

**Bruker format**

- .PAR + .SPC
- Little endian
- Windows or linux based

**Bruker BES<sup>3</sup>T**

- .DSC + .DTA
- .YGF (2D)
- Big endian
- Linux based

**Bruker Magnettech**

- .XML
- base64 compression
- Windows based

**LINEV ADANI**

- .JSON
- Human readable
- Windows based

**JEOL**

- proprietary
- Little endian
- Windows based



# VisualEPR



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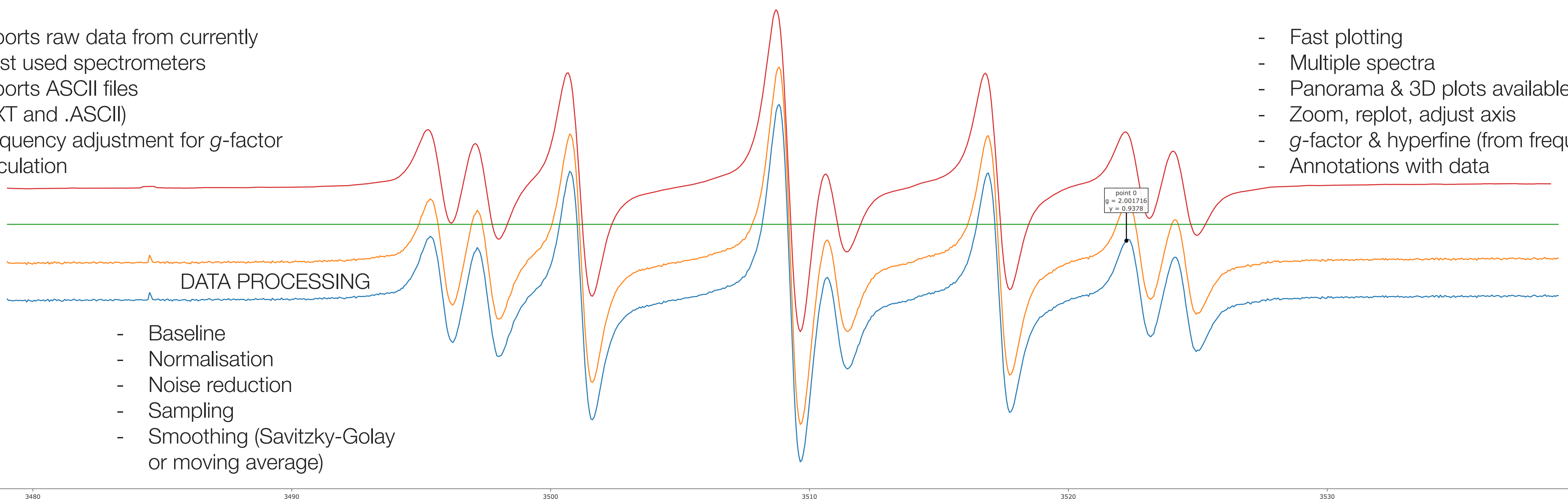
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## DATA IMPORT

- Imports raw data from currently most used spectrometers
- Imports ASCII files (.TXT and .ASCII)
- Frequency adjustment for  $g$ -factor calculation

## VISUALISATION

- Fast plotting
- Multiple spectra
- Panorama & 3D plots available
- Zoom, replot, adjust axis
- $g$ -factor & hyperfine (from frequency)
- Annotations with data



## DATA PROCESSING

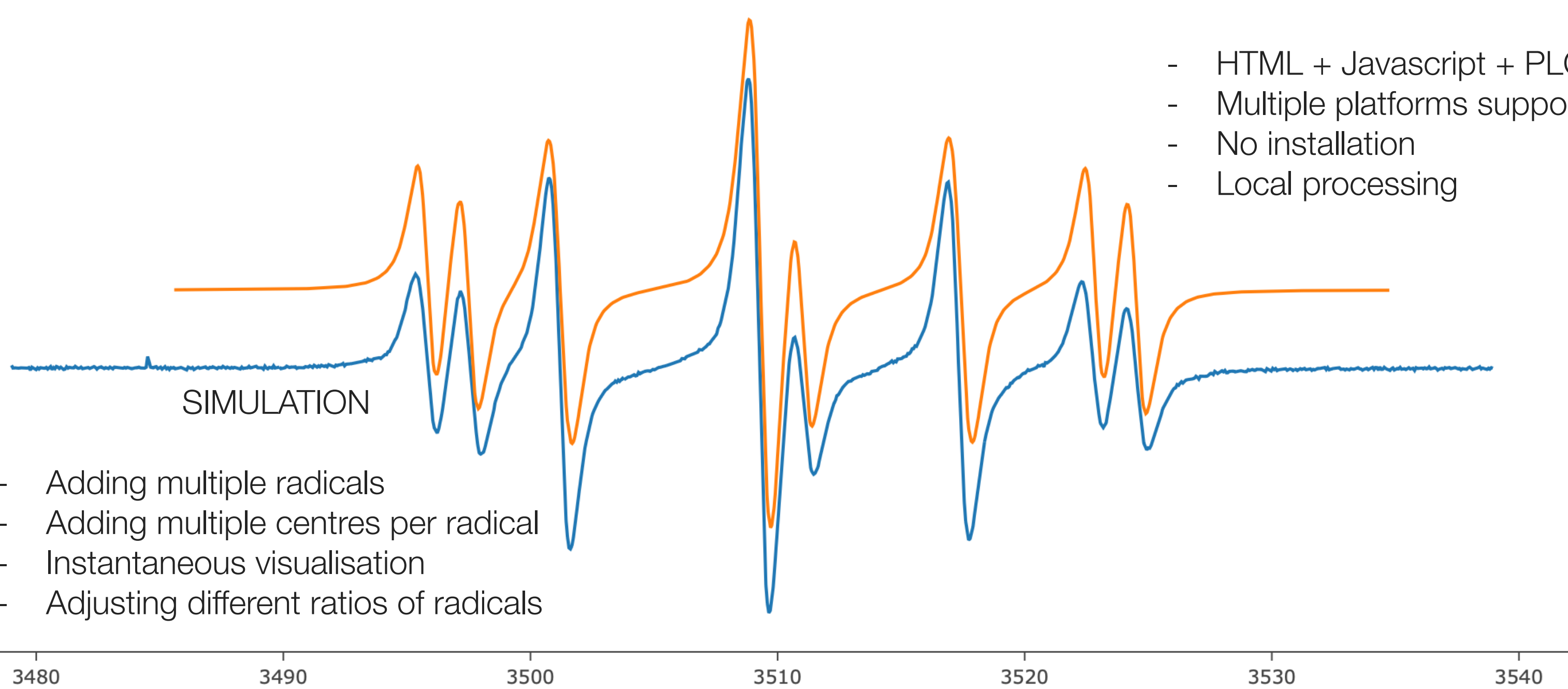
- Baseline
- Normalisation
- Noise reduction
- Sampling
- Smoothing (Savitzky-Golay or moving average)

## PROGRAMING

- HTML + Javascript + PLOTLY
- Multiple platforms supported
- No installation
- Local processing

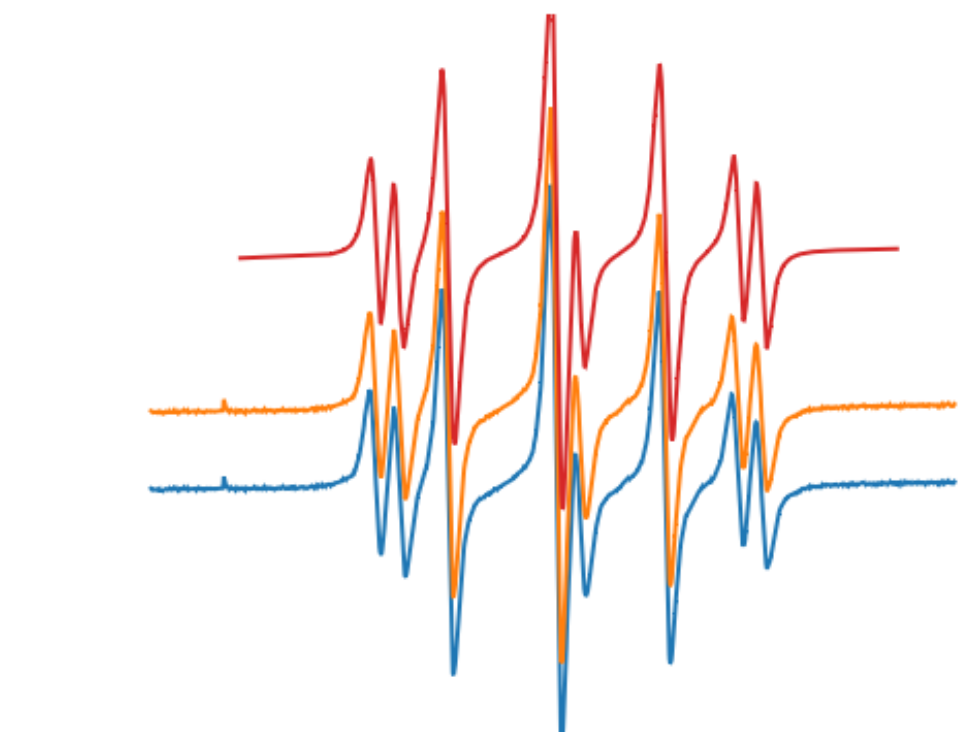
## EXPORT

- Export graphs in .SVG and .PNG
- Adjust size and scale



## SIMULATION

- Adding multiple radicals
- Adding multiple centres per radical
- Instantaneous visualisation
- Adjusting different ratios of radicals



- Export data in .CSV format

output from sw.pharma.hr/EPRSIM/visualEPR.html				
magnetic field	g-factor	EPR spectra	baseline EPR	simulation EPR
3479.00000	2.02660	0.00732	0.80732	2.36626
3479.05850	2.02656	-0.02242	0.77758	2.36638
3479.11719	2.02653	-0.01903	0.78097	2.36651
3479.17578	2.02649	-0.02393	0.77607	2.36663
3479.23438	2.02646	-0.02856	0.77144	2.36675
3479.29297	2.02643	-0.02378	0.77622	2.36688

