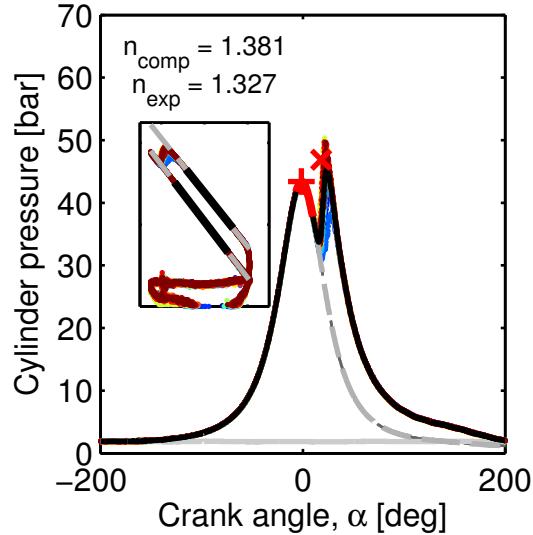


$$P_{\text{motor}} = 43.4 \pm 0.2 \quad \alpha_P = -1.4 \pm 0.4^\circ$$

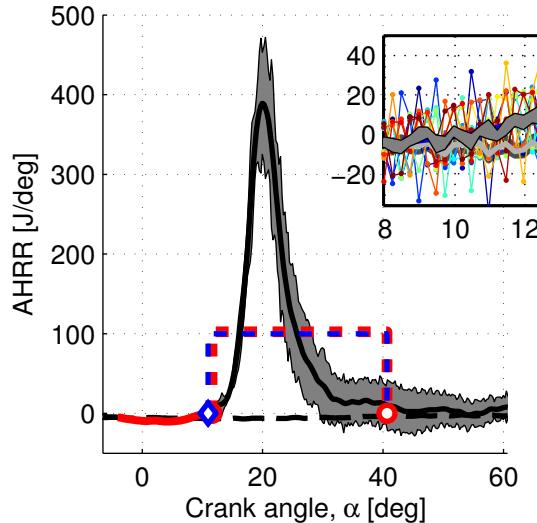
$$P_{\text{max}} = 46.9 \pm 2.4 \quad \alpha_P^{\text{motor}} = 18.1 \pm 10.2^\circ$$



$$\alpha_{\text{AHRRmax}} = 20.6 \pm 1.6^\circ$$

$$\text{MEAHR} = 99.8\text{--}102.4 \text{ J/deg}$$

$$\text{DAHRR} = 4.06 \pm 0.19 \text{ ms}$$



Inj: CRI2.2 hydr. delay  $2.4 \pm 0.2 \text{ CAD}$   
7 orifice, diameter = 0.14mm

Settings:  
runname = 140929u  
Rc = 9.93  
RPM = 1201  
DSE = 2292  $\mu\text{s}$   
SSE = 353.5 CAD

TDC conditions:  
P = 43.39 bar  
T = 802.9 K  
 $\rho = 18.61 \text{ kg/m}^3$   
Z = 1.011  
S = 6696.1 J/K/kg

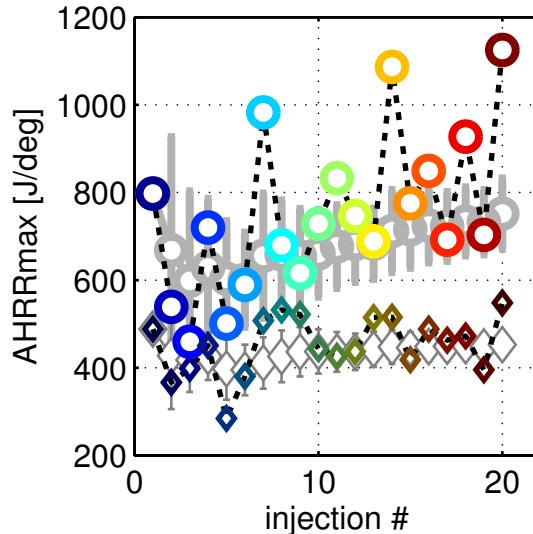
Inlet conditions:  
T = 52.0 °C  
Qair = 47.1 g/s  
Fuel:  
Jet-A  
Prail = 800 ± 7 bar

BDC conditions:  
P = 1.90 bar  
T = 65.8 °C  
 $\rho = 1.95 \text{ kg/m}^3$   
Z = 0.999  
S = 6696.1 J/K/kg

Ambient gasses:  
%O<sub>2</sub> = 21.0 (1.0mol Air + 0.0mol N<sub>2</sub>)  
M<sub>air</sub> = 28.95 g/mol; M<sub>fg</sub> = 28.95 g/mol

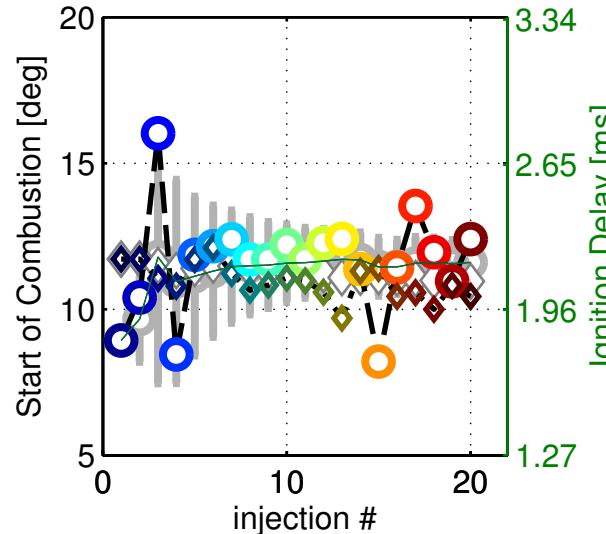
$$\langle \text{AHRR}_{\text{max}} \rangle = 752 \pm 57$$

$$\langle \text{AHRRfilt}_{\text{max}} \rangle = 453 \pm 21$$

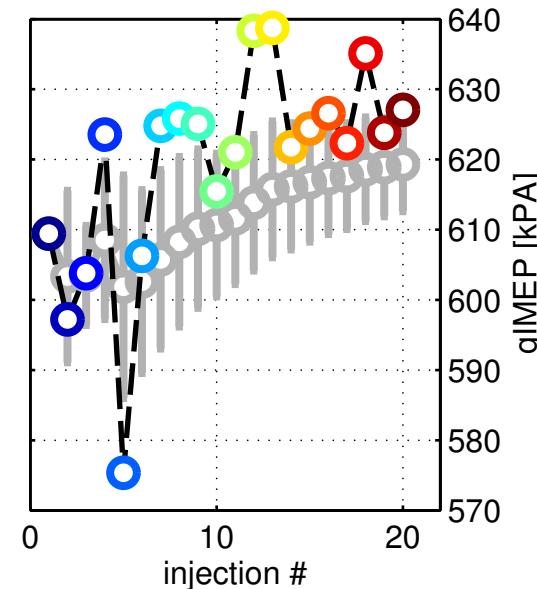


$$\langle \text{SOC} \rangle = 11.6 \pm 0.5^\circ \quad \langle \text{SOC}_{\text{filt}} \rangle = 11.0^\circ$$

$$\langle \text{ID} \rangle = 2.19 \pm 0.08 \quad \langle \text{ID}_{\text{filt}} \rangle = 2.10$$



$$\langle \text{gIMEP} \rangle = 619.3 \pm 30$$



—○— running mean and 95% conf. intrvl —◇— filtered data running mean and 95% CI - - - measured value