COMPACTIFICATIONS OF $\omega^* \setminus \{x\}$

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Abstract. Under the Continuum Hypothesis, we investigate finite compactifications of $\omega^* \setminus \{x\}$ ($\omega^*$ denotes the Stone-Čech remainder of the integers) and show that they are all homeomorphic to $\omega^*$. Interestingly, $\omega^*$ shares this behaviour with several other well-known spaces like the Cantor set or the Double Arrow space, and also with $S_\kappa$, the $\kappa$-Parovičenko space of weight $\kappa$. We identify the common reason that makes these examples work and list some naturally arising questions.