

# Compactness of the complex Green operator

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We indicate a new proof for, and a slight improvement of, a recent result of A. Raich on compactness of the complex Green operator on a CR-submanifold of  $\mathbb{C}^n$  of hypersurface type. Let  $M$  be a smooth compact pseudoconvex CR-submanifold of  $\mathbb{C}^n$  of hypersurface type, let  $\dim_{\mathbb{C}} T_z^{1,0}(M) = m - 1$ ,  $z \in M$ , and let  $1 \leq q \leq m - 2$ . If  $M$  satisfies property( $P_q$ ) and property( $P_{m-1-q}$ ), then the complex Green operator on  $(0, q)$ -forms is compact. Our proof is based on the fact that locally,  $M$  is CR-equivalent to an actual hypersurface, and the corresponding compactness result of Raich and the author for boundaries of domains.