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On an integral operator on the unit ball in \mathbb{C}^n . (English) Zbl 1074.47013
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Let $H(B)$ denote the space of all holomorphic functions on the unit ball $B \subset \mathbb{C}^n$. In this paper, the integral operator

$$T_g(f)(z) = \int_0^1 f(tz)Rg(tz)(dt/t)$$

is investigated, where $f \in H(B)$, $z \in B$, $g \in H(B)$ and $Rg(z) = \sum_{j=1}^n z_j(\partial g)\partial z_j(z)$ is the radial derivative of g . This operator can be considered as an extension of the Cesàro operator on the unit disk. The present article characterizes those g for which T_g is bounded on α -Bloch spaces.

Reviewer: [Zehua Zhou \(Tianjin\)](#)

MSC:

[47B38](#) Linear operators on function spaces (general)
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[Cesàro operator](#); [Bloch space](#); [integral operator](#)

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