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Yu Wang* (yw2340@math.columbia.edu), 2990 Broadway, Room 509, MC 4406, New York, NY 10027. *On a $C^{2,\alpha}$ -Estimate for the Complex Monge-Ampère Equation.*

We prove a $C^{2,\alpha}$ -estimate for the solution u to the equation

$$\det(u_{\bar{k}j}) = f, \quad f^{1/n} \in C^\alpha, \quad f \geq \lambda$$

under the assumption that Δu is bounded from above. Our result settles one of the regularity problems arisen from a paper of Chen and Tian (2008). The proof is based on a reduction of the complex Monge-Ampère equation to a Bellman-type equation, to which the regularity theory of fully-nonlinear uniformly elliptic equations can be applied. (Received August 02, 2012)