Observing System Simulation Experiments has been conducted at NCEP and JCSDA for last few decades. Space Based Doppler Wind Lidar (DWL) has been a main focus as it is very expensive instruments. Currently OSSEs are conducted as collaboration among NOAA institutes. JCSDA is building OSSE system with collaboration with AOML, ESRL, SSEC and other NOAA institutes. As the project is funded by Hurricane Sandy relive bill, focus of the research is on observing system to improve hurricane forecast.

Nature runs for this OSSE have provided by NASA/GSFC/GMAO and ECMWF. This year NASA produced two year long Nature run G5NR: 7km horizontal resolution 72 level model with complete aerosol. ECMWF is also planning to provide T1279 91 level Nature run using operational model.

In JCSDA, all observation for control experiments which is based on current observing systems as well as observational data to be evaluated. The system are being developed so that further OSSE at JCSDA will be conducted efficiently.