1135-54-2108 **N. Carlson*** (ncarlson@callutheran.edu), **J. Porter** and **G.J. Ridderbos**. *On Homogeneity and the H-closed Property.*

We discuss several results of Porter, Ridderbos, and the author concerning the H-closed property and topological homogeneity. A space is X is H-*closed* if every open cover has a finite subfamily with dense union, and X is *homogeneous* if for all $x, y \in X$ there exists a homeomorphism $h : X \to X$ such that $h(x) = y$. First, we show that every Hausdorff space can be embedded in a homogeneous space that is the countable union of H-closed spaces. Second, it was shown by Motorov that every compact homogeneous space X is "1.5-homogeneous"; that is, for every closed set $A \subseteq X$, $x \in A$ and $y \notin A$, there exists a homeomorphism $h : X \to X$ such that $h(y) \in A$ and $h(x) \notin A$. We extend this result by showing that the above holds if X is an H-closed Urysohn homogeneous space and $A \subseteq X$ is an H-set. Third, we show that the cardinality bound $2^{t(X)}$, shown to hold for a compact homogeneous space X by De La Vega, does not hold in general for H-closed homogeneous spaces. Last, we show the Katětov H-closed extension κX is never homogeneous if X is non-H-closed, and the remainder $\sigma X \backslash X$ in the H-closed Fomin extension σX is never power homogeneous if X is locally H-closed. (Received September 25, 2017)