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Sodium luminescence from laser-induced bubbles in salt water<sup>1</sup> SONNY VO, TIM HSIEH, HAN-CHING CHU, GARY WILLIAMS, UCLA — Luminescence from collapsing laser-induced bubbles in salt water (up to 1M NaCl) has been studied. We find a new emission pulse from the 589 nm sodium line that arrives about 50 ns prior to the main blackbody luminescence pulse. This may be related to the dynamics of the compressional heating process in the bubble. We have also noticed in the salt water that the time duration of the blackbody pulse is reduced by up to 30% from the duration in pure water, and this has been observed in several other alkali salt solutions.

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