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Robert Rahm* (robertrahm@gmail.com), 6270 Cates Ave, Apt 1E, St. Louis, MO 63130, Edgar Tchoundja, University of Yaounde I, P.O. Box 812, Yaounde, Cameroon, and Brett Wick, One Brookings Drive, School of Math, St. Louis, MO 63130. Sharp Weighted Bounds for the Bergman Projection and Related Operators on $A^2(\mathbb{B}^n)$.

Using modern techniques of dyadic harmonic analysis, we are able to prove sharp estimates for the Bergman projection and Berezin transform and more general operators in weighted Bergman spaces on the unit ball in \mathbb{C}^n . The estimates are in terms of the Bekolle-Bonami constant of the weight. This generalizes results of Pott-Reguera to several variables and to a more general class of operators. (Received January 16, 2016)