$$L_{GAN}(G_{s2o}, D_{OPT}, SAR, OPT) = \mathbb{E}_{opt \sim p_{data(opt)}}[log D_{OPT}(opt)]$$
$$+ \mathbb{E}_{sar \sim p_{data(sar)}}[log(1 - D_{OPT}(G_{s2o}(sar)))]$$