MO434 Does the choice of NOEC or EC10 affect consequences of ecological risk assessments? Y. Iwasaki, Research Center for Life and Environmental Sciences; K. Kotani, Yokohama national university / Graduate School of Environment and Information Sciences; S. Kashiwada, Toyo University / Department of Life Sciences; S. Masunaga, Yokohama national university / Faculty of Environ Information Sci. No observed effect concentration (NOEC) and lowest observed effect concentration (LOEC) have been used in ecological risk assessments but strongly criticized for about 30 years by many ecotoxicologists. One of the proposed alternatives is use of ECx (the concentration that causes an effect of x%). However, few studies have investigated how the use of ECx actually affects consequences of ecological risk assessments. To address the issue, we collected chronic toxicity test data previously used for deriving species sensitivity distributions in published literature, and also obtained extensive datasets on standard chronic toxicity tests from the Ministry of the Environment of Japan (21-d reproduction test with *Daphnia magna*, growth inhibition test with *Selenastrum capricornutum*, early-life-stage toxicity test with *Oryzias latipes*). By taking EC10 as an example, we first evaluate relationships between NOECs and EC10s. Further, we investigate how the choice of NOEC or EC10 affects hazardous concentration for 5% of species (HC5) estimated using species sensitivity distribution approach.