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Tengren Zhang* (tengren@umich.edu). *Degeneration of convex projective structures on surfaces*. Preliminary report.

Let S be a closed surface and let $C(S)$ be the space of convex projective structures on S . Choi-Goldman showed that $C(S)$ is the Hitchin component of representations of the fundamental group of S to $SL(3, \mathbb{R})$. This space was also studied and generalized by Benoist to convex projective structures on closed orbifolds. I will present new results about how some of the geometric properties of the convex projective structure degenerate as one deforms the structure along the internal parameters of the Goldman parameterization of $C(S)$. The geometric properties considered here include the lengths of closed curves, the Hilbert volume, the maximal injectivity radius, and the topological entropy of the (Hilbert) geodesic flow. (Received August 28, 2013)