Name	POL_ZERO
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This interactive program interprets the poles-and-zeros section of a SEED data header. After answering the questions, you get a double-logarithmic plot of the amplitude response. Only one pole from each pair must be entered, so you must first inspect the SEED header and identify single (real) and paired (complex) poles. The program asks for the absolute values of the real and imaginary parts; it will fix the signs automatically. Zeros of the transfer function are assumed to be at s=0, an only their number is entered. The plot may be scrolled up and down when the response curve is off the screen. You need the library GfaWin16.Ocx to run this program.

When interpreting real SEED headers, you should check that the normalized response at the normalization frequency is close to unity. This is sort of a checksum built into the SEED header. The normalization factor can be calculated from the poles and zeros and is therefore redundant in the header. Because all numbers in the header are rounded, the normalized response does not exactly come out as 1.

The program (source code, executable, and .Ocx library) is available by anonymous ftp from <u>ftp.geophys.uni-stuttgart.de/pub/ew/polzero</u>

There is also a simpler version per_dmp of the program which plots the amplitude response from given corner periods and damping constants.