Correction to "Method od orthogonal projections and approximation of the spectrum of a bounded operator"

by

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Salinas' characterization of the Browder essential spectrum cited in Lemma 5 is false. This is shown in my paper "A characterization of the Weyl spectrum", Proc Amer. Math. Soc. 92 (1984), 215–218. However, this does not affect the results of the paper. The Salinas formula was used only once in order to show that

$$(*) \qquad \Sigma(A) \setminus W_e(A) \subset \Sigma_d(A).$$

It follows from the definition of the Weyl essential spectrum $(\Sigma_W(A)$ $= \bigcap_{K \in LC(H)} \Sigma(A+K))$ and the definition of the essential numerical range that $\Sigma_W(A) \subset W_e(A)$. Since the Browder essential spectrum is the union of the Weyl essential spectrum and some bounded components of $C \setminus \Sigma_W(A)$, the convex hulls of these two spectra are the same. Therefore $(*)$ remains true.

(1980)