

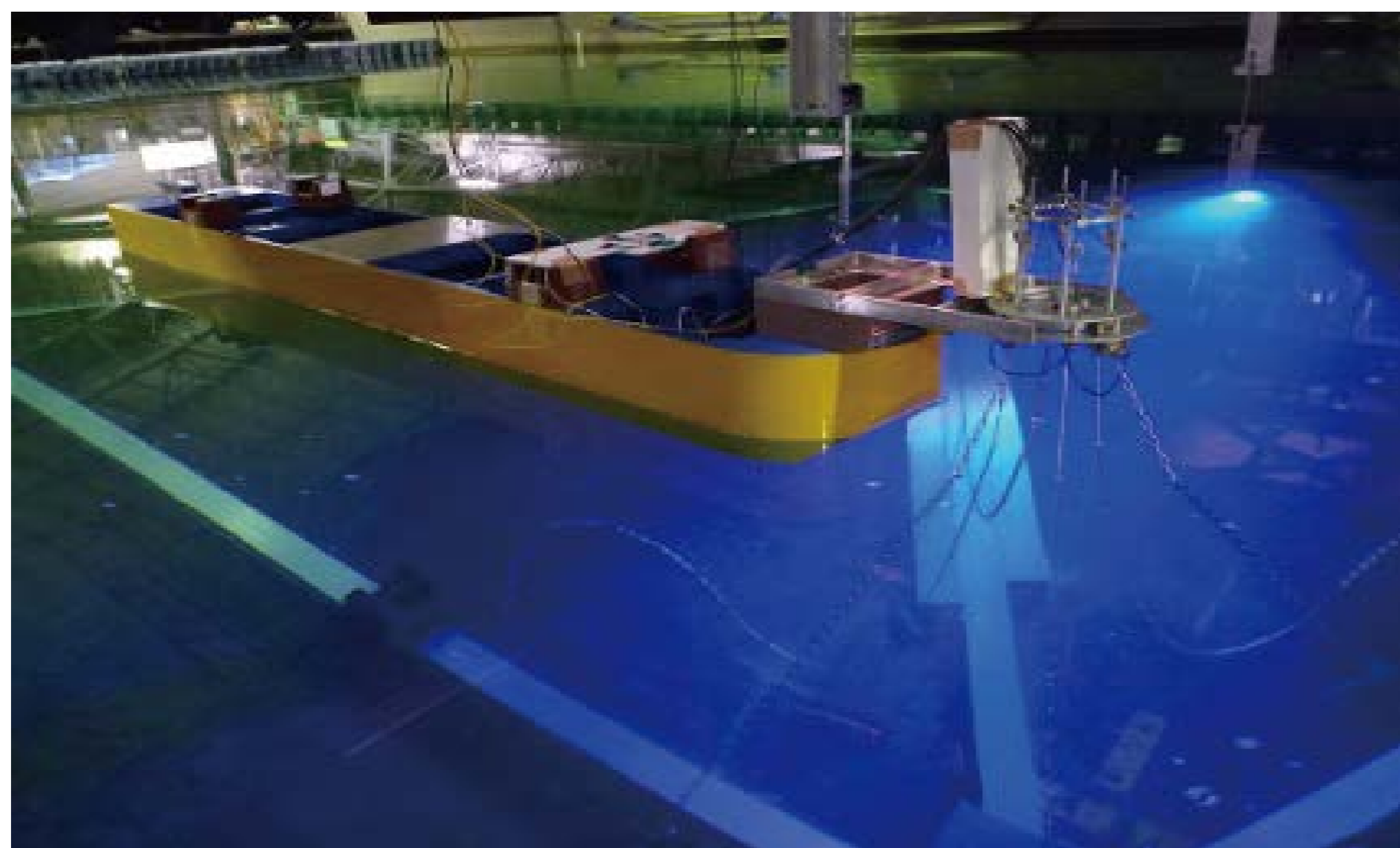
# Deepwater Oil and Gas Development Technologies

Development and Production Technology Division, Technology Department

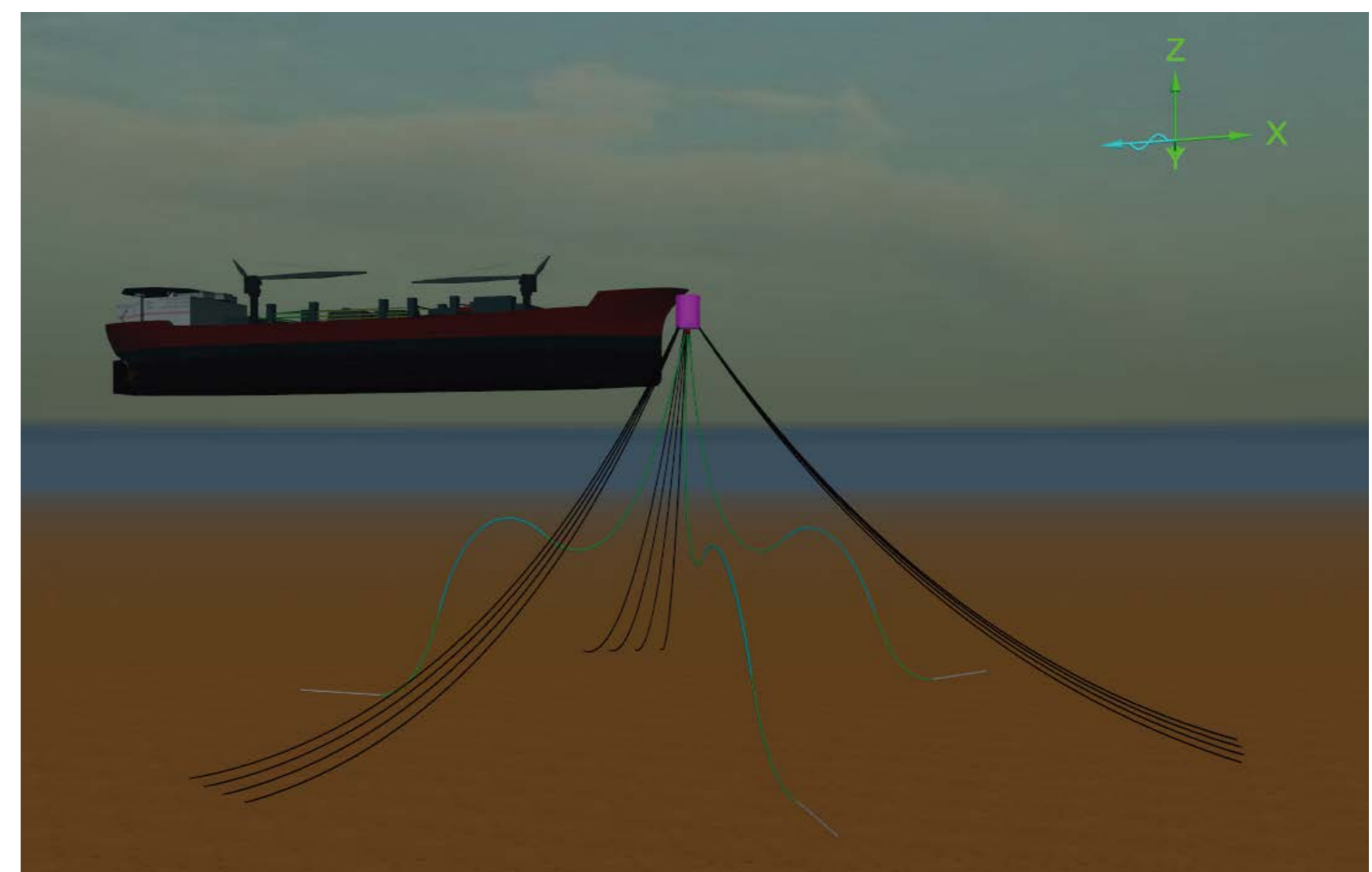
## Floating Drilling and Production Systems for Oil and Gas Development in Deepwater and Harsh Environment Condition Fields

Period	FY2008-
Collaborative Research Partner	National Maritime Research Institute
Key Technologies	Experiment and Simulation of Floating, Riser and Mooring Systems

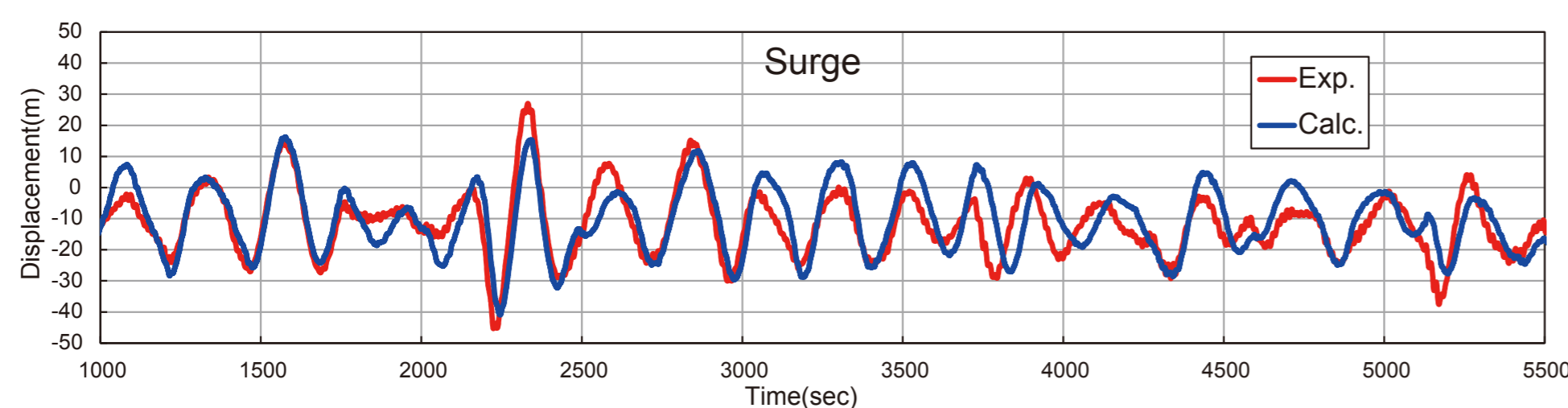
### Development of Floater-Mooring-Riser Motion Analysis Platform(FY2014)



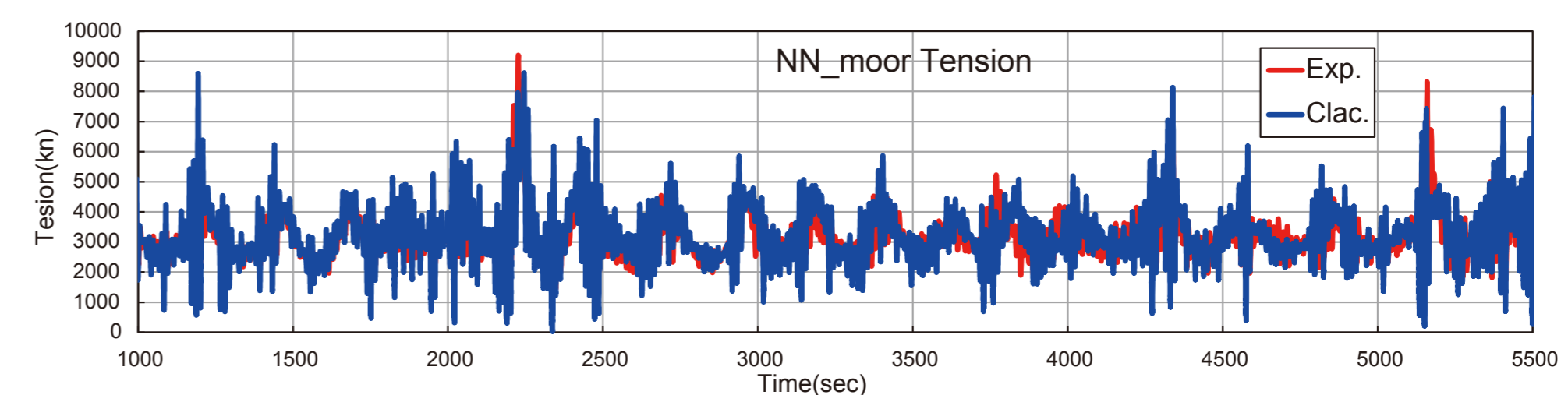
Experimental model of FPSO



Simulation model of FPSO

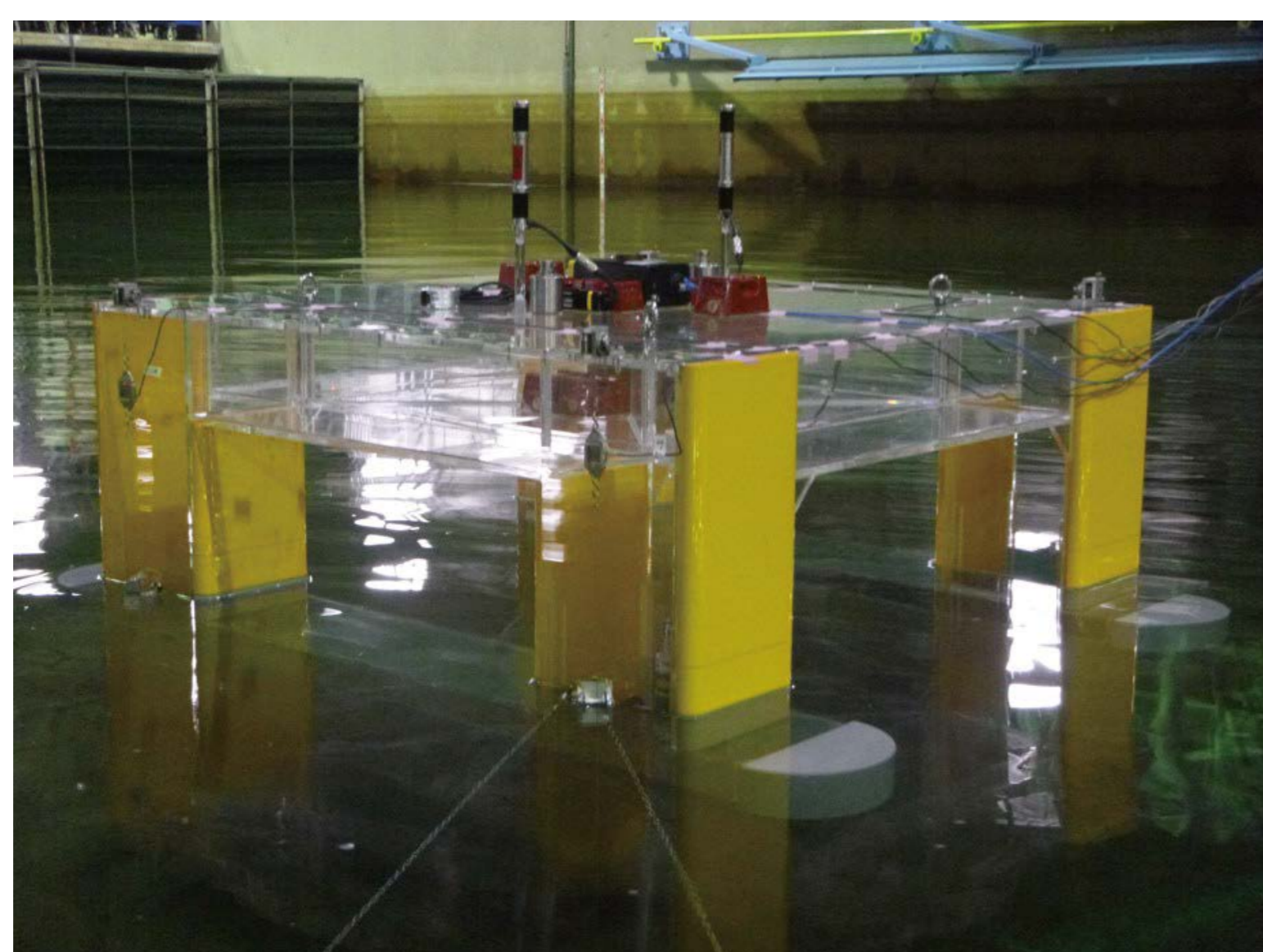


Time history of Surge motion

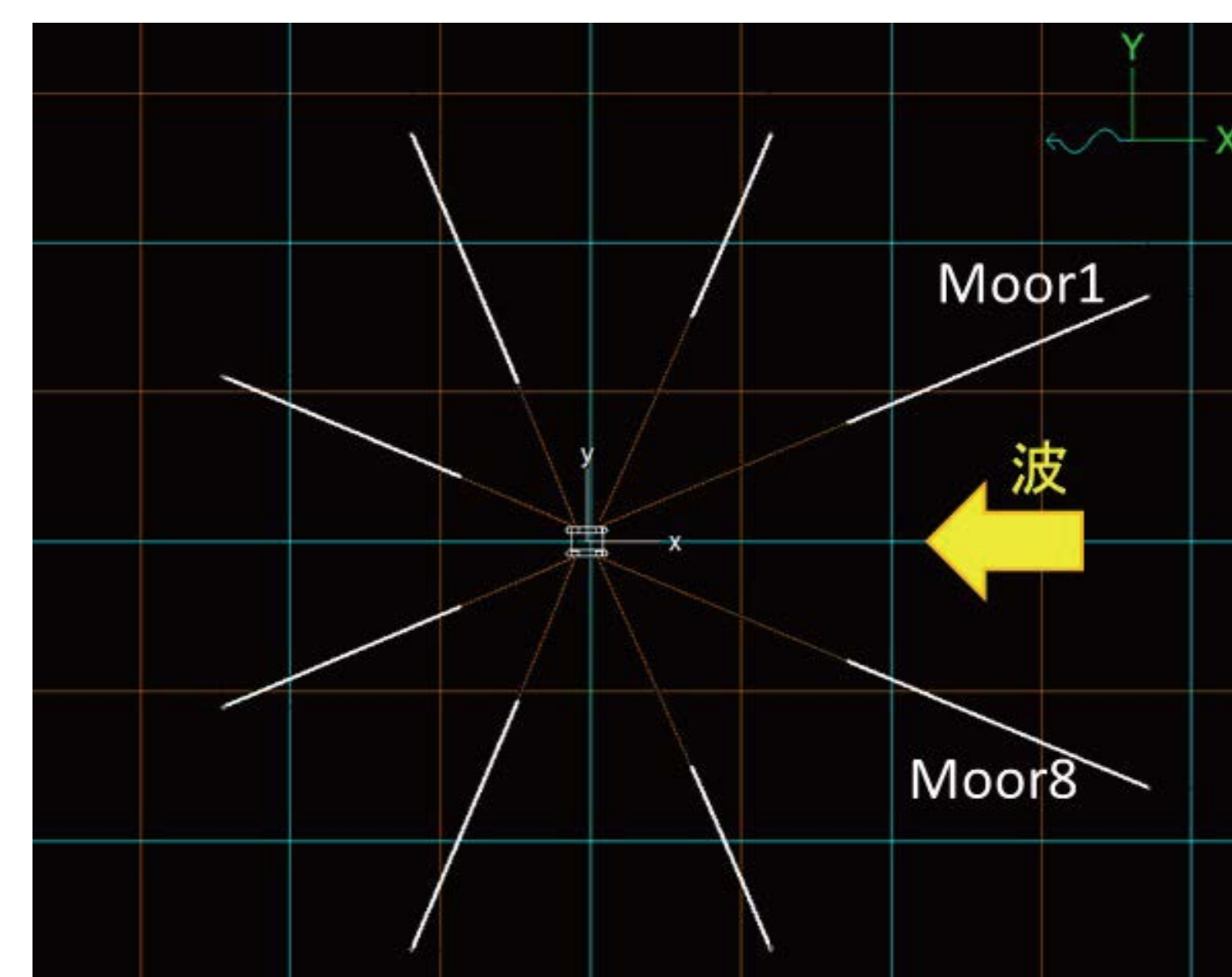


Time history of mooring line tension

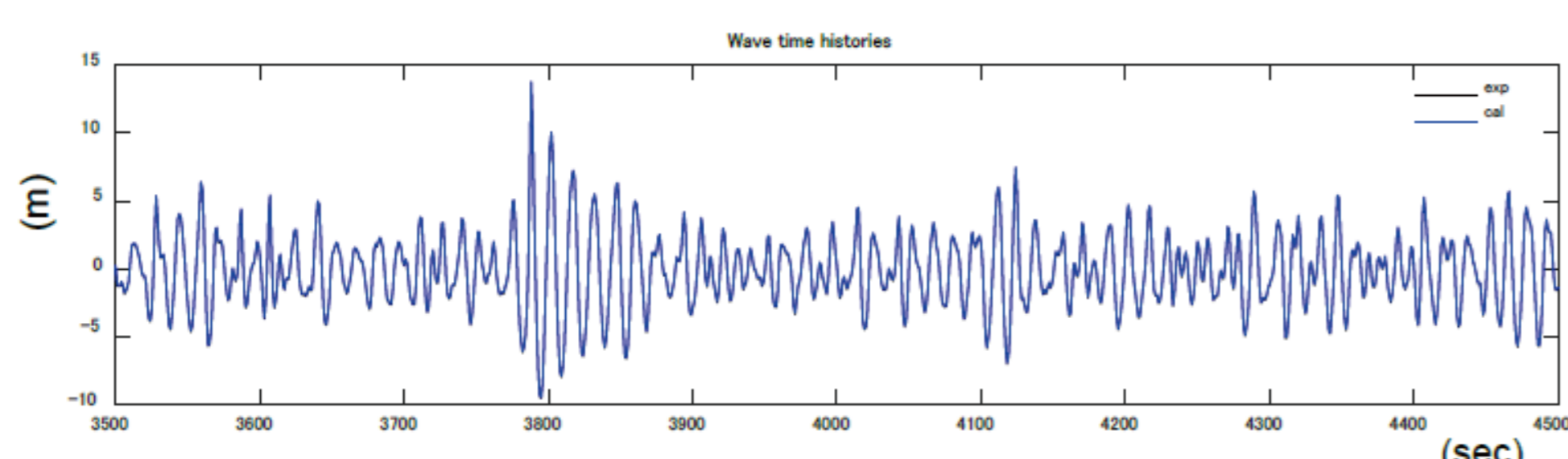
### Experiment and Simulation for Mooring Line Failure Accident Condition of Semi-submersible Rig (FY2015)



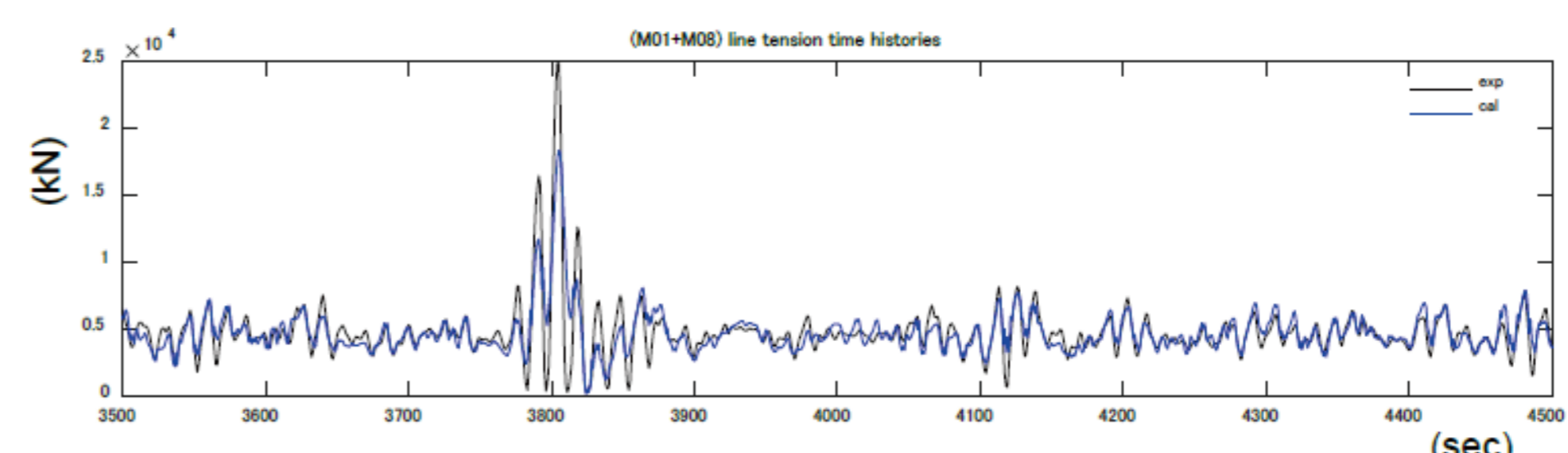
Experimental model of Semi-submersible Rig



Simulation model of Semi-submersible Rig



Time history of Extraordinary wave



Time history of Mooring Line Tension