Dear Editor,

Thank you first for accepting my paper "Nonmodular infinite products and a conjecture of Seo and Yee" (Ref. AiM 210507-Chern).

When I was double-checking the source file of this paper, I found that there are some missing marginal contributions to the residues R_1 & R_2 calculated in Section 4, as I mistakenly evaluated

$$\sum_{1\le\mu\le k} \cos\frac{2\pi\mu\rho}{k} \qquad (1\le\rho\le k \ \&\ \rho\equiv b \bmod M^*)$$

as 0 when $\rho = k$ but it should be k in this marginal case. Fortunately, such contributions are very negligible; they are roughly $\log X$ times a small constant in comparison with the original error term $X^{1/2}\log X$ for sufficiently large X. So the results in the previous version are NOT affected.

Below are some changes made concerning these marginal contributions.

- Lemma 4.3, a summation formula involving the generalized Stieltjes constant, is added.
- The evaluations of the residues in Section 4 are listed as separate theorems (Theorems 4.4–4.7). I hope this may improve the readability.
- The extra marginal contributions to R_1 are presented in eqs. (4.12) and (4.13).
- The extra marginal contributions to R_2 are presented in eqs. (4.25) and (4.26).
- Remark 2.1 is added for the purpose of carrying out the above evaluations.
- Accordingly, there are some minor changes in the estimations of the error terms in (5.8), (5.11), (5.14) and (5.17). The lower bound $X \ge 3.4\times 10^7$ remains valid as the additional contributions are very small (≈ 100 when $X = 3.4\times 10^7$, for instance) and this bound is previously chosen with certain flexibility allowed (the optimal lower bound is around 3.3×10^7 so it was chosen slightly larger); I have double-checked related computations.

Could you please kindly pass the revised manuscript along with this letter to the referees, if you find it necessary?

I am truly sorry for the inconvenience.

Best wishes,
Shane