Demo of using EVILFIT for the analysis of SPR biosensor data

EVILFIT is a program for the analysis of 2-dimensional distributions of affinity constants and kinetic rate constants, P(Kd,koff) of binding sites at a surface for a single class of analytes, based on the evolution of surface binding, s(c,t), measured at multiple concentrations. The name based on the aphorism "God made the solid state, he left the surface for the devil" attributed to Enrico Fermi. The video is a simple screen capture of an analysis of an example data set, which can be downloaded from
https://sedfitsedphat.nibib.nih.gov/tools/EVILFIT%20demo/EVILFITdemodata.zip

The EVILFIT software is compiled 32-bit MATLAB code that can be downloaded from
https://sedfitsedphat.nibib.nih.gov/software/Shared%20Documents/evilfit_standalone_V3.zip
It requires installation of Matlab Compiler Runtime library from Mathworks (MRC v 7.17, Release R2012a)
http://www.mathworks.com/products/compiler/mcr/index.html

For detailed references, see
Svitel et al. Biophys J 2003;84:4062-4077 (http://www.ncbi.nlm.nih.gov/pubmed/12770910)
Svitel et al. Biophys J 2007;92:742-58 (http://www.ncbi.nlm.nih.gov/pubmed/17158569)
Gorshkova et al, Langmuir 2008;24:11577-86 (http://www.ncbi.nlm.nih.gov/pubmed/18816013)
Schuck & Zhao, Methods Mol Biol 2010;627:15-54 (http://www.ncbi.nlm.nih.gov/pubmed/20217612)