



# T1 mapping from spin echo and stimulated echoes

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Titre T1 mapping from spin echo and stimulated echoes

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We present an imaging method to obtain a map of the spin-lattice relaxation time. Images were acquired with the same spatial resolution and in the same time as for a regular spin-echo acquisition. The sequence was based on the simultaneous acquisition of a spin echo and several stimulated echoes with the same intensity except for T1 weighting which increases with the interval between the excitation pulse and the readout pulse. T1 values obtained on phantoms were compared to those from the inversion-recovery method and show the accuracy (2%) and the precision (5%) of the method. T1 images of the brain of a healthy volunteer are presented and demonstrate the ability of the method to obtain T1 mapping in vivo in 12 min and without susceptibility artifacts. In vivo and in vitro results were compared to those obtained by a TOMROP sequence in the same acquisition time.

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