Mathematics > Number Theory

## The normality of digits in almost constant additive functions

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We consider numbers formed by concatenating some of the base $b$ digits from additive functions $f(n)$ that closely resemble the prime counting function \Omega(n). If we concatenate the last $\backslash$ lceil $y \backslash f r a c\{\backslash \log \backslash \log \backslash \log n\}\{\backslash \log b\} \backslash r c e i l$ digits of each $f(n)$ in succession, then the number so created will be normal if and only if $0<y \backslash / \mathrm{le} 1 / 2$. This provides insight into the randomness of digit patterns of additive function after the Erdos-Kac theorem becomes ineffective.

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