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Slow and stored light in paraffin-coated Rb vapor cells MASON KLEIN, MICHAEL HOHENSEE, YANHONG XIAO, IRINA NOVIKOVA, DAVID PHILLIPS, RONALD WALSWORTH, Harvard-Smithsonian — The slow ground-state decoherence rate of paraffin-coated Rb vapor cells leads to a dual-structured electromagnetically induced transparency (EIT) spectrum with a narrow (<100 Hz) transparency peak on top of a broad pedestal. We present an experimental study of the effect of such dual-structured EIT on slow and stored light. Based on dynamical simulations we consider optimal conditions for storage and retrieval of optical information.

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