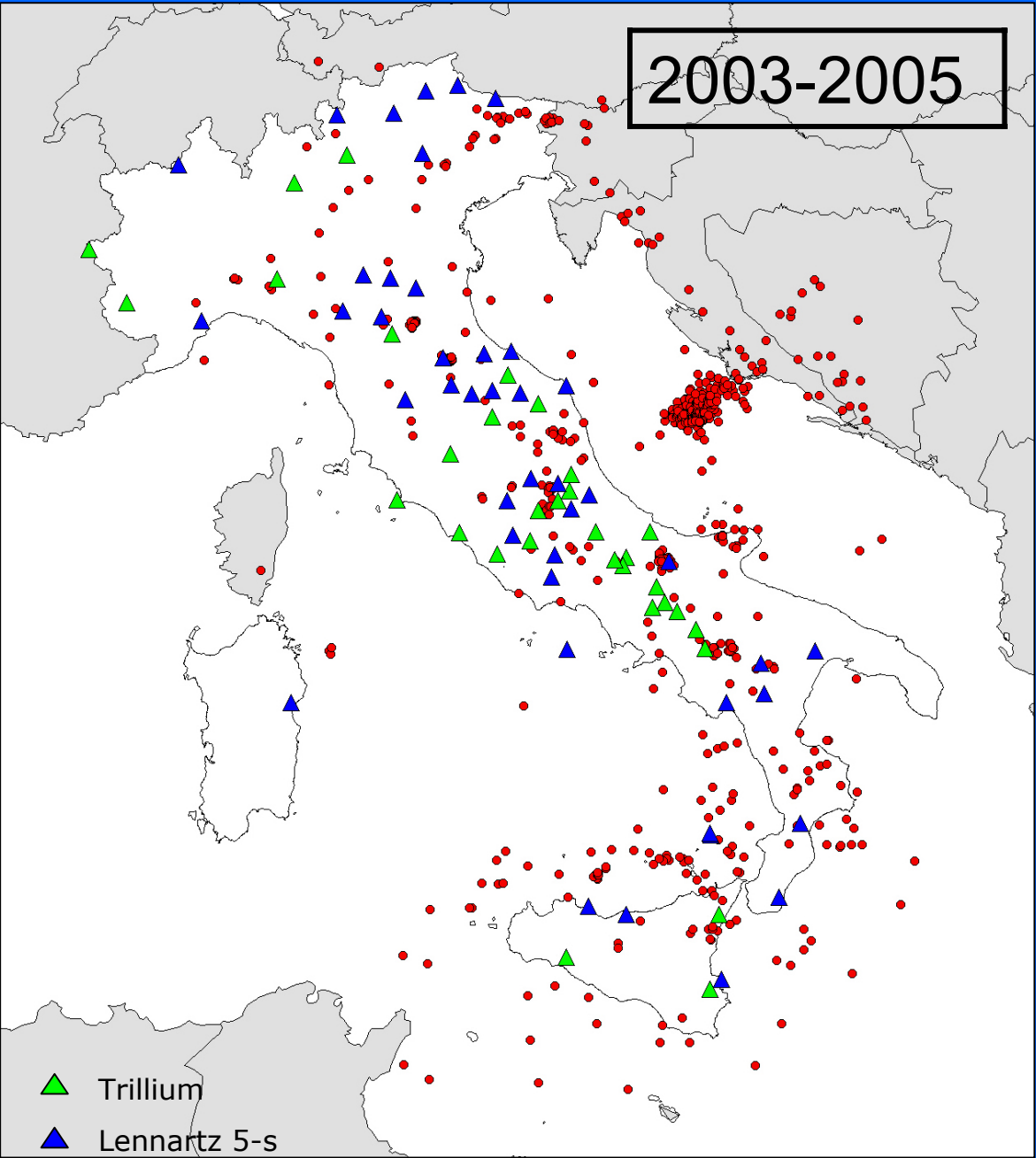


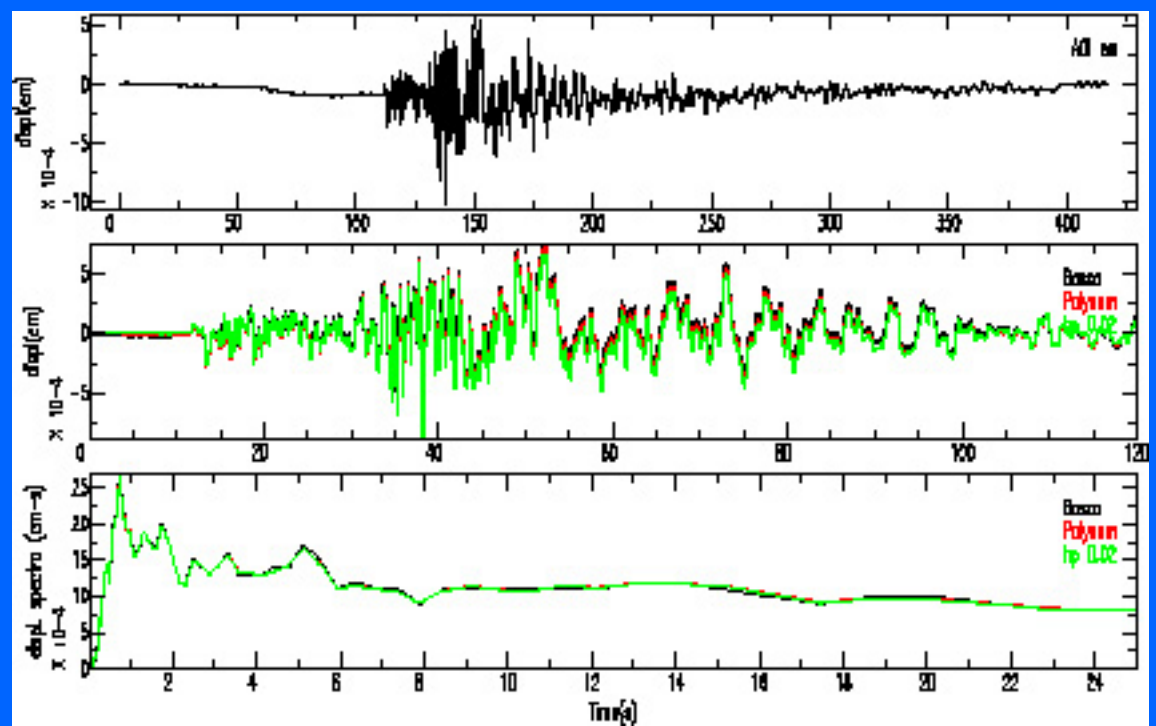
Task 4a

Work in progress at UR2 (INGV-RM1)

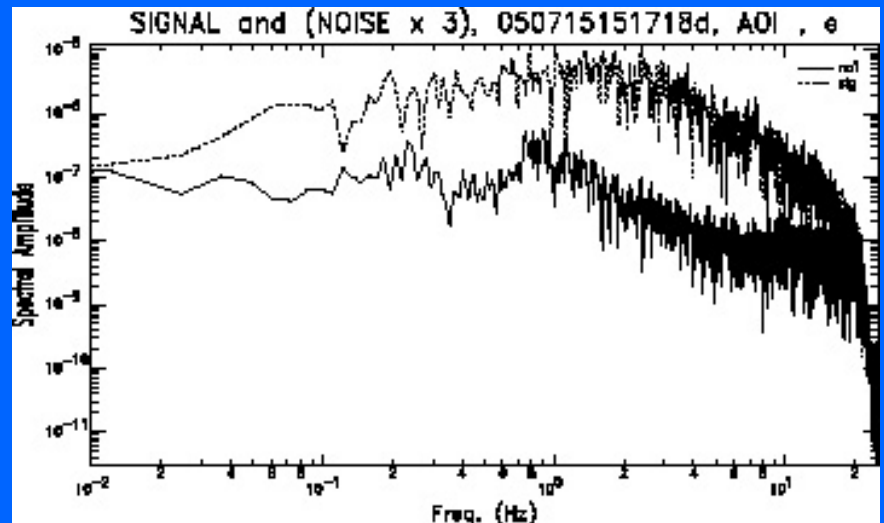
- Selection of events ($M > 3.5$)
- Check on the integration procedures for both accelerometric and velocimetric recordings
- Definition of a quality criterion for the computed displacement waveforms

2003-2005



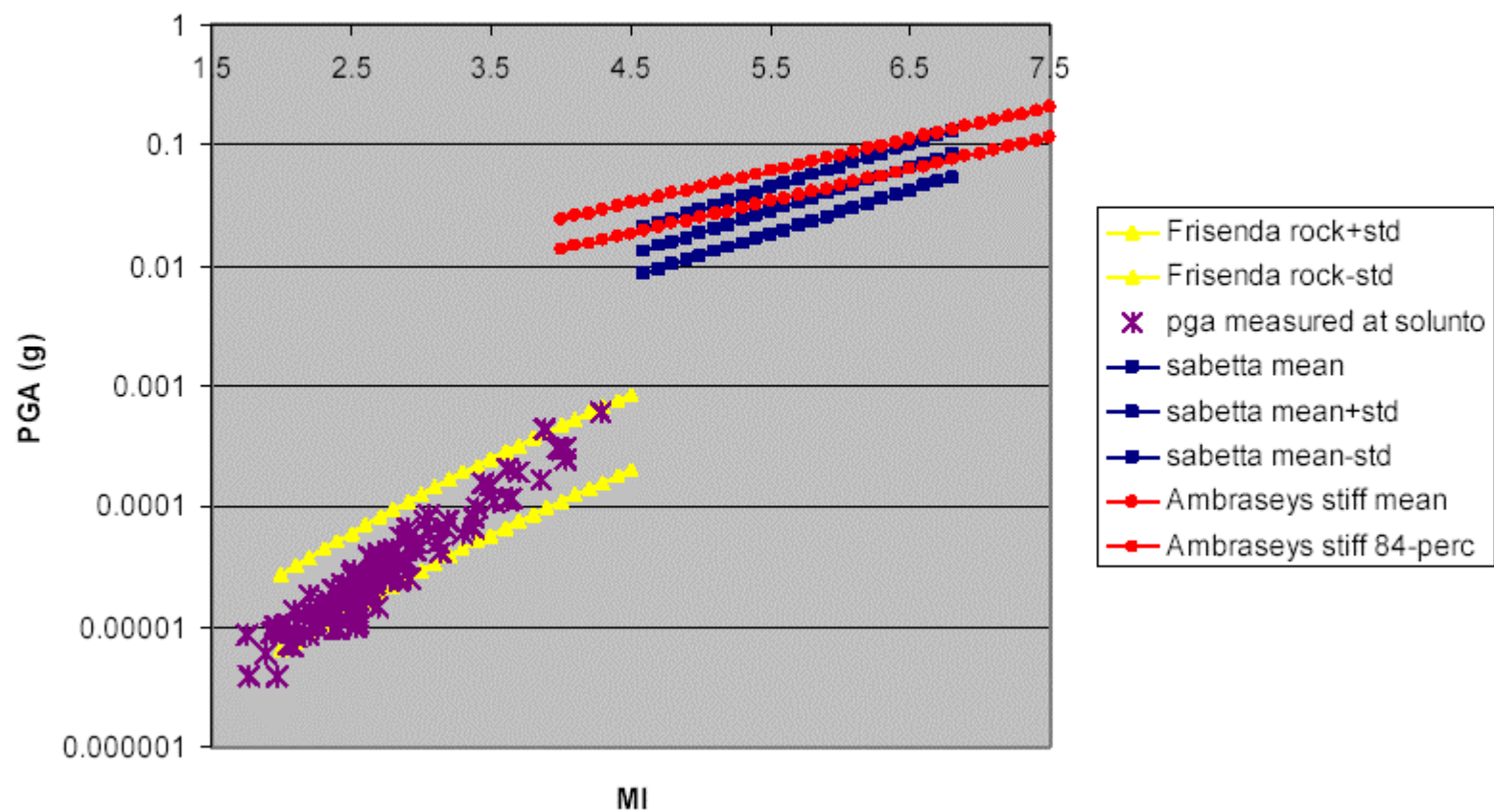


August 22, 2005
ML 4.5 R 140 km



Why so weak motions?

R=50km stiff site; Frisenda vs Sabetta-Pugliese vs Ambraseys



Task 4b

Work in progress at UR1 (INGV-CT) and
UR2 (INGV-RM1)

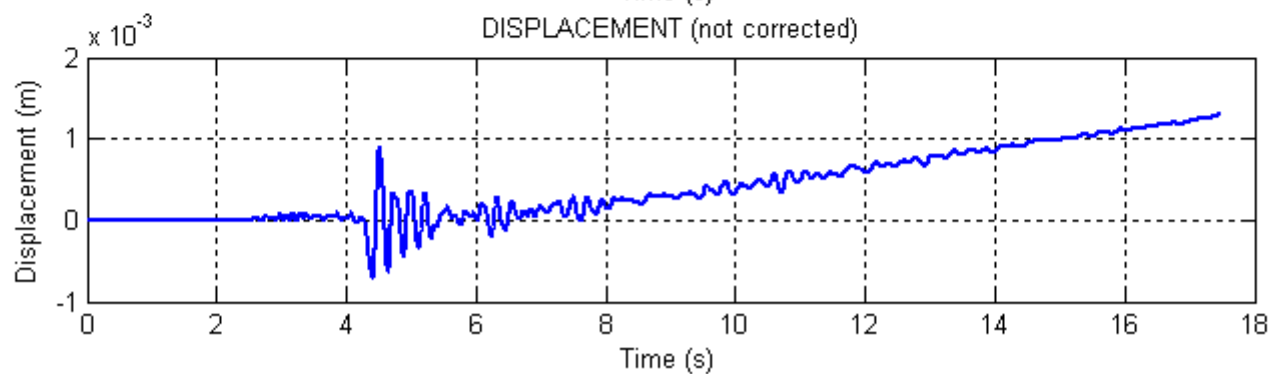
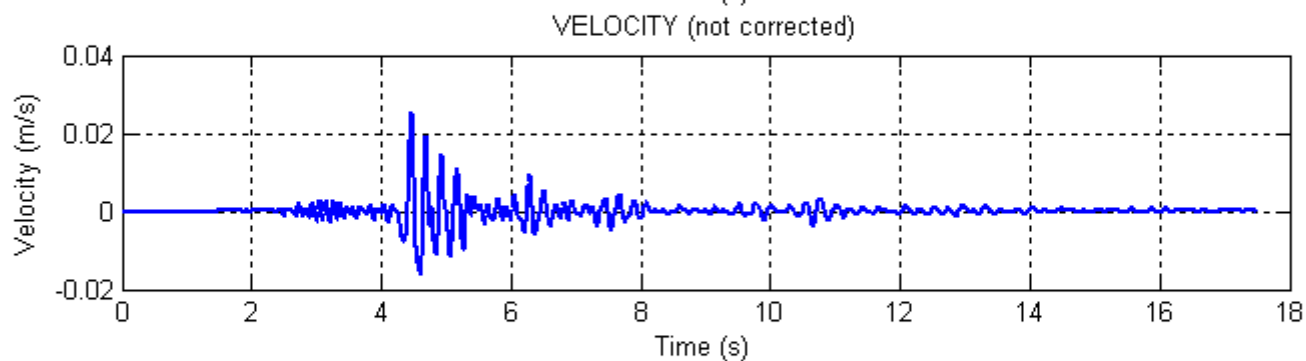
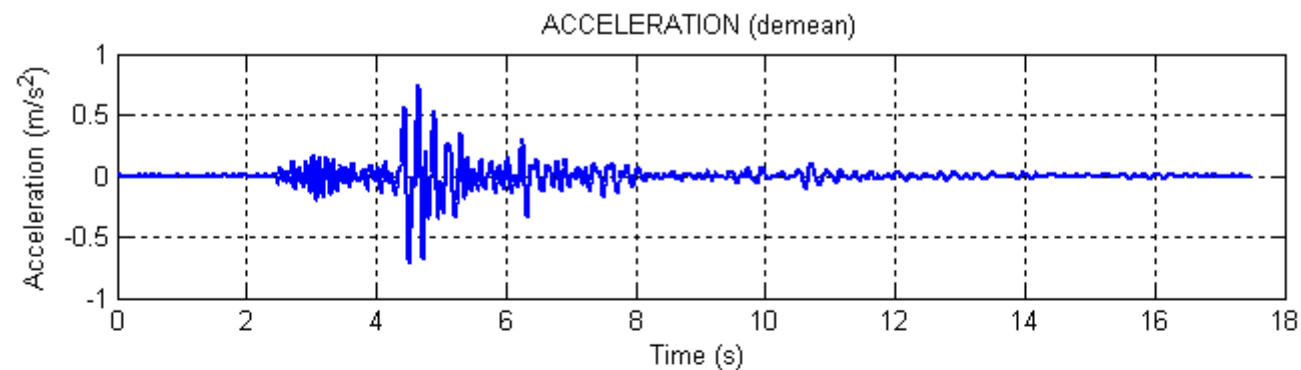
- Selection of earthquakes in the Mt. Etna area
- Check on the integration procedures for both accelerometric and velocimetric recordings
- Definition of a quality criterion for the computed displacement waveforms
- Separation of VT-A from VT-B and hybrid (LP) events

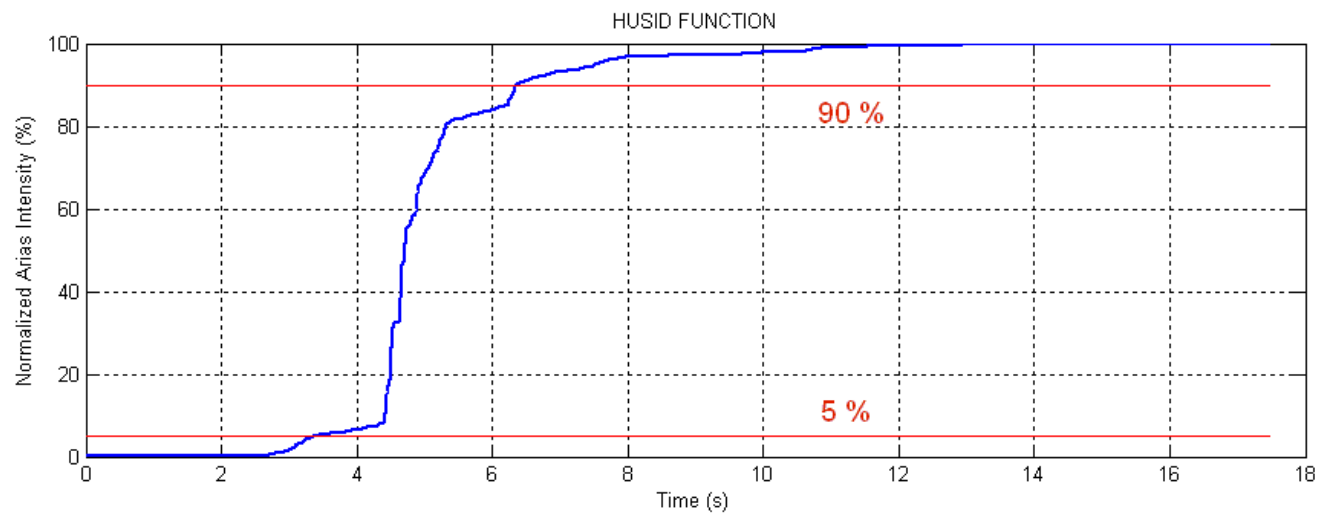
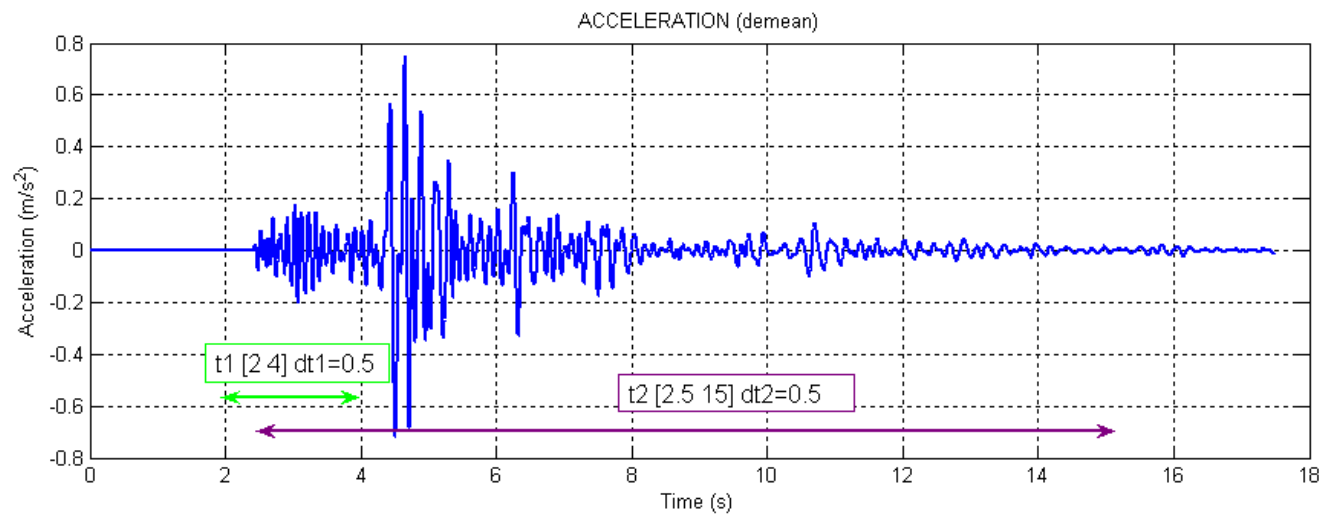
BASCO

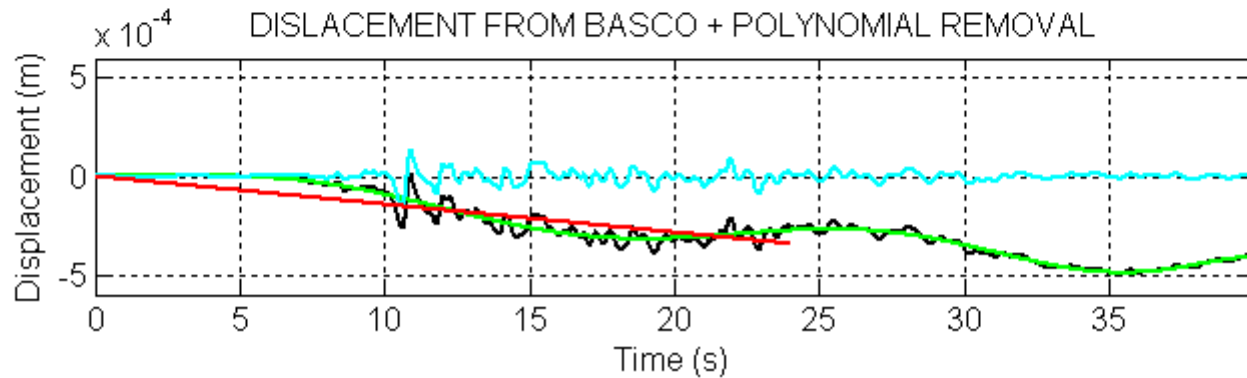
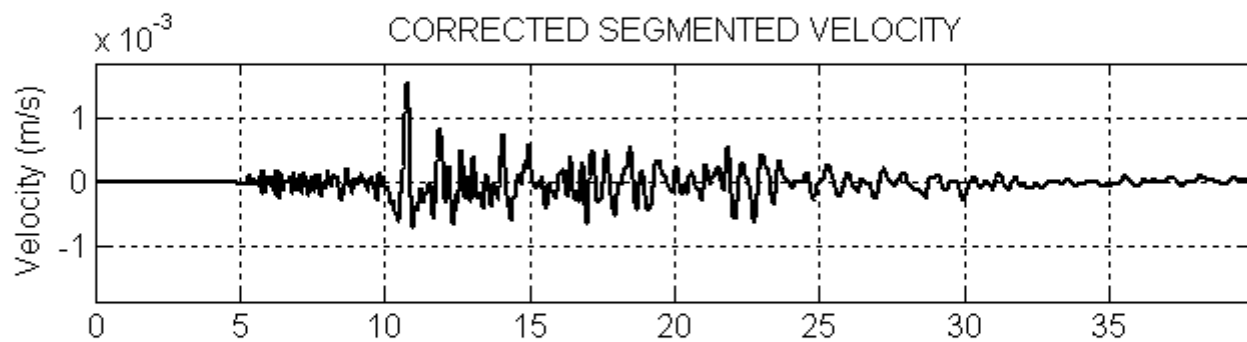
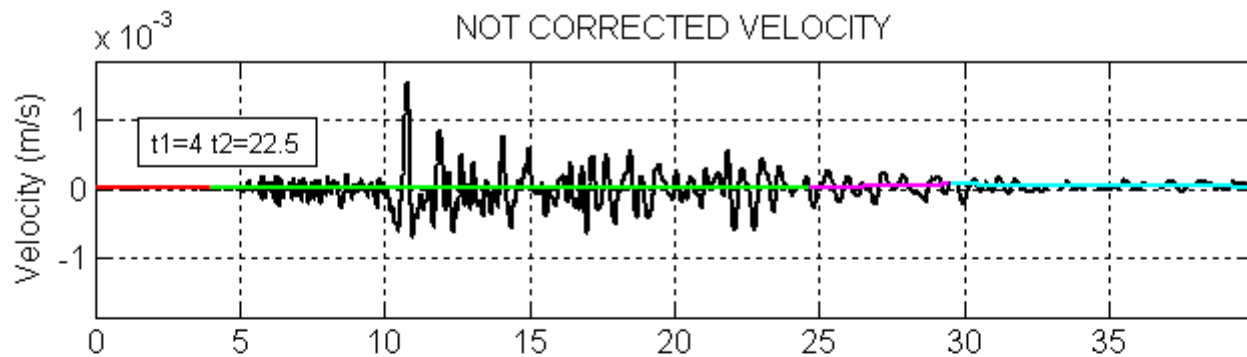
(courtesy by POLI-MI)

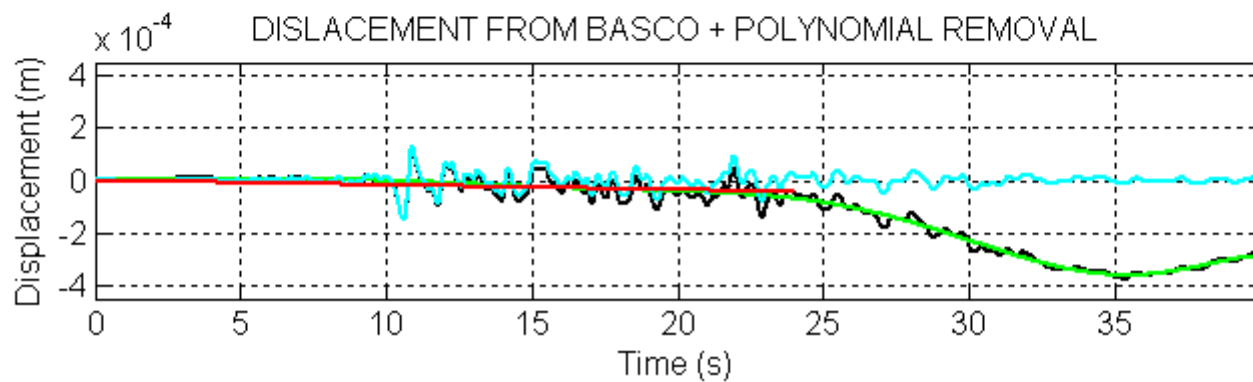
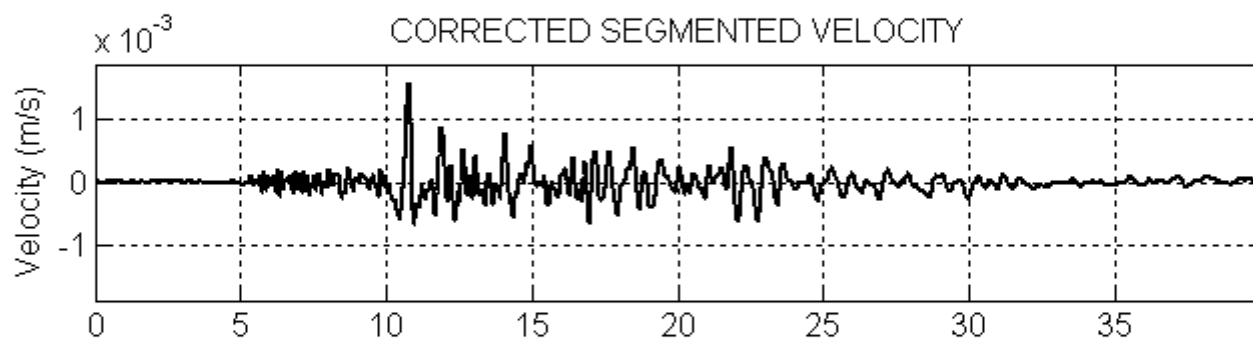
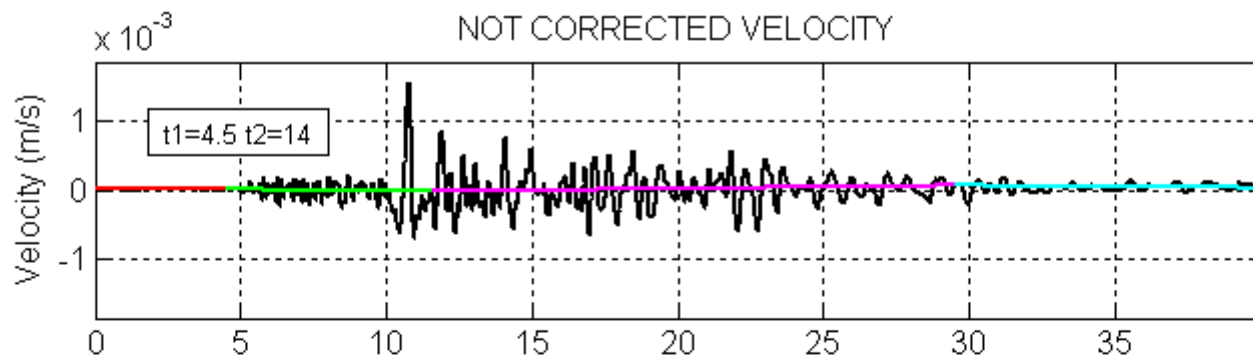
Implementation with

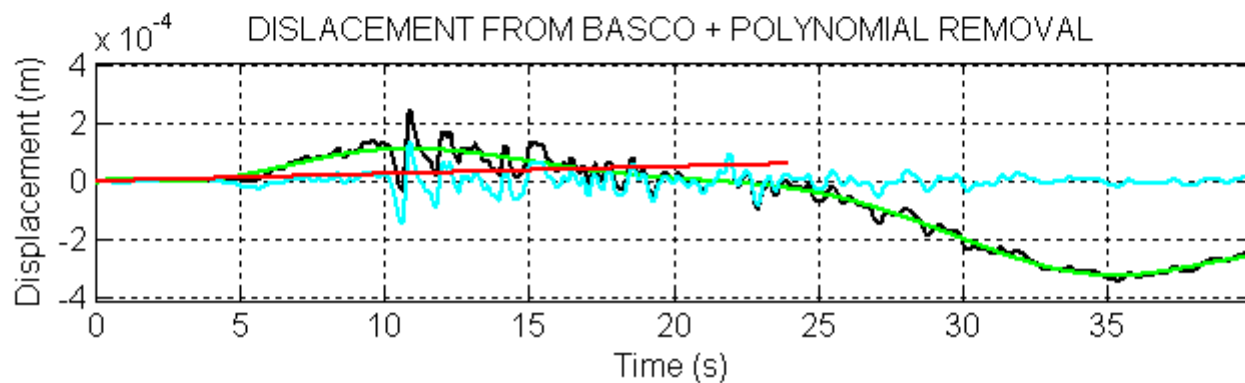
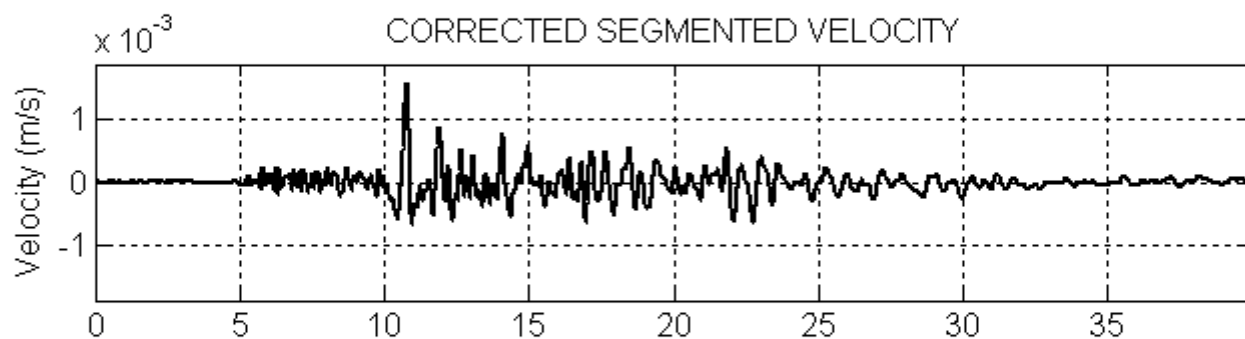
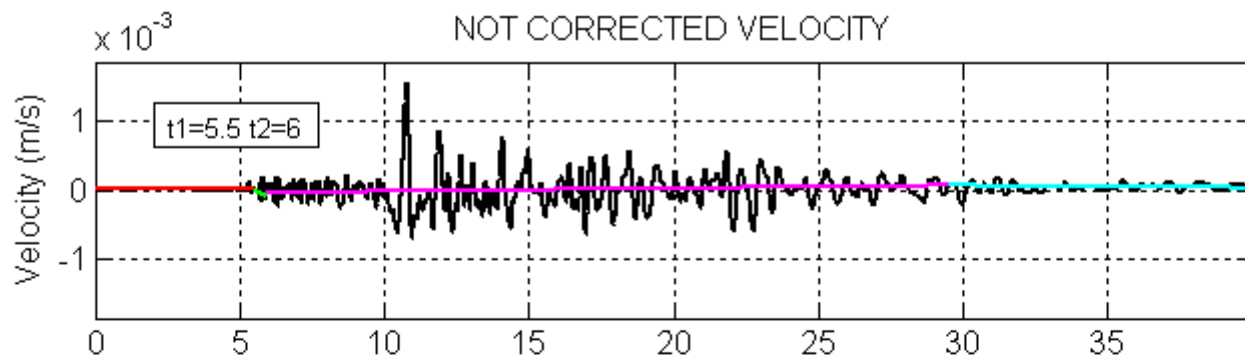
- Step 1 – Visualization of the Husid function and choice of the variability range of the code parameters as a function of 5% and 95% of the Arias intensity.
- Step 2 – Automatic grid search varying t_1 and t_2 .
- Step 3 – Visualization of the optimal (objective) solutions and choice of the best (expert criterion) displacement time history to be stored as the result of the integration process.

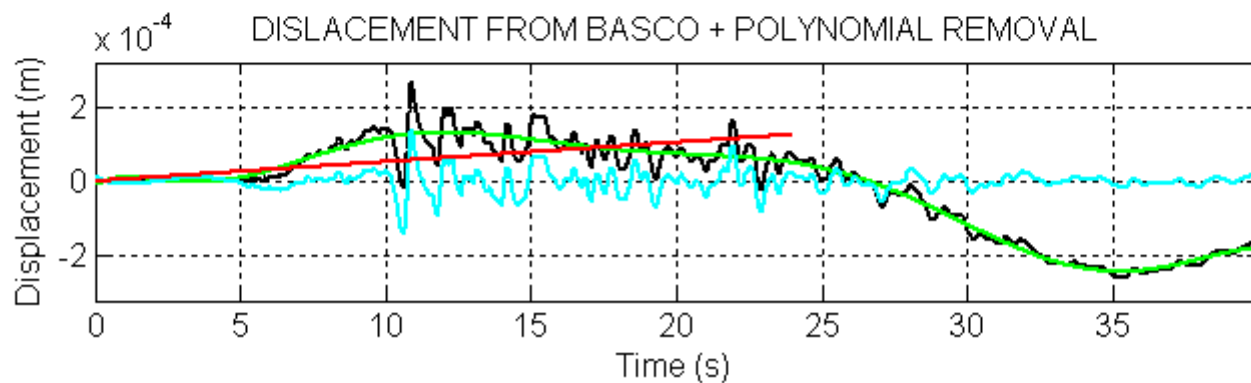
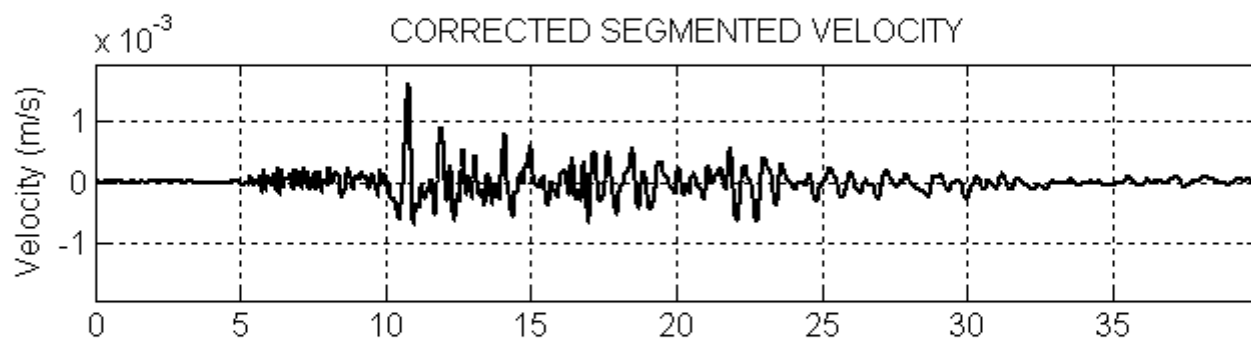
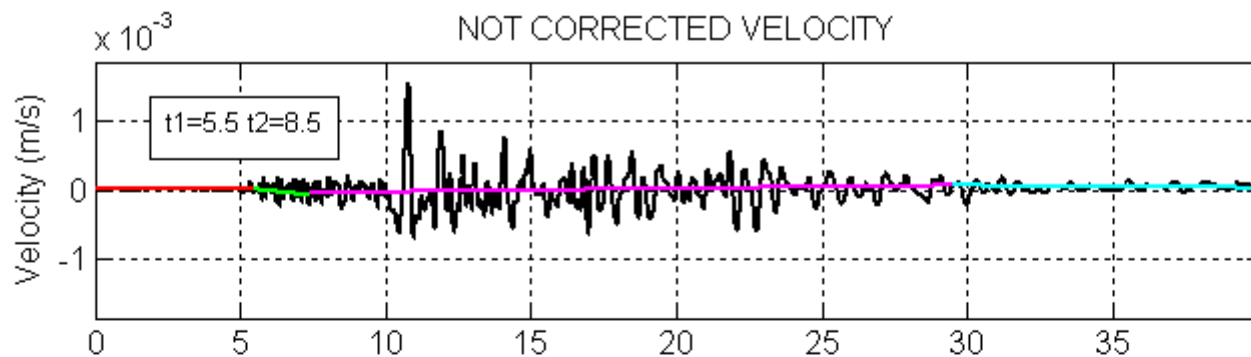


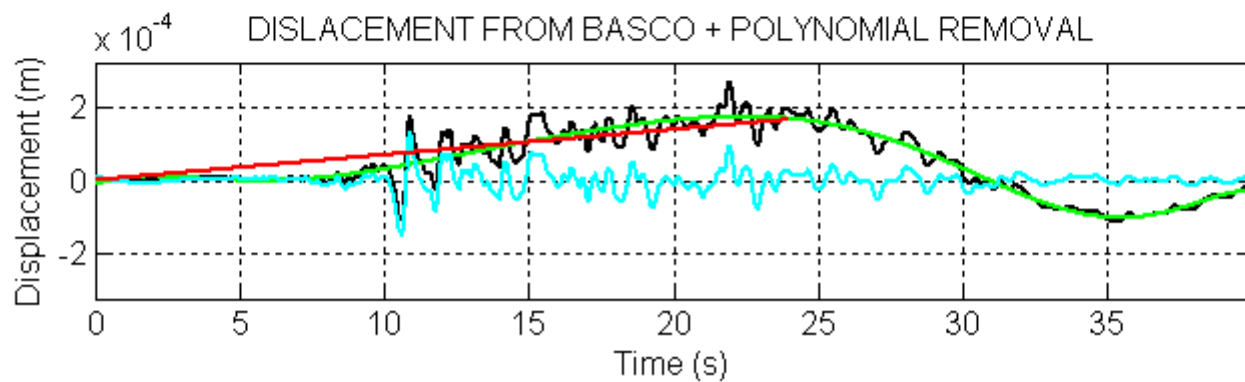
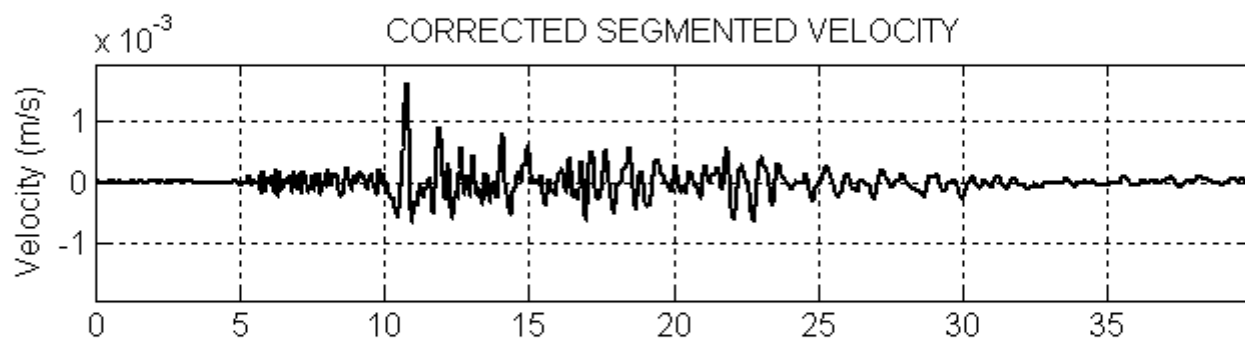
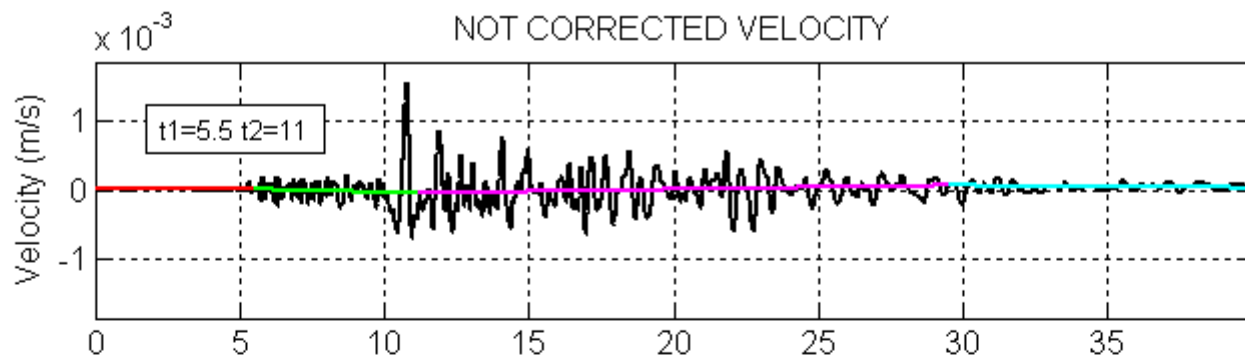


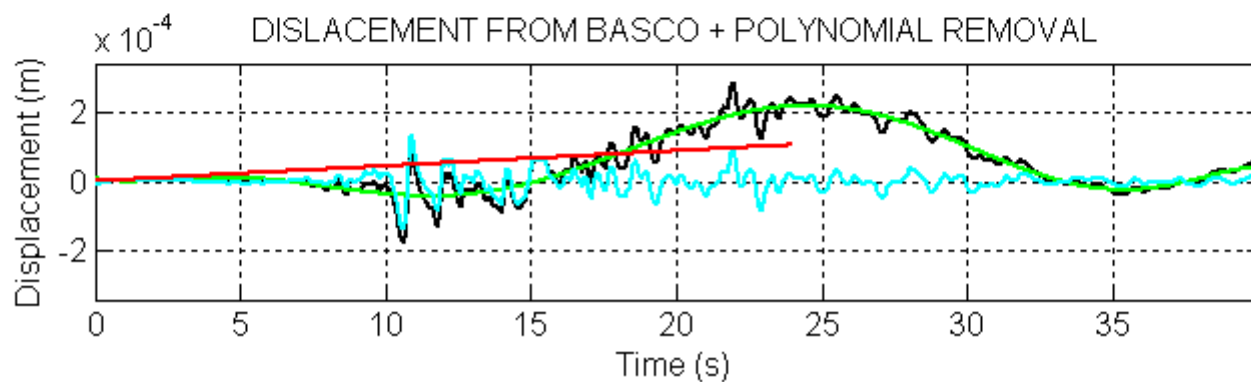
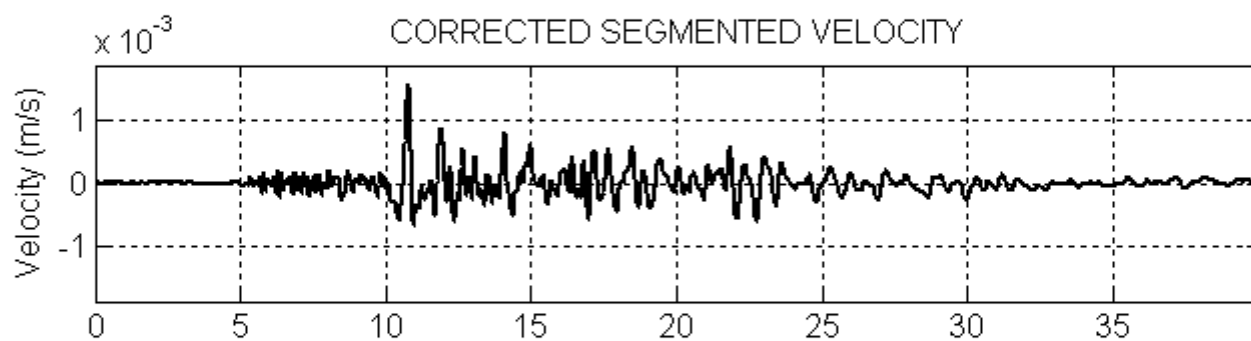
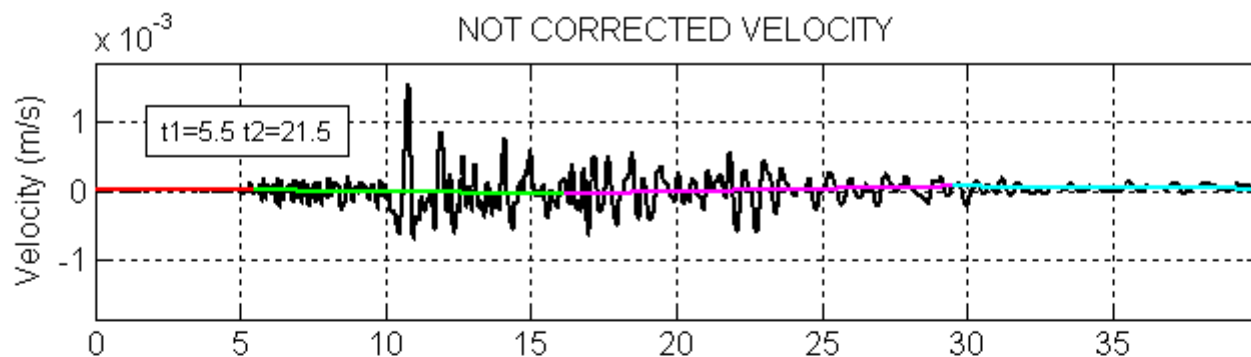


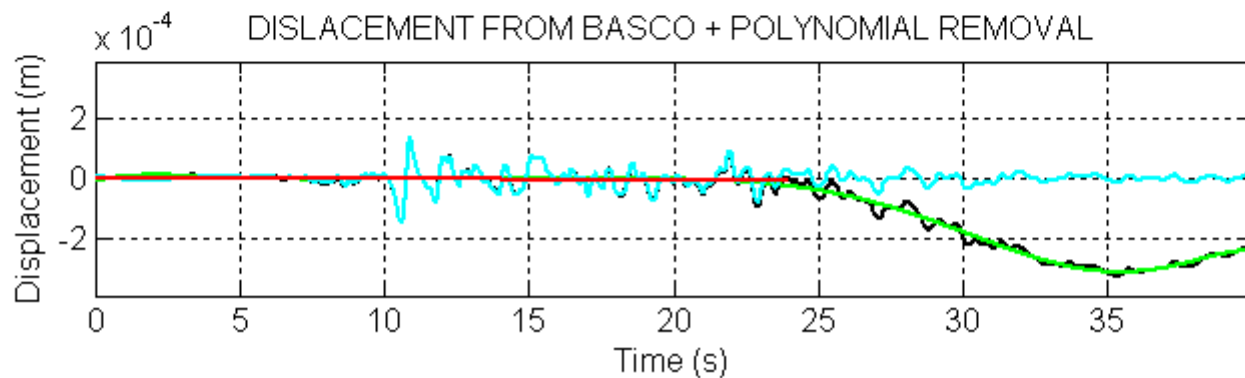
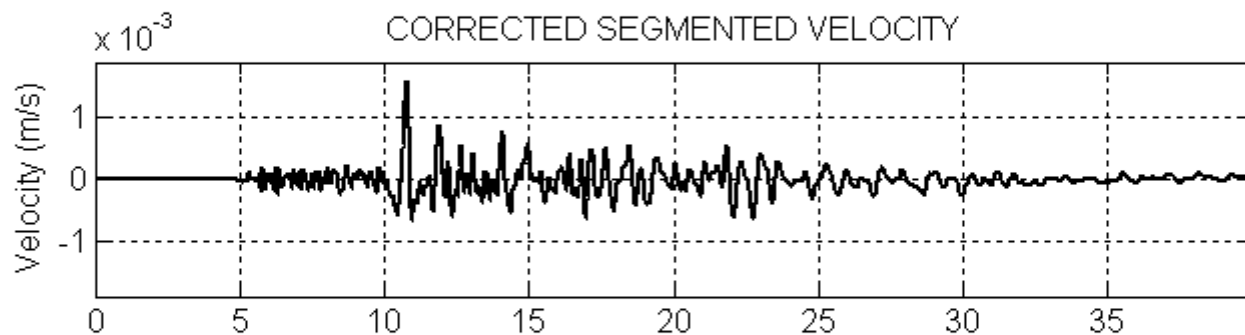
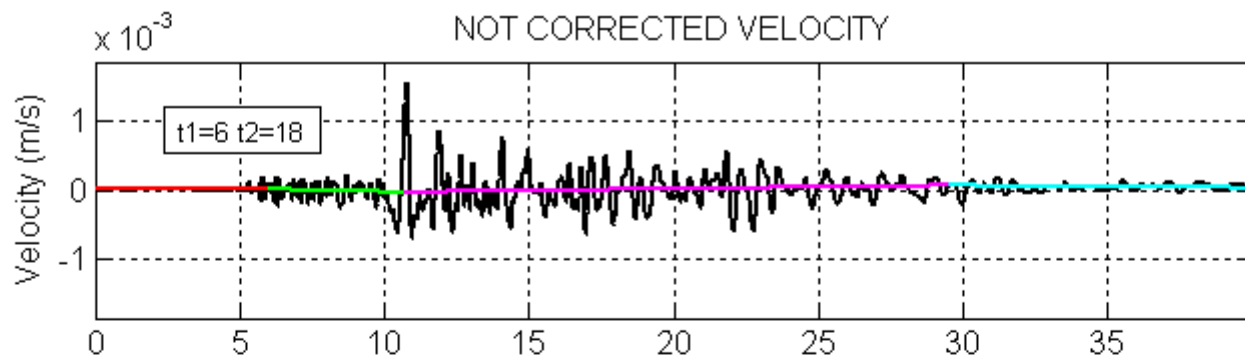


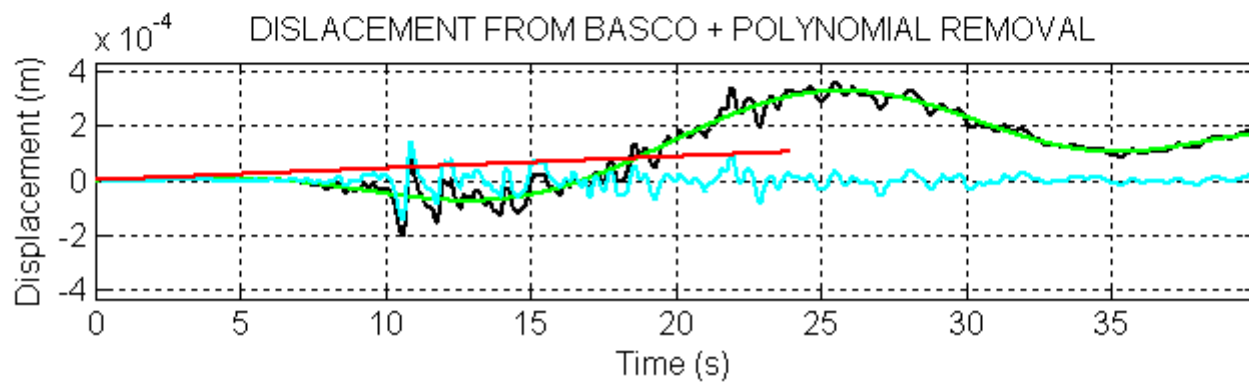
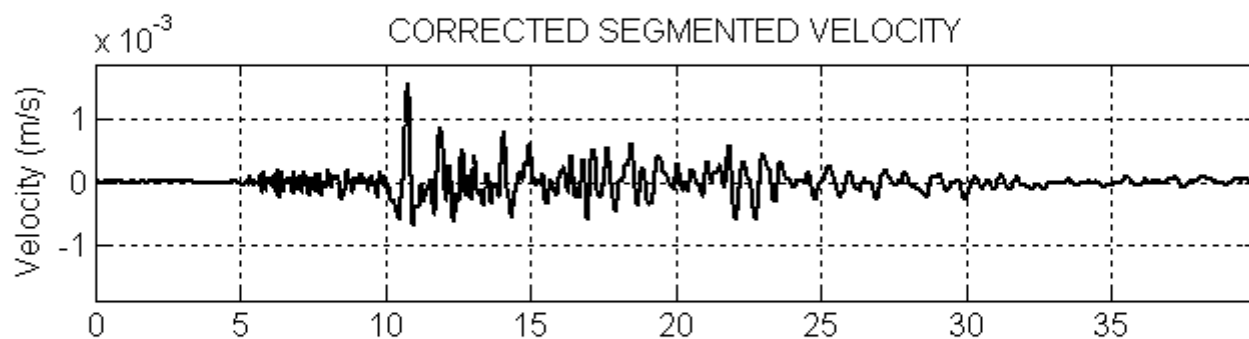
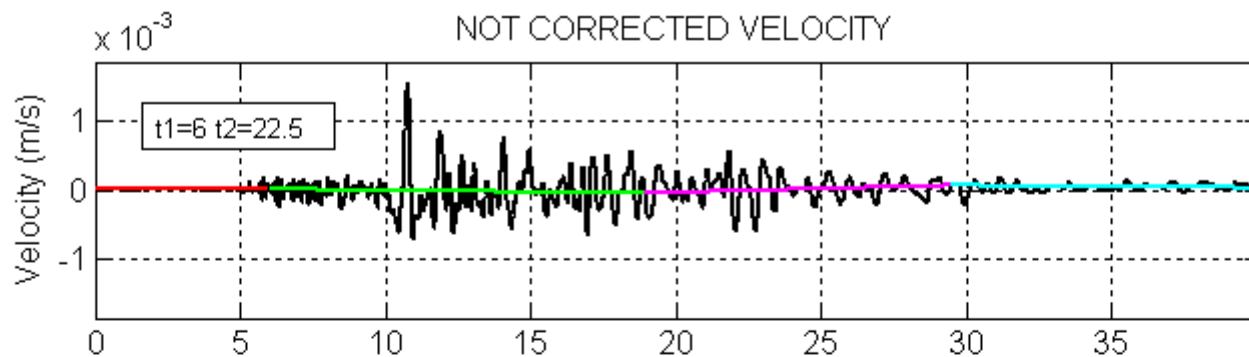


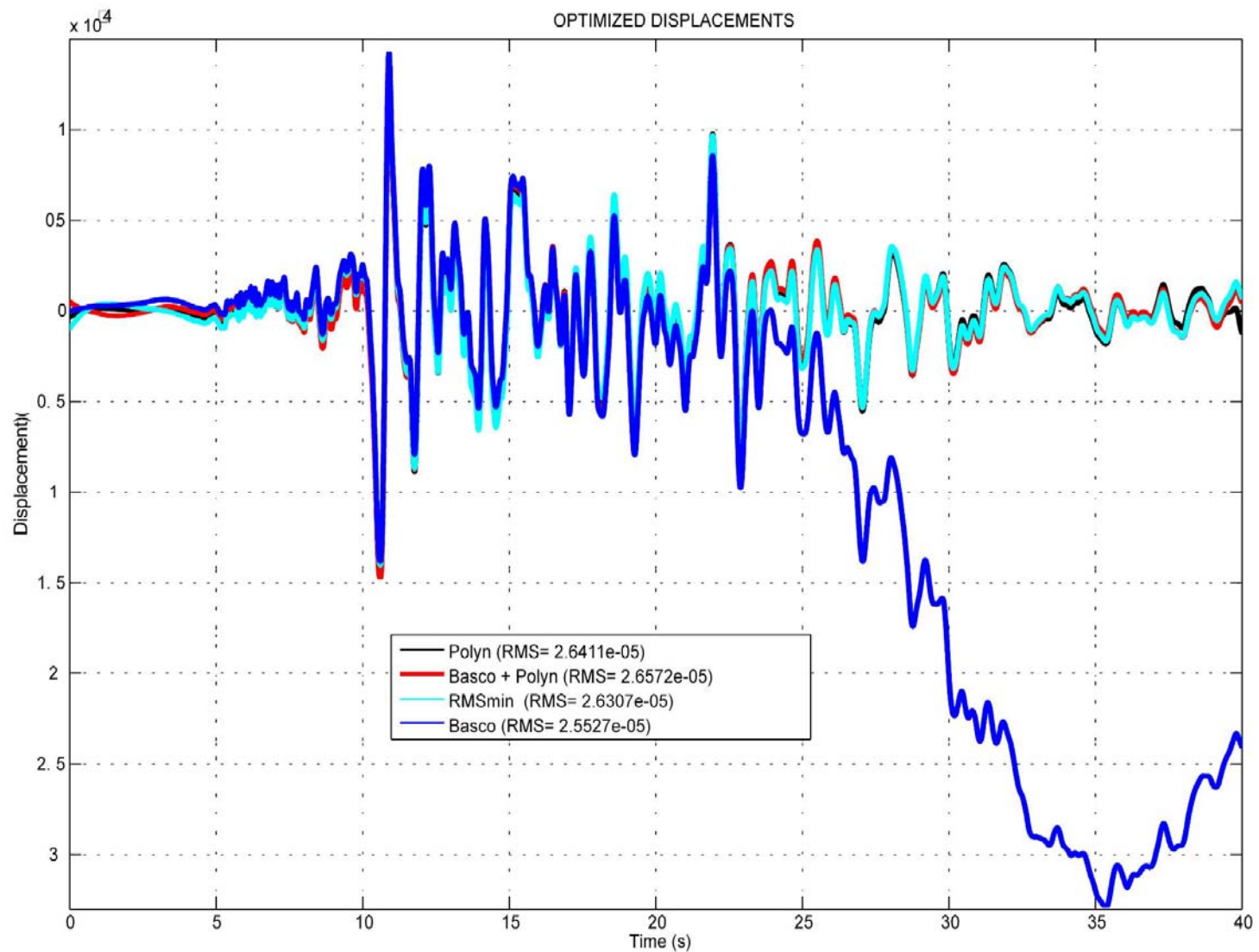




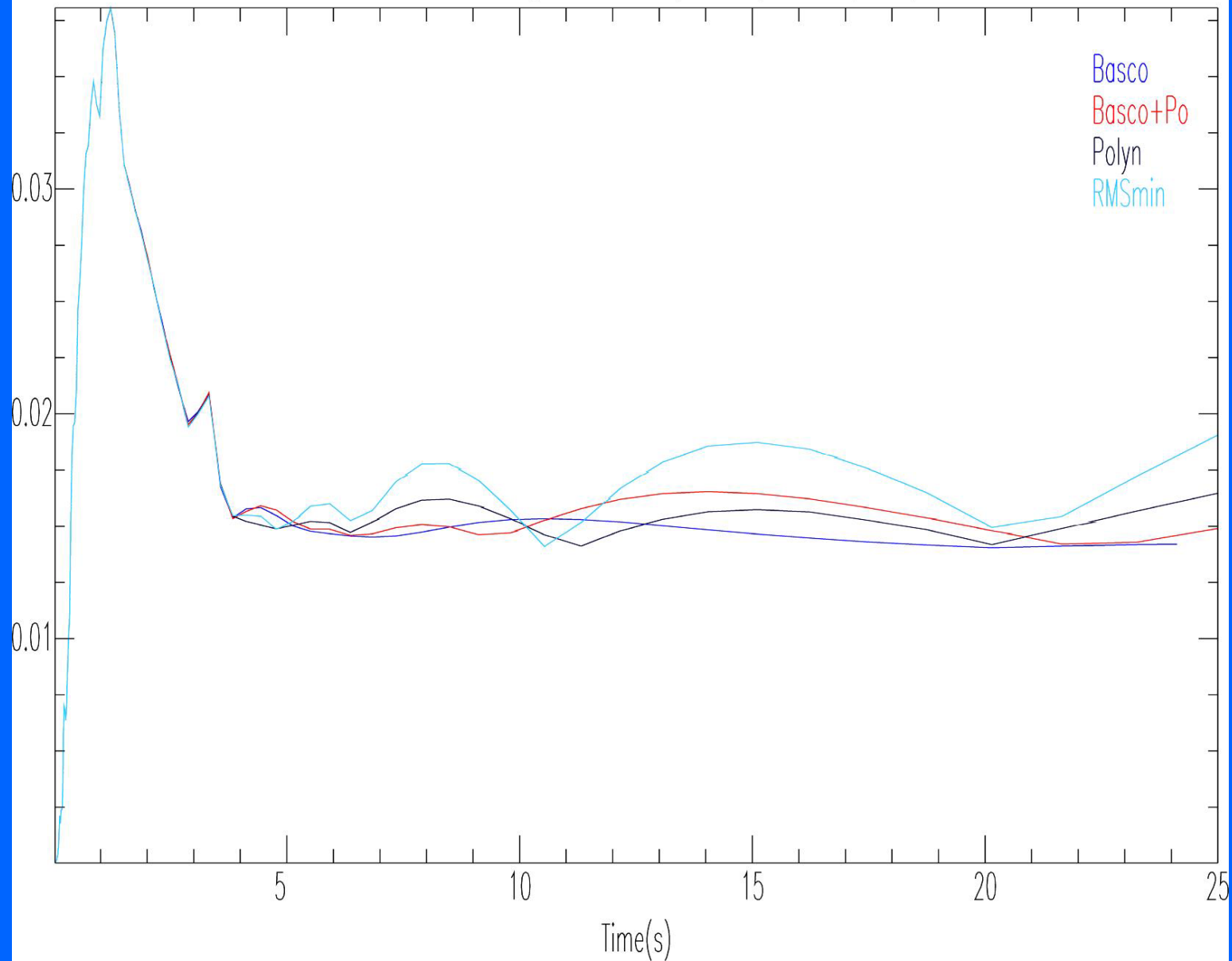


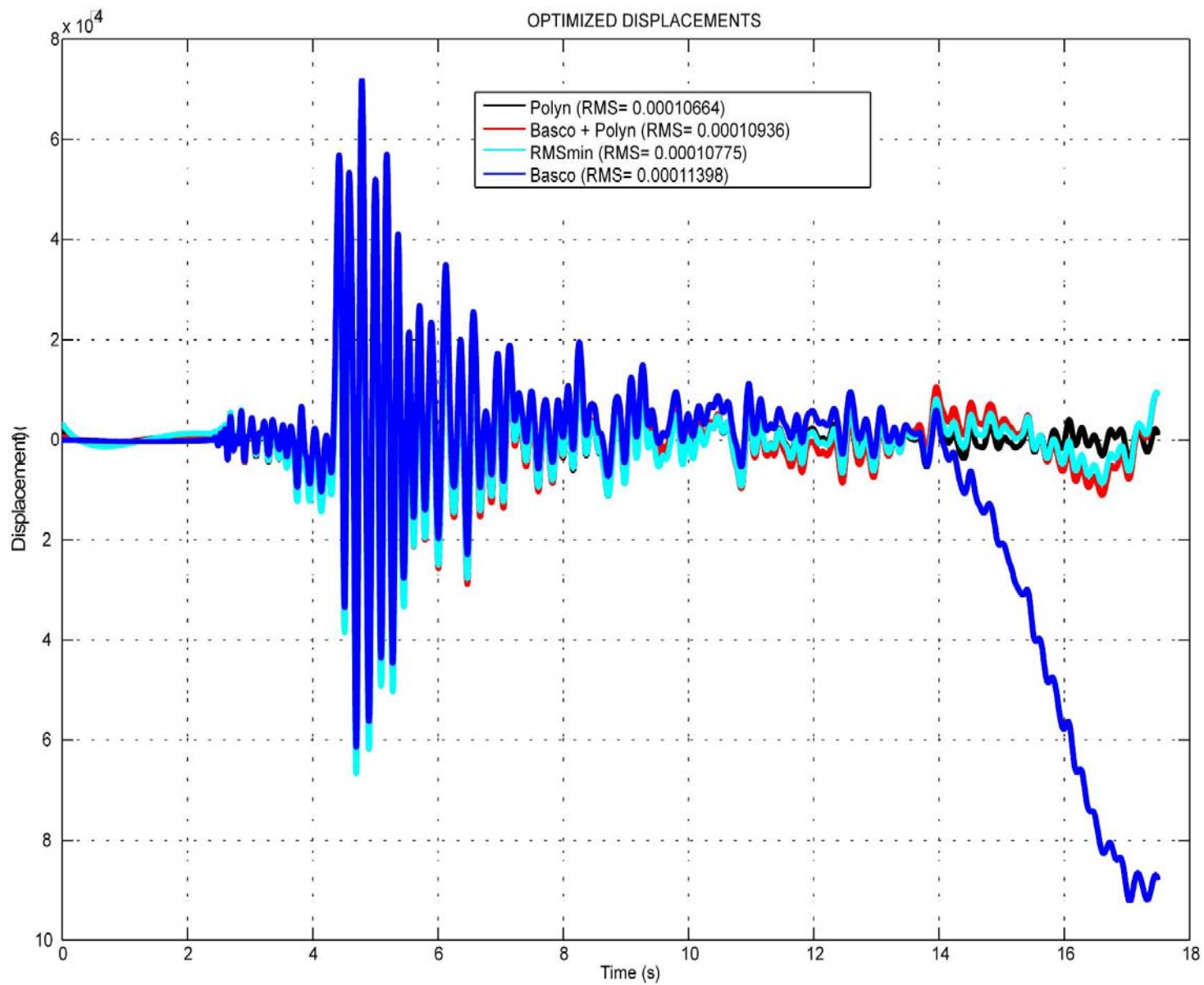




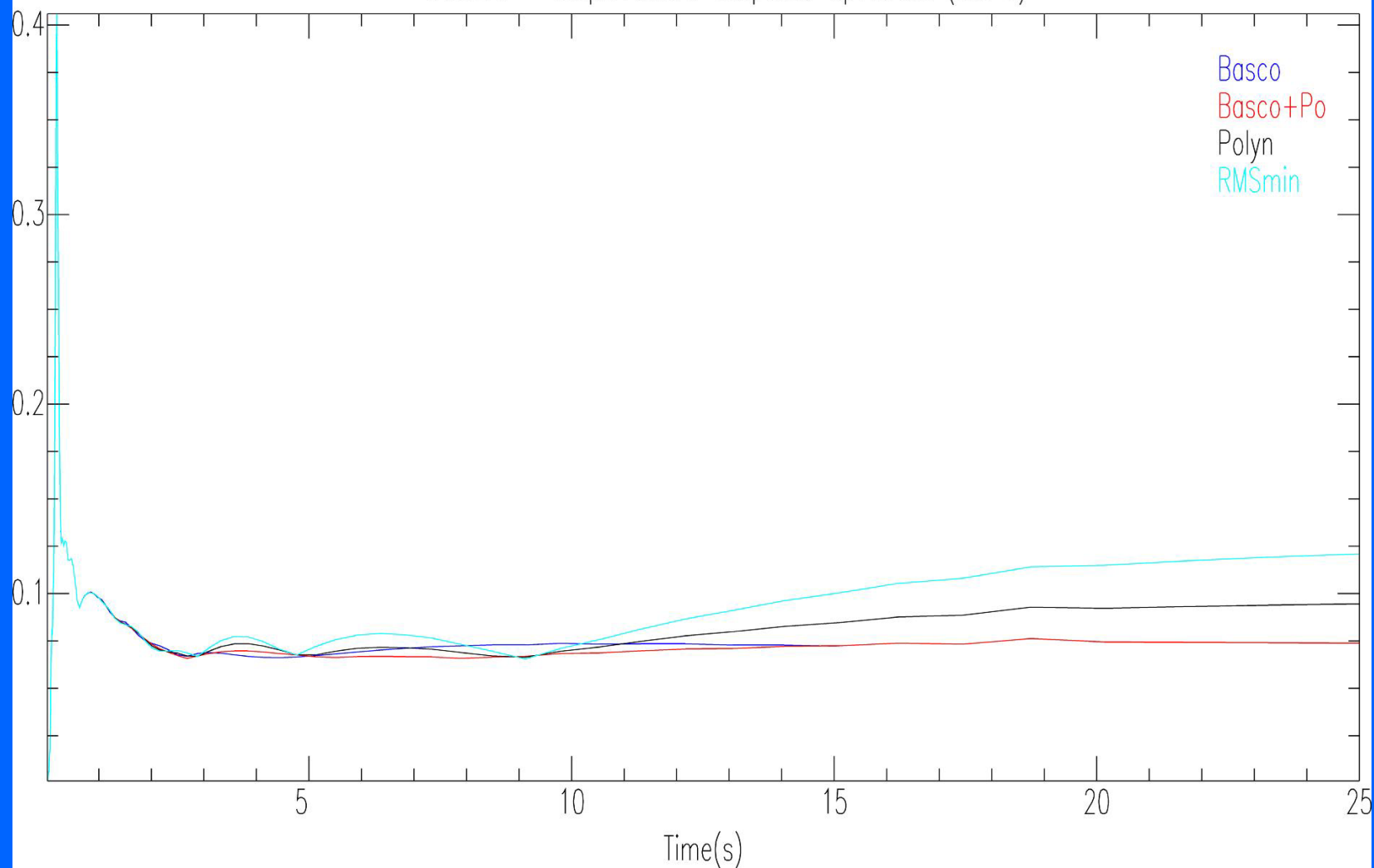


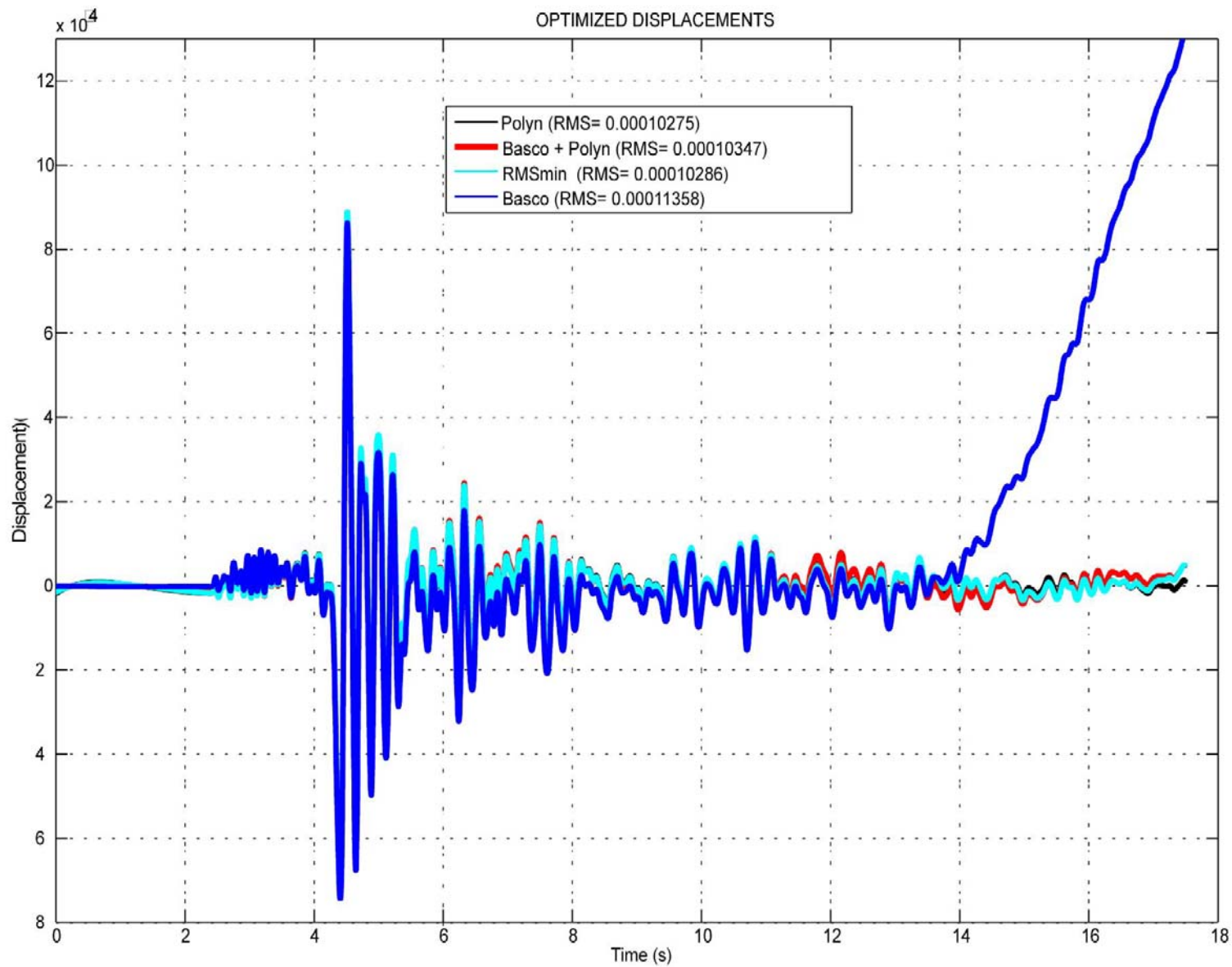
- CATAew - Displacement Response Spectrum (cm-s)



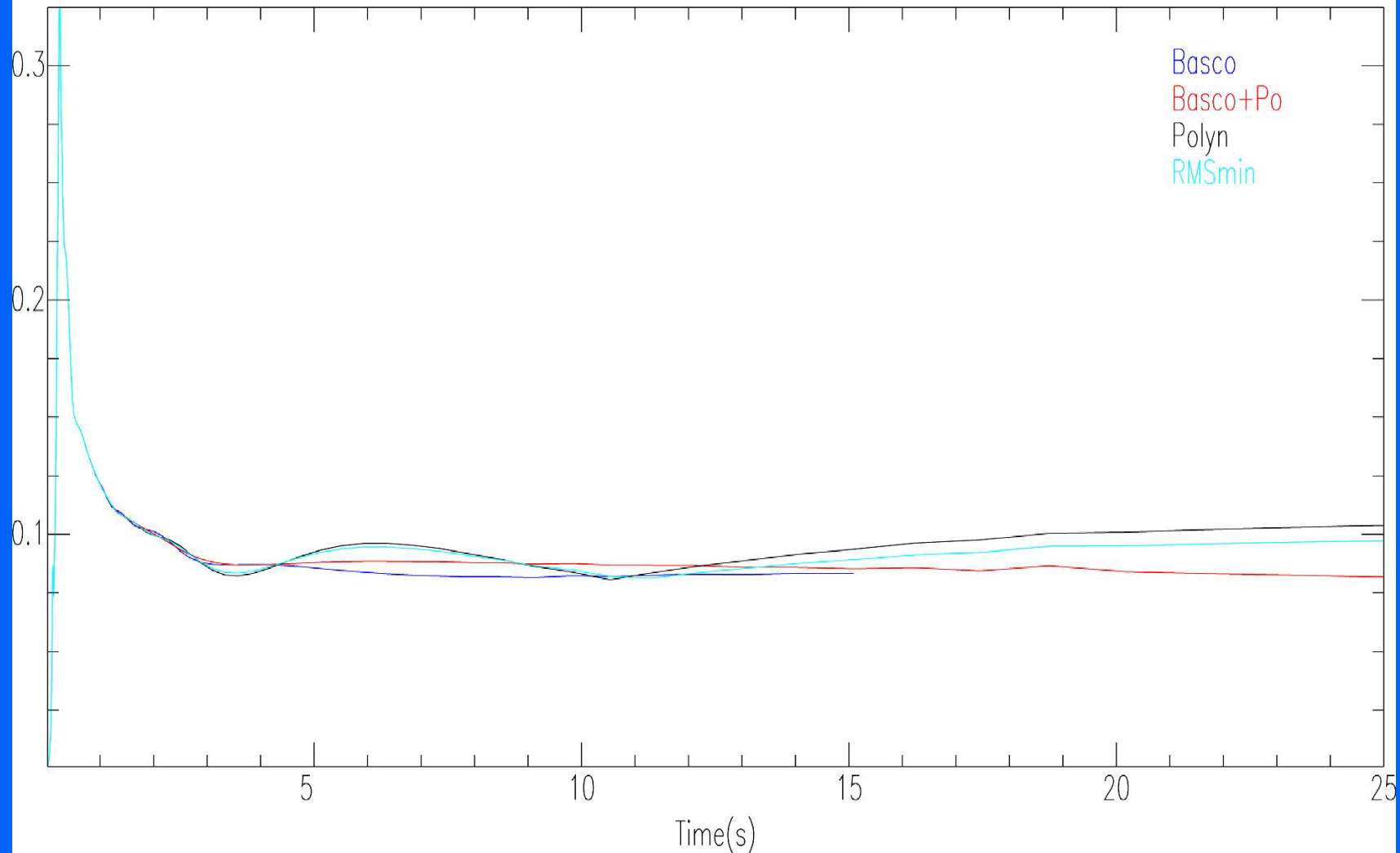


- SVENew - Displacement Response Spectrum (cm-s)



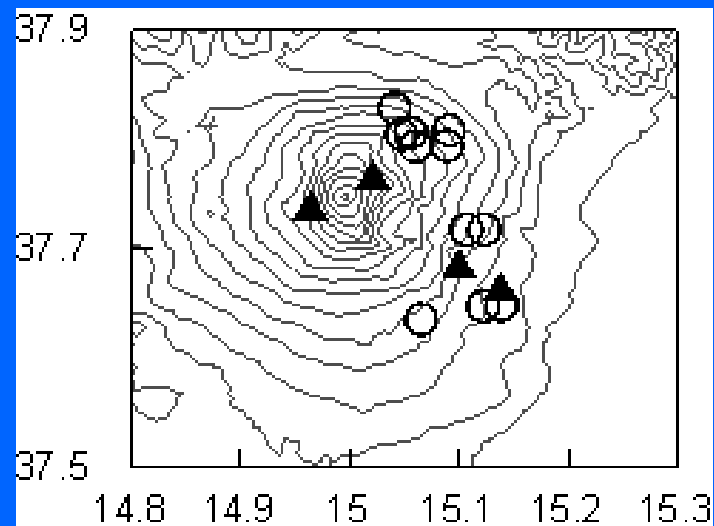


- SVENns - Displacement Response Spectrum (cm-s)

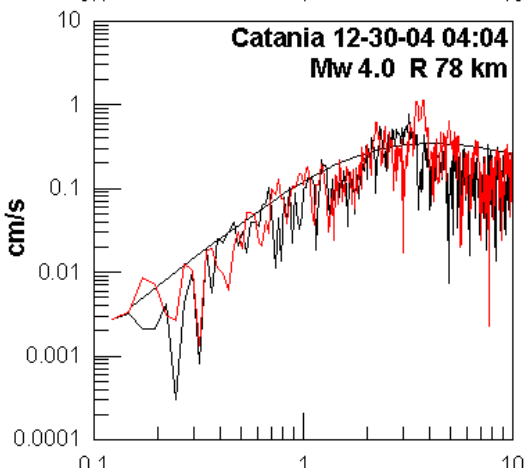
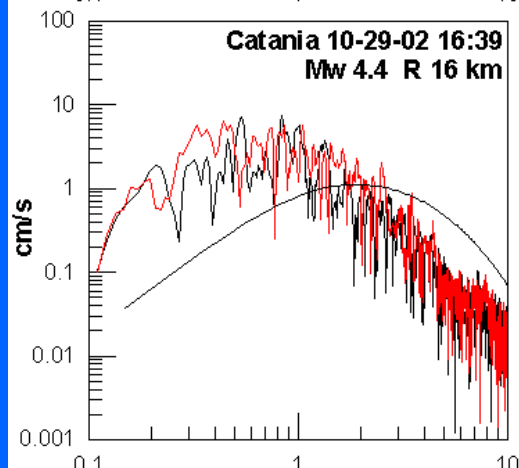
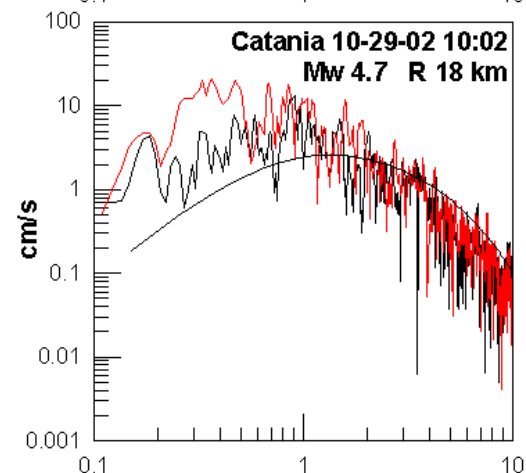
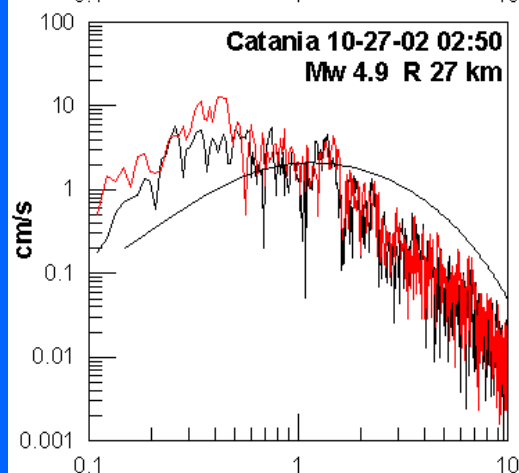
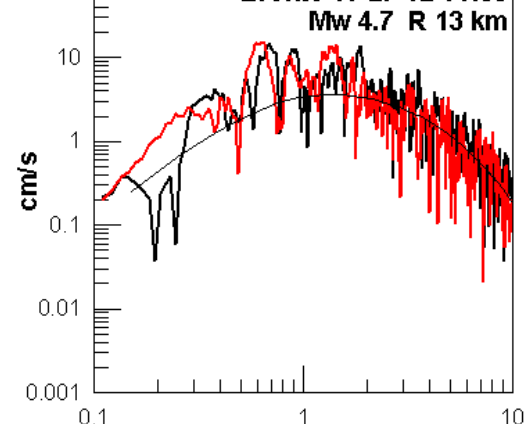
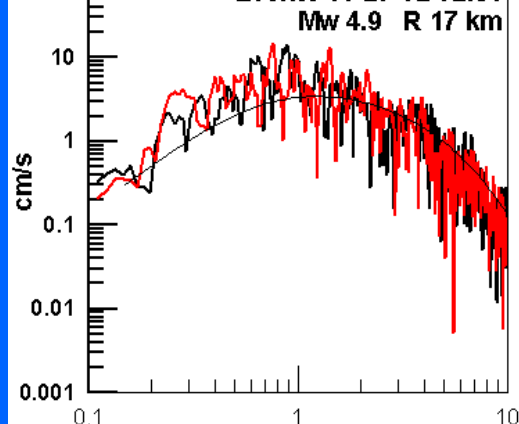




- ▲ **October 2002 (largest shocks)**
- **December 2002 (minor shocks)**

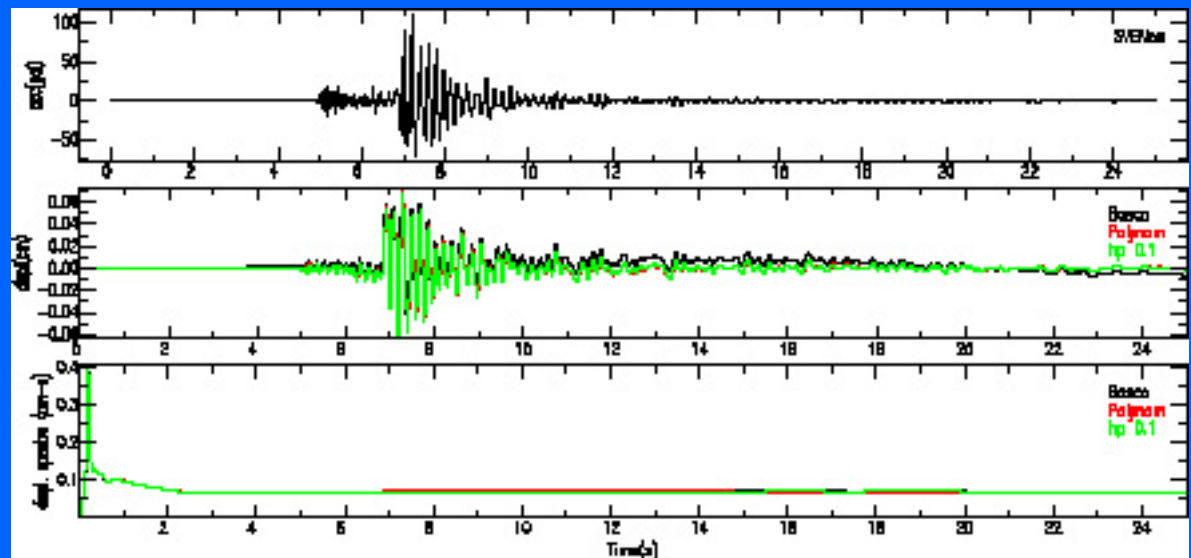


October 2002 Strongest motions

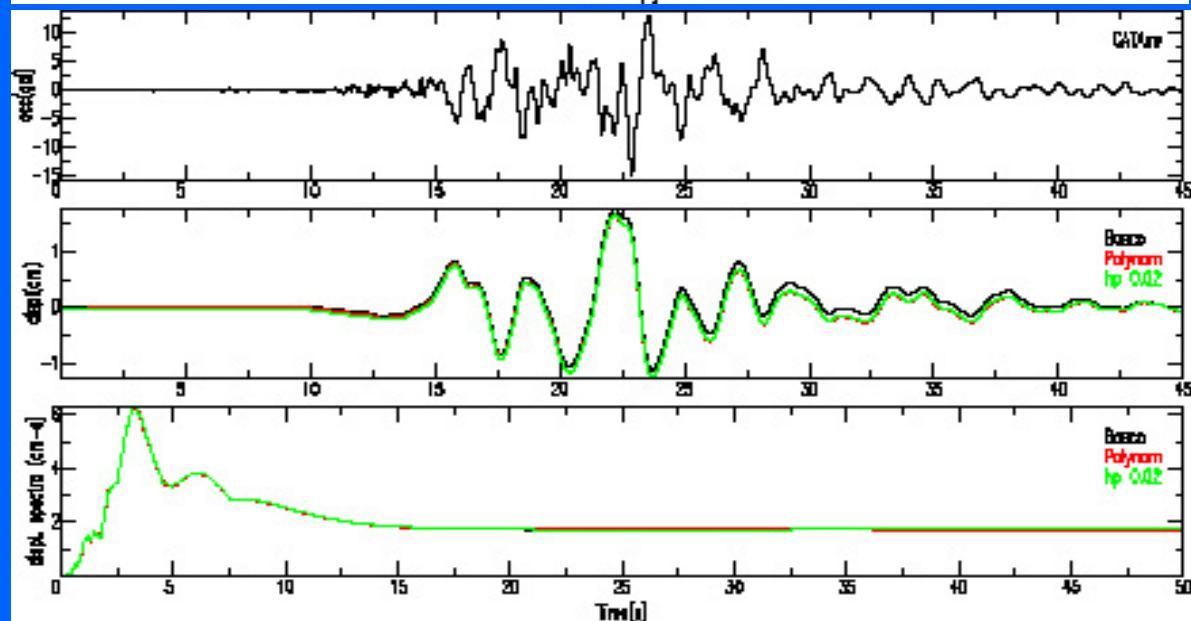


PGA and PGD of VT-A and VT-B events

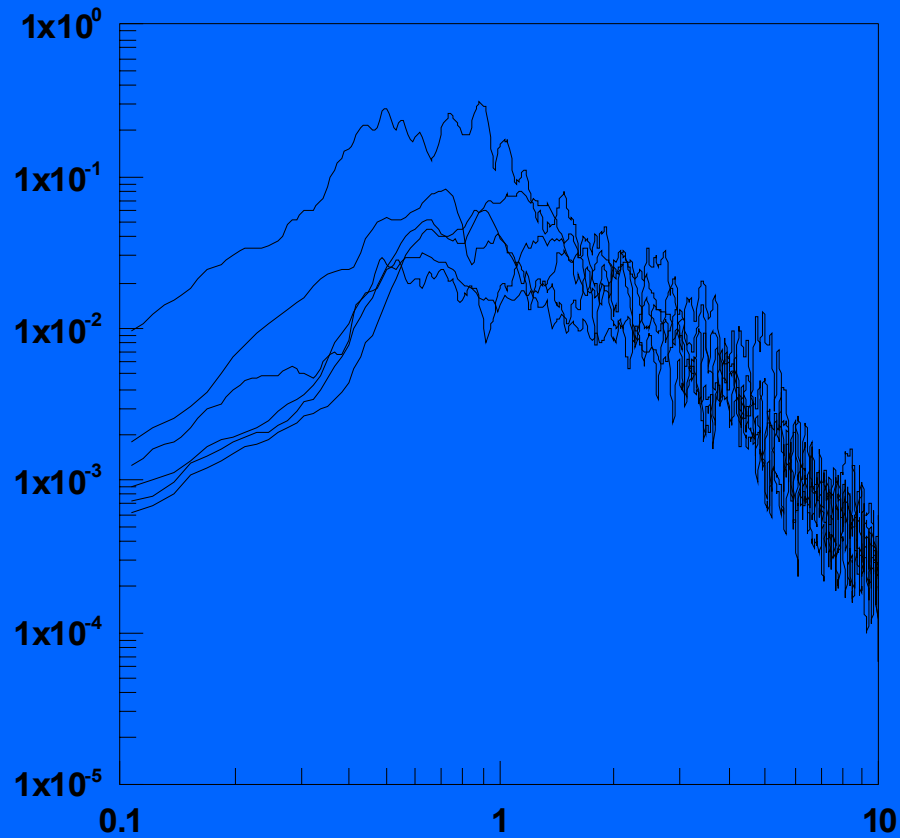
October 31, 2005
ML 3.8
VT-A event



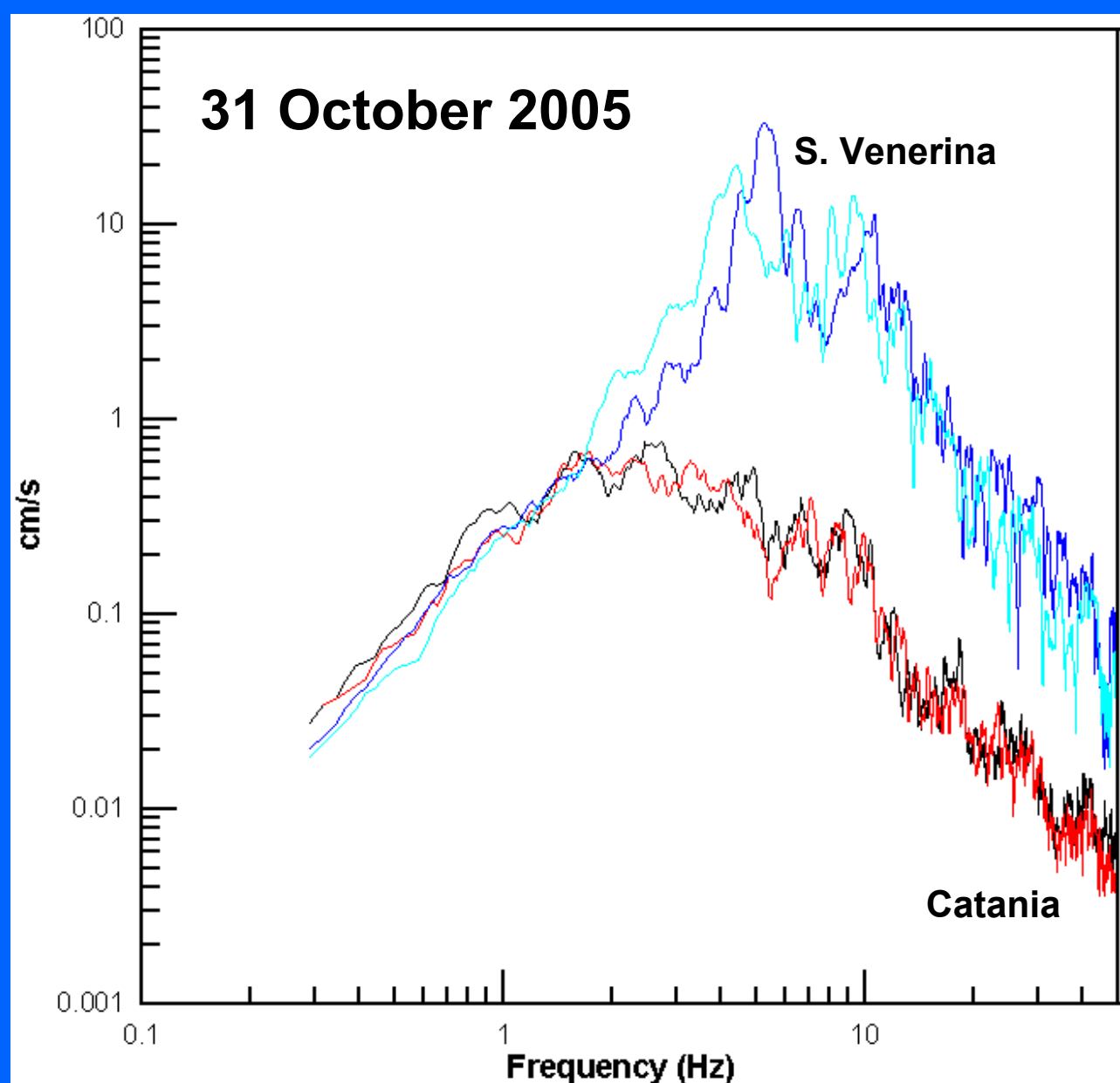
October 29, 2002
ML 4.4
VT-B event



December 2002 aftershocks



**Le sorprese
continuano...**



Task 4, a and b - Deliverables

- D14, a (Italy) and b (Etna) (definition of operative details, 6 months)
- D15, a (Italy) and b (Etna) (preliminary attenuation relationships, 12 months)
- D16, a (Italy) and b (Etna) (final attenuation relationships, 18 months)