

석탄화력발전소 NO_x 모델의 온라인 업데이트 :
LSSVM 및 output bias 업데이트 선정기준

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In this paper, a new model update scheme is applied to Least Squares Support Vector Machines to build its online version. For long term predictions, this online model is equipped with recursive LSSVM update along with output bias update. Two update schemes, scheme-I and scheme-II, are applied to NO_x emission process data from Taean Power Plant, South Korea. These schemes make use of NO_x emission's behavior to select the proper update method from LSSVM update and output bias update at the instance of time when new measurement arrives to update or calibrate the model. Prediction result obtained from proposed online LSSVM model is compared with online PLS model developed by authors (Ahmed et. al.; 2009) . Online LSSVM predicts NO_x outstandingly and also outperforms online PLS model.