

Report on combustibility of fuel oil

Fuel properties

Sample No.	
Viscosity(cSt 50deg.C)	-
Viscosity(cSt 100deg.C)	-

Sample No. C重油+水40%

Date : Experiment 2011.4.27

Experimental condition

Test1. T=756K(483deg.C)

P=2.1MPa

Nozzle : ϕ 0.20mm

O₂ : 21%

Injection temperature=107deg.C

Test2. T=756K(483deg.C)

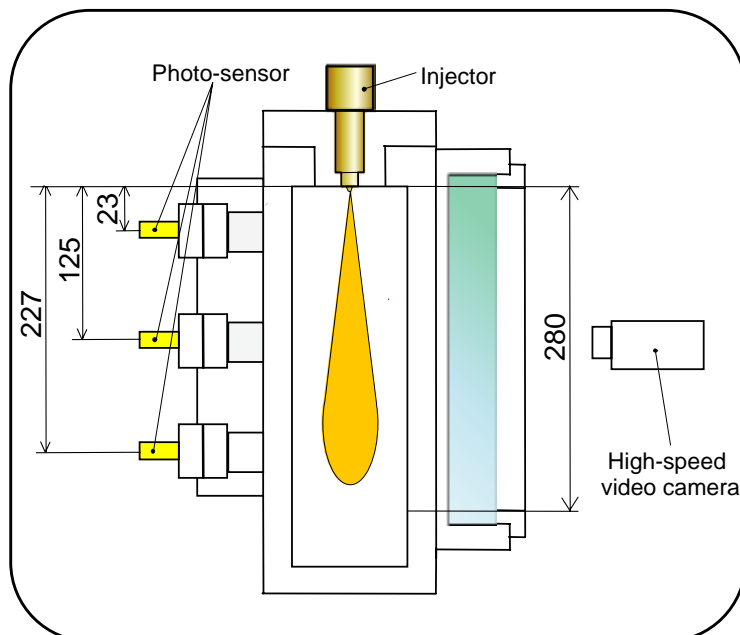
P=2.1MPa

Nozzle : ϕ 0.20mm

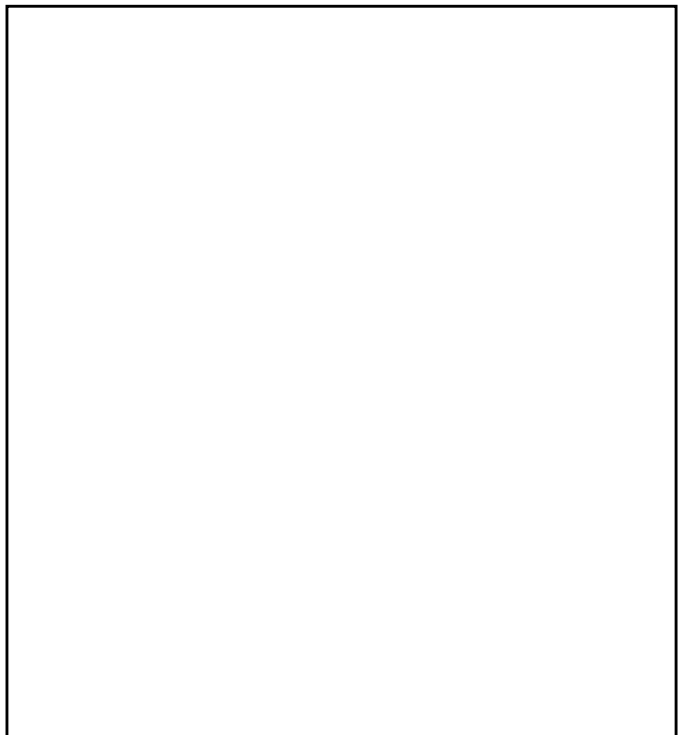
O₂ : 21%

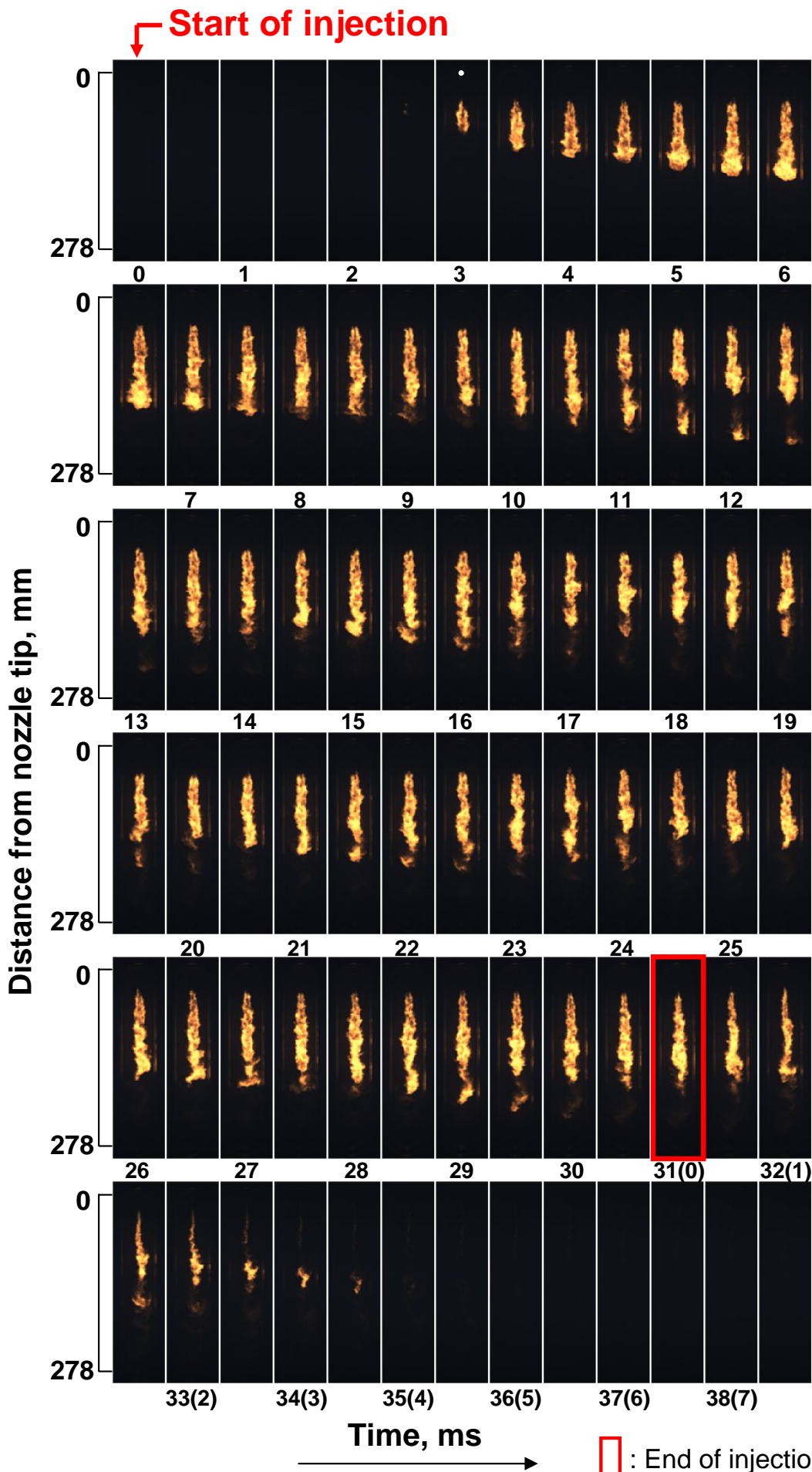
Injection temperature=107deg.C

Optical system



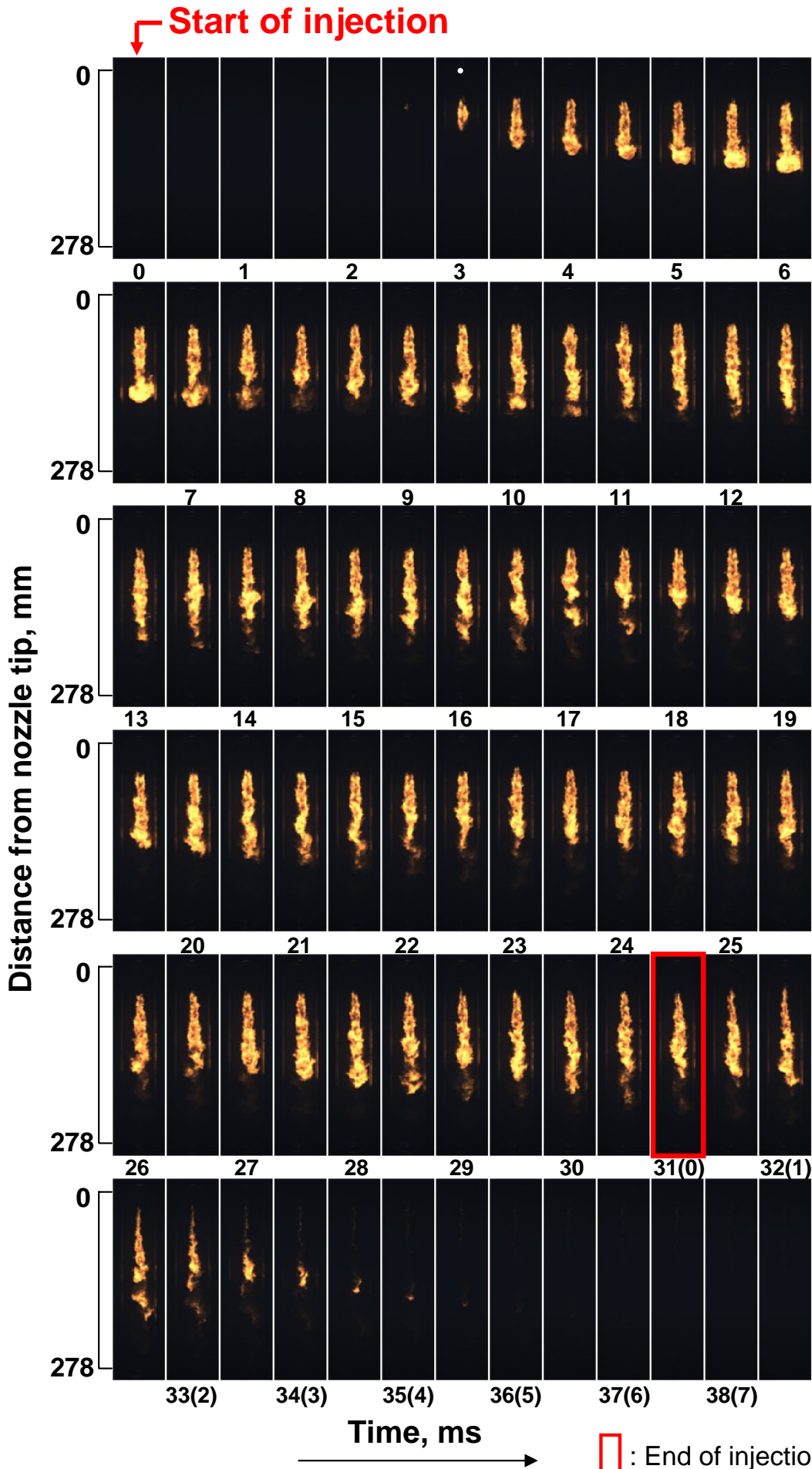
Comments





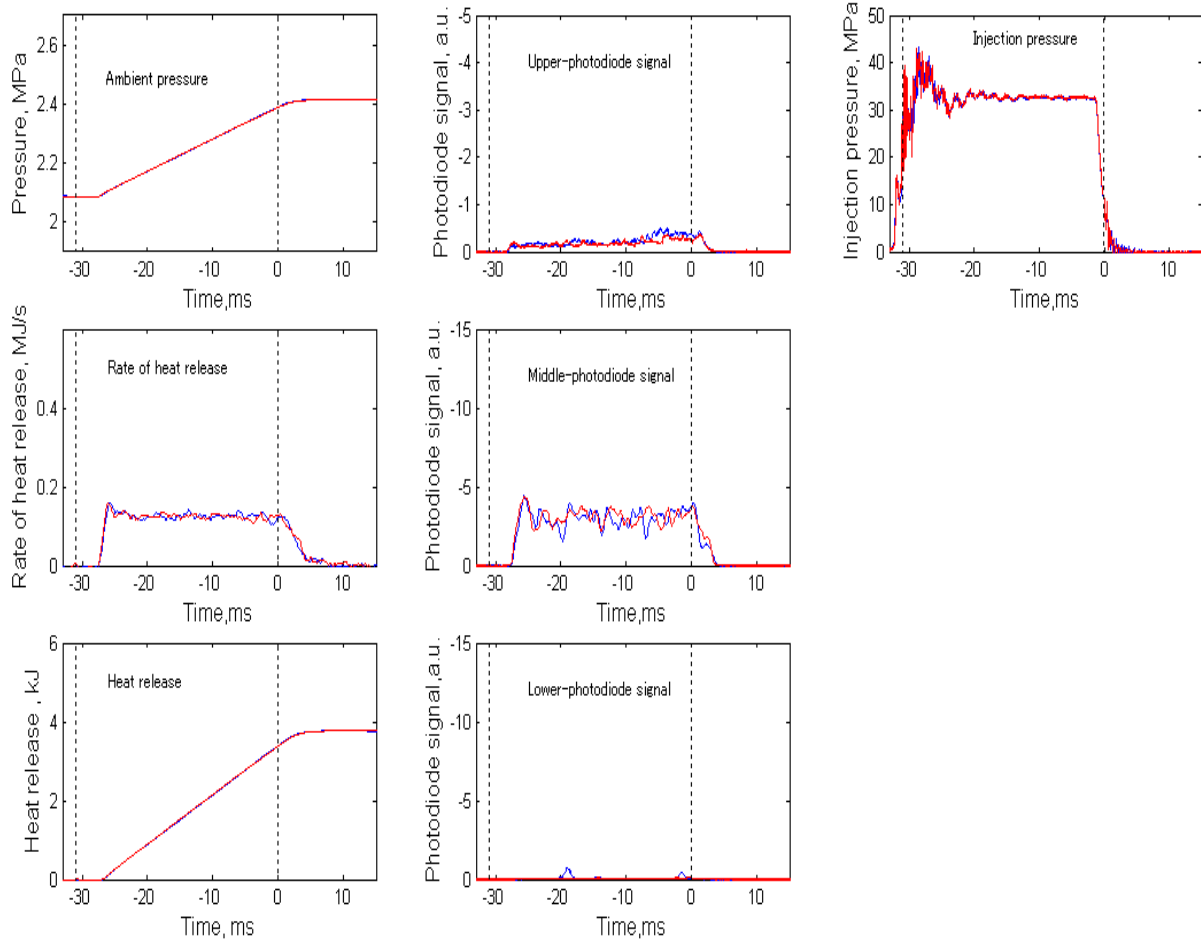
Experimental condition
Test1. T=756K(483deg.C)
P=2.1MPa
Nozzle : ϕ 0.20mm
O₂ : 21%

□ : End of injection
() : Time of after burning



Experimental condition
Test2. T=756K(483deg.C)
P=2.1MPa
Nozzle : ϕ 0.20mm
O₂ : 21%

: End of injection
() : Time of after burning



【Test1】(Blue line)

Fuel injection = 30.94[msec]

Injection pressure = 31.85[MPa]

Ignition delay = 3.06[msec]

After-burning = 4.20[msec]

Max. ROHR level & time = 0.1593[MJ/s], 5.21[msec] (After the start of injection)

Heat release value = 3.7512[kJ]

【Test2】(Red line)

Fuel injection = 30.96[msec]

Injection pressure = 31.96[MPa]

Ignition delay = 2.98[msec]

After-burning = 3.93[msec]

Max. ROHR level & time = 0.1596[MJ/s], 4.97[msec] (After the start of injection)

Heat release value = 3.7838[kJ]