1070-53-29   **Taechang Byun*** (`tcbyun@math.ou.edu`), Department of Mathematics, University of Oklahoma, Norman, OK 73019, **Kyeonghee Jo** (`khjo@mmu.ac.kr`), Division of Liberal Arts and Sciences, Haeyangdaehang-Ro 91, Mokpo, Jeolanamdo 530-729, South Korea, and **Kyung-Bai Lee** (`kblee@math.ou.edu`), Department of Mathematics, University of Oklahoma, Norman, OK 73019. *$SO(n) \backslash SO_0(n,1)$ has positive curvatures.*

The Lie group $SO_0(n,1)$ has the left-invariant metric coming from the Killing-Cartan form. The maximal compact subgroup $SO(n)$ of the isometry group acts from the left. The geometry of the quotient space of the homogeneous submersion $SO_0(n,1) \to SO(n) \backslash SO_0(n,1)$ is investigated. The space is expressed as a warped product. Its group of isometries, sectional curvatures, and geodesics are calculated. (Received December 15, 2010)