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Jun Hu and **Susovan Pal*** (susovan97@gmail.com), NJ 08904. *On Boundary regularity and Asymptotic Conformality of Douady-Earle extensions of diffeomorphisms of S^n .*

Let f be a C^1 diffeomorphism of the unit sphere S^n . We show that $\Phi(f)$ is C^1 -smooth self map of B^{n+1} which is C^1 upto the boundary of B^{n+1} and in general not asymptotically conformal near the boundary except for $n = 1$. In particular, we show that when f is orientation-preserving and $n = 1$, $\Phi(f)_z \rightarrow 1$, $\Phi(f)_{\bar{z}} \rightarrow 0$, and $\Phi(f)$ is always asymptotically conformal near the boundary. (Received August 26, 2012)