ERRATUM TO "PSEUDOLOCAL ESTIMATES FOR $\bar\partial$ ON GENERAL PSEUDOCONVEX DOMAINS"

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The author thanks Nils Øvrelid for pointing out to him a gap in the above paper on page 1600, in the Remark at the end of Section 3: namely, while it is indeed true that the constant C in the estimate

$$\|\zeta M\alpha\|^2_{k\epsilon} \le C(\|\zeta_1\alpha\|^2_{(k-2)\epsilon} + \|\alpha\|^2) \qquad \forall\alpha\in L^2$$

(or, equivalently, in the estimate (3.1) there) depends only on k, ζ, ζ_1 and the coordinate chart U — and thus, in particular, can be chosen the same for all domains Ω_δ appearing above — this is no longer true if the operator M is replaced by the Neumann operator N. All one gets by the argument of Folland and Kohn ([FK], (3.1.2) and (3.1.3)) is that

$$(*) \qquad \|\zeta N\alpha\|^2_{k\epsilon} \le C(\|\zeta_1\alpha\|^2_{(k-2)\epsilon} + \|\alpha + N\alpha\|^2)$$

with C depending only on k, ζ, ζ_1 and U. Unfortunately, this is not sufficient for the application in Proposition 4.1, and thus all the proofs from Section 4 (and, hence, Theorems 0.2 and 0.3, and Corollary 0.5) hold only under the additional hypothesis that the domain Ω be bounded (though possibly still with nonsmooth boundary): in that case, since all the domains Ω_δ are contained in Ω, the norms of the corresponding Neumann operators N_δ are jointly bounded by $e\,\mathrm{diam}(\Omega)^2$ (by the well-known result of Hörmander), and thus one can replace $\|\alpha + N_\delta\alpha\|$ in $(*)$ by $\|\alpha\|$.

It would certainly be interesting to know whether the results just mentioned remain in force also in the unbounded situation.

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