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94 Figure 3 — figure supplement 2. Ability of NL models to reproduce observed change in 95 input-output curves.

(a-c) Static NL model responses. (a) The input nonlinearity of NL model is chosen to be a Hill 96 function with n = 1. (b) Filter of NL model, measured directly from the data. (c) NL model 97

responses vs. projected stimulus. While these curves appear to change slope with increasing

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99 mean stimulus, mean responses also tend to increase (purple ... yellow). (d-f) Varving NL model

responses, where the K_D of the input nonlinearity is allowed to vary with the mean stimulus. (d) 100

Input nonlinearities for stimuli with different mean (colors). The K_D of each curve is set to the 101 mean stimulus of that trial. (e) Filter of NL model, same as in (b). (f) Model responses vs.

102 103 projected stimulus. Note that, like in the data (cf. Fig. 2e), the mean response remains relatively

104 invariant with mean stimulus, and that curves get shallower with increasing mean stimulus.

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