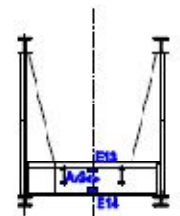
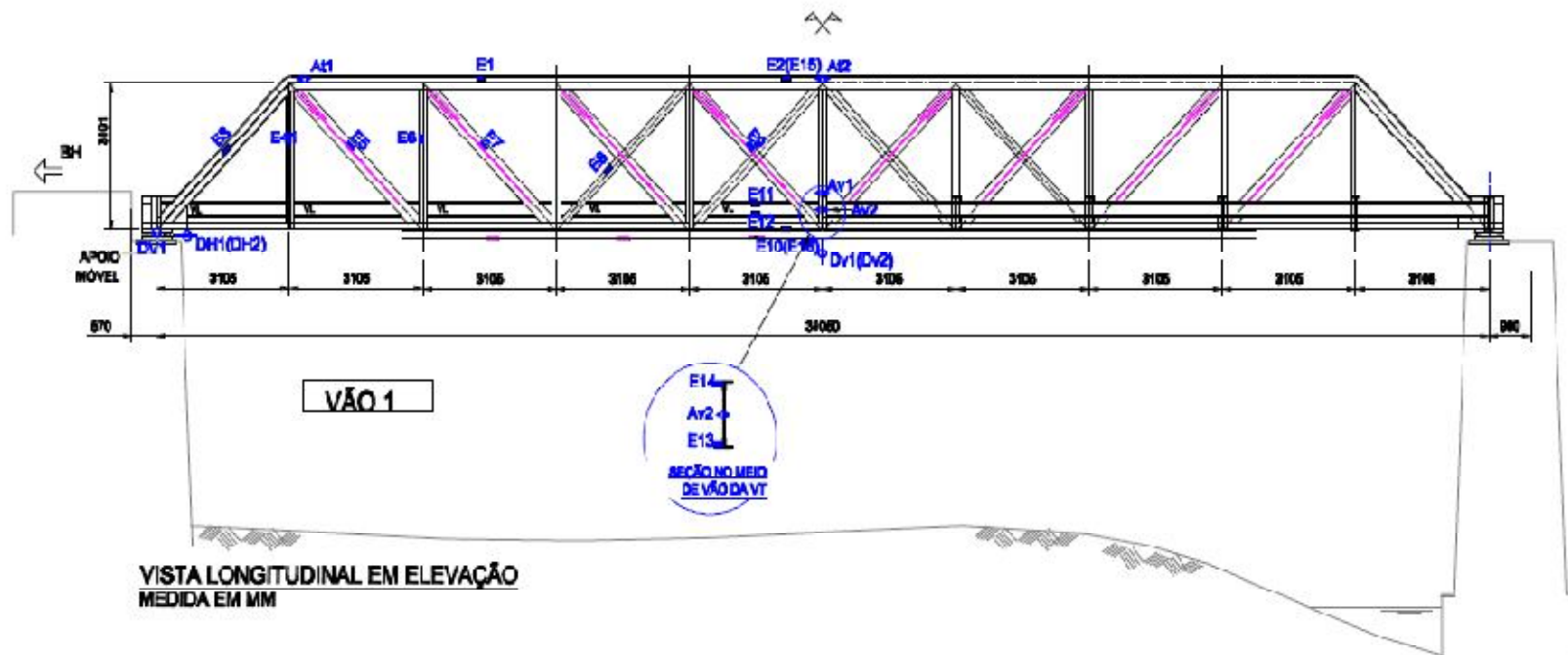
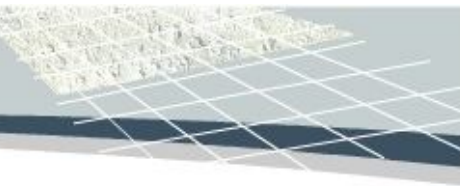




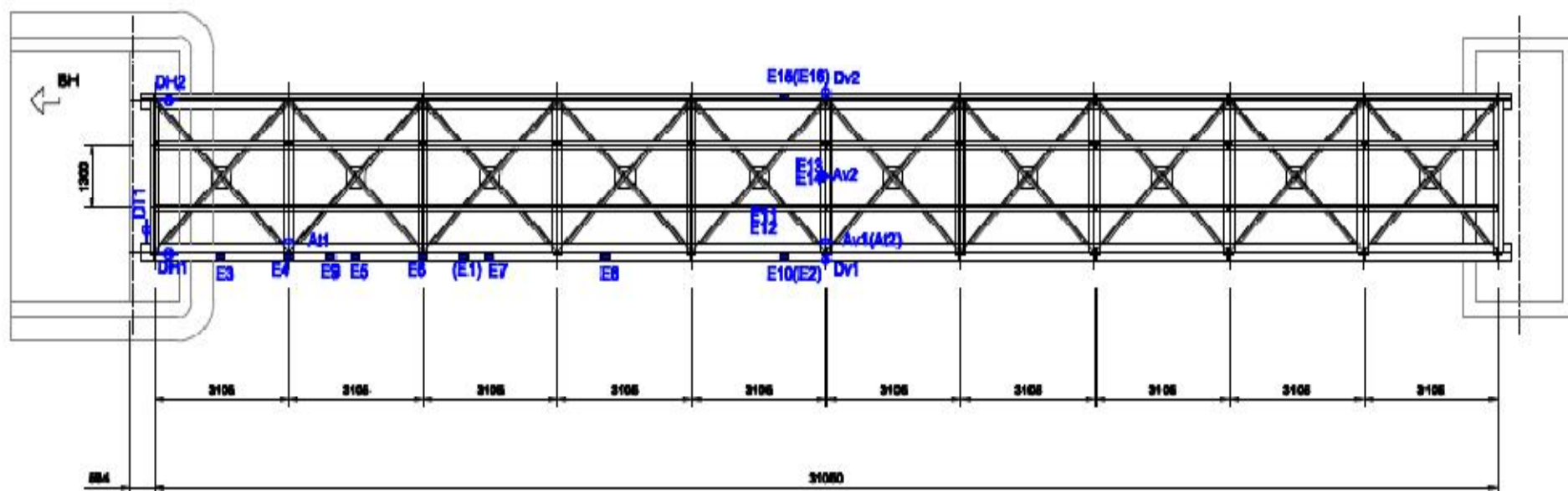
PONTE METÁLICA: EXEMPLO DE MONITORAMENTO E ANÁLISE DO COMPORTAMENTO ESTRUTURAL



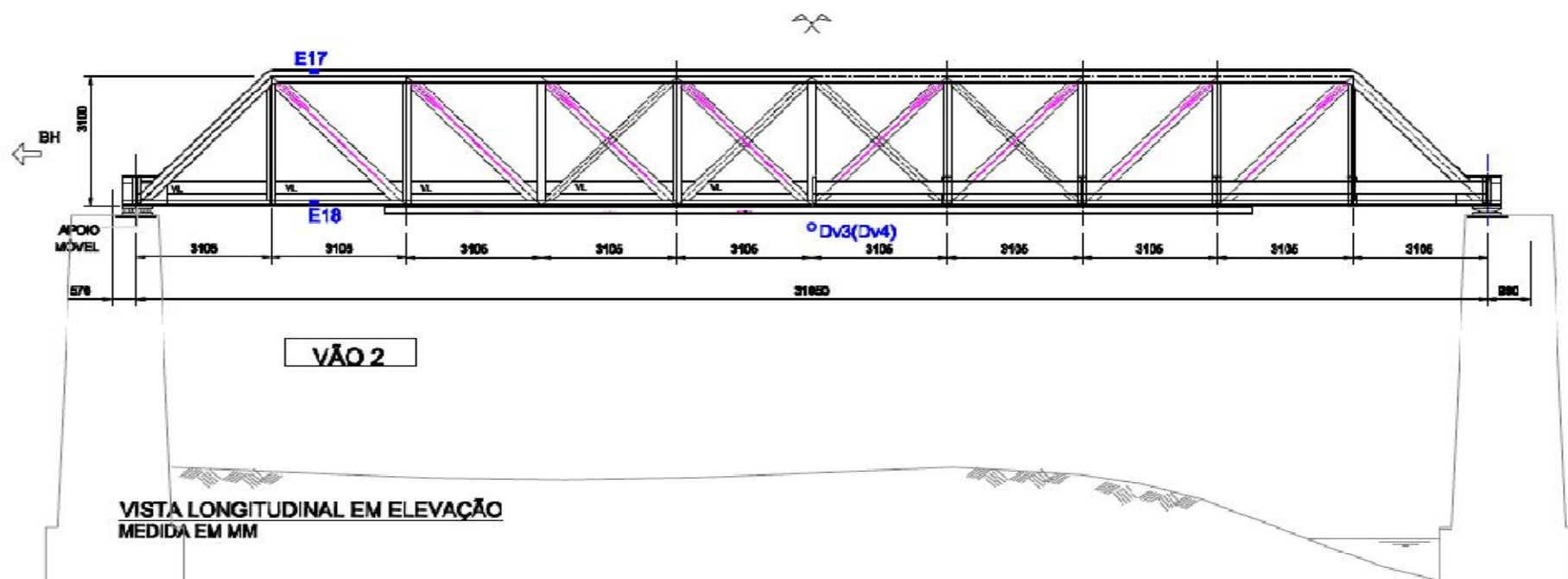
- Data da inauguração da obra: 1914

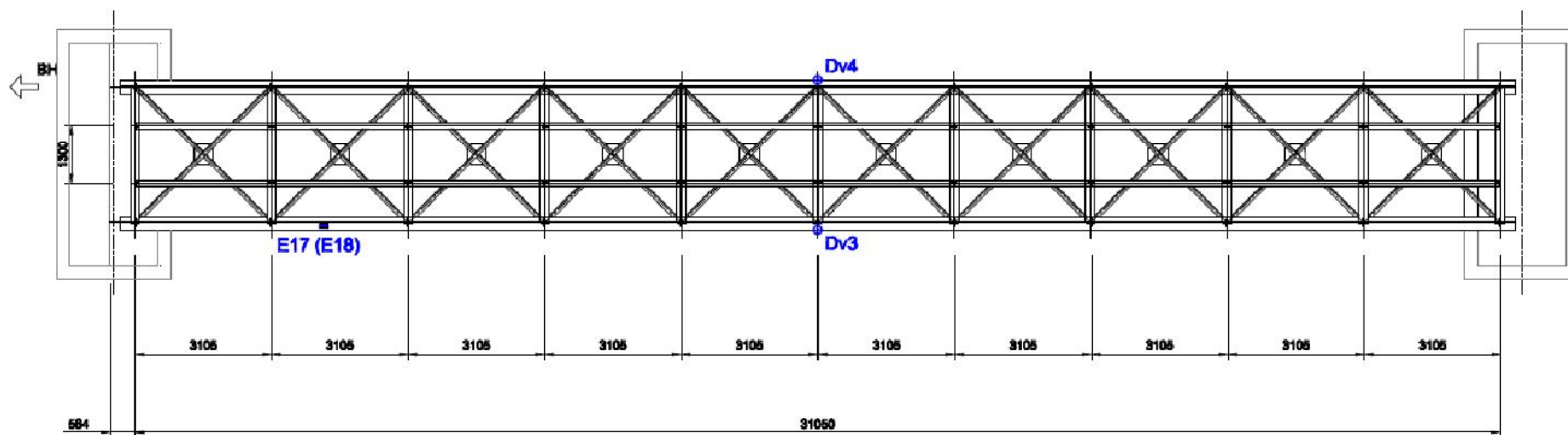


SEÇÃO TRANSV.
MEIO DE VÃO
MEDIDA EM MM

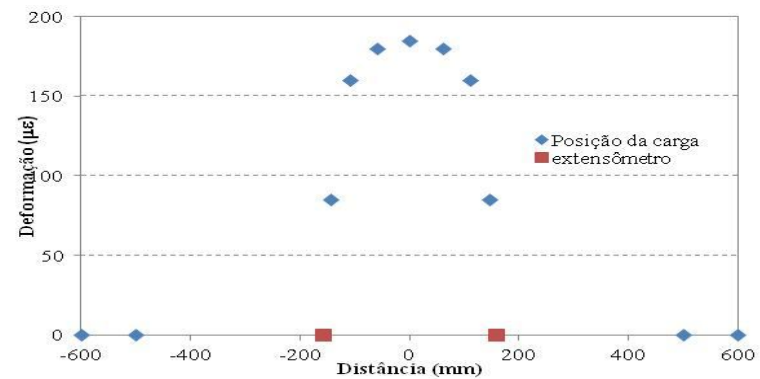
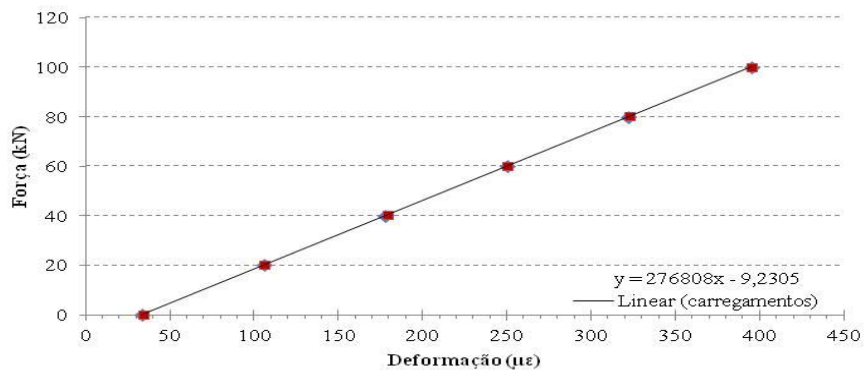


VISTA LONGITUDINAL EM PLANTA
MEDIDA EM MM

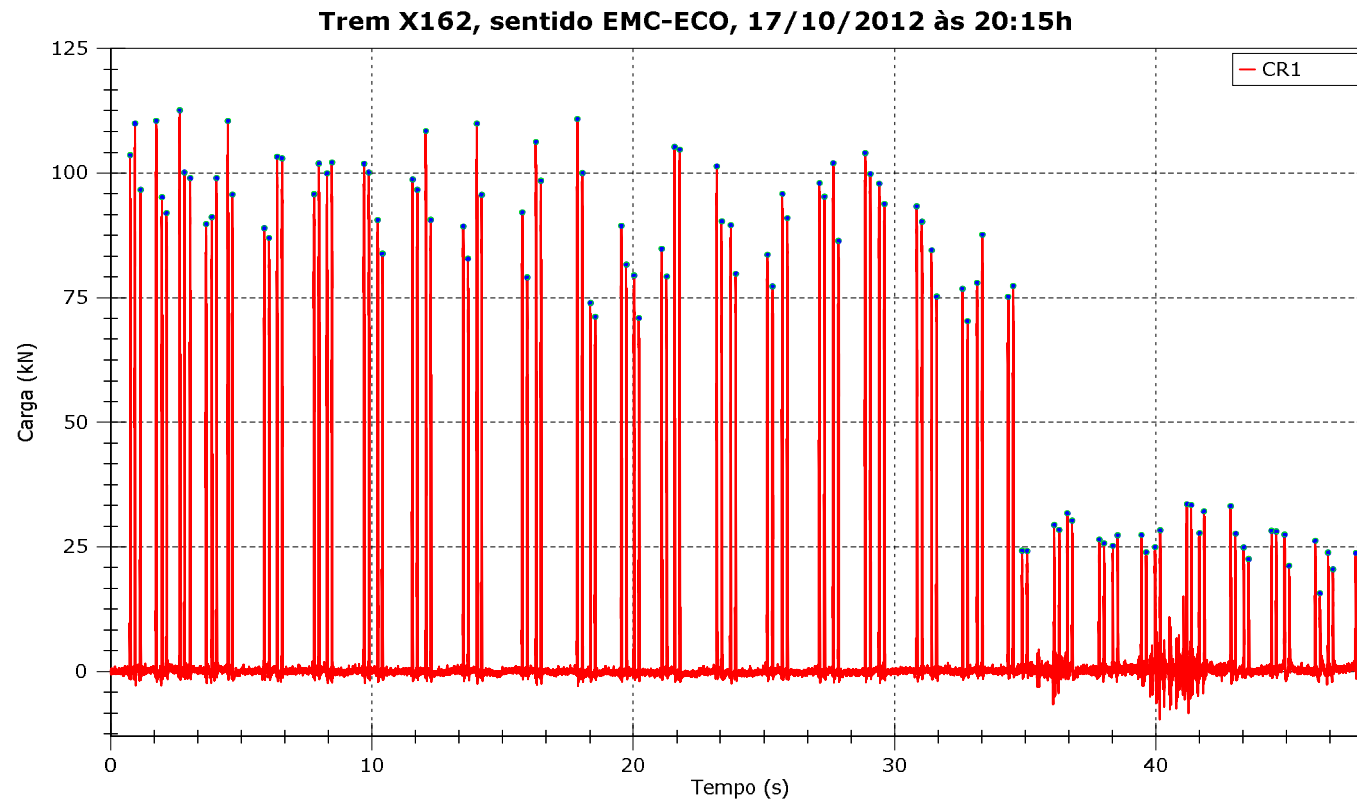




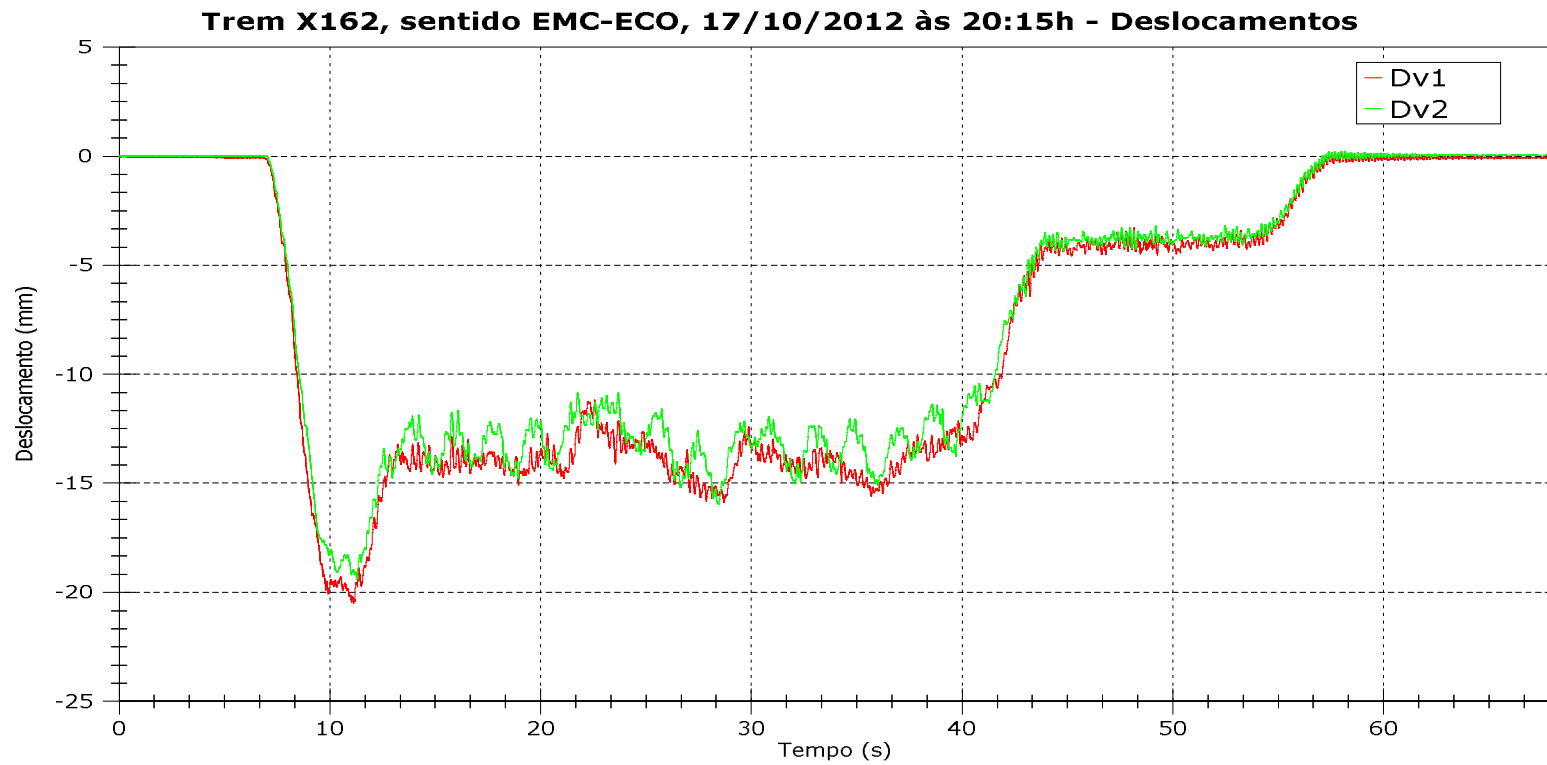
VISTA LONGITUDINAL EM PLANTA
MEDIDA EM MM



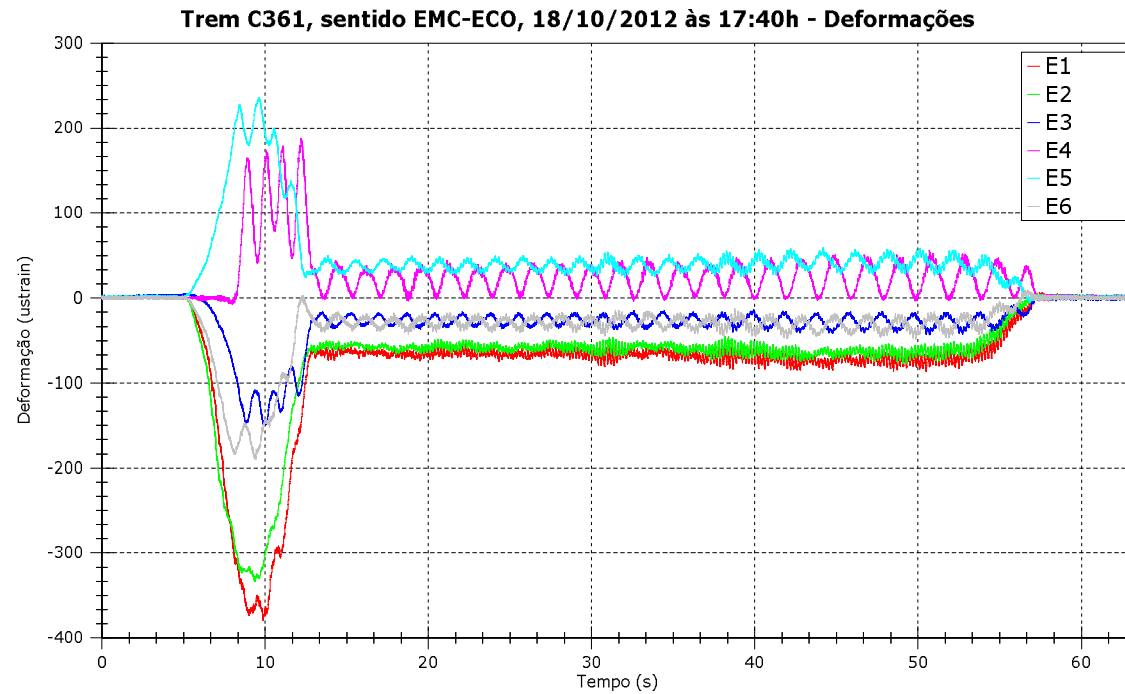
- Sistema de medição de carga de roda



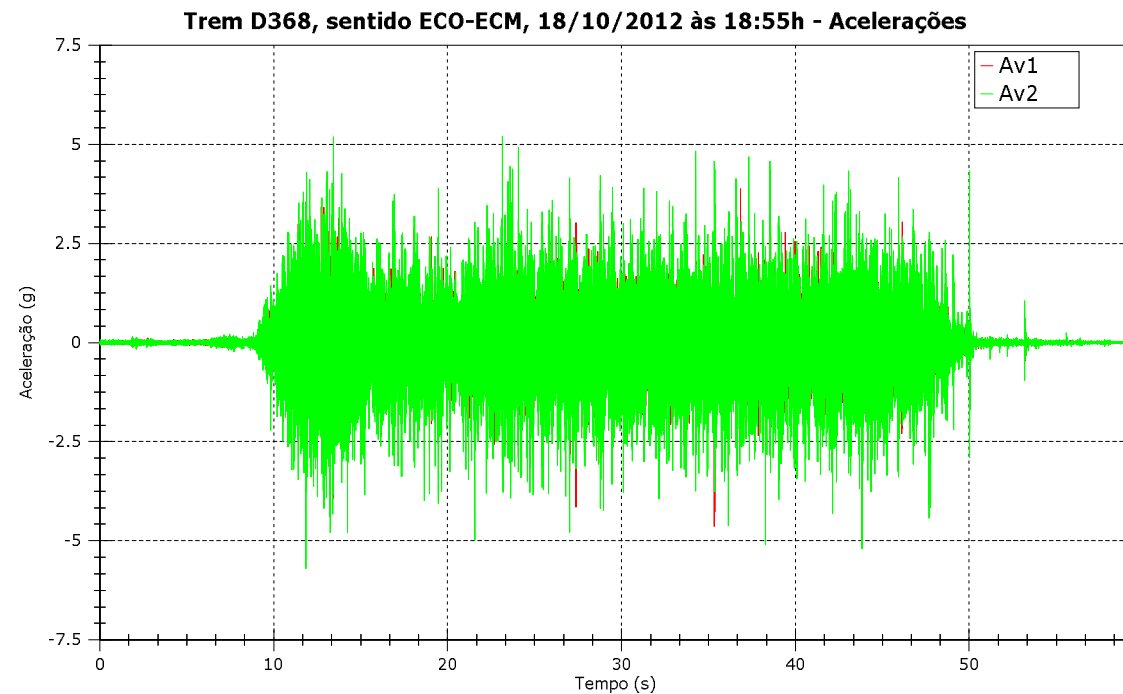
- Sinais e medição de cargas de roda em um dos trilhos



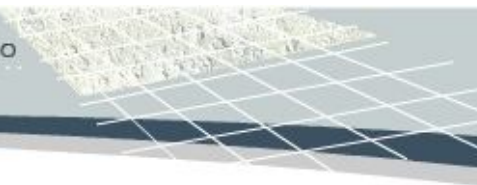
- Sinais e medição de deslocamentos no meio do vão



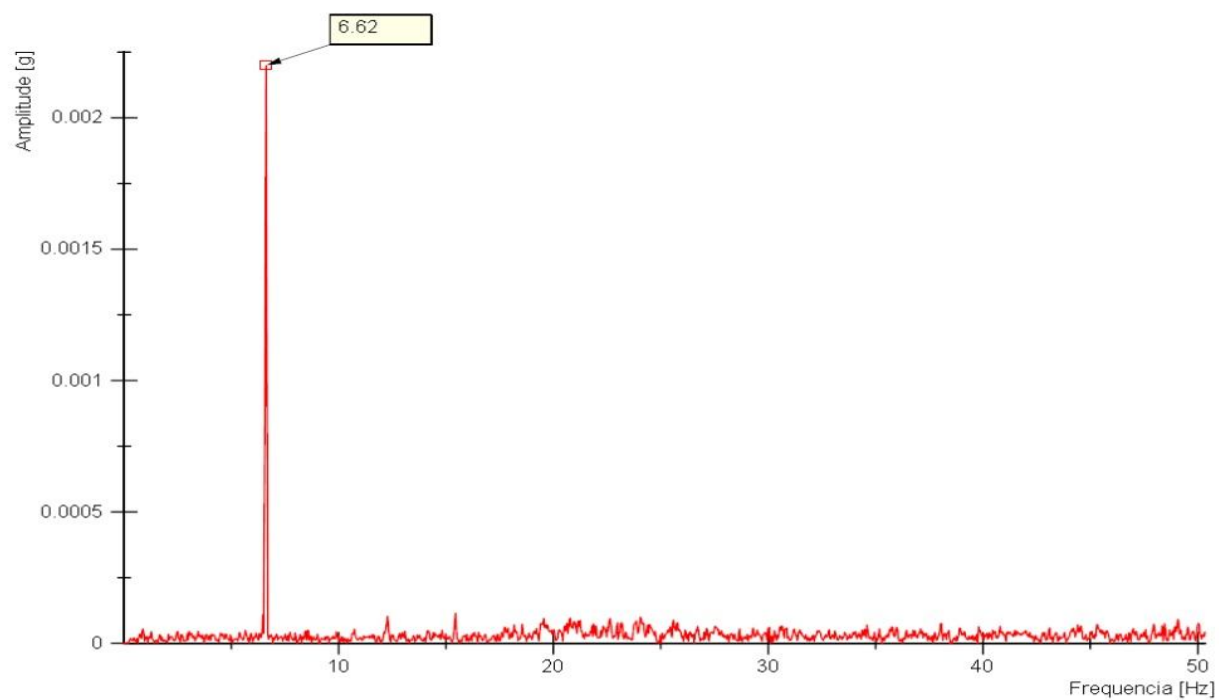
- Sinais e medição de deformações



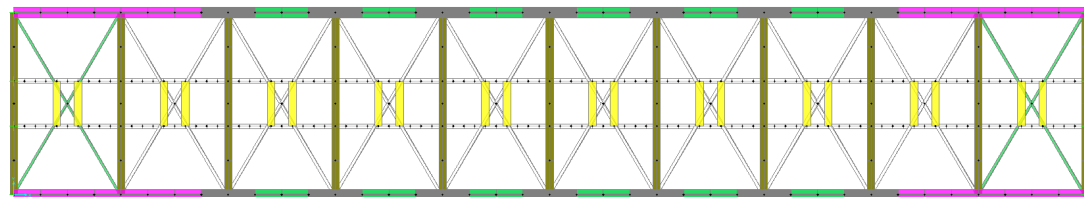
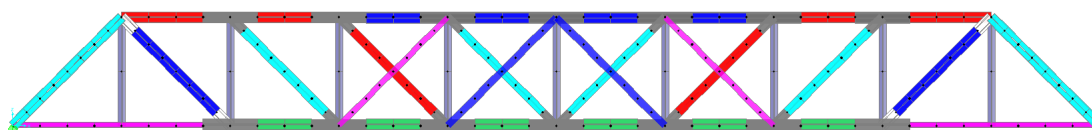
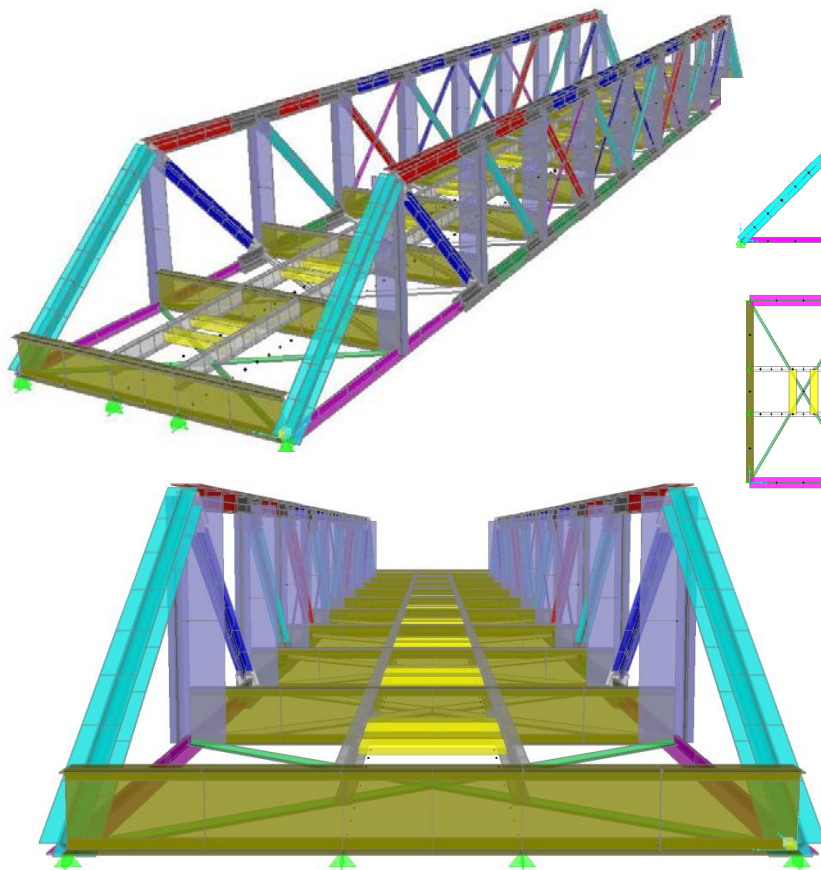
- Sinais e medição de acelerações verticais (freq. máx. da aquisição: 1.000Hz)



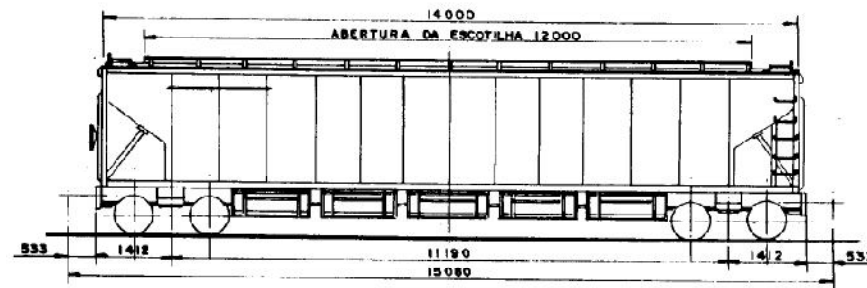
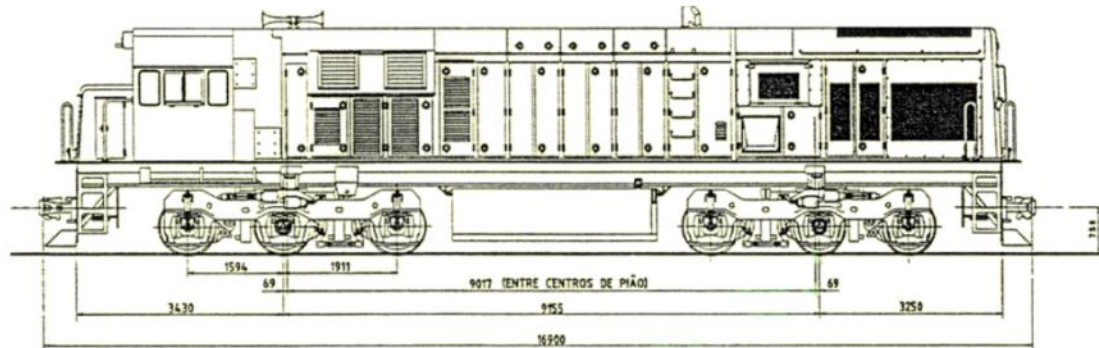
Trem C361, sentido EMC - ECO, 18/10/2012 às 17:40 - Espectro RMS do AV2



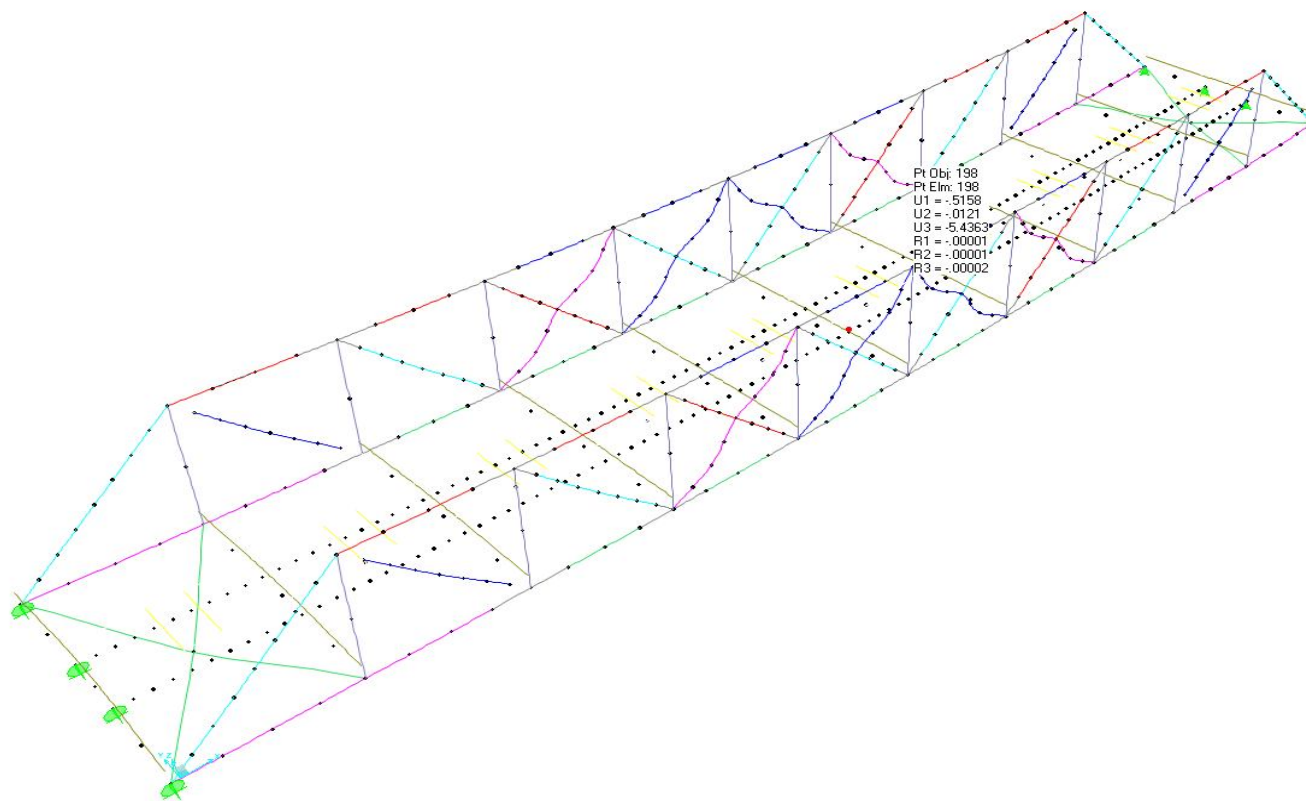
- Espectro RMS de aceleração (ao sair da ponte)



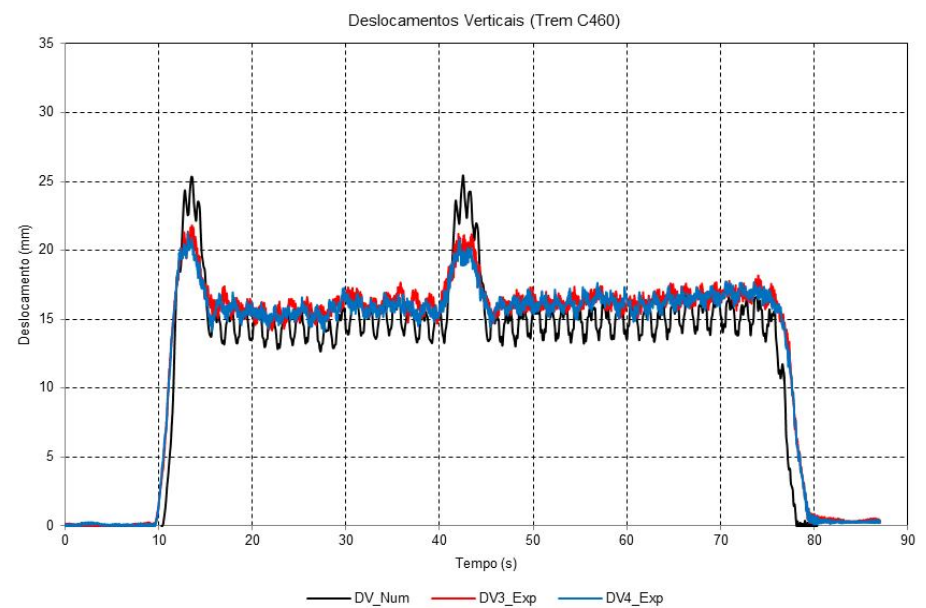
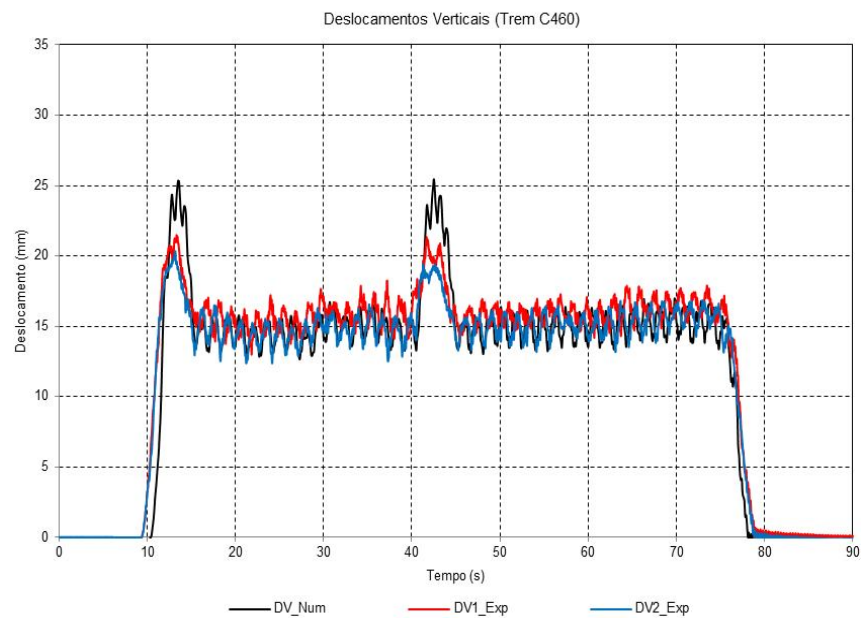
- Modelo numérico – SAP2000 v. 14: vistas da ponte modelada



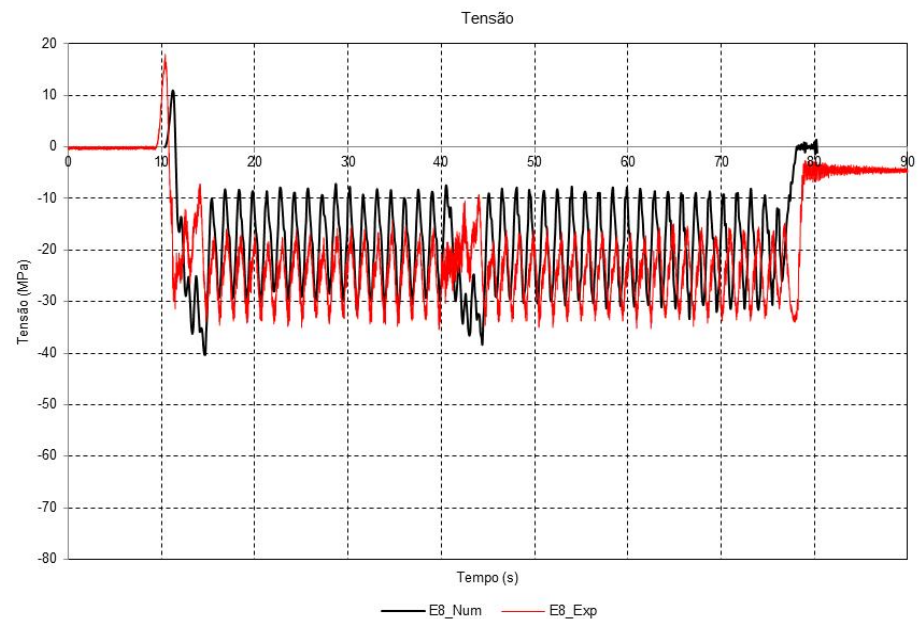
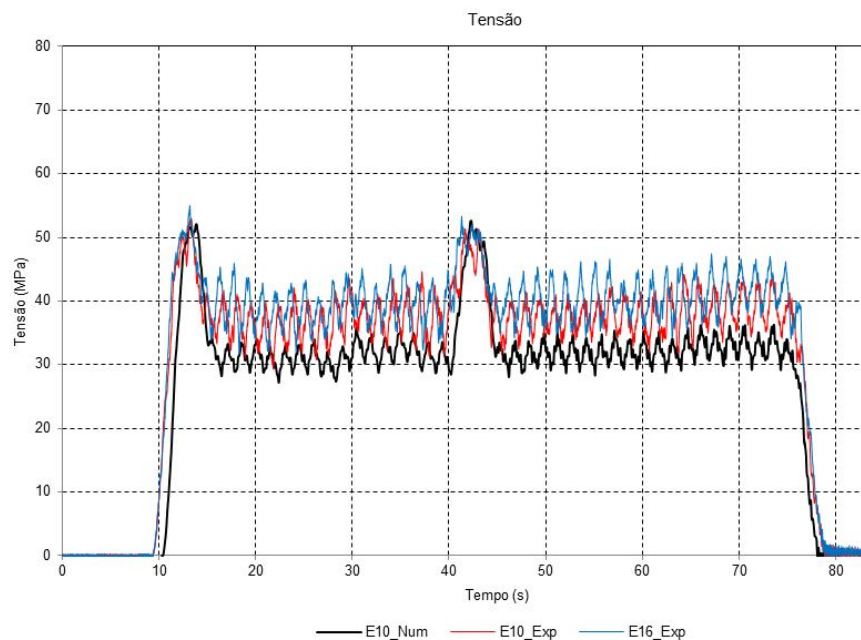
- Material rodante / trem: loco (20tf/eixo); vagão (19,7tf/eixo)



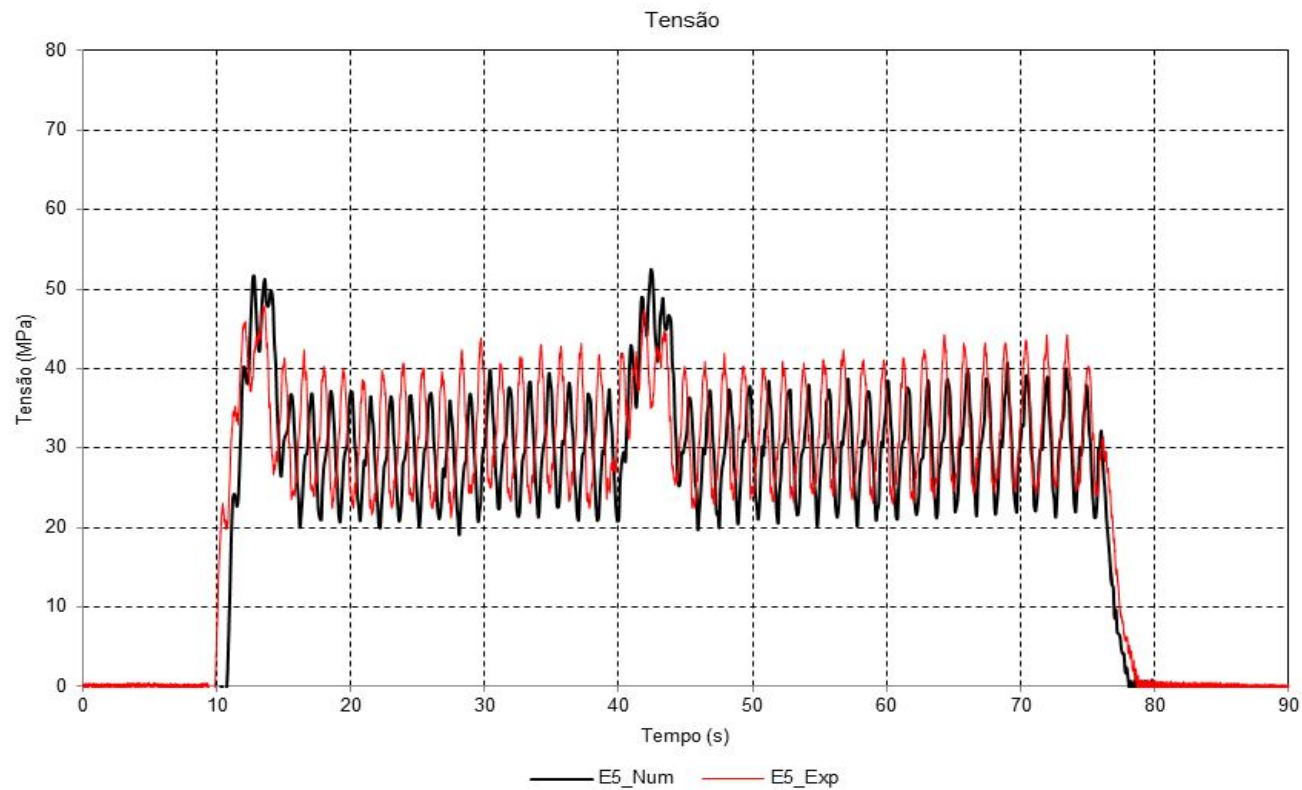
- Ponte nas posições indeformada e deformada (peso próprio)



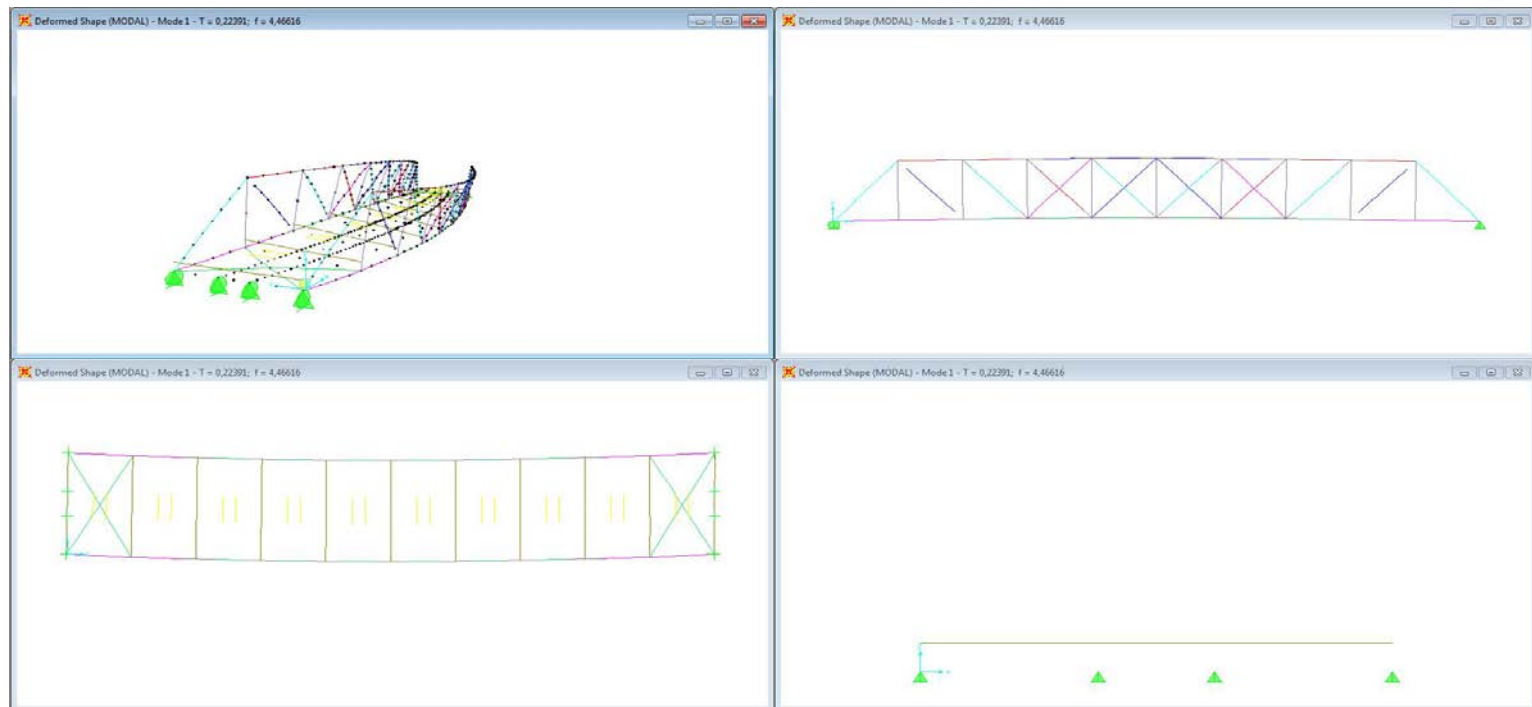
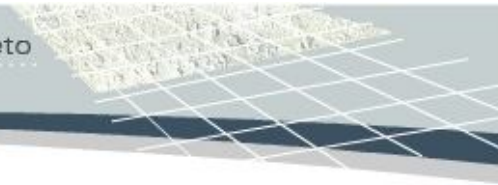
- Deslocamentos nos meios de vão (Vão 1 / esq.; Vão 2 / dir)



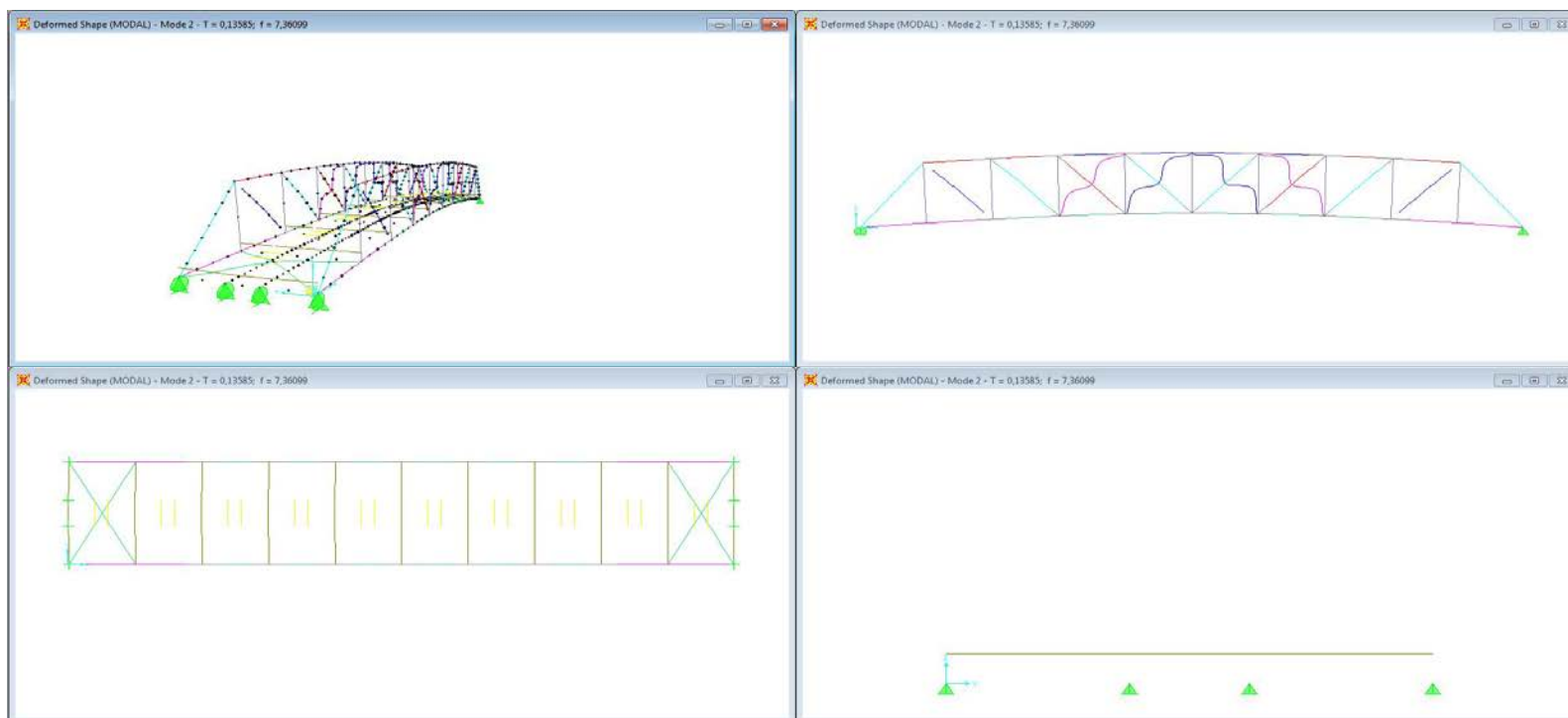
- Tensões numéricas e experimentais (banzo sup. / esq.; diagonal comprimida / dir.)



- Tensões numéricas e experimentais (diagonal tracionada)



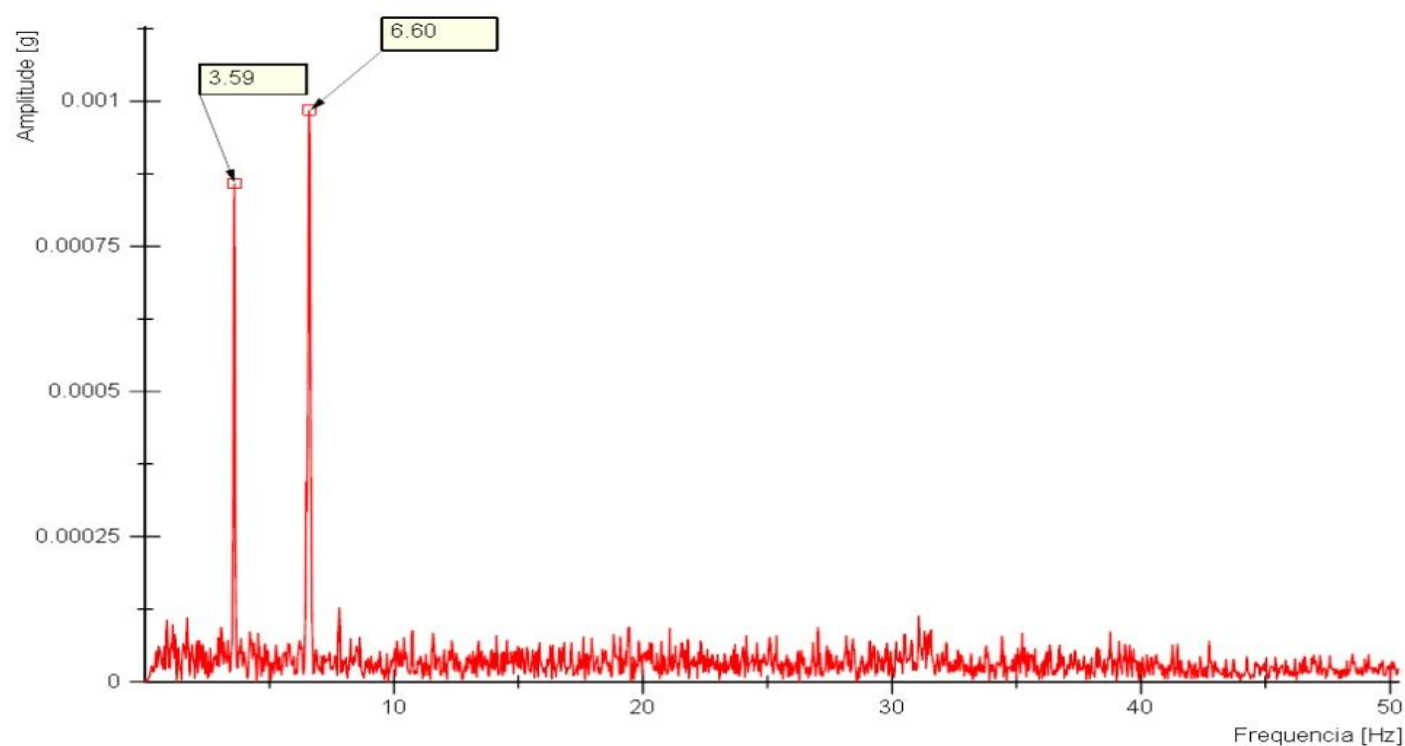
- Modo de vibração 1 / torção (f1=4,46Hz)



- Modo de vibração 2 / flexão vertical (f2=7,36Hz)



Trem D368, sentide ECO - ECM, 18/10/2012 às 18:55 - Espectro RMS do AV1



- Espectro RMS de aceleração vertical / AV1

GMEC

Grupo de Modelagem de Estruturas de Concreto
Structural Concrete Modelling Group



FIM - obrigado