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cases			authors	Johan Thim		
			title	Two Weight Estimates for the Single Layer Potential on Lipschitz Surfaces with Small Lipschitz Constant		
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	journal	Potential Analysis				1114
	volume	43	id	id-1179185471583160613		1114
	doi	10.1007/s11118-015-9464-7	abstract	This article considers two weight estimates for the single layer potential corresponding to the Laplace operator in R^N+1 on Lipschitz surfaces with small Lipschitz constant. We present conditions on the weights to obtain solvability and uniqueness results in weighted Lebesgue spaces and weighted homogeneous Sobolev spaces, where the weights are assumed to be radial and doubling. In the case when the weights are additionally assumed to be differentiable almost everywhere, simplified conditions in terms of the logarithmic derivative are presented, and as an application, we prove that the operator corresponding to the single layer potential in question is an isomorphism between certain weighted spaces of the type mentioned above. Furthermore, we consider several explicit weight functions. In particular, we present results for power exponential weights which generalize known		
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	versions					
			results for the case when the single layer potential is reduced to a Riesz potential, which is the case when the Lipschitz surface is given by a hyperplane.			
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