-0.696
36	1100	-0.815	-0.904	-0.726	-0.928	-0.698
37	1101	-0.283	-0.312	-0.254	-0.319	-0.245
38	1102	0.438	0.385	0.490	0.368	0.505
39	1103	0.102	0.087	0.116	0.082	0.120
40	1104	0.595	0.525	0.666	0.503	0.685
41	1105	0.194	0.169	0.219	0.161	0.226
42	1106	0.827	0.730	0.924	0.700	0.950
43	1107	-1.071	-1.190	-0.954	-1.222	-0.916
44	1108	-0.452	-0.501	-0.405	-0.514	-0.389
45	1109	-1.813	-2.016	-1.612	-2.071	-1.548
46	1110	-1.177	-1.308	-1.047	-1.343	-1.006
47	1111	-2.088	-2.323	-1.856	-2.385	-1.782
48	1112	-0.822	-0.913	-0.733	-0.937	-0.704
49	1113	0.398	0.350	0.446	0.334	0.459
50	1114	-0.113	-0.122	-0.103	-0.125	-0.100

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3	1115	-1.148	-1.275	-1.021	-1.309	-0.981
4	1116	-0.887	-0.985	-0.790	-1.011	-0.759
5	1117	-1.468	-1.632	-1.306	-1.676	-1.254
6	1118	-0.681	-0.755	-0.607	-0.775	-0.584
7	1119	-1.387	-1.542	-1.234	-1.583	-1.185
8	1120	-0.794	-0.881	-0.708	-0.905	-0.680
9	1121	-0.946	-1.051	-0.843	-1.079	-0.810
10	1122	-0.176	-0.193	-0.159	-0.197	-0.154
11	1123	0.419	0.368	0.470	0.352	0.483
12	1124	-0.682	-0.757	-0.608	-0.777	-0.585
13	1125	-0.906	-1.006	-0.807	-1.033	-0.776
14	1126	0.199	0.173	0.224	0.165	0.231
15	1127	-3.246	-3.613	-2.883	-3.711	-2.768
16	1128	-1.615	-1.796	-1.436	-1.844	-1.380
17	1129	-2.314	-2.574	-2.056	-2.644	-1.974
18	1130	-3.254	-3.622	-2.890	-3.720	-2.775
19	1131	-1.506	-1.675	-1.340	-1.720	-1.287
20	1132	-1.241	-1.379	-1.104	-1.416	-1.061
21	1133	-1.936	-2.153	-1.721	-2.211	-1.653
22	1134	-1.111	-1.234	-0.989	-1.267	-0.950
23	1135	-0.181	-0.199	-0.164	-0.203	-0.158
24	1136	-1.554	-1.728	-1.382	-1.774	-1.327
25	1137	-0.969	-1.076	-0.863	-1.105	-0.829
26	1138	-1.608	-1.788	-1.430	-1.836	-1.374
27	1139	-1.725	-1.918	-1.533	-1.969	-1.473
28	1140	-0.751	-0.834	-0.670	-0.856	-0.644
29	1141	-1.225	-1.361	-1.090	-1.397	-1.047
30	1142	-2.006	-2.231	-1.783	-2.291	-1.712
31	1143	-0.992	-1.101	-0.883	-1.131	-0.848
32	1144	-1.380	-1.534	-1.227	-1.575	-1.179
33	1145	-0.832	-0.923	-0.741	-0.947	-0.712
34	1146	-1.504	-1.672	-1.337	-1.717	-1.285
35	1147	-0.436	-0.483	-0.390	-0.495	-0.376
36	1148	-1.078	-1.198	-0.960	-1.230	-0.922
37	1149	-0.032	-0.033	-0.032	-0.033	-0.032
38	1150	-1.354	-1.505	-1.204	-1.545	-1.157
39	1151	-0.884	-0.981	-0.787	-1.007	-0.757
40	1152	-0.341	-0.376	-0.305	-0.386	-0.294
41	1153	-0.740	-0.821	-0.659	-0.842	-0.634
42	1154	-0.424	-0.469	-0.379	-0.481	-0.365
43	1155	-0.097	-0.105	-0.089	-0.107	-0.087
44	1156	-0.656	-0.727	-0.585	-0.746	-0.562
45	1157	-1.046	-1.162	-0.931	-1.193	-0.895
46	1158	-0.676	-0.750	-0.603	-0.770	-0.580
47	1159	-0.694	-0.770	-0.619	-0.790	-0.595
48	1160	-0.611	-0.677	-0.545	-0.695	-0.524
49	1161	0.109	0.094	0.125	0.089	0.129
50	1162	-0.365	-0.403	-0.327	-0.414	-0.315

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3	1163	-0.540	-0.599	-0.483	-0.614	-0.464
4	1164	-0.036	-0.037	-0.035	-0.037	-0.035
5	1165	0.018	0.013	0.023	0.011	0.025
6	1166	0.178	0.155	0.201	0.147	0.208
7	1167	0.358	0.314	0.402	0.300	0.413
8	1168	0.837	0.739	0.936	0.709	0.962
9	1169	-0.462	-0.512	-0.413	-0.525	-0.398
10	1170	0.426	0.375	0.477	0.358	0.491
11	1171	-0.579	-0.642	-0.517	-0.659	-0.498
12	1172	0.499	0.439	0.559	0.420	0.575
13	1173	-0.547	-0.606	-0.489	-0.622	-0.470
14	1174	-0.007	-0.010	-0.005	-0.010	-0.004
15	1175	0.527	0.464	0.590	0.444	0.607
16	1176	-0.840	-0.933	-0.749	-0.958	-0.720
17	1177	-0.385	-0.425	-0.345	-0.436	-0.332
18	1178	0.038	0.030	0.045	0.028	0.047
19	1179	-0.909	-1.009	-0.809	-1.036	-0.778
20	1180	-0.015	-0.017	-0.014	-0.017	-0.013
21	1181	-0.579	-0.642	-0.517	-0.659	-0.498
22	1182	-1.317	-1.463	-1.171	-1.503	-1.125
23	1183	-0.230	-0.253	-0.208	-0.260	-0.200
24	1184	0.550	0.484	0.615	0.464	0.633
25	1185	0.562	0.496	0.630	0.475	0.647
26	1186	0.000	-0.003	0.003	-0.004	0.004
27	1187	-0.363	-0.402	-0.326	-0.412	-0.314
28	1188	0.301	0.264	0.338	0.252	0.348
29	1189	-1.359	-1.510	-1.208	-1.551	-1.161
30	1190	-0.362	-0.400	-0.324	-0.410	-0.312
31	1191	-0.586	-0.649	-0.523	-0.666	-0.503
32	1192	-2.654	-2.953	-2.358	-3.033	-2.264
33	1193	0.255	0.223	0.288	0.213	0.296
34	1194	-3.192	-3.552	-2.835	-3.648	-2.722
35	1195	-0.398	-0.440	-0.356	-0.452	-0.343
36	1196	-0.372	-0.411	-0.333	-0.422	-0.321
37	1197	-2.047	-2.276	-1.819	-2.338	-1.747
38	1198	-0.196	-0.215	-0.177	-0.220	-0.171
39	1199	0.509	0.449	0.570	0.429	0.587
40	1200	-0.110	-0.119	-0.101	-0.122	-0.098
41	1201	-0.943	-1.047	-0.840	-1.075	-0.807
42	1202	-1.234	-1.371	-1.098	-1.408	-1.055
43	1203	0.299	0.262	0.336	0.250	0.346
44	1204	0.452	0.398	0.507	0.381	0.521
45	1205	-0.194	-0.213	-0.175	-0.218	-0.169
46	1206	-1.257	-1.397	-1.118	-1.434	-1.074
47	1207	-0.569	-0.631	-0.508	-0.647	-0.489
48	1208	-1.498	-1.665	-1.332	-1.710	-1.280
49	1209	0.314	0.275	0.352	0.263	0.363
50	1210	-1.009	-1.121	-0.898	-1.150	-0.863

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3	1211	-0.888	-0.986	-0.791	-1.013	-0.761
4	1212	-0.798	-0.885	-0.711	-0.909	-0.683
5	1213	-0.705	-0.782	-0.629	-0.803	-0.604
6	1214	-0.692	-0.767	-0.617	-0.787	-0.593
7	1215	-1.567	-1.742	-1.393	-1.789	-1.338
8	1216	-0.573	-0.635	-0.511	-0.651	-0.492
9	1217	0.165	0.144	0.188	0.137	0.193
10	1218	-0.572	-0.634	-0.511	-0.650	-0.491
11	1219	-1.109	-1.232	-0.987	-1.264	-0.948
12	1220	-1.234	-1.371	-1.098	-1.408	-1.055
13	1221	0.192	0.167	0.217	0.159	0.224
14	1222	-0.690	-0.765	-0.615	-0.786	-0.592
15	1223	-0.226	-0.248	-0.203	-0.254	-0.196
16	1224	-0.922	-1.023	-0.821	-1.051	-0.789
17	1225	-1.685	-1.874	-1.498	-1.924	-1.439
18	1226	-2.495	-2.775	-2.216	-2.851	-2.128
19	1227	0.394	0.346	0.442	0.331	0.454
20	1228	-2.936	-3.267	-2.608	-3.355	-2.504
21	1229	-1.425	-1.584	-1.267	-1.627	-1.217
22	1230	-3.578	-3.982	-3.177	-4.090	-3.050
23	1231	-1.432	-1.592	-1.274	-1.635	-1.224
24	1232	-2.563	-2.851	-2.277	-2.928	-2.186
25	1233	-1.331	-1.479	-1.184	-1.518	-1.137
26	1234	-1.391	-1.546	-1.237	-1.588	-1.189
27	1235	-1.437	-1.597	-1.278	-1.640	-1.228
28	1236	-1.369	-1.521	-1.217	-1.562	-1.169
29	1237	-0.944	-1.048	-0.841	-1.076	-0.808
30	1238	-1.609	-1.789	-1.431	-1.837	-1.374
31	1239	-1.090	-1.211	-0.970	-1.243	-0.932
32	1240	-1.552	-1.725	-1.380	-1.771	-1.325
33	1241	-1.319	-1.466	-1.174	-1.506	-1.127
34	1242	-1.618	-1.799	-1.438	-1.847	-1.381
35	1243	-1.511	-1.680	-1.344	-1.725	-1.291
36	1244	-2.316	-2.577	-2.058	-2.647	-1.976
37	1245	-1.563	-1.737	-1.389	-1.784	-1.335
38	1246	-2.152	-2.394	-1.912	-2.458	-1.836
39	1247	-2.043	-2.272	-1.816	-2.334	-1.744
40	1248	-2.095	-2.330	-1.861	-2.393	-1.788
41	1249	-1.492	-1.659	-1.327	-1.704	-1.275
42	1250	-1.258	-1.398	-1.119	-1.435	-1.075
43	1251	-1.990	-2.213	-1.768	-2.273	-1.698
44	1252	-2.304	-2.563	-2.047	-2.632	-1.966
45	1253	-1.360	-1.512	-1.210	-1.552	-1.162
46	1254	-1.463	-1.626	-1.301	-1.670	-1.249
47	1255	-1.520	-1.690	-1.352	-1.736	-1.299
48	1256	-1.757	-1.954	-1.562	-2.006	-1.500
49	1257	-1.192	-1.324	-1.060	-1.359	-1.019
50	1258	-2.254	-2.508	-2.003	-2.576	-1.924

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3	1259	-2.020	-2.247	-1.795	-2.307	-1.724
4	1260	-1.641	-1.825	-1.459	-1.874	-1.402
5	1261	-1.471	-1.635	-1.308	-1.679	-1.257
6	1262	-1.482	-1.648	-1.318	-1.692	-1.266
7	1263	-1.860	-2.068	-1.653	-2.124	-1.588
8	1264	-1.893	-2.105	-1.682	-2.162	-1.616
9	1265	-1.929	-2.145	-1.715	-2.203	-1.647
10	1266	-0.665	-0.738	-0.593	-0.757	-0.570
11	1267	-0.514	-0.569	-0.459	-0.584	-0.442
12	1268	-0.108	-0.117	-0.099	-0.119	-0.096
13	1269	0.516	0.454	0.577	0.435	0.594
14	1270	-0.279	-0.308	-0.251	-0.315	-0.242
15	1271	-0.484	-0.536	-0.433	-0.550	-0.416
16	1272	-0.029	-0.030	-0.029	-0.030	-0.029
17	1273	-0.769	-0.853	-0.685	-0.876	-0.659
18	1274	-1.864	-2.073	-1.657	-2.129	-1.592
19	1275	-0.133	-0.144	-0.121	-0.148	-0.117
20	1276	-0.778	-0.863	-0.693	-0.886	-0.666
21	1277	-1.469	-1.633	-1.306	-1.677	-1.255
22	1278	-2.134	-2.374	-1.897	-2.438	-1.821
23	1279	-0.838	-0.930	-0.746	-0.954	-0.717
24	1280	-0.858	-0.953	-0.765	-0.978	-0.735
25	1281	-0.779	-0.865	-0.694	-0.887	-0.668
26	1282	-1.484	-1.650	-1.320	-1.694	-1.268
27	1283	-0.324	-0.358	-0.291	-0.367	-0.280
28	1284	-0.886	-0.983	-0.789	-1.009	-0.758
29	1285	-0.672	-0.745	-0.599	-0.765	-0.576
30	1286	-0.081	-0.087	-0.075	-0.089	-0.073
31	1287	-0.206	-0.226	-0.186	-0.232	-0.180
32	1288	-0.591	-0.655	-0.527	-0.672	-0.507
33	1289	-0.577	-0.640	-0.515	-0.656	-0.496
34	1290	-1.239	-1.377	-1.103	-1.414	-1.059
35	1291	-1.253	-1.392	-1.114	-1.429	-1.071
36	1292	-2.148	-2.389	-1.909	-2.454	-1.833
37	1293	-0.888	-0.986	-0.791	-1.013	-0.761
38	1294	-1.715	-1.907	-1.525	-1.959	-1.465
39	1295	-0.570	-0.631	-0.508	-0.648	-0.489
40	1296	-1.954	-2.174	-1.737	-2.232	-1.668
41	1297	-1.158	-1.287	-1.030	-1.321	-0.990
42	1298	-1.350	-1.501	-1.201	-1.541	-1.154
43	1299	-1.036	-1.151	-0.922	-1.182	-0.886
44	1300	-1.140	-1.267	-1.015	-1.301	-0.975
45	1301	-1.654	-1.839	-1.471	-1.889	-1.413
46	1302	-1.017	-1.130	-0.906	-1.160	-0.870
47	1303	-1.074	-1.193	-0.956	-1.225	-0.919
48	1304	-1.661	-1.847	-1.477	-1.897	-1.419
49	1305	-1.109	-1.232	-0.987	-1.265	-0.949
50	1306	-0.315	-0.348	-0.283	-0.356	-0.272

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3	1307	-0.599	-0.664	-0.534	-0.681	-0.514
4	1308	-0.755	-0.837	-0.673	-0.859	-0.647
5	1309	-1.576	-1.753	-1.402	-1.800	-1.346
6	1310	0.066	0.055	0.077	0.052	0.080
7	1311	-0.948	-1.052	-0.844	-1.080	-0.811
8	1312	-0.596	-0.661	-0.532	-0.678	-0.512
9	1313	-1.559	-1.733	-1.386	-1.780	-1.331
10	1314	-1.529	-1.699	-1.359	-1.745	-1.306
11	1315	-0.095	-0.103	-0.087	-0.105	-0.085
12	1316	0.054	0.045	0.064	0.042	0.066
13	1317	-1.108	-1.231	-0.986	-1.264	-0.948
14	1318	-0.279	-0.308	-0.251	-0.315	-0.242
15	1319	-0.604	-0.669	-0.539	-0.687	-0.518
16	1320	-0.635	-0.704	-0.566	-0.722	-0.545
17	1321	-1.794	-1.995	-1.595	-2.048	-1.531
18	1322	-1.403	-1.559	-1.247	-1.601	-1.198
19	1323	-1.443	-1.604	-1.283	-1.647	-1.233
20	1324	-1.052	-1.169	-0.937	-1.200	-0.900
21	1325	-0.610	-0.676	-0.545	-0.694	-0.524
22	1326	-0.995	-1.105	-0.886	-1.134	-0.851
23	1327	0.123	0.106	0.141	0.101	0.145
24	1328	-2.151	-2.392	-1.911	-2.457	-1.835
25	1329	-0.778	-0.864	-0.694	-0.887	-0.667
26	1330	-2.122	-2.360	-1.885	-2.424	-1.811
27	1331	0.045	0.037	0.054	0.034	0.056
28	1332	-0.928	-1.031	-0.827	-1.058	-0.794
29	1333	-1.807	-2.009	-1.606	-2.064	-1.543
30	1334	0.116	0.100	0.133	0.095	0.137
31	1335	-0.458	-0.507	-0.409	-0.520	-0.394
32	1336	-0.667	-0.740	-0.595	-0.759	-0.572
33	1337	-1.762	-1.959	-1.566	-2.012	-1.504
34	1338	-1.065	-1.183	-0.948	-1.214	-0.911
35	1339	-0.253	-0.278	-0.227	-0.285	-0.219
36	1340	-0.312	-0.345	-0.280	-0.353	-0.270
37	1341	-0.994	-1.104	-0.885	-1.133	-0.850
38	1342	-0.543	-0.601	-0.485	-0.617	-0.466
39	1343	-0.319	-0.352	-0.286	-0.361	-0.276
40	1344	-0.612	-0.679	-0.546	-0.697	-0.525
41	1345	-1.009	-1.120	-0.898	-1.150	-0.863
42	1346	-2.221	-2.471	-1.974	-2.538	-1.895
43	1347	-0.710	-0.788	-0.633	-0.809	-0.609
44	1348	-2.201	-2.449	-1.956	-2.515	-1.878
45	1349	-2.903	-3.230	-2.579	-3.318	-2.476
46	1350	-1.117	-1.241	-0.994	-1.274	-0.955
47	1351	0.361	0.317	0.405	0.303	0.417
48	1352	-0.666	-0.739	-0.594	-0.758	-0.571
49	1353	-1.279	-1.422	-1.138	-1.460	-1.093
50	1354	-0.042	-0.044	-0.041	-0.044	-0.040

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3	1355	-0.329	-0.364	-0.295	-0.373	-0.285
4	1356	-0.395	-0.436	-0.353	-0.448	-0.340
5	1357	-0.313	-0.346	-0.281	-0.354	-0.271
6	1358	-1.458	-1.621	-1.297	-1.664	-1.246
7	1359	-0.564	-0.625	-0.503	-0.641	-0.484
8	1360	-1.140	-1.266	-1.014	-1.300	-0.975
9	1361	-0.483	-0.535	-0.432	-0.548	-0.415
10	1362	-0.468	-0.518	-0.418	-0.532	-0.403
11	1363	-2.784	-3.097	-2.473	-3.181	-2.374
12	1364	-0.754	-0.836	-0.672	-0.858	-0.646
13	1365	-0.232	-0.255	-0.209	-0.261	-0.202
14	1366	0.192	0.167	0.217	0.160	0.224
15	1367	-1.459	-1.621	-1.297	-1.665	-1.246
16	1368	-0.082	-0.088	-0.076	-0.090	-0.074
17	1369	-1.060	-1.178	-0.944	-1.209	-0.907
18	1370	-1.402	-1.558	-1.247	-1.600	-1.198
19	1371	-0.022	-0.023	-0.022	-0.023	-0.022
20	1372	0.495	0.436	0.554	0.417	0.570
21	1373	-0.850	-0.943	-0.757	-0.968	-0.728
22	1374	0.447	0.393	0.501	0.376	0.516
23	1375	-1.906	-2.119	-1.694	-2.177	-1.627
24	1376	-0.898	-0.997	-0.800	-1.024	-0.769
25	1377	-1.127	-1.252	-1.003	-1.286	-0.964
26	1378	-1.269	-1.410	-1.129	-1.448	-1.085
27	1379	-0.235	-0.259	-0.212	-0.265	-0.205
28	1380	-1.083	-1.203	-0.964	-1.235	-0.926
29	1381	-0.053	-0.055	-0.050	-0.056	-0.049
30	1382	-0.623	-0.690	-0.556	-0.709	-0.534
31	1383	-0.041	-0.043	-0.040	-0.043	-0.039
32	1384	-0.115	-0.124	-0.105	-0.127	-0.102
33	1385	-1.610	-1.790	-1.431	-1.838	-1.375
34	1386	-0.177	-0.194	-0.160	-0.198	-0.155
35	1387	-0.398	-0.440	-0.356	-0.452	-0.343
36	1388	-0.480	-0.532	-0.429	-0.545	-0.413
37	1389	-1.927	-2.143	-1.713	-2.201	-1.645
38	1390	-1.561	-1.735	-1.388	-1.782	-1.333
39	1391	-0.386	-0.427	-0.346	-0.438	-0.333
40	1392	-0.815	-0.904	-0.726	-0.928	-0.698
41	1393	-1.401	-1.557	-1.246	-1.599	-1.197
42	1394	-1.360	-1.511	-1.210	-1.552	-1.162
43	1395	-1.366	-1.518	-1.215	-1.559	-1.167
44	1396	-0.884	-0.981	-0.787	-1.007	-0.757
45	1397	-1.655	-1.840	-1.472	-1.890	-1.413
46	1398	-1.205	-1.339	-1.072	-1.375	-1.030
47	1399	-0.748	-0.830	-0.667	-0.852	-0.641
48	1400	-0.745	-0.827	-0.664	-0.849	-0.639
49	1401	-0.281	-0.310	-0.253	-0.318	-0.244
50	1402	-0.172	-0.189	-0.156	-0.193	-0.151

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3	1403	-1.080	-1.200	-0.961	-1.232	-0.924
4	1404	0.624	0.550	0.698	0.527	0.718
5	1405	-0.630	-0.698	-0.562	-0.716	-0.540
6	1406	0.351	0.308	0.394	0.295	0.406
7	1407	0.269	0.235	0.302	0.225	0.311
8	1408	-0.153	-0.167	-0.139	-0.171	-0.134
9	1409	-0.052	-0.055	-0.049	-0.056	-0.049
10	1410	-0.430	-0.476	-0.385	-0.489	-0.371
11	1411	1.028	0.909	1.148	0.871	1.180
12	1412	-0.558	-0.618	-0.498	-0.634	-0.479
13	1413	0.557	0.491	0.624	0.470	0.642
14	1414	-0.607	-0.672	-0.541	-0.690	-0.521
15	1415	0.173	0.151	0.196	0.144	0.203
16	1416	-0.179	-0.196	-0.162	-0.201	-0.157
17	1417	-0.293	-0.323	-0.263	-0.331	-0.253
18	1418	0.021	0.016	0.027	0.014	0.029
19	1419	-0.447	-0.495	-0.400	-0.508	-0.385
20	1420	-1.105	-1.227	-0.983	-1.260	-0.945
21	1421	0.006	0.002	0.010	0.001	0.011
22	1422	-1.247	-1.386	-1.110	-1.423	-1.066
23	1423	-0.505	-0.559	-0.451	-0.574	-0.434
24	1424	0.611	0.539	0.684	0.516	0.703
25	1425	0.386	0.339	0.433	0.325	0.446
26	1426	-0.145	-0.158	-0.131	-0.161	-0.127
27	1427	-0.122	-0.132	-0.111	-0.135	-0.108
28	1428	-0.362	-0.400	-0.325	-0.411	-0.313
29	1429	0.191	0.167	0.216	0.159	0.223
30	1430	-0.758	-0.841	-0.676	-0.863	-0.649
31	1431	-0.061	-0.064	-0.057	-0.065	-0.056
32	1432	-0.060	-0.064	-0.057	-0.065	-0.055
33	1433	0.086	0.073	0.099	0.069	0.102
34	1434	0.464	0.408	0.520	0.391	0.535
35	1435	0.562	0.496	0.629	0.475	0.647
36	1436	-0.461	-0.510	-0.412	-0.523	-0.396
37	1437	-0.627	-0.695	-0.559	-0.713	-0.538
38	1438	-1.911	-2.125	-1.698	-2.182	-1.631
39	1439	-0.118	-0.128	-0.108	-0.131	-0.104
40	1440	-1.444	-1.605	-1.284	-1.648	-1.233
41	1441	-0.396	-0.437	-0.354	-0.449	-0.341
42	1442	-0.987	-1.096	-0.879	-1.125	-0.845
43	1443	-0.997	-1.108	-0.888	-1.137	-0.853
44	1444	-0.753	-0.836	-0.671	-0.858	-0.645
45	1445	-0.435	-0.481	-0.389	-0.493	-0.374
46	1446	-0.838	-0.930	-0.747	-0.955	-0.718
47	1447	-1.227	-1.364	-1.092	-1.400	-1.049
48	1448	-0.072	-0.078	-0.067	-0.079	-0.066
49	1449	-0.741	-0.822	-0.660	-0.843	-0.635
50	1450	0.250	0.218	0.281	0.208	0.290

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3	1451	-0.534	-0.591	-0.477	-0.606	-0.458
4	1452	-0.722	-0.801	-0.643	-0.822	-0.619
5	1453	-3.923	-4.366	-3.484	-4.485	-3.344
6	1454	-2.128	-2.367	-1.891	-2.431	-1.816
7	1455	-1.847	-2.054	-1.642	-2.110	-1.577
8	1456	-2.330	-2.592	-2.070	-2.662	-1.988
9	1457	-2.630	-2.926	-2.336	-3.005	-2.243
10	1458	-2.406	-2.676	-2.137	-2.749	-2.052
11	1459	-2.641	-2.939	-2.346	-3.018	-2.253
12	1460	-1.791	-1.991	-1.592	-2.045	-1.529
13	1461	-2.280	-2.537	-2.026	-2.605	-1.946
14	1462	-2.743	-3.052	-2.437	-3.135	-2.340
15	1463	-2.614	-2.908	-2.322	-2.987	-2.230
16	1464	-1.947	-2.165	-1.730	-2.223	-1.662
17	1465	-1.570	-1.746	-1.396	-1.793	-1.341
18	1466	-2.317	-2.577	-2.058	-2.647	-1.976
19	1467	-1.404	-1.560	-1.248	-1.602	-1.199
20	1468	-0.301	-0.332	-0.271	-0.341	-0.261
21	1469	-0.679	-0.753	-0.605	-0.773	-0.582
22	1470	-0.046	-0.048	-0.044	-0.048	-0.043
23	1471	-1.227	-1.364	-1.092	-1.400	-1.049
24	1472	-0.892	-0.990	-0.794	-1.016	-0.763
25	1473	-1.569	-1.744	-1.395	-1.791	-1.340
26	1474	-0.841	-0.934	-0.749	-0.958	-0.720
27	1475	-1.216	-1.351	-1.082	-1.387	-1.039
28	1476	-2.088	-2.323	-1.856	-2.386	-1.782
29	1477	-2.360	-2.625	-2.097	-2.696	-2.013
30	1478	-1.951	-2.170	-1.734	-2.228	-1.665
31	1479	-0.906	-1.006	-0.807	-1.033	-0.775
32	1480	-1.531	-1.703	-1.362	-1.748	-1.308
33	1481	-0.746	-0.827	-0.665	-0.849	-0.639
34	1482	-1.440	-1.601	-1.280	-1.643	-1.230
35	1483	-2.664	-2.964	-2.366	-3.044	-2.272
36	1484	-0.800	-0.888	-0.713	-0.912	-0.686
37	1485	-0.070	-0.074	-0.065	-0.076	-0.063
38	1486	-0.882	-0.979	-0.786	-1.005	-0.755
39	1487	-0.517	-0.573	-0.462	-0.588	-0.445
40	1488	-0.808	-0.897	-0.720	-0.921	-0.692
41	1489	-1.380	-1.533	-1.227	-1.575	-1.179
42	1490	0.125	0.108	0.143	0.103	0.148
43	1491	-0.028	-0.029	-0.028	-0.029	-0.028
44	1492	0.268	0.234	0.301	0.224	0.310
45	1493	-0.648	-0.718	-0.578	-0.737	-0.556
46	1494	-0.081	-0.087	-0.075	-0.089	-0.073
47	1495	-0.855	-0.949	-0.762	-0.974	-0.732
48	1496	-0.361	-0.399	-0.323	-0.409	-0.311
49	1497	-1.945	-2.163	-1.728	-2.221	-1.660
50	1498	-1.419	-1.577	-1.262	-1.620	-1.212

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3	1499	-0.904	-1.004	-0.805	-1.031	-0.774
4	1500	-0.627	-0.696	-0.560	-0.714	-0.538
5	1501	-0.751	-0.833	-0.669	-0.855	-0.643
6	1502	-0.765	-0.849	-0.682	-0.872	-0.656
7	1503	-0.699	-0.775	-0.623	-0.796	-0.599
8	1504	-1.263	-1.404	-1.124	-1.441	-1.080
9	1505	-0.206	-0.226	-0.186	-0.232	-0.180
10	1506	-0.152	-0.166	-0.138	-0.170	-0.134
11	1507	-2.369	-2.635	-2.105	-2.707	-2.021
12	1508	-0.026	-0.026	-0.026	-0.027	-0.026
13	1509	-0.857	-0.951	-0.763	-0.976	-0.734
14	1510	-0.743	-0.825	-0.663	-0.846	-0.637
15	1511	-0.326	-0.360	-0.293	-0.369	-0.282
16	1512	-0.936	-1.039	-0.834	-1.067	-0.801
17	1513	-0.305	-0.336	-0.274	-0.345	-0.264
18	1514	-1.727	-1.921	-1.535	-1.972	-1.475
19	1515	0.013	0.008	0.018	0.007	0.019
20	1516	-1.950	-2.169	-1.733	-2.227	-1.664
21	1517	-1.371	-1.524	-1.219	-1.565	-1.171
22	1518	-0.779	-0.865	-0.695	-0.888	-0.668
23	1519	-0.659	-0.731	-0.588	-0.750	-0.565
24	1520	-1.783	-1.983	-1.585	-2.036	-1.522
25	1521	-0.665	-0.737	-0.593	-0.757	-0.570
26	1522	-1.516	-1.686	-1.348	-1.731	-1.295
27	1523	-2.057	-2.288	-1.828	-2.350	-1.756
28	1524	-2.714	-3.020	-2.411	-3.101	-2.315
29	1525	-0.830	-0.921	-0.740	-0.946	-0.711
30	1526	-2.133	-2.372	-1.895	-2.436	-1.820
31	1527	-1.581	-1.758	-1.406	-1.805	-1.350
32	1528	-1.754	-1.950	-1.559	-2.003	-1.498
33	1529	-1.204	-1.338	-1.072	-1.374	-1.030
34	1530	-1.634	-1.817	-1.453	-1.866	-1.395
35	1531	-1.186	-1.318	-1.055	-1.353	-1.014
36	1532	-0.348	-0.385	-0.312	-0.394	-0.301
37	1533	-0.121	-0.131	-0.110	-0.134	-0.107
38	1534	-0.065	-0.070	-0.061	-0.071	-0.060
39	1535	-1.740	-1.935	-1.547	-1.987	-1.486
40	1536	-0.825	-0.916	-0.735	-0.940	-0.707
41	1537	-0.149	-0.163	-0.136	-0.167	-0.131
42	1538	-0.997	-1.107	-0.887	-1.136	-0.853
43	1539	-0.651	-0.722	-0.580	-0.740	-0.558
44	1540	-0.801	-0.889	-0.714	-0.913	-0.686
45	1541	-0.367	-0.405	-0.329	-0.416	-0.316
46	1542	-1.591	-1.769	-1.415	-1.816	-1.359
47	1543	-1.362	-1.513	-1.211	-1.554	-1.164
48	1544	-1.547	-1.720	-1.376	-1.767	-1.322
49	1545	0.359	0.315	0.403	0.302	0.415
50	1546	-0.496	-0.549	-0.443	-0.563	-0.426

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3	1547	-0.464	-0.514	-0.415	-0.527	-0.399
4	1548	-0.928	-1.031	-0.827	-1.058	-0.795
5	1549	-1.338	-1.487	-1.190	-1.527	-1.143
6	1550	-2.038	-2.267	-1.812	-2.328	-1.740
7	1551	-0.695	-0.771	-0.620	-0.791	-0.596
8	1552	-0.890	-0.988	-0.793	-1.014	-0.762
9	1553	-0.506	-0.560	-0.452	-0.575	-0.435
10	1554	-0.890	-0.988	-0.793	-1.014	-0.762
11	1555	-1.077	-1.197	-0.959	-1.229	-0.921
12	1556	-1.063	-1.181	-0.946	-1.213	-0.909
13	1557	-1.582	-1.759	-1.407	-1.806	-1.351
14	1558	0.210	0.183	0.237	0.175	0.244
15	1559	-0.712	-0.790	-0.635	-0.811	-0.611
16	1560	-1.412	-1.570	-1.256	-1.612	-1.207
17	1561	-0.147	-0.161	-0.134	-0.164	-0.130
18	1562	-1.039	-1.154	-0.925	-1.185	-0.889
19	1563	0.174	0.151	0.197	0.144	0.203
20	1564	0.448	0.394	0.502	0.377	0.517
21	1565	-0.191	-0.210	-0.173	-0.215	-0.167
22	1566	-0.207	-0.228	-0.187	-0.233	-0.181
23	1567	-1.831	-2.036	-1.628	-2.091	-1.563
24	1568	-0.788	-0.875	-0.702	-0.898	-0.675
25	1569	0.434	0.382	0.487	0.366	0.501
26	1570	-1.220	-1.356	-1.086	-1.392	-1.043
27	1571	-0.258	-0.284	-0.232	-0.291	-0.223
28	1572	-0.207	-0.227	-0.187	-0.233	-0.180
29	1573	-1.362	-1.513	-1.211	-1.554	-1.164
30	1574	-1.035	-1.150	-0.922	-1.181	-0.886
31	1575	-0.659	-0.731	-0.588	-0.751	-0.566
32	1576	-0.549	-0.608	-0.490	-0.624	-0.471
33	1577	-0.067	-0.071	-0.063	-0.073	-0.061
34	1578	-0.721	-0.800	-0.643	-0.821	-0.618
35	1579	-0.366	-0.405	-0.328	-0.415	-0.316
36	1580	-1.362	-1.514	-1.212	-1.554	-1.164
37	1581	-0.742	-0.824	-0.662	-0.845	-0.636
38	1582	-0.180	-0.197	-0.163	-0.202	-0.158
39	1583	0.513	0.452	0.574	0.432	0.591
40	1584	-1.170	-1.300	-1.041	-1.335	-1.001
41	1585	-0.421	-0.466	-0.377	-0.478	-0.363
42	1586	0.272	0.238	0.306	0.227	0.315
43	1587	-1.466	-1.630	-1.304	-1.674	-1.253
44	1588	-0.414	-0.458	-0.371	-0.470	-0.357
45	1589	-1.313	-1.459	-1.168	-1.498	-1.122
46	1590	-0.515	-0.570	-0.460	-0.585	-0.443
47	1591	0.213	0.186	0.240	0.177	0.248
48	1592	0.347	0.305	0.390	0.292	0.402
49	1593	-0.313	-0.346	-0.281	-0.354	-0.271
50	1594	-0.352	-0.389	-0.315	-0.399	-0.304

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3	1595	-0.128	-0.140	-0.117	-0.143	-0.113
4	1596	-1.645	-1.829	-1.463	-1.879	-1.405
5	1597	-0.322	-0.356	-0.289	-0.365	-0.279
6	1598	0.928	0.820	1.037	0.786	1.066
7	1599	0.780	0.689	0.872	0.660	0.897
8	1600	-0.148	-0.161	-0.134	-0.165	-0.130
9	1601	-2.360	-2.625	-2.097	-2.696	-2.013
10	1602	-0.600	-0.665	-0.535	-0.682	-0.515
11	1603	-0.871	-0.966	-0.775	-0.992	-0.745
12	1604	-1.123	-1.248	-0.999	-1.281	-0.960
13	1605	-1.266	-1.407	-1.127	-1.445	-1.082
14	1606	-2.023	-2.250	-1.798	-2.311	-1.726
15	1607	-2.226	-2.476	-1.978	-2.543	-1.900
16	1608	-2.422	-2.695	-2.152	-2.768	-2.066
17	1609	-1.583	-1.760	-1.407	-1.807	-1.352
18	1610	-1.485	-1.651	-1.321	-1.695	-1.269
19	1611	-0.938	-1.042	-0.836	-1.070	-0.803
20	1612	-0.163	-0.179	-0.148	-0.183	-0.143
21	1613	-0.399	-0.442	-0.357	-0.453	-0.344
22	1614	-2.201	-2.448	-1.956	-2.514	-1.878
23	1615	-1.546	-1.719	-1.375	-1.766	-1.321
24	1616	-1.055	-1.171	-0.939	-1.203	-0.902
25	1617	-0.331	-0.366	-0.297	-0.375	-0.286
26	1618	-1.118	-1.242	-0.995	-1.275	-0.956
27	1619	0.322	0.282	0.362	0.270	0.372
28	1620	-1.429	-1.588	-1.271	-1.631	-1.221
29	1621	-0.283	-0.312	-0.255	-0.320	-0.245
30	1622	0.082	0.070	0.095	0.066	0.098
31	1623	-0.550	-0.610	-0.491	-0.625	-0.473
32	1624	0.448	0.394	0.502	0.377	0.517
33	1625	-1.045	-1.161	-0.930	-1.192	-0.894
34	1626	0.847	0.749	0.947	0.717	0.974
35	1627	-0.024	-0.024	-0.023	-0.024	-0.023
36	1628	0.099	0.084	0.113	0.080	0.117
37	1629	0.598	0.528	0.670	0.505	0.689
38	1630	-1.407	-1.564	-1.251	-1.606	-1.202
39	1631	0.177	0.154	0.200	0.146	0.206
40	1632	-2.525	-2.809	-2.243	-2.885	-2.154
41	1633	-2.633	-2.930	-2.339	-3.009	-2.246
42	1634	0.117	0.101	0.134	0.095	0.138
43	1635	-1.709	-1.901	-1.520	-1.952	-1.459
44	1636	-0.185	-0.203	-0.167	-0.208	-0.162
45	1637	-1.192	-1.324	-1.060	-1.360	-1.019
46	1638	-2.521	-2.805	-2.240	-2.881	-2.151
47	1639	-0.174	-0.190	-0.157	-0.195	-0.152
48	1640	0.271	0.237	0.305	0.226	0.314
49	1641	-2.908	-3.236	-2.583	-3.324	-2.480
50	1642	-0.491	-0.543	-0.438	-0.557	-0.422

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3	1643	-2.354	-2.619	-2.092	-2.690	-2.009
4	1644	-1.688	-1.877	-1.501	-1.928	-1.442
5	1645	-0.645	-0.715	-0.575	-0.734	-0.553
6	1646	-0.337	-0.373	-0.303	-0.382	-0.291
7	1647	-2.317	-2.577	-2.058	-2.647	-1.977
8	1648	0.765	0.675	0.855	0.647	0.879
9	1649	0.428	0.377	0.480	0.360	0.494
10	1650	0.105	0.090	0.120	0.085	0.124
11	1651	-0.279	-0.308	-0.251	-0.315	-0.242
12	1652	-0.869	-0.964	-0.774	-0.990	-0.744
13	1653	-1.190	-1.322	-1.059	-1.357	-1.017
14	1654	-0.385	-0.426	-0.345	-0.437	-0.332
15	1655	0.179	0.156	0.203	0.148	0.209
16	1656	0.127	0.110	0.145	0.104	0.150
17	1657	0.237	0.207	0.268	0.198	0.276
18	1658	0.574	0.506	0.643	0.485	0.661
19	1659	0.093	0.079	0.107	0.075	0.110
20	1660	0.593	0.523	0.664	0.501	0.683
21	1661	0.027	0.020	0.033	0.018	0.034
22	1662	-0.553	-0.613	-0.494	-0.629	-0.475
23	1663	-1.347	-1.497	-1.198	-1.537	-1.151
24	1664	0.397	0.349	0.445	0.334	0.458
25	1665	0.338	0.297	0.380	0.283	0.391
26	1666	-0.875	-0.971	-0.779	-0.997	-0.749
27	1667	-1.710	-1.901	-1.520	-1.953	-1.460
28	1668	-1.129	-1.255	-1.005	-1.288	-0.966
29	1669	-2.313	-2.573	-2.055	-2.643	-1.974
30	1670	-1.405	-1.561	-1.249	-1.603	-1.200
31	1671	-0.737	-0.818	-0.657	-0.839	-0.632
32	1672	-1.557	-1.731	-1.384	-1.777	-1.330
33	1673	-1.528	-1.699	-1.359	-1.744	-1.305
34	1674	-1.520	-1.690	-1.352	-1.736	-1.299
35	1675	-2.210	-2.458	-1.964	-2.525	-1.886
36	1676	-0.573	-0.635	-0.512	-0.652	-0.492
37	1677	-0.414	-0.458	-0.370	-0.470	-0.357
38	1678	-0.626	-0.694	-0.559	-0.712	-0.537
39	1679	-1.564	-1.739	-1.391	-1.786	-1.336
40	1680	-1.520	-1.689	-1.351	-1.735	-1.298
41	1681	-0.441	-0.488	-0.395	-0.501	-0.380
42	1682	-1.705	-1.896	-1.515	-1.947	-1.456
43	1683	-1.142	-1.268	-1.016	-1.302	-0.976
44	1684	-0.789	-0.875	-0.703	-0.898	-0.676
45	1685	-0.841	-0.934	-0.750	-0.959	-0.720
46	1686	-1.364	-1.516	-1.213	-1.556	-1.165
47	1687	-1.836	-2.041	-1.632	-2.096	-1.567
48	1688	-1.234	-1.371	-1.097	-1.407	-1.054
49	1689	0.523	0.461	0.586	0.442	0.603
50	1690	-0.609	-0.675	-0.543	-0.693	-0.523

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3	1691	-0.168	-0.184	-0.152	-0.188	-0.147
4	1692	0.352	0.309	0.396	0.296	0.407
5	1693	-0.367	-0.405	-0.328	-0.416	-0.316
6	1694	-0.592	-0.656	-0.528	-0.673	-0.508
7	1695	-2.002	-2.227	-1.780	-2.287	-1.709
8	1696	-1.837	-2.043	-1.633	-2.098	-1.568
9	1697	-1.831	-2.036	-1.627	-2.091	-1.563
10	1698	-0.306	-0.338	-0.275	-0.347	-0.265
11	1699	-0.705	-0.782	-0.629	-0.803	-0.605
12	1700	-0.026	-0.026	-0.025	-0.026	-0.025
13	1701	-1.394	-1.550	-1.240	-1.591	-1.191
14	1702	0.134	0.115	0.152	0.110	0.157
15	1703	0.595	0.525	0.666	0.502	0.685
16	1704	-0.943	-1.047	-0.840	-1.075	-0.807
17	1705	-2.252	-2.505	-2.001	-2.573	-1.921
18	1706	-2.139	-2.379	-1.901	-2.444	-1.825
19	1707	0.101	0.086	0.116	0.082	0.120
20	1708	-2.441	-2.716	-2.169	-2.789	-2.083
21	1709	-1.825	-2.030	-1.622	-2.084	-1.558
22	1710	-0.843	-0.936	-0.751	-0.960	-0.722
23	1711	0.529	0.466	0.592	0.446	0.609
24	1712	-0.505	-0.559	-0.451	-0.574	-0.434
25	1713	-0.030	-0.030	-0.029	-0.030	-0.029
26	1714	0.090	0.077	0.103	0.072	0.107
27	1715	0.297	0.260	0.334	0.248	0.344
28	1716	-0.919	-1.021	-0.819	-1.048	-0.787
29	1717	-0.464	-0.513	-0.414	-0.526	-0.399
30	1718	-1.439	-1.599	-1.279	-1.642	-1.229
31	1719	-1.975	-2.197	-1.755	-2.256	-1.686
32	1720	-1.377	-1.530	-1.225	-1.571	-1.176
33	1721	-0.957	-1.063	-0.852	-1.091	-0.819
34	1722	-0.571	-0.633	-0.510	-0.650	-0.490
35	1723	-0.841	-0.934	-0.749	-0.958	-0.720
36	1724	-0.954	-1.059	-0.849	-1.087	-0.816
37	1725	-0.161	-0.176	-0.146	-0.180	-0.141
38	1726	-0.549	-0.608	-0.490	-0.624	-0.472
39	1727	-0.899	-0.998	-0.801	-1.025	-0.770
40	1728	-1.660	-1.846	-1.476	-1.896	-1.418
41	1729	-0.789	-0.875	-0.703	-0.898	-0.676
42	1730	-0.079	-0.085	-0.073	-0.087	-0.072
43	1731	-1.392	-1.547	-1.238	-1.588	-1.189
44	1732	-0.250	-0.276	-0.225	-0.282	-0.217
45	1733	-1.120	-1.244	-0.997	-1.278	-0.958
46	1734	-0.981	-1.090	-0.874	-1.119	-0.840
47	1735	-0.485	-0.537	-0.434	-0.551	-0.417
48	1736	-0.170	-0.186	-0.154	-0.191	-0.149
49	1737	-1.342	-1.491	-1.193	-1.531	-1.146
50	1738	-0.287	-0.316	-0.258	-0.324	-0.248

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3	1739	-1.356	-1.507	-1.206	-1.547	-1.158
4	1740	-1.023	-1.136	-0.911	-1.167	-0.875
5	1741	-1.451	-1.613	-1.291	-1.656	-1.240
6	1742	-1.489	-1.656	-1.324	-1.700	-1.272
7	1743	-0.402	-0.445	-0.360	-0.456	-0.347
8	1744	0.186	0.162	0.210	0.154	0.217
9	1745	-0.240	-0.265	-0.216	-0.271	-0.209
10	1746	-0.252	-0.277	-0.226	-0.284	-0.218
11	1747	-0.880	-0.977	-0.784	-1.003	-0.753
12	1748	-1.118	-1.243	-0.995	-1.276	-0.956
13	1749	-0.195	-0.214	-0.176	-0.219	-0.170
14	1750	-0.117	-0.128	-0.107	-0.130	-0.104
15	1751	-0.123	-0.134	-0.112	-0.137	-0.109
16	1752	0.622	0.548	0.696	0.525	0.715
17	1753	-0.371	-0.410	-0.332	-0.420	-0.320
18	1754	0.235	0.205	0.265	0.196	0.273
19	1755	0.257	0.225	0.290	0.215	0.298
20	1756	-0.836	-0.928	-0.745	-0.953	-0.716
21	1757	0.416	0.366	0.467	0.350	0.480
22	1758	-0.665	-0.737	-0.593	-0.757	-0.570
23	1759	-0.020	-0.021	-0.019	-0.021	-0.019
24	1760	0.194	0.169	0.219	0.161	0.226
25	1761	1.007	0.890	1.125	0.853	1.156
26	1762	0.062	0.051	0.072	0.048	0.075
27	1763	-0.118	-0.129	-0.108	-0.131	-0.105
28	1764	-0.303	-0.335	-0.272	-0.343	-0.262
29	1765	-0.876	-0.973	-0.781	-0.999	-0.750
30	1766	0.004	0.000	0.008	-0.001	0.009
31	1767	-0.453	-0.501	-0.405	-0.514	-0.390
32	1768	-1.764	-1.962	-1.568	-2.015	-1.506
33	1769	-0.991	-1.100	-0.882	-1.130	-0.848
34	1770	-0.452	-0.500	-0.404	-0.513	-0.389
35	1771	-0.778	-0.863	-0.693	-0.886	-0.667
36	1772	-2.053	-2.283	-1.824	-2.345	-1.752
37	1773	0.165	0.144	0.187	0.137	0.193
38	1774	0.044	0.036	0.052	0.033	0.054
39	1775	0.152	0.131	0.172	0.125	0.178
40	1776	0.405	0.356	0.455	0.341	0.468
41	1777	-0.782	-0.868	-0.697	-0.891	-0.670
42	1778	-1.096	-1.218	-0.976	-1.250	-0.937
43	1779	-0.525	-0.581	-0.469	-0.596	-0.451
44	1780	-0.605	-0.671	-0.540	-0.688	-0.519
45	1781	-1.697	-1.887	-1.509	-1.938	-1.449
46	1782	-1.159	-1.288	-1.032	-1.323	-0.991
47	1783	-2.439	-2.714	-2.167	-2.787	-2.081
48	1784	-1.615	-1.795	-1.436	-1.843	-1.379
49	1785	-0.780	-0.865	-0.695	-0.888	-0.668
50	1786	0.102	0.087	0.117	0.083	0.121

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3	1787	-1.185	-1.316	-1.054	-1.351	-1.013
4	1788	0.026	0.020	0.032	0.018	0.034
5	1789	0.136	0.118	0.155	0.112	0.160
6	1790	-2.356	-2.621	-2.093	-2.691	-2.010
7	1791	-0.672	-0.746	-0.600	-0.765	-0.577
8	1792	-1.196	-1.329	-1.064	-1.365	-1.023
9	1793	-1.087	-1.207	-0.967	-1.239	-0.929
10	1794	-1.089	-1.210	-0.970	-1.242	-0.932
11	1795	-1.206	-1.340	-1.073	-1.376	-1.031
12	1796	-0.037	-0.038	-0.036	-0.038	-0.036
13	1797	-1.266	-1.407	-1.127	-1.445	-1.082
14	1798	-0.358	-0.396	-0.321	-0.406	-0.309
15	1799	-0.242	-0.267	-0.218	-0.273	-0.210
16	1800	-1.673	-1.860	-1.487	-1.910	-1.429
17	1801	-0.420	-0.464	-0.376	-0.476	-0.362
18	1802	-1.221	-1.357	-1.087	-1.393	-1.044
19	1803	-0.378	-0.418	-0.338	-0.428	-0.326
20	1804	0.366	0.322	0.411	0.308	0.423
21	1805	-1.191	-1.324	-1.060	-1.359	-1.018
22	1806	-0.710	-0.787	-0.633	-0.808	-0.608
23	1807	-0.883	-0.981	-0.787	-1.007	-0.756
24	1808	-0.237	-0.261	-0.214	-0.267	-0.206
25	1809	-0.792	-0.879	-0.706	-0.902	-0.679
26	1810	-1.175	-1.306	-1.046	-1.341	-1.005
27	1811	-0.864	-0.960	-0.770	-0.985	-0.740
28	1812	-2.299	-2.557	-2.042	-2.626	-1.961
29	1813	-0.828	-0.919	-0.738	-0.944	-0.709
30	1814	-0.624	-0.692	-0.557	-0.710	-0.535
31	1815	-1.017	-1.130	-0.905	-1.160	-0.870
32	1816	-1.178	-1.309	-1.048	-1.344	-1.007
33	1817	-1.258	-1.398	-1.119	-1.435	-1.075
34	1818	-1.391	-1.546	-1.237	-1.587	-1.188
35	1819	0.242	0.212	0.273	0.202	0.281
36	1820	-0.182	-0.200	-0.165	-0.205	-0.159
37	1821	-1.736	-1.930	-1.543	-1.982	-1.482
38	1822	-0.562	-0.623	-0.502	-0.639	-0.483
39	1823	0.328	0.288	0.368	0.275	0.379
40	1824	-0.557	-0.617	-0.497	-0.633	-0.478
41	1825	-1.334	-1.483	-1.187	-1.523	-1.140
42	1826	0.615	0.543	0.689	0.520	0.708
43	1827	-0.192	-0.211	-0.174	-0.216	-0.168
44	1828	-1.068	-1.187	-0.951	-1.219	-0.914
45	1829	-1.197	-1.330	-1.065	-1.365	-1.023
46	1830	-0.946	-1.051	-0.843	-1.079	-0.810
47	1831	0.452	0.397	0.506	0.380	0.521
48	1832	-1.466	-1.630	-1.304	-1.674	-1.253
49	1833	-1.353	-1.504	-1.203	-1.544	-1.156
50	1834	-0.763	-0.846	-0.680	-0.868	-0.653

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3	1835	-0.784	-0.870	-0.698	-0.893	-0.671
4	1836	-1.818	-2.021	-1.616	-2.076	-1.552
5	1837	-1.206	-1.341	-1.073	-1.376	-1.031
6	1838	-1.438	-1.599	-1.279	-1.642	-1.229
7	1839	-1.713	-1.905	-1.523	-1.956	-1.463
8	1840	-0.456	-0.505	-0.408	-0.518	-0.393
9	1841	-0.759	-0.842	-0.676	-0.864	-0.650
10	1842	-0.073	-0.078	-0.068	-0.079	-0.066
11	1843	-0.477	-0.528	-0.426	-0.542	-0.410
12	1844	0.072	0.060	0.083	0.057	0.086
13	1845	-0.062	-0.066	-0.058	-0.067	-0.057
14	1846	0.231	0.202	0.260	0.192	0.268
15	1847	0.293	0.257	0.330	0.245	0.339
16	1848	-0.200	-0.220	-0.181	-0.225	-0.175
17	1849	-0.586	-0.650	-0.523	-0.667	-0.503
18	1850	-0.185	-0.203	-0.167	-0.208	-0.162
19	1851	-0.522	-0.578	-0.466	-0.593	-0.448
20	1852	0.128	0.111	0.146	0.105	0.151
21	1853	0.056	0.046	0.065	0.043	0.068
22	1854	0.861	0.761	0.962	0.729	0.989
23	1855	-0.339	-0.374	-0.304	-0.384	-0.293
24	1856	-0.990	-1.099	-0.881	-1.129	-0.847
25	1857	-0.883	-0.981	-0.787	-1.007	-0.756
26	1858	0.235	0.205	0.265	0.196	0.273
27	1859	-0.387	-0.428	-0.347	-0.439	-0.334
28	1860	0.620	0.547	0.694	0.524	0.714
29	1861	0.752	0.664	0.840	0.636	0.864
30	1862	-0.951	-1.056	-0.847	-1.084	-0.814
31	1863	-0.387	-0.428	-0.347	-0.439	-0.334
32	1864	-1.076	-1.195	-0.958	-1.227	-0.920
33	1865	-0.581	-0.644	-0.519	-0.661	-0.499
34	1866	-0.298	-0.328	-0.267	-0.337	-0.258
35	1867	-1.366	-1.518	-1.215	-1.559	-1.167
36	1868	0.121	0.104	0.138	0.099	0.143
37	1869	-0.625	-0.693	-0.557	-0.711	-0.536
38	1870	-0.127	-0.138	-0.116	-0.141	-0.112
39	1871	-1.123	-1.247	-0.999	-1.280	-0.960
40	1872	-0.255	-0.281	-0.230	-0.288	-0.222
41	1873	0.631	0.557	0.706	0.533	0.726
42	1874	-1.022	-1.136	-0.910	-1.166	-0.875
43	1875	-0.120	-0.130	-0.110	-0.133	-0.106
44	1876	0.077	0.065	0.088	0.061	0.092
45	1877	-1.440	-1.601	-1.281	-1.644	-1.230
46	1878	-0.478	-0.529	-0.427	-0.543	-0.411
47	1879	-0.025	-0.025	-0.024	-0.025	-0.024
48	1880	-0.853	-0.947	-0.760	-0.972	-0.730
49	1881	-1.245	-1.384	-1.108	-1.421	-1.064
50	1882	-0.230	-0.253	-0.208	-0.260	-0.200

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3	1883	0.228	0.199	0.257	0.190	0.265
4	1884	-0.627	-0.695	-0.560	-0.714	-0.538
5	1885	-0.793	-0.880	-0.707	-0.903	-0.679
6	1886	0.412	0.362	0.462	0.346	0.475
7	1887	-0.044	-0.046	-0.042	-0.047	-0.042
8	1888	-0.341	-0.376	-0.305	-0.386	-0.294
9	1889	-0.099	-0.107	-0.091	-0.110	-0.089
10	1890	0.043	0.035	0.051	0.033	0.053
11	1891	-1.534	-1.705	-1.364	-1.751	-1.310
12	1892	-1.843	-2.049	-1.638	-2.104	-1.573
13	1893	-1.349	-1.500	-1.200	-1.540	-1.153
14	1894	0.292	0.256	0.329	0.245	0.339
15	1895	-0.069	-0.074	-0.065	-0.075	-0.063
16	1896	0.258	0.225	0.290	0.215	0.299
17	1897	0.545	0.480	0.610	0.460	0.628
18	1898	-0.064	-0.068	-0.060	-0.069	-0.058
19	1899	-1.608	-1.787	-1.429	-1.835	-1.373
20	1900	-1.068	-1.187	-0.951	-1.219	-0.914
21	1901	0.731	0.646	0.818	0.619	0.841
22	1902	-2.811	-3.128	-2.497	-3.212	-2.397
23	1903	-1.039	-1.154	-0.925	-1.184	-0.889
24	1904	-1.415	-1.573	-1.258	-1.615	-1.209
25	1905	-0.561	-0.621	-0.501	-0.637	-0.482
26	1906	-1.178	-1.309	-1.049	-1.344	-1.008
27	1907	-0.958	-1.063	-0.853	-1.092	-0.820
28	1908	-0.472	-0.522	-0.422	-0.536	-0.406
29	1909	-1.116	-1.239	-0.993	-1.272	-0.954
30	1910	-0.901	-1.000	-0.802	-1.027	-0.771
31	1911	-0.001	-0.004	0.002	-0.005	0.003
32	1912	-0.802	-0.890	-0.715	-0.914	-0.687
33	1913	-0.203	-0.223	-0.183	-0.228	-0.177
34	1914	-0.613	-0.679	-0.547	-0.697	-0.526
35	1915	-1.157	-1.286	-1.030	-1.320	-0.989
36	1916	-0.956	-1.062	-0.851	-1.090	-0.818
37	1917	0.249	0.218	0.281	0.208	0.289
38	1918	-0.358	-0.395	-0.321	-0.405	-0.309
39	1919	-0.122	-0.133	-0.112	-0.136	-0.108
40	1920	1.106	0.978	1.235	0.937	1.269
41	1921	0.501	0.441	0.561	0.422	0.577
42	1922	1.272	1.126	1.420	1.079	1.460
43	1923	-1.548	-1.721	-1.376	-1.767	-1.322
44	1924	0.611	0.539	0.684	0.516	0.703
45	1925	0.784	0.693	0.877	0.664	0.902
46	1926	0.632	0.558	0.707	0.534	0.727
47	1927	0.339	0.298	0.381	0.285	0.392
48	1928	0.219	0.191	0.247	0.182	0.254
49	1929	0.149	0.129	0.169	0.123	0.174
50	1930	0.563	0.496	0.630	0.475	0.648

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3	1931	-0.732	-0.813	-0.653	-0.834	-0.628
4	1932	-0.215	-0.236	-0.194	-0.242	-0.187
5	1933	0.905	0.799	1.011	0.766	1.039
6	1934	1.373	1.215	1.532	1.165	1.575
7	1935	-0.019	-0.020	-0.018	-0.020	-0.018
8	1936	0.843	0.744	0.942	0.713	0.968
9	1937	1.977	1.751	2.206	1.679	2.267
10	1938	1.245	1.101	1.390	1.056	1.429
11	1939	1.086	0.960	1.212	0.920	1.246
12	1940	0.750	0.662	0.839	0.634	0.862
13	1941	0.212	0.185	0.240	0.177	0.247
14	1942	0.603	0.532	0.675	0.510	0.694
15	1943	0.669	0.590	0.748	0.565	0.770
16	1944	-0.578	-0.641	-0.516	-0.658	-0.497
17	1945	0.405	0.356	0.454	0.340	0.467
18	1946	0.727	0.642	0.813	0.615	0.836
19	1947	0.644	0.568	0.720	0.544	0.741
20	1948	-0.291	-0.321	-0.261	-0.329	-0.252
21	1949	-0.993	-1.103	-0.884	-1.132	-0.850
22	1950	0.602	0.531	0.673	0.508	0.692
23	1951	-0.522	-0.578	-0.466	-0.593	-0.449
24	1952	-0.696	-0.772	-0.621	-0.792	-0.597
25	1953	0.232	0.203	0.262	0.193	0.269
26	1954	0.159	0.138	0.181	0.132	0.187
27	1955	0.367	0.322	0.412	0.308	0.424
28	1956	-0.574	-0.636	-0.512	-0.653	-0.493
29	1957	-0.084	-0.091	-0.078	-0.092	-0.076
30	1958	0.277	0.242	0.311	0.231	0.321
31	1959	0.962	0.850	1.075	0.815	1.105
32	1960	1.320	1.168	1.474	1.120	1.515
33	1961	0.572	0.504	0.640	0.483	0.659
34	1962	-1.285	-1.429	-1.144	-1.467	-1.099
35	1963	-0.180	-0.197	-0.163	-0.202	-0.157
36	1964	-0.682	-0.756	-0.608	-0.776	-0.585
37	1965	-1.755	-1.952	-1.561	-2.005	-1.499
38	1966	0.098	0.084	0.112	0.079	0.116
39	1967	0.527	0.464	0.590	0.444	0.607
40	1968	-1.423	-1.581	-1.265	-1.624	-1.215
41	1969	0.305	0.267	0.343	0.255	0.353
42	1970	0.961	0.850	1.074	0.814	1.104
43	1971	-0.199	-0.219	-0.180	-0.224	-0.174
44	1972	0.752	0.664	0.841	0.636	0.865
45	1973	0.696	0.614	0.778	0.588	0.800
46	1974	0.540	0.476	0.604	0.455	0.622
47	1975	-0.470	-0.520	-0.420	-0.534	-0.404
48	1976	0.597	0.526	0.668	0.504	0.687
49	1977	-0.032	-0.032	-0.031	-0.032	-0.031
50	1978	-0.384	-0.425	-0.344	-0.436	-0.332

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1979	0.760	0.671	0.849	0.643	0.873
1980	0.701	0.619	0.784	0.593	0.807
1981	-1.525	-1.695	-1.356	-1.741	-1.303
1982	-1.061	-1.178	-0.944	-1.210	-0.907
1983	0.360	0.316	0.404	0.302	0.416
1984	-0.531	-0.588	-0.474	-0.604	-0.456
1985	0.139	0.120	0.157	0.114	0.163
1986	0.235	0.205	0.265	0.196	0.273
1987	-0.970	-1.077	-0.863	-1.105	-0.830
1988	0.298	0.261	0.335	0.250	0.345
1989	1.271	1.124	1.419	1.078	1.458
1990	0.794	0.701	0.888	0.672	0.913
1991	0.506	0.446	0.567	0.427	0.583
1992	0.035	0.028	0.042	0.026	0.044
1993	-0.449	-0.497	-0.402	-0.510	-0.386
1994	1.091	0.964	1.218	0.925	1.252
1995	-0.443	-0.490	-0.396	-0.503	-0.381
1996	0.115	0.099	0.132	0.094	0.136
1997	1.099	0.971	1.227	0.931	1.261
1998	-0.505	-0.560	-0.451	-0.574	-0.434
1999	-0.031	-0.031	-0.031	-0.031	-0.031
2000	0.901	0.796	1.007	0.763	1.035
2001	0.539	0.475	0.604	0.455	0.621
2002	0.984	0.870	1.099	0.834	1.130
2003	0.800	0.707	0.894	0.677	0.919
2004	0.908	0.802	1.015	0.769	1.043
2005	0.419	0.368	0.470	0.352	0.483
2006	1.717	1.520	1.915	1.458	1.968
2007	0.909	0.803	1.016	0.770	1.044
2008	-0.099	-0.107	-0.091	-0.109	-0.089
2009	1.066	0.942	1.190	0.903	1.223
2010	0.701	0.619	0.784	0.593	0.807
2011	1.311	1.160	1.464	1.112	1.504
2012	1.193	1.056	1.332	1.012	1.370
2013	1.546	1.368	1.725	1.312	1.773
2014	0.040	0.033	0.048	0.030	0.050

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Year	MJJA	CI 95% L	CI 95% U	CI 99% L	CI 99% U
850	-0.013	-0.015	-0.010	-0.015	-0.010
851	-0.550	-0.624	-0.475	-0.646	-0.457
852	-0.279	-0.315	-0.243	-0.326	-0.234
853	-0.820	-0.933	-0.706	-0.966	-0.678
854	-0.079	-0.086	-0.071	-0.088	-0.070
855	0.255	0.214	0.295	0.204	0.307
856	0.415	0.351	0.478	0.336	0.497
857	-0.634	-0.721	-0.547	-0.746	-0.526
858	-0.299	-0.337	-0.260	-0.349	-0.250

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3	859	-0.068	-0.074	-0.062	-0.075	-0.061
4	860	-0.050	-0.053	-0.047	-0.054	-0.046
5	861	-0.154	-0.172	-0.136	-0.177	-0.132
6	862	-0.207	-0.232	-0.181	-0.240	-0.175
7	863	-0.251	-0.282	-0.218	-0.292	-0.211
8	864	-0.259	-0.292	-0.226	-0.302	-0.218
9	865	-0.852	-0.969	-0.733	-1.004	-0.704
10	866	0.092	0.075	0.110	0.071	0.115
11	867	0.091	0.074	0.108	0.070	0.113
12	868	0.381	0.322	0.440	0.308	0.457
13	869	0.696	0.591	0.799	0.567	0.830
14	870	-0.331	-0.374	-0.287	-0.387	-0.277
15	871	0.115	0.095	0.136	0.090	0.142
16	872	-0.217	-0.244	-0.190	-0.252	-0.183
17	873	0.059	0.046	0.071	0.043	0.075
18	874	-0.263	-0.297	-0.229	-0.307	-0.221
19	875	0.320	0.270	0.370	0.258	0.384
20	876	0.876	0.746	1.005	0.714	1.043
21	877	-1.615	-1.841	-1.386	-1.908	-1.331
22	878	0.606	0.515	0.697	0.493	0.724
23	879	0.005	0.000	0.010	-0.001	0.011
24	880	-0.037	-0.038	-0.035	-0.038	-0.035
25	881	-1.298	-1.479	-1.114	-1.532	-1.071
26	882	0.187	0.156	0.217	0.148	0.226
27	883	0.258	0.217	0.299	0.207	0.311
28	884	0.275	0.231	0.318	0.221	0.331
29	885	0.107	0.087	0.126	0.083	0.132
30	886	0.606	0.514	0.696	0.492	0.723
31	887	0.880	0.749	1.010	0.718	1.048
32	888	0.324	0.273	0.374	0.261	0.389
33	889	-0.031	-0.032	-0.031	-0.032	-0.031
34	890	0.741	0.630	0.851	0.603	0.883
35	891	1.340	1.142	1.534	1.095	1.592
36	892	-0.517	-0.587	-0.447	-0.608	-0.430
37	893	0.206	0.173	0.240	0.165	0.250
38	894	0.394	0.333	0.454	0.319	0.472
39	895	0.274	0.230	0.317	0.220	0.330
40	896	0.383	0.324	0.442	0.310	0.459
41	897	0.180	0.150	0.210	0.143	0.219
42	898	-0.176	-0.197	-0.155	-0.203	-0.149
43	899	0.909	0.774	1.043	0.741	1.082
44	900	-0.434	-0.492	-0.375	-0.509	-0.362
45	901	0.338	0.285	0.390	0.272	0.405
46	902	-0.109	-0.121	-0.098	-0.124	-0.095
47	903	-0.062	-0.067	-0.057	-0.069	-0.056
48	904	0.375	0.316	0.432	0.303	0.449
49	905	0.688	0.585	0.790	0.560	0.820
50	906	0.627	0.532	0.720	0.510	0.748

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3	907	-0.689	-0.783	-0.593	-0.811	-0.571
4	908	0.146	0.121	0.171	0.115	0.179
5	909	0.327	0.276	0.378	0.264	0.393
6	910	-0.219	-0.246	-0.191	-0.254	-0.185
7	911	-0.518	-0.588	-0.447	-0.608	-0.430
8	912	1.009	0.859	1.157	0.823	1.200
9	913	0.013	0.007	0.019	0.006	0.021
10	914	-0.213	-0.239	-0.186	-0.247	-0.180
11	915	0.456	0.386	0.525	0.370	0.545
12	916	-0.090	-0.098	-0.081	-0.101	-0.079
13	917	-0.598	-0.680	-0.516	-0.703	-0.496
14	918	0.028	0.020	0.036	0.018	0.039
15	919	0.316	0.267	0.365	0.255	0.380
16	920	-0.074	-0.081	-0.068	-0.083	-0.066
17	921	-0.874	-0.994	-0.752	-1.030	-0.723
18	922	0.165	0.137	0.193	0.131	0.201
19	923	-0.651	-0.740	-0.561	-0.766	-0.540
20	924	0.516	0.438	0.594	0.419	0.617
21	925	0.195	0.163	0.227	0.155	0.236
22	926	0.711	0.604	0.816	0.579	0.847
23	927	-0.496	-0.563	-0.428	-0.582	-0.412
24	928	0.386	0.326	0.445	0.312	0.462
25	929	0.333	0.280	0.384	0.268	0.399
26	930	0.568	0.482	0.653	0.461	0.678
27	931	-0.007	-0.010	-0.004	-0.011	-0.003
28	932	0.578	0.491	0.665	0.470	0.690
29	933	0.223	0.187	0.259	0.178	0.270
30	934	1.021	0.869	1.170	0.833	1.214
31	935	0.614	0.521	0.705	0.499	0.732
32	936	-0.781	-0.888	-0.672	-0.920	-0.646
33	937	-0.411	-0.466	-0.356	-0.482	-0.343
34	938	-0.233	-0.263	-0.204	-0.271	-0.197
35	939	0.229	0.192	0.265	0.183	0.276
36	940	-1.430	-1.630	-1.227	-1.689	-1.179
37	941	0.177	0.147	0.206	0.140	0.215
38	942	-0.151	-0.168	-0.133	-0.173	-0.129
39	943	0.517	0.438	0.595	0.420	0.618
40	944	0.780	0.663	0.895	0.635	0.929
41	945	0.719	0.611	0.826	0.586	0.857
42	946	0.802	0.682	0.920	0.653	0.955
43	947	0.352	0.297	0.407	0.284	0.423
44	948	-0.284	-0.321	-0.247	-0.332	-0.239
45	949	-0.216	-0.243	-0.189	-0.251	-0.183
46	950	-0.417	-0.473	-0.361	-0.489	-0.348
47	951	0.581	0.493	0.668	0.472	0.694
48	952	-0.444	-0.503	-0.384	-0.521	-0.370
49	953	-0.320	-0.362	-0.278	-0.374	-0.268
50	954	-0.281	-0.317	-0.245	-0.328	-0.236

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3	955	0.173	0.144	0.201	0.137	0.210
4	956	-0.186	-0.208	-0.163	-0.215	-0.157
5	957	-0.019	-0.021	-0.018	-0.021	-0.018
6	958	-0.337	-0.381	-0.292	-0.394	-0.281
7	959	0.257	0.216	0.298	0.206	0.310
8	960	0.376	0.317	0.433	0.303	0.450
9	961	-1.592	-1.815	-1.366	-1.880	-1.312
10	962	-0.041	-0.042	-0.039	-0.043	-0.038
11	963	-0.029	-0.029	-0.029	-0.029	-0.029
12	964	0.582	0.494	0.669	0.473	0.695
13	965	-0.408	-0.463	-0.353	-0.479	-0.340
14	966	-0.335	-0.378	-0.290	-0.391	-0.280
15	967	-0.080	-0.087	-0.072	-0.089	-0.071
16	968	-0.045	-0.047	-0.042	-0.048	-0.042
17	969	0.336	0.284	0.388	0.271	0.404
18	970	-0.474	-0.538	-0.410	-0.556	-0.394
19	971	0.326	0.275	0.376	0.262	0.391
20	972	1.212	1.033	1.388	0.990	1.440
21	973	0.200	0.167	0.232	0.159	0.242
22	974	-0.469	-0.532	-0.405	-0.550	-0.390
23	975	-0.002	-0.006	0.002	-0.007	0.003
24	976	-0.409	-0.463	-0.354	-0.479	-0.341
25	977	0.427	0.362	0.492	0.346	0.512
26	978	0.543	0.461	0.624	0.441	0.648
27	979	-0.839	-0.954	-0.721	-0.988	-0.694
28	980	0.083	0.067	0.098	0.063	0.103
29	981	-0.520	-0.591	-0.449	-0.611	-0.432
30	982	1.175	1.001	1.347	0.960	1.397
31	983	0.583	0.495	0.670	0.474	0.696
32	984	-0.232	-0.261	-0.202	-0.269	-0.195
33	985	-0.223	-0.251	-0.195	-0.259	-0.188
34	986	0.809	0.688	0.929	0.660	0.964
35	987	0.310	0.261	0.358	0.249	0.372
36	988	0.307	0.259	0.355	0.247	0.369
37	989	-0.428	-0.485	-0.371	-0.502	-0.357
38	990	1.085	0.924	1.244	0.886	1.290
39	991	-0.153	-0.170	-0.135	-0.176	-0.130
40	992	0.724	0.615	0.831	0.590	0.863
41	993	0.060	0.048	0.073	0.045	0.077
42	994	-0.112	-0.124	-0.100	-0.127	-0.097
43	995	0.371	0.313	0.428	0.300	0.445
44	996	-0.121	-0.134	-0.108	-0.138	-0.105
45	997	0.157	0.131	0.184	0.124	0.192
46	998	-0.148	-0.165	-0.131	-0.170	-0.127
47	999	-0.357	-0.404	-0.309	-0.417	-0.298
48	1000	0.791	0.673	0.908	0.645	0.942
49	1001	0.067	0.053	0.081	0.050	0.085
50	1002	0.592	0.502	0.681	0.481	0.707

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3	1003	-0.216	-0.243	-0.189	-0.251	-0.183
4	1004	0.097	0.079	0.115	0.075	0.120
5	1005	-0.074	-0.080	-0.067	-0.082	-0.066
6	1006	0.409	0.346	0.472	0.331	0.490
7	1007	0.211	0.176	0.245	0.168	0.255
8	1008	-1.228	-1.400	-1.055	-1.450	-1.014
9	1009	0.358	0.302	0.413	0.289	0.429
10	1010	-0.177	-0.198	-0.155	-0.204	-0.150
11	1011	0.556	0.471	0.639	0.451	0.663
12	1012	-0.079	-0.086	-0.071	-0.088	-0.070
13	1013	-0.005	-0.008	-0.001	-0.009	0.000
14	1014	0.267	0.225	0.309	0.214	0.322
15	1015	-0.509	-0.577	-0.439	-0.597	-0.423
16	1016	-0.070	-0.076	-0.064	-0.078	-0.062
17	1017	-0.770	-0.876	-0.663	-0.907	-0.637
18	1018	0.465	0.393	0.535	0.376	0.555
19	1019	0.587	0.498	0.675	0.477	0.701
20	1020	0.331	0.279	0.382	0.266	0.397
21	1021	0.523	0.443	0.601	0.424	0.624
22	1022	-0.019	-0.020	-0.018	-0.021	-0.018
23	1023	-0.123	-0.137	-0.110	-0.141	-0.106
24	1024	-0.205	-0.230	-0.179	-0.238	-0.173
25	1025	1.226	1.045	1.404	1.001	1.457
26	1026	-0.261	-0.295	-0.228	-0.304	-0.220
27	1027	0.251	0.211	0.291	0.201	0.303
28	1028	0.208	0.174	0.241	0.166	0.251
29	1029	-0.103	-0.113	-0.092	-0.116	-0.089
30	1030	0.037	0.028	0.046	0.025	0.049
31	1031	-0.785	-0.893	-0.676	-0.925	-0.650
32	1032	-0.430	-0.487	-0.372	-0.504	-0.358
33	1033	-0.372	-0.421	-0.323	-0.436	-0.311
34	1034	0.316	0.266	0.365	0.254	0.379
35	1035	-0.190	-0.213	-0.167	-0.220	-0.161
36	1036	0.208	0.174	0.242	0.166	0.251
37	1037	0.976	0.831	1.119	0.797	1.162
38	1038	-0.133	-0.148	-0.118	-0.153	-0.115
39	1039	0.100	0.081	0.118	0.077	0.123
40	1040	0.644	0.547	0.740	0.524	0.768
41	1041	-0.783	-0.891	-0.674	-0.922	-0.648
42	1042	-0.746	-0.849	-0.643	-0.879	-0.618
43	1043	-0.343	-0.388	-0.298	-0.401	-0.287
44	1044	-0.343	-0.388	-0.297	-0.401	-0.287
45	1045	-0.125	-0.139	-0.111	-0.143	-0.107
46	1046	-0.031	-0.031	-0.030	-0.031	-0.030
47	1047	-1.070	-1.219	-0.920	-1.262	-0.884
48	1048	0.952	0.810	1.091	0.776	1.133
49	1049	-0.157	-0.175	-0.138	-0.180	-0.134
50	1050	-0.801	-0.912	-0.690	-0.944	-0.663

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3	1051	0.977	0.832	1.120	0.797	1.162
4	1052	0.520	0.441	0.598	0.422	0.621
5	1053	-0.403	-0.456	-0.349	-0.472	-0.336
6	1054	-0.046	-0.049	-0.044	-0.050	-0.043
7	1055	0.013	0.007	0.019	0.006	0.021
8	1056	-0.069	-0.075	-0.063	-0.077	-0.062
9	1057	0.786	0.669	0.902	0.641	0.936
10	1058	0.918	0.781	1.052	0.748	1.092
11	1059	-0.291	-0.329	-0.253	-0.340	-0.244
12	1060	0.379	0.320	0.437	0.306	0.454
13	1061	0.773	0.657	0.887	0.629	0.920
14	1062	0.346	0.292	0.400	0.279	0.416
15	1063	-0.231	-0.260	-0.202	-0.268	-0.195
16	1064	0.357	0.301	0.412	0.288	0.428
17	1065	0.452	0.383	0.521	0.367	0.541
18	1066	-0.073	-0.080	-0.067	-0.082	-0.065
19	1067	-0.210	-0.236	-0.184	-0.243	-0.177
20	1068	-1.286	-1.466	-1.105	-1.519	-1.061
21	1069	-0.734	-0.835	-0.632	-0.864	-0.608
22	1070	-0.457	-0.519	-0.395	-0.537	-0.381
23	1071	0.082	0.066	0.097	0.062	0.102
24	1072	-0.048	-0.050	-0.045	-0.051	-0.044
25	1073	0.146	0.121	0.171	0.115	0.178
26	1074	0.129	0.107	0.152	0.101	0.158
27	1075	-0.217	-0.244	-0.190	-0.252	-0.183
28	1076	-0.080	-0.088	-0.073	-0.090	-0.071
29	1077	-0.503	-0.571	-0.434	-0.591	-0.418
30	1078	-0.690	-0.785	-0.595	-0.813	-0.572
31	1079	0.383	0.323	0.441	0.309	0.459
32	1080	0.382	0.323	0.440	0.309	0.458
33	1081	-0.300	-0.339	-0.261	-0.351	-0.252
34	1082	-0.285	-0.322	-0.248	-0.333	-0.239
35	1083	-0.749	-0.851	-0.645	-0.882	-0.620
36	1084	0.535	0.454	0.615	0.434	0.639
37	1085	-0.417	-0.472	-0.360	-0.488	-0.347
38	1086	0.893	0.760	1.025	0.728	1.063
39	1087	0.022	0.015	0.029	0.013	0.031
40	1088	0.499	0.423	0.574	0.405	0.596
41	1089	0.211	0.177	0.246	0.169	0.256
42	1090	0.568	0.482	0.653	0.461	0.678
43	1091	0.568	0.482	0.653	0.461	0.678
44	1092	1.078	0.918	1.235	0.880	1.282
45	1093	0.097	0.079	0.115	0.075	0.120
46	1094	0.145	0.120	0.170	0.114	0.177
47	1095	-0.293	-0.331	-0.255	-0.342	-0.246
48	1096	-0.408	-0.462	-0.353	-0.478	-0.340
49	1097	0.303	0.255	0.350	0.244	0.364
50	1098	0.217	0.182	0.252	0.173	0.262

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3	1099	0.407	0.344	0.469	0.329	0.487
4	1100	0.262	0.220	0.304	0.210	0.316
5	1101	0.652	0.554	0.749	0.531	0.778
6	1102	0.404	0.342	0.466	0.327	0.484
7	1103	0.727	0.618	0.835	0.592	0.866
8	1104	0.654	0.556	0.751	0.532	0.780
9	1105	0.349	0.295	0.403	0.282	0.419
10	1106	1.152	0.982	1.320	0.941	1.370
11	1107	-0.159	-0.177	-0.140	-0.183	-0.135
12	1108	0.225	0.188	0.261	0.179	0.271
13	1109	-1.341	-1.529	-1.152	-1.584	-1.107
14	1110	-0.282	-0.318	-0.245	-0.329	-0.237
15	1111	-0.628	-0.714	-0.541	-0.739	-0.521
16	1112	-0.220	-0.248	-0.192	-0.256	-0.186
17	1113	0.846	0.720	0.971	0.690	1.007
18	1114	0.430	0.364	0.495	0.348	0.515
19	1115	-0.170	-0.190	-0.149	-0.196	-0.144
20	1116	0.188	0.157	0.219	0.150	0.228
21	1117	-0.092	-0.101	-0.082	-0.103	-0.080
22	1118	0.766	0.651	0.879	0.624	0.912
23	1119	0.112	0.091	0.132	0.087	0.137
24	1120	0.584	0.496	0.671	0.474	0.697
25	1121	-0.164	-0.183	-0.144	-0.189	-0.140
26	1122	0.817	0.695	0.937	0.666	0.972
27	1123	0.256	0.215	0.296	0.205	0.308
28	1124	-0.069	-0.074	-0.063	-0.076	-0.061
29	1125	-0.270	-0.305	-0.235	-0.315	-0.227
30	1126	0.510	0.432	0.587	0.414	0.609
31	1127	-1.083	-1.233	-0.931	-1.278	-0.894
32	1128	-0.254	-0.286	-0.221	-0.295	-0.213
33	1129	-0.488	-0.554	-0.422	-0.573	-0.406
34	1130	-1.020	-1.161	-0.877	-1.203	-0.843
35	1131	0.239	0.200	0.277	0.191	0.288
36	1132	0.292	0.246	0.338	0.235	0.351
37	1133	-0.497	-0.564	-0.429	-0.584	-0.413
38	1134	-0.353	-0.399	-0.306	-0.413	-0.295
39	1135	0.700	0.595	0.804	0.570	0.835
40	1136	-0.969	-1.103	-0.833	-1.142	-0.801
41	1137	-0.249	-0.280	-0.217	-0.289	-0.209
42	1138	-0.167	-0.186	-0.147	-0.192	-0.142
43	1139	-0.371	-0.420	-0.322	-0.435	-0.310
44	1140	-0.011	-0.013	-0.009	-0.014	-0.008
45	1141	-0.505	-0.573	-0.436	-0.593	-0.419
46	1142	-0.895	-1.018	-0.769	-1.055	-0.740
47	1143	0.096	0.078	0.113	0.074	0.119
48	1144	-0.214	-0.240	-0.187	-0.248	-0.180
49	1145	-0.077	-0.084	-0.070	-0.086	-0.068
50	1146	-0.403	-0.456	-0.349	-0.472	-0.336

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3	1147	-0.156	-0.174	-0.137	-0.179	-0.133
4	1148	0.321	0.270	0.370	0.258	0.385
5	1149	0.093	0.076	0.111	0.072	0.116
6						
7	1150	-0.250	-0.281	-0.218	-0.291	-0.210
8	1151	0.054	0.042	0.066	0.039	0.069
9	1152	0.618	0.524	0.710	0.502	0.737
10						
11	1153	0.522	0.442	0.600	0.423	0.623
12	1154	0.459	0.389	0.529	0.372	0.549
13	1155	0.805	0.684	0.923	0.656	0.958
14	1156	0.322	0.271	0.372	0.259	0.386
15	1157	-0.173	-0.194	-0.152	-0.200	-0.147
16	1158	0.308	0.259	0.355	0.247	0.369
17	1159	0.491	0.416	0.565	0.398	0.586
18						
19	1160	0.624	0.529	0.717	0.507	0.744
20	1161	1.202	1.024	1.377	0.982	1.429
21	1162	0.812	0.690	0.931	0.661	0.967
22						
23	1163	0.458	0.388	0.527	0.371	0.548
24	1164	0.769	0.654	0.883	0.626	0.916
25	1165	0.733	0.623	0.842	0.597	0.874
26	1166	0.554	0.470	0.637	0.450	0.661
27	1167	0.573	0.486	0.658	0.465	0.684
28						
29	1168	0.618	0.524	0.710	0.502	0.737
30	1169	-0.399	-0.452	-0.345	-0.467	-0.333
31	1170	0.507	0.429	0.583	0.411	0.605
32	1171	-0.306	-0.345	-0.266	-0.357	-0.256
33	1172	1.031	0.878	1.182	0.842	1.227
34	1173	-0.012	-0.014	-0.010	-0.015	-0.009
35	1174	0.561	0.476	0.646	0.456	0.670
36	1175	0.596	0.506	0.685	0.485	0.712
37						
38	1176	-0.246	-0.277	-0.214	-0.286	-0.207
39	1177	-0.297	-0.335	-0.258	-0.347	-0.249
40						
41	1178	0.611	0.519	0.702	0.497	0.729
42	1179	-0.067	-0.072	-0.061	-0.074	-0.060
43	1180	0.452	0.383	0.521	0.366	0.541
44	1181	0.010	0.005	0.015	0.003	0.017
45	1182	-0.171	-0.191	-0.150	-0.197	-0.145
46	1183	0.555	0.470	0.638	0.450	0.662
47	1184	0.769	0.654	0.882	0.626	0.916
48	1185	0.861	0.733	0.988	0.702	1.025
49	1186	0.094	0.077	0.112	0.073	0.117
50	1187	0.082	0.066	0.098	0.062	0.103
51	1188	0.423	0.357	0.487	0.342	0.506
52	1189	-0.158	-0.176	-0.139	-0.181	-0.134
53	1190	0.539	0.457	0.620	0.438	0.644
54	1191	0.262	0.220	0.303	0.210	0.315
55	1192	-0.235	-0.265	-0.205	-0.274	-0.198
56	1193	0.903	0.768	1.035	0.736	1.075
57						
58						
59	1194	-1.264	-1.440	-1.085	-1.492	-1.043
60						

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2						
3	1195	0.483	0.409	0.556	0.392	0.578
4	1196	-0.155	-0.174	-0.137	-0.179	-0.133
5	1197	-1.124	-1.280	-0.966	-1.326	-0.928
6	1198	-0.498	-0.565	-0.430	-0.585	-0.414
7	1199	0.291	0.245	0.337	0.234	0.350
8	1200	-0.001	-0.005	0.003	-0.005	0.005
9	1201	0.110	0.090	0.130	0.086	0.136
10	1202	-0.884	-1.006	-0.760	-1.042	-0.731
11	1203	0.618	0.525	0.710	0.502	0.737
12	1204	0.964	0.820	1.105	0.786	1.147
13	1205	0.633	0.537	0.727	0.514	0.754
14	1206	-0.240	-0.270	-0.209	-0.279	-0.202
15	1207	-0.266	-0.300	-0.231	-0.310	-0.223
16	1208	-0.458	-0.519	-0.396	-0.537	-0.381
17	1209	0.564	0.478	0.648	0.458	0.673
18	1210	-0.369	-0.418	-0.320	-0.432	-0.308
19	1211	0.226	0.190	0.263	0.181	0.273
20	1212	-0.099	-0.110	-0.089	-0.113	-0.087
21	1213	-0.033	-0.033	-0.032	-0.034	-0.032
22	1214	-0.141	-0.157	-0.124	-0.161	-0.120
23	1215	-0.461	-0.522	-0.398	-0.540	-0.383
24	1216	0.241	0.202	0.279	0.193	0.290
25	1217	1.143	0.974	1.310	0.934	1.359
26	1218	0.756	0.642	0.867	0.615	0.900
27	1219	0.846	0.719	0.970	0.689	1.007
28	1220	-0.294	-0.332	-0.256	-0.343	-0.247
29	1221	0.905	0.771	1.038	0.738	1.078
30	1222	-0.078	-0.085	-0.070	-0.087	-0.069
31	1223	-0.309	-0.349	-0.268	-0.360	-0.258
32	1224	0.289	0.244	0.335	0.233	0.348
33	1225	-0.148	-0.165	-0.130	-0.170	-0.126
34	1226	-0.589	-0.669	-0.508	-0.693	-0.489
35	1227	0.884	0.752	1.014	0.721	1.053
36	1228	-1.283	-1.462	-1.102	-1.515	-1.059
37	1229	-0.178	-0.200	-0.157	-0.206	-0.152
38	1230	-1.160	-1.321	-0.996	-1.369	-0.957
39	1231	-0.061	-0.066	-0.056	-0.067	-0.055
40	1232	-0.953	-1.085	-0.819	-1.124	-0.787
41	1233	0.610	0.517	0.700	0.495	0.727
42	1234	0.692	0.588	0.795	0.563	0.825
43	1235	0.504	0.427	0.579	0.409	0.602
44	1236	0.464	0.393	0.534	0.376	0.554
45	1237	1.009	0.859	1.157	0.824	1.200
46	1238	-1.172	-1.335	-1.007	-1.383	-0.967
47	1239	0.259	0.217	0.300	0.208	0.312
48	1240	0.599	0.508	0.688	0.487	0.715
49	1241	0.775	0.659	0.890	0.632	0.924
50	1242	-0.003	-0.007	0.000	-0.008	0.001

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3	1243	0.295	0.248	0.341	0.237	0.355
4	1244	-0.093	-0.102	-0.084	-0.105	-0.082
5	1245	0.569	0.483	0.654	0.462	0.679
6	1246	-0.211	-0.237	-0.185	-0.245	-0.178
7	1247	0.189	0.157	0.219	0.150	0.229
8	1248	0.330	0.278	0.381	0.266	0.396
9	1249	0.655	0.556	0.752	0.533	0.781
10	1250	0.657	0.558	0.755	0.535	0.784
11	1251	-0.068	-0.073	-0.062	-0.075	-0.061
12	1252	0.306	0.258	0.354	0.246	0.368
13	1253	0.492	0.417	0.566	0.399	0.588
14	1254	0.303	0.255	0.350	0.244	0.364
15	1255	0.533	0.452	0.613	0.433	0.637
16	1256	-0.003	-0.006	0.001	-0.007	0.002
17	1257	1.399	1.193	1.603	1.144	1.663
18	1258	0.340	0.287	0.392	0.274	0.408
19	1259	-0.364	-0.412	-0.315	-0.426	-0.304
20	1260	-0.046	-0.048	-0.043	-0.049	-0.043
21	1261	0.327	0.275	0.377	0.263	0.392
22	1262	-0.099	-0.109	-0.088	-0.112	-0.086
23	1263	0.012	0.006	0.018	0.005	0.019
24	1264	-0.462	-0.524	-0.399	-0.542	-0.384
25	1265	0.493	0.417	0.567	0.400	0.589
26	1266	0.517	0.438	0.594	0.419	0.617
27	1267	0.181	0.151	0.211	0.144	0.220
28	1268	0.791	0.672	0.908	0.644	0.942
29	1269	1.312	1.118	1.503	1.072	1.559
30	1270	0.859	0.731	0.986	0.701	1.023
31	1271	0.411	0.348	0.474	0.332	0.492
32	1272	0.798	0.678	0.915	0.650	0.950
33	1273	0.947	0.806	1.086	0.773	1.127
34	1274	-0.052	-0.055	-0.048	-0.056	-0.048
35	1275	0.653	0.555	0.750	0.531	0.779
36	1276	-0.462	-0.524	-0.400	-0.543	-0.385
37	1277	-0.278	-0.314	-0.242	-0.325	-0.234
38	1278	-0.134	-0.149	-0.118	-0.153	-0.115
39	1279	-0.043	-0.045	-0.040	-0.045	-0.040
40	1280	0.412	0.348	0.474	0.333	0.493
41	1281	-0.199	-0.224	-0.175	-0.231	-0.169
42	1282	0.019	0.012	0.025	0.010	0.027
43	1283	0.389	0.329	0.448	0.314	0.466
44	1284	0.364	0.307	0.420	0.294	0.436
45	1285	0.763	0.648	0.875	0.621	0.908
46	1286	-0.005	-0.008	-0.001	-0.009	0.000
47	1287	0.328	0.276	0.379	0.264	0.393
48	1288	-0.125	-0.139	-0.111	-0.143	-0.108
49	1289	0.305	0.257	0.353	0.246	0.367
50	1290	0.124	0.102	0.146	0.097	0.152

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3	1291	0.365	0.308	0.421	0.294	0.437
4	1292	-0.074	-0.081	-0.068	-0.083	-0.066
5	1293	-0.037	-0.038	-0.035	-0.038	-0.035
6	1294	-0.343	-0.388	-0.297	-0.401	-0.286
7	1295	0.559	0.474	0.642	0.454	0.667
8	1296	-1.010	-1.150	-0.868	-1.192	-0.835
9	1297	0.130	0.107	0.152	0.102	0.159
10	1298	0.026	0.018	0.033	0.016	0.035
11	1299	0.666	0.566	0.765	0.542	0.794
12	1300	1.007	0.857	1.154	0.822	1.198
13	1301	0.070	0.055	0.083	0.052	0.088
14	1302	0.757	0.643	0.868	0.616	0.901
15	1303	0.682	0.580	0.783	0.555	0.813
16	1304	0.453	0.384	0.522	0.367	0.542
17	1305	0.861	0.732	0.987	0.702	1.025
18	1306	1.241	1.058	1.422	1.014	1.475
19	1307	-0.009	-0.012	-0.007	-0.013	-0.006
20	1308	0.090	0.073	0.107	0.069	0.112
21	1309	-1.074	-1.224	-0.923	-1.268	-0.887
22	1310	0.490	0.416	0.564	0.398	0.586
23	1311	0.509	0.432	0.586	0.413	0.608
24	1312	0.014	0.008	0.020	0.007	0.022
25	1313	-0.107	-0.118	-0.096	-0.122	-0.093
26	1314	-0.332	-0.376	-0.288	-0.389	-0.278
27	1315	1.099	0.936	1.259	0.897	1.306
28	1316	1.239	1.056	1.419	1.012	1.472
29	1317	-0.192	-0.216	-0.169	-0.223	-0.163
30	1318	0.943	0.803	1.081	0.769	1.122
31	1319	0.092	0.075	0.109	0.071	0.114
32	1320	0.695	0.590	0.798	0.565	0.828
33	1321	-0.038	-0.040	-0.037	-0.040	-0.036
34	1322	0.431	0.364	0.496	0.349	0.515
35	1323	-0.156	-0.174	-0.137	-0.179	-0.133
36	1324	-0.363	-0.410	-0.314	-0.424	-0.303
37	1325	0.593	0.503	0.681	0.482	0.707
38	1326	0.188	0.157	0.218	0.149	0.227
39	1327	0.785	0.668	0.901	0.640	0.935
40	1328	-0.900	-1.025	-0.774	-1.061	-0.744
41	1329	-0.540	-0.613	-0.466	-0.635	-0.449
42	1330	-0.335	-0.378	-0.290	-0.391	-0.280
43	1331	0.228	0.191	0.264	0.182	0.275
44	1332	-0.568	-0.645	-0.490	-0.667	-0.471
45	1333	-0.410	-0.464	-0.355	-0.480	-0.342
46	1334	0.540	0.458	0.621	0.438	0.645
47	1335	0.288	0.243	0.333	0.232	0.347
48	1336	-0.190	-0.213	-0.166	-0.220	-0.161
49	1337	-0.232	-0.261	-0.203	-0.270	-0.196
50	1338	-0.113	-0.125	-0.101	-0.129	-0.098

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3	1339	0.217	0.182	0.252	0.174	0.263
4	1340	0.584	0.496	0.672	0.475	0.697
5	1341	-0.853	-0.970	-0.734	-1.005	-0.705
6	1342	0.626	0.531	0.719	0.509	0.746
7	1343	0.977	0.832	1.120	0.797	1.162
8	1344	-0.082	-0.090	-0.075	-0.093	-0.073
9	1345	0.118	0.097	0.139	0.092	0.145
10	1346	-0.795	-0.904	-0.684	-0.936	-0.658
11	1347	0.515	0.436	0.592	0.417	0.615
12	1348	-0.177	-0.198	-0.155	-0.204	-0.150
13	1349	-0.308	-0.348	-0.268	-0.360	-0.258
14	1350	0.037	0.028	0.047	0.026	0.050
15	1351	0.567	0.481	0.652	0.460	0.677
16	1352	-0.313	-0.353	-0.272	-0.365	-0.262
17	1353	-0.329	-0.372	-0.285	-0.384	-0.275
18	1354	0.720	0.612	0.826	0.586	0.858
19	1355	0.191	0.159	0.222	0.152	0.231
20	1356	0.830	0.706	0.952	0.676	0.988
21	1357	0.065	0.051	0.078	0.048	0.082
22	1358	-0.310	-0.350	-0.269	-0.362	-0.259
23	1359	0.391	0.330	0.451	0.316	0.468
24	1360	-0.052	-0.056	-0.049	-0.057	-0.048
25	1361	0.531	0.451	0.611	0.431	0.635
26	1362	0.182	0.152	0.212	0.145	0.221
27	1363	-0.998	-1.136	-0.857	-1.176	-0.824
28	1364	0.805	0.685	0.924	0.656	0.959
29	1365	0.839	0.713	0.962	0.684	0.998
30	1366	0.928	0.790	1.064	0.757	1.104
31	1367	-0.546	-0.620	-0.471	-0.642	-0.453
32	1368	1.233	1.051	1.412	1.007	1.465
33	1369	0.001	-0.003	0.006	-0.004	0.007
34	1370	-0.279	-0.315	-0.243	-0.326	-0.234
35	1371	0.891	0.758	1.022	0.726	1.060
36	1372	0.892	0.759	1.023	0.728	1.062
37	1373	-0.161	-0.180	-0.142	-0.186	-0.137
38	1374	0.982	0.836	1.126	0.802	1.169
39	1375	-0.471	-0.534	-0.407	-0.552	-0.392
40	1376	0.295	0.248	0.341	0.237	0.354
41	1377	-0.670	-0.761	-0.577	-0.788	-0.555
42	1378	-0.359	-0.406	-0.311	-0.420	-0.300
43	1379	0.726	0.617	0.833	0.591	0.865
44	1380	0.496	0.420	0.570	0.402	0.592
45	1381	0.279	0.235	0.323	0.224	0.336
46	1382	0.362	0.306	0.418	0.292	0.434
47	1383	0.748	0.636	0.859	0.610	0.892
48	1384	0.533	0.452	0.613	0.433	0.636
49	1385	-0.314	-0.354	-0.272	-0.366	-0.262
50	1386	0.340	0.287	0.393	0.274	0.408

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3	1387	-0.039	-0.041	-0.038	-0.041	-0.037
4	1388	-0.012	-0.014	-0.010	-0.015	-0.009
5	1389	-0.084	-0.092	-0.076	-0.094	-0.074
6	1390	0.495	0.420	0.570	0.402	0.592
7	1391	0.836	0.711	0.959	0.681	0.995
8	1392	0.339	0.286	0.391	0.273	0.406
9	1393	0.023	0.016	0.030	0.014	0.032
10	1394	-0.863	-0.982	-0.742	-1.017	-0.713
11	1395	-0.140	-0.155	-0.123	-0.160	-0.120
12	1396	0.367	0.310	0.423	0.296	0.440
13	1397	-0.113	-0.125	-0.101	-0.129	-0.098
14	1398	0.251	0.211	0.291	0.201	0.303
15	1399	0.139	0.115	0.163	0.109	0.170
16	1400	0.104	0.085	0.122	0.080	0.128
17	1401	0.702	0.597	0.806	0.572	0.837
18	1402	0.835	0.710	0.958	0.680	0.994
19	1403	0.805	0.684	0.923	0.656	0.958
20	1404	0.812	0.691	0.932	0.662	0.967
21	1405	0.474	0.401	0.545	0.384	0.566
22	1406	0.541	0.459	0.622	0.439	0.646
23	1407	0.434	0.367	0.500	0.351	0.519
24	1408	0.338	0.285	0.390	0.272	0.405
25	1409	0.337	0.285	0.390	0.272	0.405
26	1410	0.455	0.385	0.524	0.369	0.544
27	1411	1.428	1.218	1.636	1.168	1.697
28	1412	-0.046	-0.048	-0.043	-0.049	-0.042
29	1413	0.696	0.592	0.799	0.567	0.830
30	1414	0.248	0.208	0.287	0.198	0.299
31	1415	1.079	0.919	1.237	0.881	1.283
32	1416	0.890	0.757	1.021	0.726	1.059
33	1417	-0.028	-0.028	-0.028	-0.028	-0.028
34	1418	0.708	0.601	0.813	0.576	0.843
35	1419	-0.009	-0.011	-0.006	-0.012	-0.005
36	1420	0.297	0.250	0.343	0.239	0.357
37	1421	0.740	0.629	0.850	0.603	0.882
38	1422	0.072	0.058	0.086	0.054	0.091
39	1423	0.033	0.025	0.042	0.022	0.045
40	1424	0.728	0.619	0.836	0.593	0.868
41	1425	0.983	0.837	1.128	0.802	1.170
42	1426	0.626	0.531	0.719	0.509	0.746
43	1427	1.105	0.942	1.267	0.903	1.315
44	1428	-0.060	-0.065	-0.056	-0.066	-0.055
45	1429	0.810	0.689	0.929	0.660	0.964
46	1430	0.049	0.038	0.060	0.035	0.064
47	1431	0.375	0.316	0.432	0.303	0.449
48	1432	0.754	0.641	0.866	0.614	0.898
49	1433	0.291	0.245	0.337	0.234	0.350
50	1434	0.996	0.848	1.141	0.812	1.184

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3	1435	1.057	0.901	1.212	0.863	1.258
4	1436	0.360	0.304	0.416	0.291	0.432
5	1437	0.545	0.463	0.627	0.443	0.651
6	1438	-0.128	-0.142	-0.114	-0.147	-0.110
7	1439	-0.406	-0.459	-0.351	-0.475	-0.338
8	1440	0.012	0.006	0.018	0.005	0.020
9	1441	0.822	0.699	0.943	0.670	0.979
10	1442	-0.018	-0.020	-0.017	-0.020	-0.016
11	1443	-0.085	-0.093	-0.076	-0.095	-0.074
12	1444	-0.289	-0.327	-0.252	-0.338	-0.243
13	1445	0.184	0.154	0.215	0.146	0.223
14	1446	0.003	-0.002	0.007	-0.003	0.008
15	1447	-0.117	-0.129	-0.104	-0.133	-0.101
16	1448	0.152	0.126	0.178	0.120	0.185
17	1449	-0.023	-0.024	-0.022	-0.024	-0.022
18	1450	1.249	1.064	1.431	1.020	1.485
19	1451	0.340	0.287	0.393	0.274	0.408
20	1452	0.160	0.133	0.187	0.126	0.195
21	1453	-1.895	-2.162	-1.626	-2.240	-1.561
22	1454	-0.411	-0.466	-0.356	-0.482	-0.343
23	1455	-0.715	-0.813	-0.616	-0.842	-0.592
24	1456	-0.183	-0.206	-0.161	-0.212	-0.156
25	1457	-0.192	-0.216	-0.169	-0.223	-0.163
26	1458	-0.688	-0.782	-0.593	-0.810	-0.570
27	1459	-0.176	-0.197	-0.155	-0.203	-0.149
28	1460	-0.329	-0.372	-0.286	-0.385	-0.275
29	1461	-0.253	-0.285	-0.220	-0.294	-0.213
30	1462	-0.546	-0.620	-0.471	-0.642	-0.453
31	1463	-0.592	-0.672	-0.510	-0.696	-0.491
32	1464	-0.349	-0.394	-0.302	-0.408	-0.291
33	1465	0.334	0.282	0.386	0.269	0.401
34	1466	-0.193	-0.217	-0.169	-0.224	-0.164
35	1467	-0.223	-0.251	-0.195	-0.259	-0.188
36	1468	0.564	0.479	0.649	0.458	0.673
37	1469	-0.007	-0.010	-0.004	-0.011	-0.003
38	1470	0.269	0.226	0.311	0.216	0.323
39	1471	-0.452	-0.512	-0.390	-0.530	-0.376
40	1472	-0.468	-0.531	-0.405	-0.550	-0.390
41	1473	-0.912	-1.038	-0.785	-1.076	-0.754
42	1474	-0.270	-0.304	-0.235	-0.314	-0.226
43	1475	-0.127	-0.141	-0.113	-0.145	-0.109
44	1476	-0.763	-0.868	-0.657	-0.899	-0.632
45	1477	-0.073	-0.079	-0.066	-0.081	-0.065
46	1478	-0.800	-0.910	-0.689	-0.943	-0.662
47	1479	-0.032	-0.033	-0.032	-0.033	-0.031
48	1480	-0.268	-0.302	-0.234	-0.313	-0.225
49	1481	-0.184	-0.206	-0.162	-0.213	-0.156
50	1482	-0.088	-0.097	-0.080	-0.099	-0.078

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3	1483	-0.736	-0.836	-0.633	-0.866	-0.609
4	1484	0.235	0.197	0.273	0.188	0.284
5	1485	0.639	0.542	0.734	0.519	0.762
6	1486	-0.233	-0.262	-0.203	-0.270	-0.196
7	1487	-0.245	-0.276	-0.214	-0.285	-0.206
8	1488	-0.313	-0.354	-0.272	-0.366	-0.262
9	1489	0.385	0.326	0.444	0.311	0.462
10	1490	0.919	0.782	1.054	0.750	1.094
11	1491	0.451	0.382	0.520	0.366	0.540
12	1492	0.404	0.342	0.466	0.327	0.484
13	1493	-0.079	-0.086	-0.072	-0.088	-0.070
14	1494	1.032	0.878	1.183	0.842	1.227
15	1495	0.290	0.244	0.336	0.233	0.349
16	1496	1.051	0.895	1.205	0.858	1.250
17	1497	-1.165	-1.327	-1.001	-1.375	-0.962
18	1498	-0.151	-0.168	-0.133	-0.174	-0.129
19	1499	-0.042	-0.044	-0.040	-0.044	-0.039
20	1500	0.408	0.345	0.470	0.330	0.488
21	1501	-0.012	-0.014	-0.010	-0.015	-0.009
22	1502	0.215	0.180	0.249	0.171	0.260
23	1503	0.049	0.038	0.060	0.035	0.064
24	1504	0.183	0.153	0.213	0.145	0.222
25	1505	0.399	0.337	0.460	0.323	0.478
26	1506	0.363	0.306	0.418	0.293	0.435
27	1507	-1.461	-1.665	-1.254	-1.726	-1.205
28	1508	0.365	0.309	0.421	0.295	0.438
29	1509	-0.517	-0.586	-0.446	-0.607	-0.429
30	1510	-0.386	-0.437	-0.334	-0.452	-0.322
31	1511	0.076	0.061	0.090	0.057	0.095
32	1512	-0.498	-0.565	-0.430	-0.585	-0.414
33	1513	0.357	0.301	0.412	0.288	0.428
34	1514	-0.139	-0.155	-0.123	-0.160	-0.119
35	1515	0.647	0.549	0.743	0.526	0.771
36	1516	-0.488	-0.554	-0.422	-0.573	-0.406
37	1517	-0.321	-0.363	-0.279	-0.375	-0.269
38	1518	0.413	0.349	0.476	0.334	0.494
39	1519	-0.216	-0.243	-0.189	-0.251	-0.183
40	1520	-0.591	-0.671	-0.510	-0.695	-0.490
41	1521	-0.283	-0.319	-0.246	-0.330	-0.237
42	1522	-0.379	-0.429	-0.328	-0.444	-0.316
43	1523	-0.116	-0.129	-0.104	-0.133	-0.101
44	1524	-0.660	-0.750	-0.569	-0.777	-0.547
45	1525	0.040	0.030	0.050	0.028	0.053
46	1526	-0.620	-0.704	-0.534	-0.729	-0.514
47	1527	0.061	0.048	0.073	0.045	0.077
48	1528	-0.416	-0.471	-0.360	-0.487	-0.346
49	1529	0.255	0.214	0.295	0.204	0.307
50	1530	-0.582	-0.661	-0.502	-0.685	-0.483

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3	1531	0.170	0.141	0.198	0.134	0.206
4	1532	0.871	0.741	0.999	0.710	1.037
5	1533	0.812	0.691	0.932	0.662	0.967
6	1534	0.364	0.308	0.420	0.294	0.437
7	1535	0.019	0.013	0.026	0.011	0.028
8	1536	-0.739	-0.840	-0.636	-0.870	-0.612
9	1537	0.175	0.146	0.204	0.139	0.213
10	1538	0.712	0.605	0.817	0.579	0.848
11	1539	0.679	0.577	0.780	0.552	0.809
12	1540	-0.277	-0.313	-0.241	-0.323	-0.232
13	1541	0.123	0.101	0.144	0.096	0.151
14	1542	-0.368	-0.416	-0.318	-0.430	-0.307
15	1543	-0.169	-0.189	-0.149	-0.195	-0.144
16	1544	-0.841	-0.957	-0.723	-0.991	-0.695
17	1545	0.884	0.752	1.014	0.721	1.052
18	1546	-0.513	-0.582	-0.443	-0.603	-0.427
19	1547	-0.077	-0.084	-0.070	-0.086	-0.068
20	1548	-0.084	-0.091	-0.075	-0.094	-0.074
21	1549	-0.036	-0.037	-0.034	-0.037	-0.034
22	1550	-0.277	-0.313	-0.241	-0.323	-0.232
23	1551	0.190	0.158	0.221	0.151	0.230
24	1552	0.345	0.291	0.398	0.278	0.414
25	1553	0.297	0.250	0.344	0.239	0.357
26	1554	-0.034	-0.035	-0.034	-0.036	-0.033
27	1555	0.120	0.099	0.142	0.094	0.148
28	1556	0.072	0.058	0.087	0.055	0.091
29	1557	-0.478	-0.542	-0.413	-0.561	-0.397
30	1558	0.870	0.741	0.998	0.710	1.036
31	1559	-0.575	-0.653	-0.496	-0.676	-0.477
32	1560	-0.090	-0.099	-0.081	-0.102	-0.079
33	1561	0.285	0.239	0.329	0.229	0.342
34	1562	-0.650	-0.739	-0.560	-0.765	-0.539
35	1563	0.914	0.778	1.048	0.745	1.088
36	1564	1.102	0.938	1.263	0.900	1.310
37	1565	0.562	0.477	0.646	0.456	0.671
38	1566	-0.189	-0.212	-0.166	-0.219	-0.161
39	1567	-1.240	-1.413	-1.065	-1.464	-1.023
40	1568	-0.361	-0.408	-0.313	-0.422	-0.301
41	1569	0.844	0.718	0.969	0.688	1.005
42	1570	0.095	0.077	0.112	0.073	0.117
43	1571	-0.432	-0.490	-0.374	-0.507	-0.360
44	1572	0.168	0.139	0.196	0.133	0.204
45	1573	-0.751	-0.854	-0.647	-0.885	-0.622
46	1574	-0.473	-0.537	-0.409	-0.555	-0.394
47	1575	-0.152	-0.170	-0.134	-0.175	-0.130
48	1576	-0.294	-0.332	-0.256	-0.343	-0.246
49	1577	-0.447	-0.507	-0.386	-0.524	-0.372
50	1578	-0.388	-0.439	-0.336	-0.454	-0.323

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3	1579	-0.696	-0.792	-0.600	-0.820	-0.577
4	1580	-1.150	-1.310	-0.988	-1.358	-0.950
5	1581	-0.754	-0.857	-0.649	-0.888	-0.624
6	1582	-0.324	-0.366	-0.281	-0.379	-0.271
7	1583	-0.591	-0.671	-0.509	-0.694	-0.490
8	1584	-0.162	-0.181	-0.142	-0.186	-0.138
9	1585	-0.322	-0.364	-0.279	-0.376	-0.269
10	1586	-0.263	-0.296	-0.229	-0.306	-0.221
11	1587	-1.251	-1.426	-1.075	-1.477	-1.032
12	1588	0.006	0.001	0.011	0.000	0.013
13	1589	-0.708	-0.805	-0.610	-0.833	-0.586
14	1590	-0.812	-0.924	-0.699	-0.957	-0.672
15	1591	-0.605	-0.687	-0.522	-0.711	-0.502
16	1592	-0.609	-0.692	-0.525	-0.716	-0.505
17	1593	-0.414	-0.469	-0.358	-0.485	-0.345
18	1594	-0.695	-0.790	-0.598	-0.818	-0.576
19	1595	-0.726	-0.825	-0.625	-0.854	-0.601
20	1596	-0.110	-0.122	-0.098	-0.125	-0.095
21	1597	-0.650	-0.739	-0.560	-0.765	-0.539
22	1598	0.066	0.052	0.079	0.049	0.083
23	1599	-0.499	-0.566	-0.431	-0.585	-0.414
24	1600	-0.369	-0.418	-0.320	-0.432	-0.308
25	1601	-1.462	-1.666	-1.255	-1.726	-1.205
26	1602	-0.644	-0.732	-0.555	-0.758	-0.534
27	1603	-0.526	-0.597	-0.454	-0.618	-0.437
28	1604	-0.947	-1.078	-0.814	-1.116	-0.783
29	1605	-1.168	-1.330	-1.003	-1.378	-0.964
30	1606	-0.800	-0.911	-0.689	-0.943	-0.662
31	1607	-0.798	-0.907	-0.686	-0.940	-0.660
32	1608	-0.908	-1.033	-0.781	-1.070	-0.750
33	1609	-0.822	-0.935	-0.707	-0.968	-0.680
34	1610	-0.430	-0.488	-0.372	-0.505	-0.358
35	1611	-0.386	-0.437	-0.334	-0.452	-0.322
36	1612	-1.015	-1.156	-0.873	-1.197	-0.839
37	1613	0.078	0.063	0.094	0.059	0.098
38	1614	-1.807	-2.061	-1.550	-2.135	-1.489
39	1615	-1.140	-1.299	-0.980	-1.346	-0.941
40	1616	-1.172	-1.335	-1.007	-1.383	-0.967
41	1617	-0.331	-0.374	-0.287	-0.386	-0.277
42	1618	-1.204	-1.371	-1.034	-1.420	-0.993
43	1619	0.053	0.041	0.064	0.038	0.068
44	1620	-0.463	-0.525	-0.400	-0.543	-0.385
45	1621	-0.464	-0.526	-0.401	-0.544	-0.386
46	1622	0.072	0.058	0.086	0.054	0.091
47	1623	-0.015	-0.017	-0.014	-0.018	-0.013
48	1624	-0.385	-0.435	-0.333	-0.450	-0.321
49	1625	-0.499	-0.566	-0.431	-0.586	-0.414
50	1626	0.120	0.099	0.141	0.093	0.147

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3	1627	0.120	0.098	0.141	0.093	0.147
4	1628	0.491	0.416	0.565	0.398	0.587
5	1629	0.362	0.305	0.417	0.292	0.434
6	1630	-0.395	-0.448	-0.342	-0.463	-0.330
7	1631	0.175	0.145	0.203	0.138	0.212
8	1632	-1.181	-1.345	-1.014	-1.393	-0.975
9	1633	-1.320	-1.504	-1.133	-1.558	-1.089
10	1634	-0.229	-0.258	-0.200	-0.266	-0.193
11	1635	-0.364	-0.412	-0.316	-0.426	-0.304
12	1636	0.620	0.527	0.713	0.504	0.740
13	1637	-0.296	-0.334	-0.257	-0.345	-0.248
14	1638	-1.222	-1.392	-1.049	-1.442	-1.008
15	1639	-0.444	-0.503	-0.384	-0.521	-0.370
16	1640	0.705	0.599	0.810	0.574	0.840
17	1641	-1.512	-1.724	-1.298	-1.786	-1.247
18	1642	-0.700	-0.796	-0.603	-0.824	-0.580
19	1643	-1.305	-1.487	-1.121	-1.541	-1.077
20	1644	-0.614	-0.698	-0.530	-0.722	-0.509
21	1645	-1.334	-1.521	-1.146	-1.575	-1.101
22	1646	-0.911	-1.036	-0.783	-1.073	-0.753
23	1647	-1.439	-1.640	-1.235	-1.699	-1.187
24	1648	-0.245	-0.276	-0.214	-0.285	-0.206
25	1649	0.266	0.223	0.308	0.213	0.320
26	1650	-0.005	-0.008	-0.002	-0.009	-0.001
27	1651	0.256	0.215	0.296	0.205	0.308
28	1652	0.420	0.355	0.484	0.340	0.503
29	1653	-0.713	-0.811	-0.614	-0.840	-0.591
30	1654	-0.365	-0.413	-0.316	-0.427	-0.305
31	1655	0.677	0.575	0.778	0.551	0.807
32	1656	-0.038	-0.040	-0.037	-0.040	-0.036
33	1657	0.000	-0.004	0.004	-0.005	0.006
34	1658	0.435	0.368	0.501	0.352	0.520
35	1659	0.181	0.151	0.211	0.144	0.219
36	1660	-0.124	-0.137	-0.110	-0.141	-0.107
37	1661	-0.093	-0.103	-0.084	-0.105	-0.082
38	1662	-0.423	-0.479	-0.366	-0.496	-0.352
39	1663	-0.694	-0.789	-0.598	-0.817	-0.575
40	1664	0.404	0.342	0.466	0.327	0.484
41	1665	0.334	0.282	0.385	0.269	0.401
42	1666	-0.087	-0.096	-0.079	-0.098	-0.077
43	1667	-0.116	-0.128	-0.103	-0.132	-0.100
44	1668	-0.748	-0.851	-0.644	-0.881	-0.619
45	1669	-0.596	-0.677	-0.514	-0.700	-0.494
46	1670	-0.630	-0.716	-0.543	-0.741	-0.522
47	1671	-0.156	-0.174	-0.137	-0.179	-0.133
48	1672	-0.823	-0.936	-0.708	-0.970	-0.681
49	1673	-1.288	-1.467	-1.106	-1.520	-1.062
50	1674	-0.589	-0.669	-0.508	-0.692	-0.488

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3	1675	-0.965	-1.099	-0.830	-1.138	-0.798
4	1676	-0.563	-0.640	-0.486	-0.662	-0.468
5	1677	0.117	0.096	0.138	0.091	0.144
6	1678	-0.521	-0.592	-0.450	-0.612	-0.433
7	1679	-0.656	-0.746	-0.565	-0.772	-0.544
8	1680	-0.675	-0.767	-0.582	-0.795	-0.559
9	1681	-0.600	-0.682	-0.518	-0.706	-0.498
10	1682	-0.601	-0.683	-0.518	-0.707	-0.499
11	1683	0.311	0.262	0.360	0.251	0.374
12	1684	0.034	0.025	0.042	0.023	0.045
13	1685	-0.054	-0.057	-0.050	-0.059	-0.049
14	1686	-0.780	-0.887	-0.671	-0.919	-0.645
15	1687	-0.598	-0.679	-0.516	-0.703	-0.496
16	1688	-0.805	-0.916	-0.693	-0.948	-0.666
17	1689	0.604	0.513	0.694	0.491	0.721
18	1690	-0.316	-0.357	-0.274	-0.369	-0.264
19	1691	-0.496	-0.563	-0.429	-0.583	-0.413
20	1692	0.237	0.199	0.275	0.189	0.286
21	1693	0.050	0.038	0.061	0.036	0.064
22	1694	-0.437	-0.496	-0.378	-0.513	-0.364
23	1695	-1.000	-1.139	-0.860	-1.180	-0.826
24	1696	-0.461	-0.523	-0.399	-0.541	-0.384
25	1697	-0.268	-0.302	-0.233	-0.312	-0.225
26	1698	0.539	0.457	0.619	0.437	0.643
27	1699	-0.516	-0.585	-0.445	-0.606	-0.429
28	1700	0.346	0.292	0.399	0.279	0.415
29	1701	-0.609	-0.692	-0.525	-0.716	-0.505
30	1702	0.153	0.127	0.178	0.120	0.186
31	1703	1.357	1.157	1.555	1.109	1.613
32	1704	-0.888	-1.011	-0.764	-1.047	-0.734
33	1705	-0.863	-0.982	-0.742	-1.017	-0.714
34	1706	-1.166	-1.328	-1.001	-1.375	-0.962
35	1707	0.646	0.548	0.742	0.525	0.770
36	1708	-0.809	-0.920	-0.696	-0.953	-0.669
37	1709	-0.256	-0.288	-0.223	-0.298	-0.215
38	1710	-0.395	-0.447	-0.342	-0.463	-0.329
39	1711	0.916	0.780	1.051	0.747	1.090
40	1712	0.255	0.214	0.295	0.204	0.307
41	1713	0.110	0.090	0.130	0.086	0.136
42	1714	0.215	0.180	0.249	0.171	0.260
43	1715	0.346	0.292	0.399	0.279	0.415
44	1716	-0.303	-0.342	-0.263	-0.353	-0.253
45	1717	-0.418	-0.474	-0.362	-0.490	-0.349
46	1718	-0.827	-0.941	-0.712	-0.974	-0.684
47	1719	-0.689	-0.784	-0.594	-0.811	-0.571
48	1720	-0.644	-0.731	-0.555	-0.757	-0.533
49	1721	-0.086	-0.095	-0.078	-0.097	-0.076
50	1722	-0.458	-0.520	-0.396	-0.538	-0.381

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3	1723	-0.296	-0.334	-0.257	-0.345	-0.248
4	1724	-0.150	-0.167	-0.132	-0.172	-0.128
5	1725	0.169	0.141	0.198	0.134	0.206
6	1726	0.386	0.327	0.446	0.312	0.463
7	1727	0.468	0.396	0.538	0.379	0.559
8	1728	-1.078	-1.228	-0.926	-1.272	-0.890
9	1729	-0.277	-0.313	-0.241	-0.323	-0.233
10	1730	0.467	0.396	0.538	0.379	0.559
11	1731	-0.451	-0.512	-0.390	-0.529	-0.376
12	1732	0.326	0.275	0.377	0.263	0.392
13	1733	-0.517	-0.587	-0.447	-0.607	-0.430
14	1734	-0.097	-0.106	-0.087	-0.109	-0.084
15	1735	0.265	0.223	0.307	0.213	0.320
16	1736	1.122	0.956	1.286	0.916	1.334
17	1737	-0.170	-0.190	-0.150	-0.196	-0.145
18	1738	0.174	0.145	0.203	0.138	0.212
19	1739	-0.582	-0.661	-0.502	-0.684	-0.483
20	1740	-0.055	-0.059	-0.051	-0.060	-0.050
21	1741	-0.601	-0.682	-0.518	-0.707	-0.498
22	1742	-0.701	-0.797	-0.604	-0.825	-0.581
23	1743	-0.603	-0.685	-0.520	-0.709	-0.500
24	1744	-0.119	-0.132	-0.106	-0.136	-0.103
25	1745	-0.255	-0.288	-0.222	-0.297	-0.215
26	1746	-0.303	-0.343	-0.264	-0.354	-0.254
27	1747	-0.176	-0.197	-0.154	-0.203	-0.149
28	1748	-0.562	-0.638	-0.485	-0.661	-0.467
29	1749	0.124	0.102	0.146	0.097	0.152
30	1750	-0.392	-0.444	-0.339	-0.459	-0.327
31	1751	-0.121	-0.134	-0.107	-0.138	-0.104
32	1752	0.352	0.297	0.406	0.284	0.422
33	1753	-0.063	-0.068	-0.058	-0.070	-0.057
34	1754	0.173	0.144	0.202	0.137	0.210
35	1755	0.383	0.324	0.442	0.310	0.459
36	1756	-0.361	-0.409	-0.313	-0.423	-0.302
37	1757	0.560	0.475	0.643	0.454	0.668
38	1758	0.589	0.500	0.677	0.479	0.703
39	1759	0.009	0.004	0.014	0.002	0.016
40	1760	0.737	0.626	0.846	0.600	0.878
41	1761	1.186	1.011	1.359	0.969	1.410
42	1762	0.302	0.254	0.349	0.243	0.363
43	1763	0.207	0.173	0.240	0.165	0.250
44	1764	-0.217	-0.243	-0.189	-0.251	-0.183
45	1765	-0.322	-0.364	-0.279	-0.376	-0.269
46	1766	0.867	0.738	0.995	0.707	1.032
47	1767	0.201	0.168	0.234	0.160	0.244
48	1768	-0.860	-0.978	-0.740	-1.013	-0.711
49	1769	-0.673	-0.765	-0.580	-0.792	-0.557
50	1770	-0.294	-0.332	-0.256	-0.343	-0.247

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3	1771	-0.286	-0.322	-0.249	-0.333	-0.240
4	1772	-1.647	-1.878	-1.413	-1.946	-1.357
5	1773	0.322	0.272	0.372	0.260	0.387
6	1774	-0.333	-0.377	-0.289	-0.390	-0.279
7	1775	0.445	0.377	0.512	0.360	0.532
8	1776	0.903	0.769	1.036	0.736	1.075
9	1777	-0.522	-0.592	-0.450	-0.613	-0.433
10	1778	-0.471	-0.534	-0.407	-0.553	-0.392
11	1779	0.162	0.134	0.189	0.128	0.197
12	1780	-0.086	-0.094	-0.078	-0.097	-0.076
13	1781	-0.434	-0.491	-0.375	-0.508	-0.361
14	1782	-0.322	-0.363	-0.279	-0.376	-0.269
15	1783	-0.879	-1.000	-0.756	-1.036	-0.727
16	1784	-0.633	-0.719	-0.545	-0.744	-0.525
17	1785	-0.911	-1.037	-0.783	-1.074	-0.753
18	1786	-0.328	-0.371	-0.285	-0.383	-0.274
19	1787	-1.185	-1.349	-1.017	-1.398	-0.978
20	1788	-0.537	-0.609	-0.463	-0.631	-0.446
21	1789	0.781	0.664	0.896	0.636	0.930
22	1790	-1.449	-1.651	-1.243	-1.711	-1.194
23	1791	-0.382	-0.432	-0.331	-0.447	-0.318
24	1792	-0.255	-0.287	-0.222	-0.297	-0.214
25	1793	-0.095	-0.104	-0.085	-0.107	-0.083
26	1794	0.358	0.302	0.413	0.289	0.429
27	1795	0.234	0.196	0.271	0.187	0.282
28	1796	-0.174	-0.195	-0.153	-0.201	-0.148
29	1797	-0.250	-0.282	-0.218	-0.291	-0.211
30	1798	0.465	0.394	0.536	0.377	0.556
31	1799	0.083	0.067	0.099	0.063	0.104
32	1800	-0.726	-0.825	-0.625	-0.854	-0.601
33	1801	-0.173	-0.194	-0.152	-0.200	-0.147
34	1802	-1.179	-1.343	-1.013	-1.391	-0.973
35	1803	-0.633	-0.719	-0.545	-0.744	-0.525
36	1804	0.321	0.270	0.370	0.258	0.385
37	1805	-0.635	-0.721	-0.547	-0.747	-0.526
38	1806	-0.345	-0.390	-0.299	-0.403	-0.288
39	1807	-0.735	-0.836	-0.633	-0.865	-0.608
40	1808	-0.015	-0.017	-0.013	-0.018	-0.013
41	1809	-0.493	-0.560	-0.426	-0.579	-0.410
42	1810	-0.917	-1.044	-0.789	-1.081	-0.758
43	1811	-0.230	-0.258	-0.200	-0.267	-0.194
44	1812	-1.656	-1.888	-1.421	-1.956	-1.365
45	1813	-0.526	-0.597	-0.454	-0.618	-0.437
46	1814	-0.256	-0.288	-0.223	-0.298	-0.215
47	1815	-0.319	-0.361	-0.277	-0.373	-0.267
48	1816	-0.690	-0.785	-0.595	-0.813	-0.572
49	1817	-0.823	-0.936	-0.708	-0.969	-0.681
50	1818	-0.405	-0.459	-0.351	-0.475	-0.338

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3	1819	0.879	0.748	1.008	0.716	1.046
4	1820	0.200	0.167	0.232	0.159	0.242
5	1821	-1.296	-1.476	-1.112	-1.529	-1.069
6	1822	0.018	0.012	0.025	0.010	0.027
7	1823	-0.130	-0.144	-0.115	-0.148	-0.112
8	1824	-0.267	-0.301	-0.233	-0.311	-0.224
9	1825	-0.996	-1.134	-0.856	-1.175	-0.823
10	1826	0.151	0.125	0.176	0.119	0.184
11	1827	-0.660	-0.750	-0.568	-0.776	-0.547
12	1828	0.061	0.048	0.074	0.045	0.078
13	1829	-0.471	-0.534	-0.407	-0.552	-0.391
14	1830	-0.734	-0.835	-0.632	-0.864	-0.608
15	1831	1.237	1.054	1.417	1.011	1.470
16	1832	-0.345	-0.390	-0.299	-0.403	-0.288
17	1833	-0.714	-0.812	-0.615	-0.841	-0.591
18	1834	-0.674	-0.766	-0.580	-0.793	-0.558
19	1835	-0.954	-1.086	-0.820	-1.125	-0.788
20	1836	-1.189	-1.355	-1.021	-1.404	-0.982
21	1837	-1.050	-1.195	-0.902	-1.238	-0.867
22	1838	-1.264	-1.440	-1.085	-1.492	-1.043
23	1839	-1.357	-1.547	-1.165	-1.602	-1.119
24	1840	-0.921	-1.049	-0.792	-1.086	-0.762
25	1841	-0.904	-1.028	-0.777	-1.065	-0.747
26	1842	0.013	0.007	0.019	0.006	0.021
27	1843	-0.298	-0.337	-0.259	-0.348	-0.250
28	1844	0.559	0.474	0.642	0.454	0.667
29	1845	-0.080	-0.087	-0.072	-0.089	-0.071
30	1846	0.511	0.433	0.588	0.415	0.610
31	1847	0.584	0.495	0.671	0.474	0.697
32	1848	-0.319	-0.360	-0.277	-0.373	-0.267
33	1849	-1.259	-1.435	-1.081	-1.487	-1.039
34	1850	0.406	0.343	0.468	0.328	0.486
35	1851	-0.926	-1.054	-0.796	-1.092	-0.765
36	1852	0.645	0.548	0.741	0.525	0.769
37	1853	0.639	0.543	0.734	0.520	0.762
38	1854	1.087	0.926	1.246	0.888	1.293
39	1855	0.032	0.023	0.041	0.021	0.043
40	1856	-1.710	-1.950	-1.467	-2.020	-1.409
41	1857	-0.373	-0.422	-0.323	-0.436	-0.311
42	1858	0.838	0.713	0.961	0.683	0.998
43	1859	-0.916	-1.042	-0.787	-1.079	-0.757
44	1860	0.417	0.353	0.481	0.338	0.500
45	1861	0.702	0.596	0.806	0.571	0.836
46	1862	-0.674	-0.766	-0.581	-0.793	-0.558
47	1863	-0.268	-0.302	-0.233	-0.312	-0.225
48	1864	-1.187	-1.353	-1.020	-1.401	-0.980
49	1865	-0.909	-1.035	-0.782	-1.072	-0.752
50	1866	-0.426	-0.482	-0.368	-0.499	-0.355

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3	1867	-1.408	-1.604	-1.208	-1.662	-1.161
4	1868	-0.129	-0.143	-0.114	-0.148	-0.111
5	1869	-1.123	-1.279	-0.965	-1.325	-0.927
6	1870	-0.176	-0.197	-0.155	-0.204	-0.150
7	1871	-1.062	-1.209	-0.912	-1.253	-0.877
8	1872	-0.321	-0.363	-0.279	-0.375	-0.268
9	1873	0.428	0.363	0.494	0.347	0.513
10	1874	-1.307	-1.489	-1.122	-1.543	-1.078
11	1875	-0.178	-0.200	-0.156	-0.206	-0.151
12	1876	-0.039	-0.040	-0.037	-0.041	-0.037
13	1877	-1.664	-1.897	-1.428	-1.966	-1.371
14	1878	-0.034	-0.035	-0.033	-0.035	-0.033
15	1879	0.798	0.678	0.915	0.650	0.950
16	1880	-0.479	-0.543	-0.414	-0.562	-0.398
17	1881	-1.293	-1.473	-1.110	-1.526	-1.066
18	1882	0.226	0.189	0.262	0.181	0.273
19	1883	1.469	1.253	1.683	1.201	1.745
20	1884	0.363	0.307	0.419	0.293	0.436
21	1885	-1.319	-1.503	-1.132	-1.557	-1.088
22	1886	0.225	0.189	0.262	0.180	0.272
23	1887	-1.264	-1.440	-1.085	-1.492	-1.043
24	1888	-1.082	-1.232	-0.929	-1.276	-0.893
25	1889	-0.370	-0.419	-0.321	-0.433	-0.309
26	1890	-0.100	-0.110	-0.089	-0.113	-0.087
27	1891	-1.246	-1.419	-1.070	-1.470	-1.028
28	1892	-1.646	-1.877	-1.412	-1.945	-1.357
29	1893	-1.078	-1.227	-0.926	-1.271	-0.890
30	1894	0.405	0.343	0.467	0.328	0.485
31	1895	0.222	0.185	0.257	0.177	0.268
32	1896	-0.527	-0.598	-0.455	-0.619	-0.438
33	1897	0.672	0.571	0.772	0.547	0.801
34	1898	-0.284	-0.320	-0.247	-0.331	-0.238
35	1899	-1.582	-1.804	-1.358	-1.869	-1.304
36	1900	-0.877	-0.998	-0.755	-1.034	-0.725
37	1901	0.636	0.540	0.730	0.517	0.758
38	1902	-1.993	-2.273	-1.709	-2.356	-1.642
39	1903	-0.957	-1.089	-0.823	-1.128	-0.791
40	1904	-1.405	-1.601	-1.206	-1.658	-1.158
41	1905	-0.488	-0.554	-0.422	-0.573	-0.406
42	1906	-0.864	-0.983	-0.743	-1.018	-0.714
43	1907	-0.883	-1.005	-0.759	-1.040	-0.730
44	1908	-0.919	-1.046	-0.790	-1.083	-0.760
45	1909	-0.805	-0.915	-0.692	-0.948	-0.666
46	1910	0.227	0.190	0.264	0.182	0.274
47	1911	-0.263	-0.296	-0.229	-0.306	-0.221
48	1912	-0.258	-0.291	-0.225	-0.301	-0.217
49	1913	-0.178	-0.200	-0.157	-0.206	-0.151
50	1914	-0.059	-0.064	-0.055	-0.065	-0.054

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3	1915	-1.058	-1.205	-0.909	-1.248	-0.874
4	1916	-0.716	-0.814	-0.617	-0.843	-0.593
5	1917	0.221	0.185	0.257	0.177	0.267
6	1918	1.059	0.902	1.214	0.865	1.260
7	1919	-0.179	-0.200	-0.157	-0.206	-0.152
8	1920	0.248	0.208	0.288	0.199	0.299
9	1921	0.118	0.097	0.139	0.092	0.145
10	1922	0.548	0.465	0.630	0.445	0.654
11	1923	-1.196	-1.363	-1.027	-1.412	-0.987
12	1924	1.058	0.901	1.213	0.864	1.258
13	1925	0.664	0.564	0.763	0.540	0.792
14	1926	1.096	0.933	1.256	0.895	1.303
15	1927	1.225	1.044	1.404	1.001	1.456
16	1928	-0.287	-0.323	-0.249	-0.334	-0.240
17	1929	-0.167	-0.187	-0.147	-0.192	-0.142
18	1930	1.257	1.071	1.440	1.027	1.494
19	1931	-1.326	-1.511	-1.139	-1.566	-1.094
20	1932	0.082	0.066	0.098	0.063	0.103
21	1933	0.804	0.684	0.923	0.655	0.958
22	1934	1.209	1.030	1.385	0.988	1.437
23	1935	-0.017	-0.019	-0.016	-0.019	-0.015
24	1936	0.688	0.585	0.790	0.560	0.821
25	1937	1.900	1.621	2.174	1.555	2.255
26	1938	1.007	0.858	1.155	0.822	1.198
27	1939	0.683	0.580	0.784	0.556	0.814
28	1940	0.580	0.492	0.667	0.471	0.692
29	1941	-0.420	-0.476	-0.364	-0.493	-0.350
30	1942	0.355	0.299	0.409	0.286	0.425
31	1943	-0.167	-0.187	-0.147	-0.193	-0.142
32	1944	-0.213	-0.239	-0.186	-0.247	-0.180
33	1945	0.990	0.843	1.135	0.808	1.177
34	1946	0.792	0.673	0.909	0.645	0.943
35	1947	1.113	0.948	1.275	0.909	1.323
36	1948	-0.075	-0.081	-0.068	-0.083	-0.066
37	1949	-0.543	-0.616	-0.468	-0.638	-0.451
38	1950	1.012	0.862	1.160	0.826	1.204
39	1951	-0.062	-0.067	-0.057	-0.069	-0.056
40	1952	-0.168	-0.188	-0.147	-0.193	-0.143
41	1953	0.930	0.792	1.067	0.759	1.107
42	1954	-0.186	-0.209	-0.163	-0.215	-0.158
43	1955	0.232	0.194	0.269	0.185	0.280
44	1956	-0.121	-0.134	-0.107	-0.138	-0.104
45	1957	-0.473	-0.536	-0.409	-0.555	-0.393
46	1958	0.211	0.176	0.245	0.168	0.255
47	1959	0.159	0.132	0.186	0.126	0.194
48	1960	1.107	0.943	1.269	0.904	1.316
49	1961	-0.026	-0.026	-0.025	-0.026	-0.025
50	1962	-0.607	-0.690	-0.523	-0.714	-0.503

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3	1963	0.234	0.196	0.271	0.187	0.282
4	1964	-0.753	-0.856	-0.648	-0.887	-0.623
5	1965	-0.687	-0.781	-0.592	-0.809	-0.569
6	1966	-0.294	-0.332	-0.256	-0.343	-0.247
7	1967	-0.504	-0.572	-0.435	-0.592	-0.419
8	1968	-0.943	-1.074	-0.811	-1.112	-0.779
9	1969	1.071	0.912	1.228	0.875	1.274
10	1970	0.697	0.593	0.801	0.568	0.831
11	1971	-0.225	-0.253	-0.196	-0.261	-0.189
12	1972	0.869	0.739	0.997	0.709	1.035
13	1973	-0.028	-0.028	-0.028	-0.028	-0.028
14	1974	0.307	0.258	0.354	0.247	0.369
15	1975	-0.740	-0.841	-0.637	-0.871	-0.612
16	1976	0.061	0.048	0.074	0.045	0.078
17	1977	-0.273	-0.307	-0.237	-0.318	-0.229
18	1978	-0.074	-0.080	-0.067	-0.082	-0.065
19	1979	-0.136	-0.151	-0.120	-0.156	-0.116
20	1980	1.051	0.895	1.205	0.858	1.250
21	1981	-0.404	-0.458	-0.350	-0.473	-0.337
22	1982	-0.477	-0.541	-0.412	-0.560	-0.396
23	1983	-0.289	-0.326	-0.251	-0.337	-0.242
24	1984	-0.822	-0.935	-0.707	-0.968	-0.680
25	1985	-0.412	-0.467	-0.357	-0.483	-0.343
26	1986	0.482	0.408	0.554	0.391	0.576
27	1987	-0.757	-0.861	-0.652	-0.892	-0.627
28	1988	-0.244	-0.275	-0.213	-0.284	-0.205
29	1989	0.304	0.256	0.351	0.244	0.365
30	1990	0.301	0.254	0.348	0.242	0.362
31	1991	0.042	0.032	0.052	0.030	0.055
32	1992	-0.234	-0.264	-0.204	-0.272	-0.197
33	1993	-0.719	-0.817	-0.619	-0.846	-0.595
34	1994	0.782	0.665	0.897	0.637	0.931
35	1995	-0.302	-0.341	-0.262	-0.352	-0.253
36	1996	0.130	0.107	0.153	0.102	0.159
37	1997	1.085	0.924	1.244	0.886	1.291
38	1998	-0.568	-0.645	-0.490	-0.667	-0.471
39	1999	-0.380	-0.430	-0.329	-0.445	-0.317
40	2000	0.309	0.261	0.357	0.249	0.372
41	2001	-0.318	-0.360	-0.276	-0.372	-0.266
42	2002	1.181	1.006	1.353	0.965	1.404
43	2003	1.358	1.157	1.555	1.110	1.613
44	2004	0.870	0.740	0.998	0.709	1.036
45	2005	0.163	0.135	0.190	0.129	0.198
46	2006	1.309	1.116	1.500	1.070	1.556
47	2007	1.036	0.883	1.188	0.846	1.233
48	2008	0.424	0.358	0.488	0.343	0.507
49	2009	1.322	1.127	1.515	1.081	1.571
50	2010	0.221	0.185	0.256	0.176	0.267

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2011	1.011	0.861	1.159	0.825	1.203
2012	0.101	0.082	0.119	0.078	0.124
2013	1.179	1.004	1.351	0.963	1.401
2014	1.320	1.125	1.512	1.079	1.569

For Peer Review