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**Steven Glenn Jackson\*** ([jackson@math.umb.edu](mailto:jackson@math.umb.edu)), The University of Massachusetts Boston, Department of Mathematics, 100 Morrissey Blvd, Boston, MA 02125-3393, and **Alfred G. Noel** ([anoel@math.umb.edu](mailto:anoel@math.umb.edu)), The University of Massachusetts Boston, Department of Mathematics, 100 Morrissey Blvd, Boston, MA 02125-3393. *Prehomogeneous Spaces Associated to Real Nilpotent Orbits and Their Relative Invariants.*

In our recent paper *Prehomogeneous spaces associated with complex nilpotent orbits* [Journal of Algebra Volume 289, Issue 2 (515-557) 2005] we gave a complete description of isotypic decompositions and relative invariants of prehomogeneous spaces of Dynkin-Kostant type arising from conjugacy classes of nilpotent elements in complex reductive Lie algebras. In this paper, we extend the theory to all non compact real forms via the Kostant-Sekiguchi correspondence. (Received December 07, 2005)