

Jasper, S., Hussong, J., Lindken, R.,
**PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions**
Exp Fluids (2021), Springer.

Sarah Jasper
Bochum University of Applied Sciences
Institute for Thermodynamics and Fluid Mechanics
Am Hochschulcampus 1
44801 Bochum
Germany
t: +49 234 32 10432
e: sarah.jasper@hs-bochum.de

Supplementary Material B

- sapphire nozzle SN1
- cavitation numbers $\sigma = 0.36 – 2.39$
- 2D normalized velocity fields

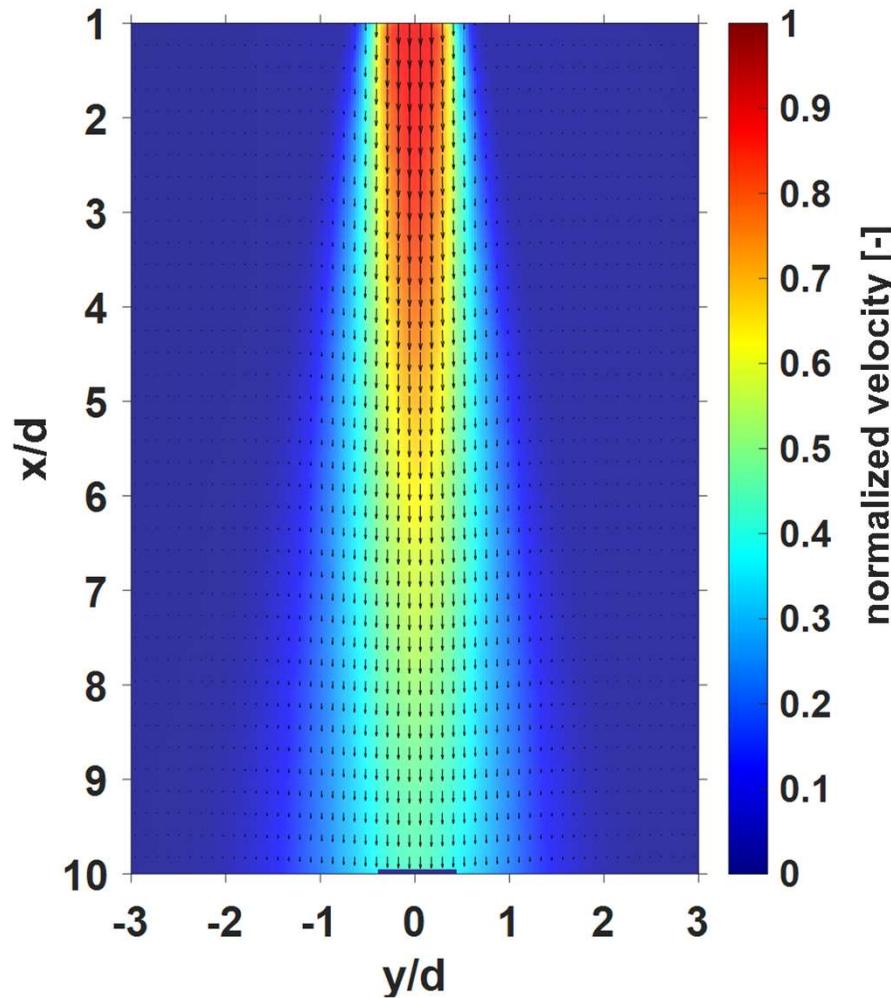
Jeanette Hussong
Technical University of Darmstadt
Fluid Mechanics and Aerodynamics
Darmstadt
Germany

Ralph Lindken
Bochum University of Applied Sciences
Institute for Thermodynamics and Fluid Mechanics
Bochum
Germany

sapphire nozzle SN1

$\sigma = 2.39$

normalized velocity field

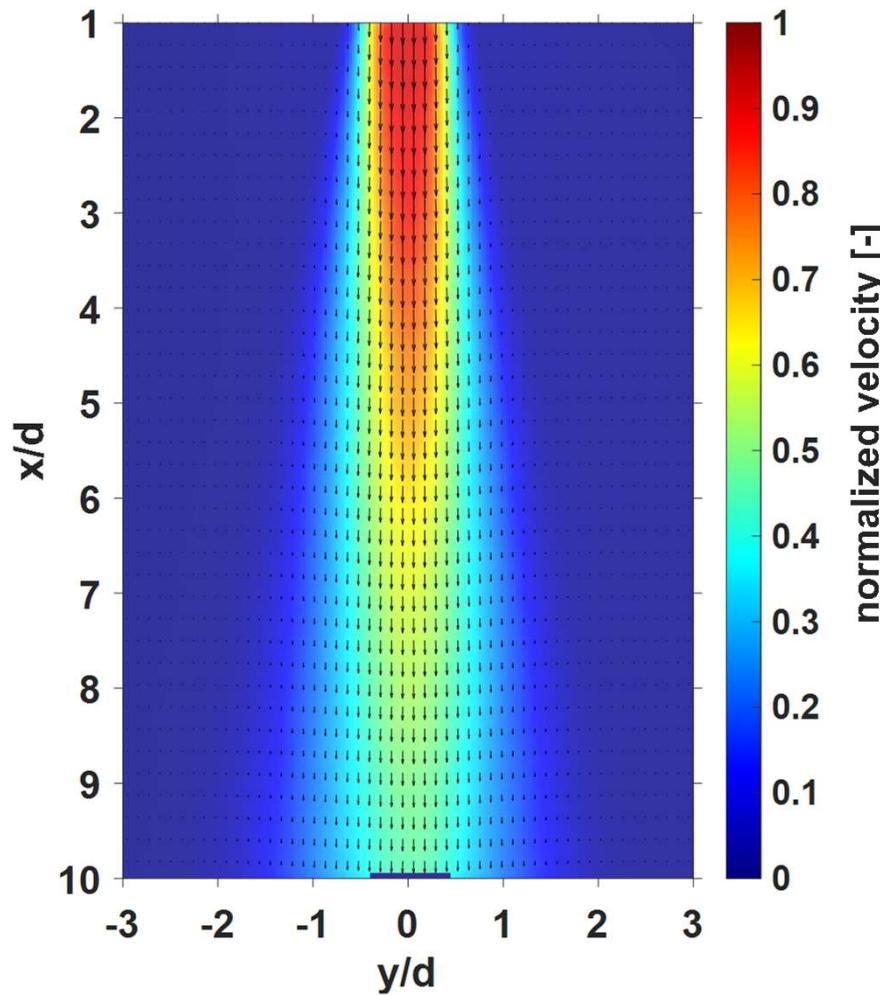


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 2.13$

normalized velocity field

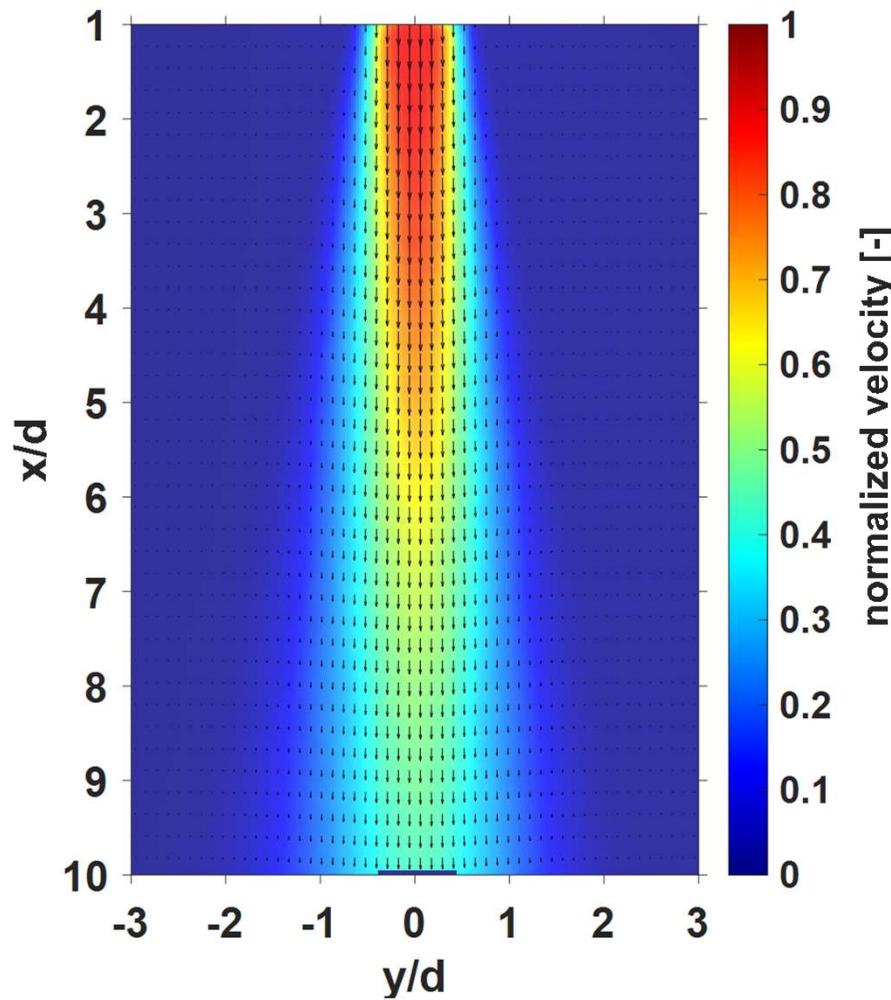


Jasper, S., Hussong, J., Lindken, R.,
**PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions**
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 2.01$

normalized velocity field

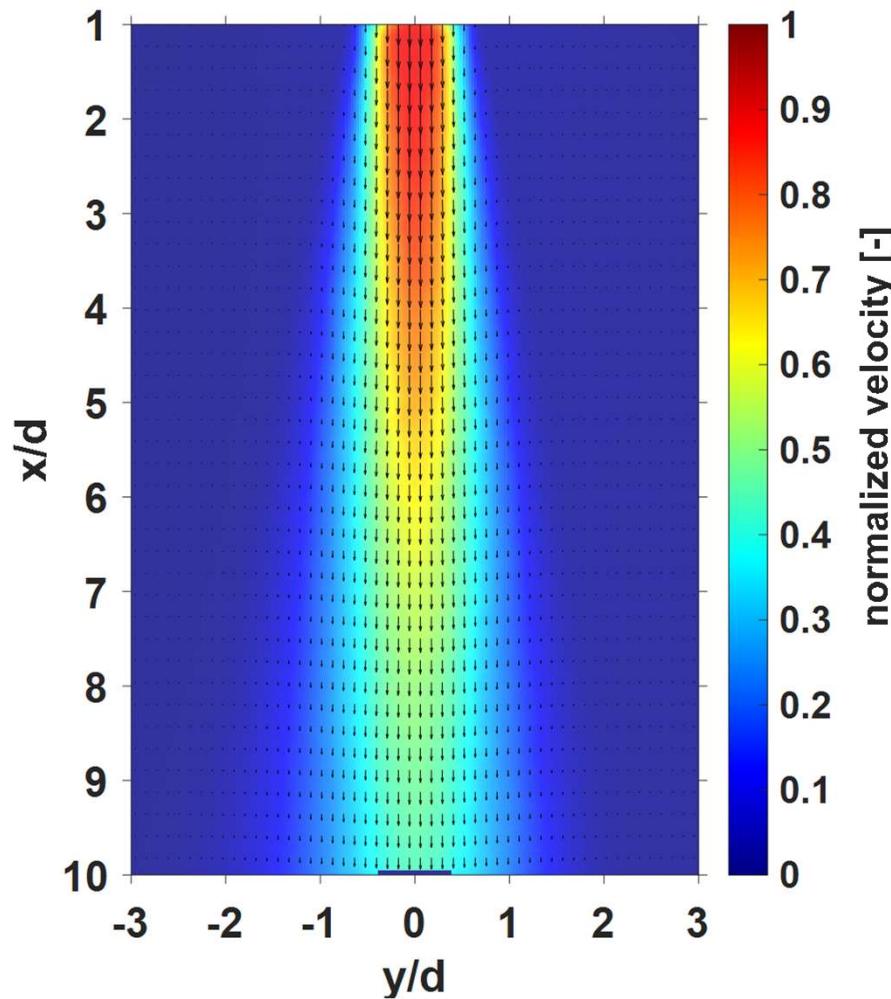


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.78$

normalized velocity field

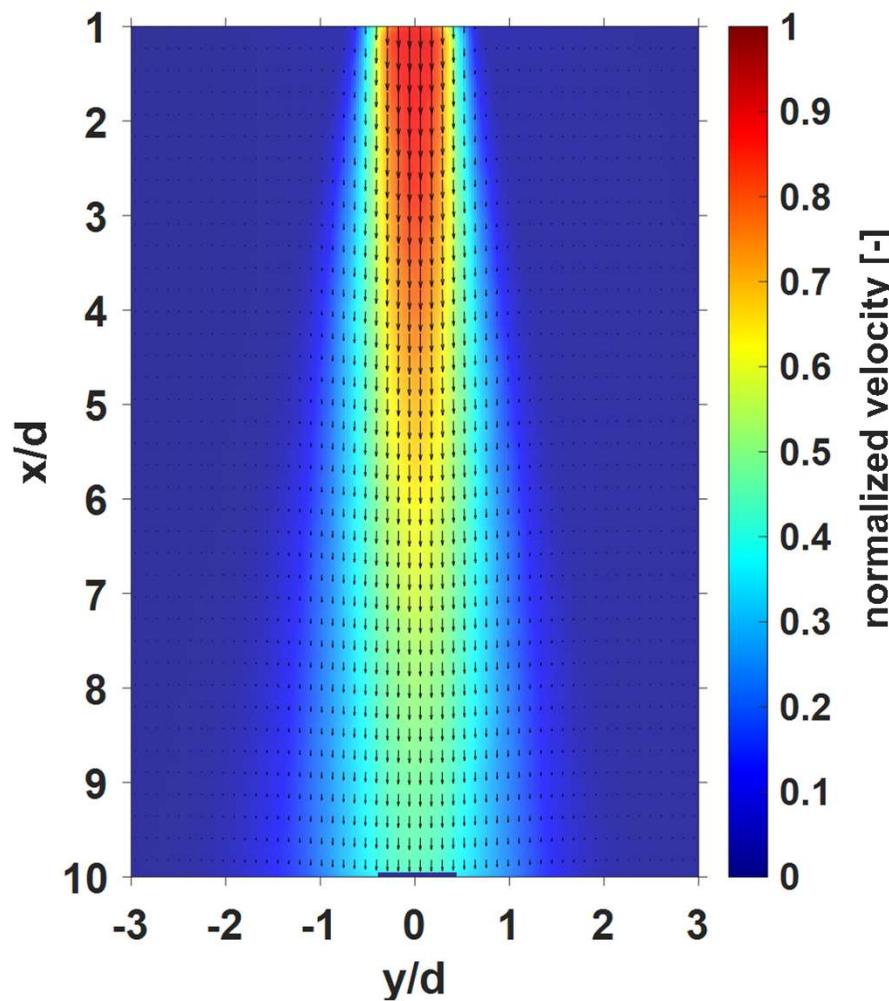


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.62$

normalized velocity field

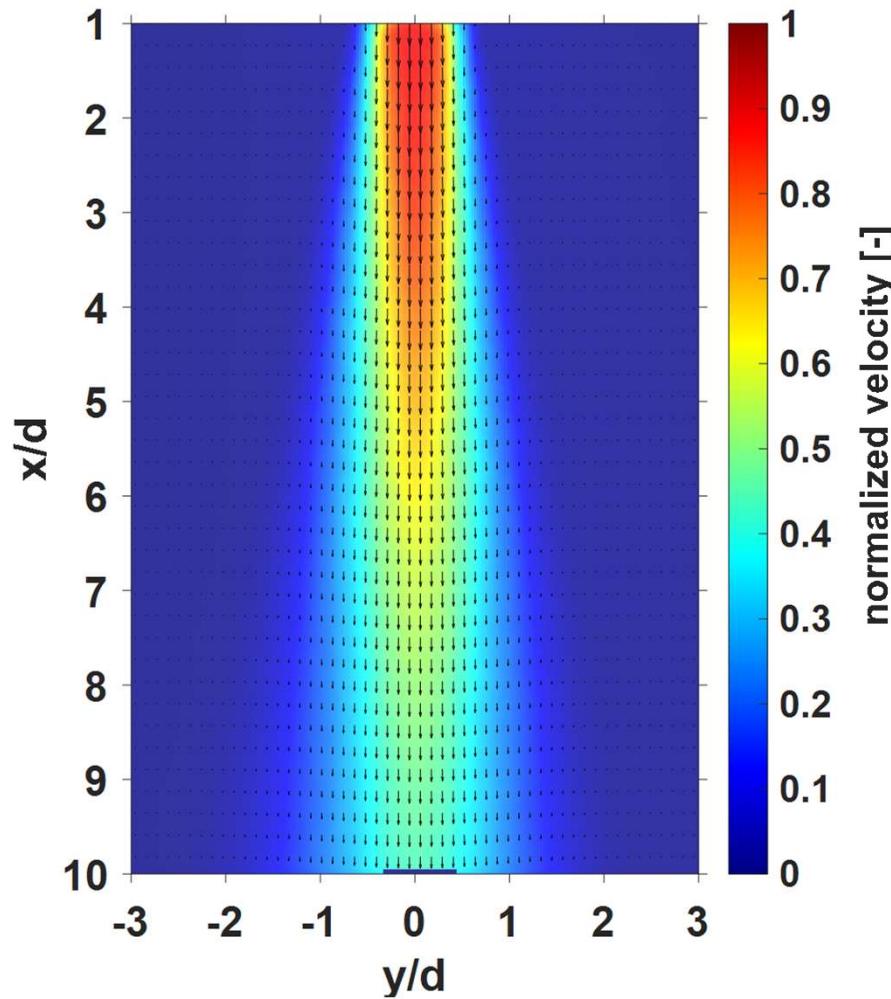


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.53$

normalized velocity field

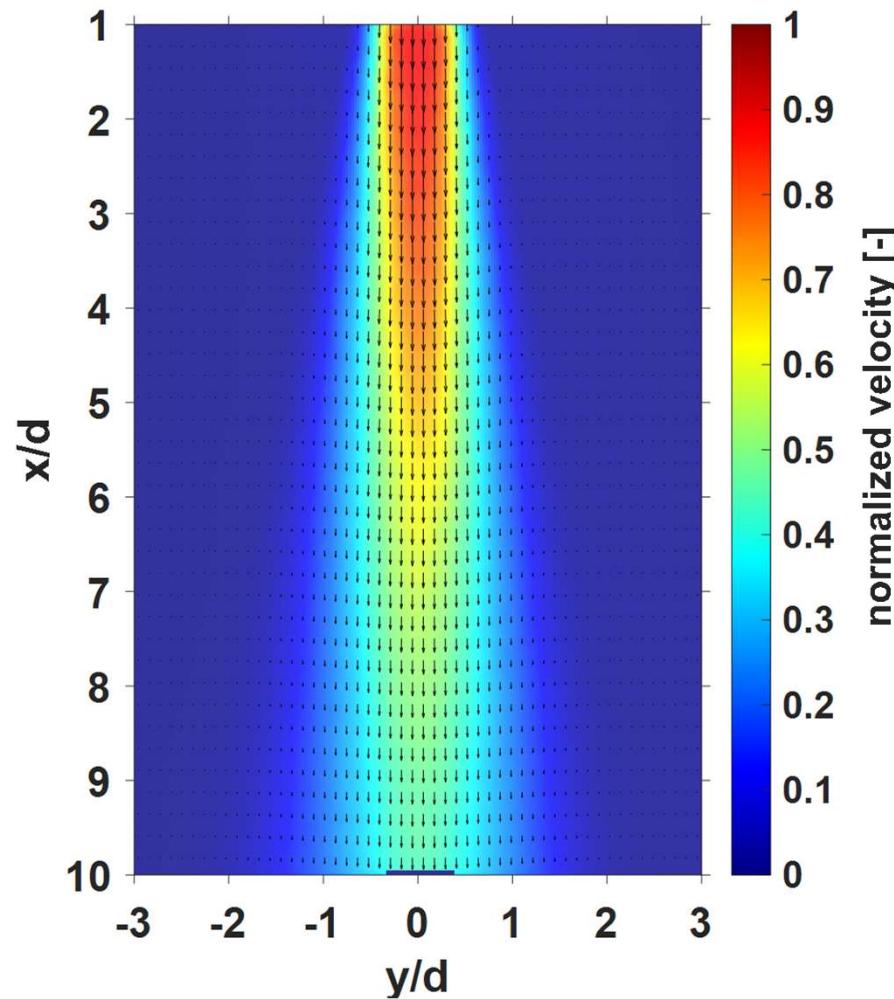


Jasper, S., Hussong, J., Lindken, R.,
**PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions**
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.42$

normalized velocity field

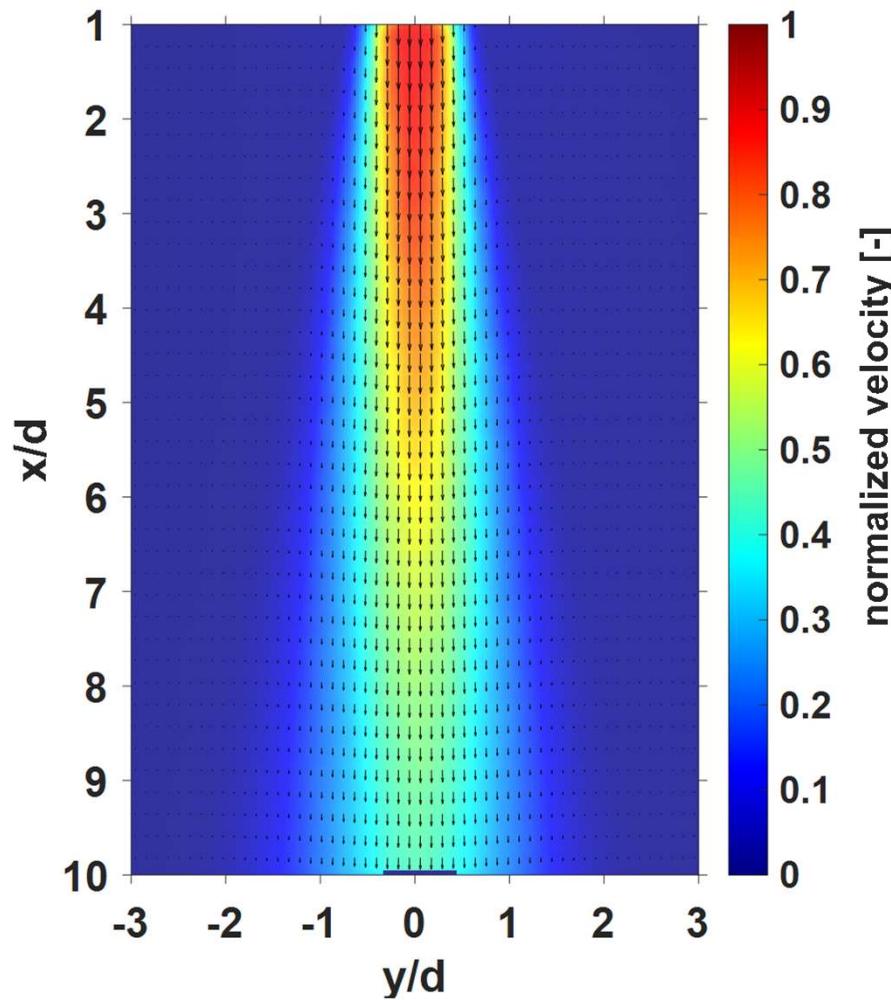


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.29$

normalized velocity field

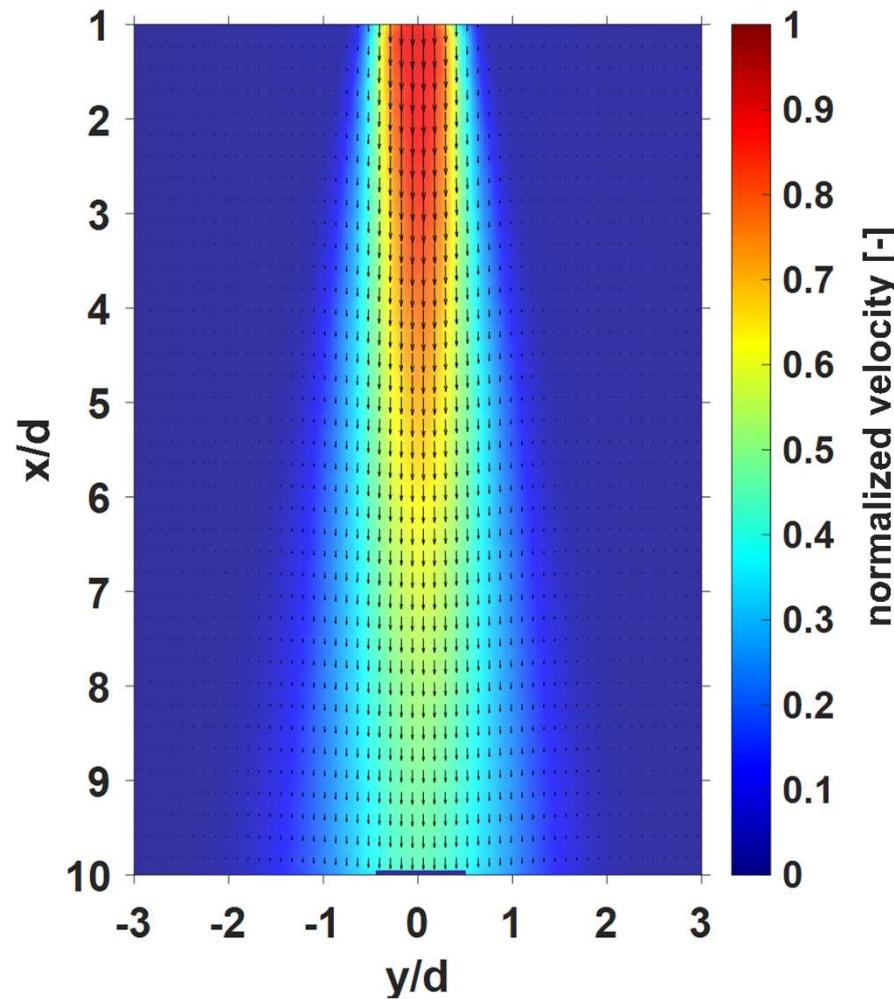


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.18$

normalized velocity field

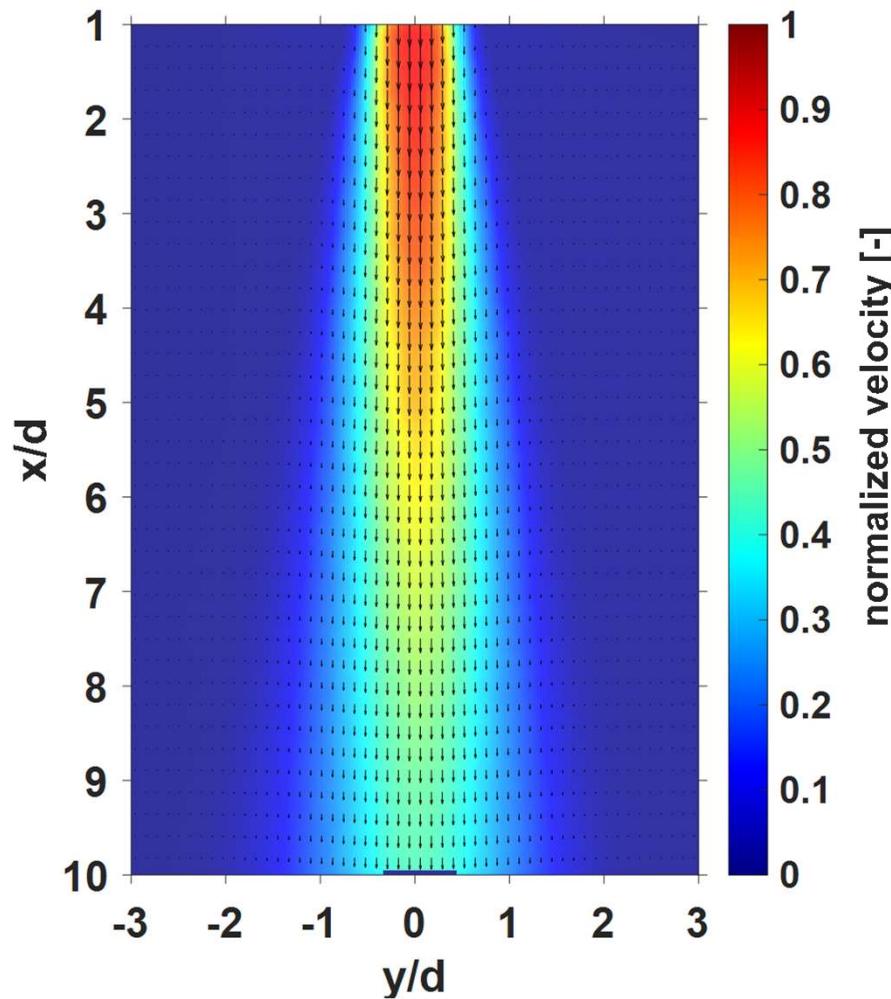


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.13$

normalized velocity field

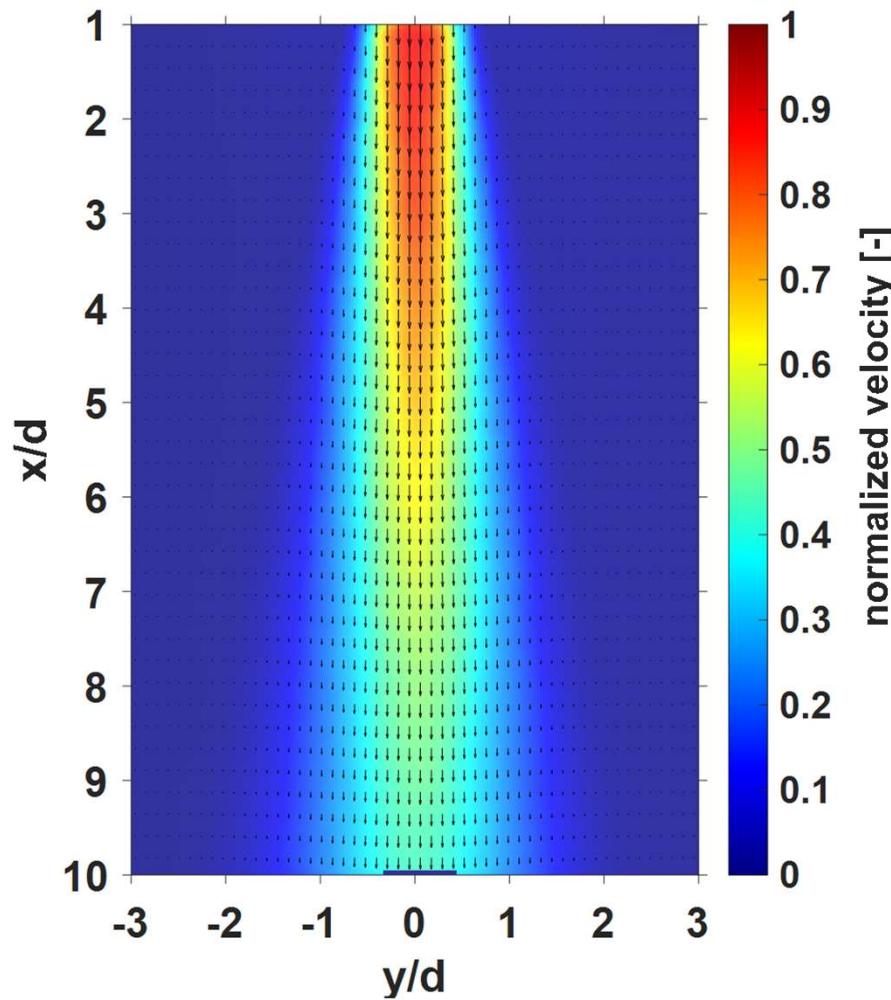


Jasper, S., Hussong, J., Lindken, R.,
**PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions**
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 1.04$

normalized velocity field

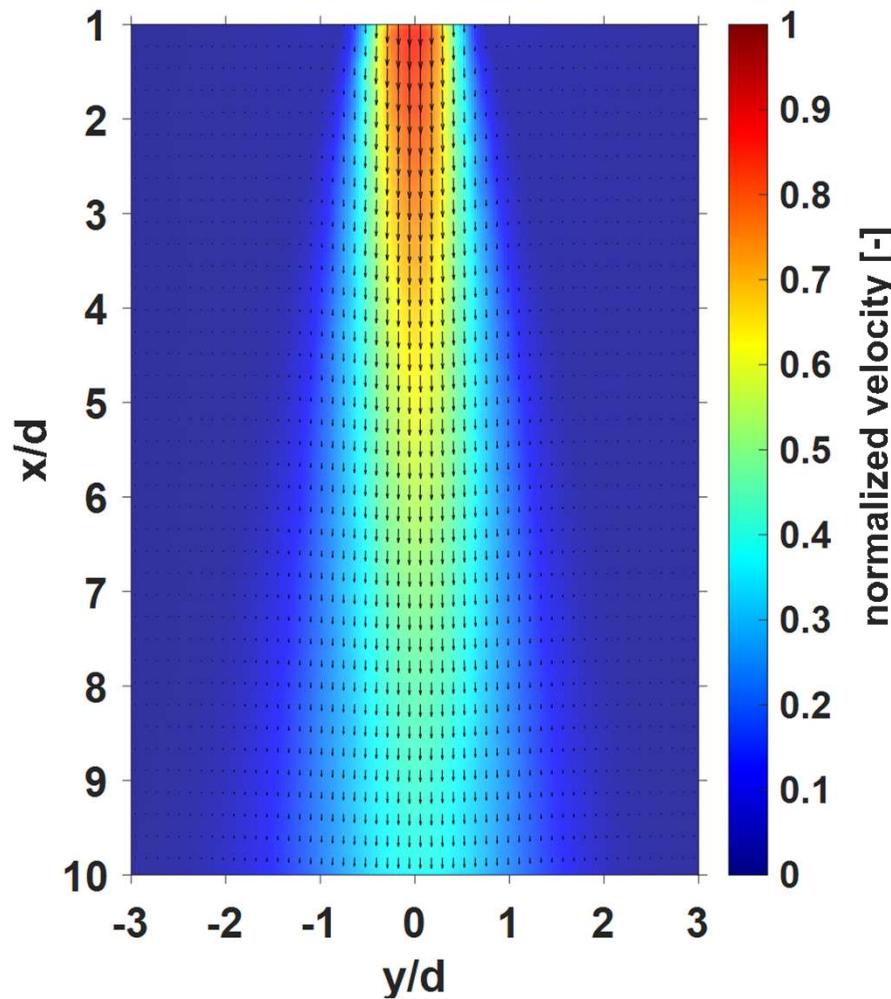


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.93$

normalized velocity field

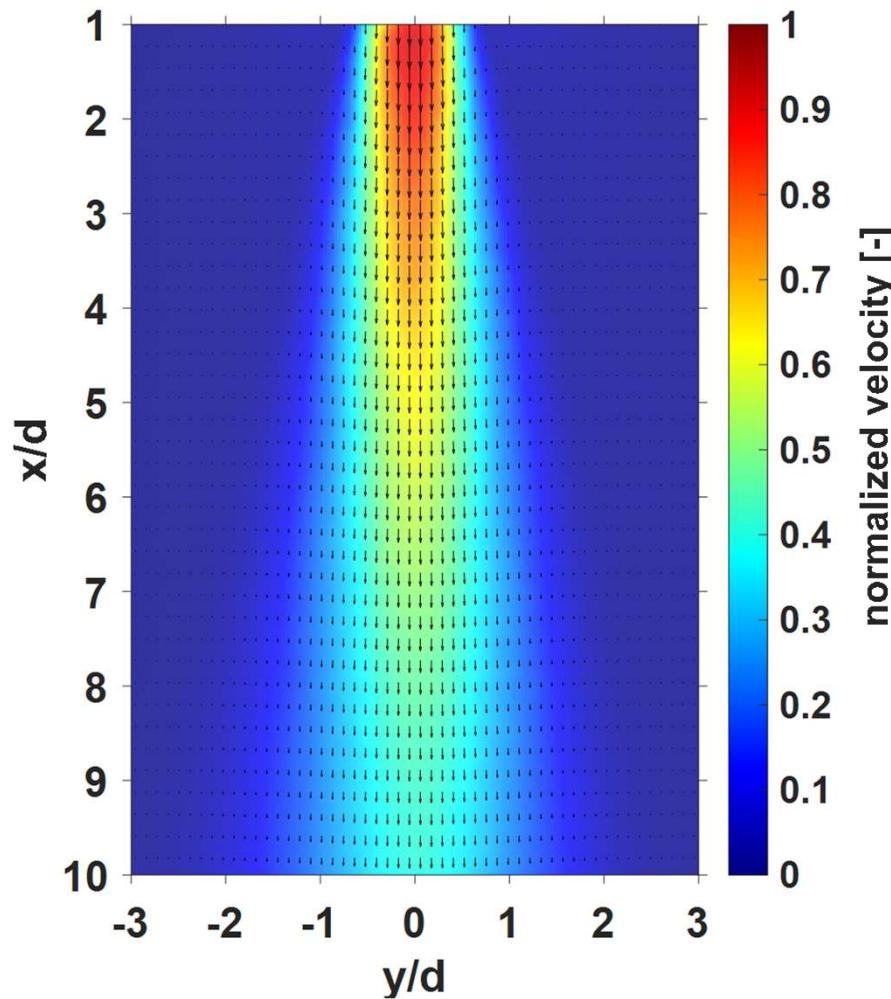


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.89$

normalized velocity field

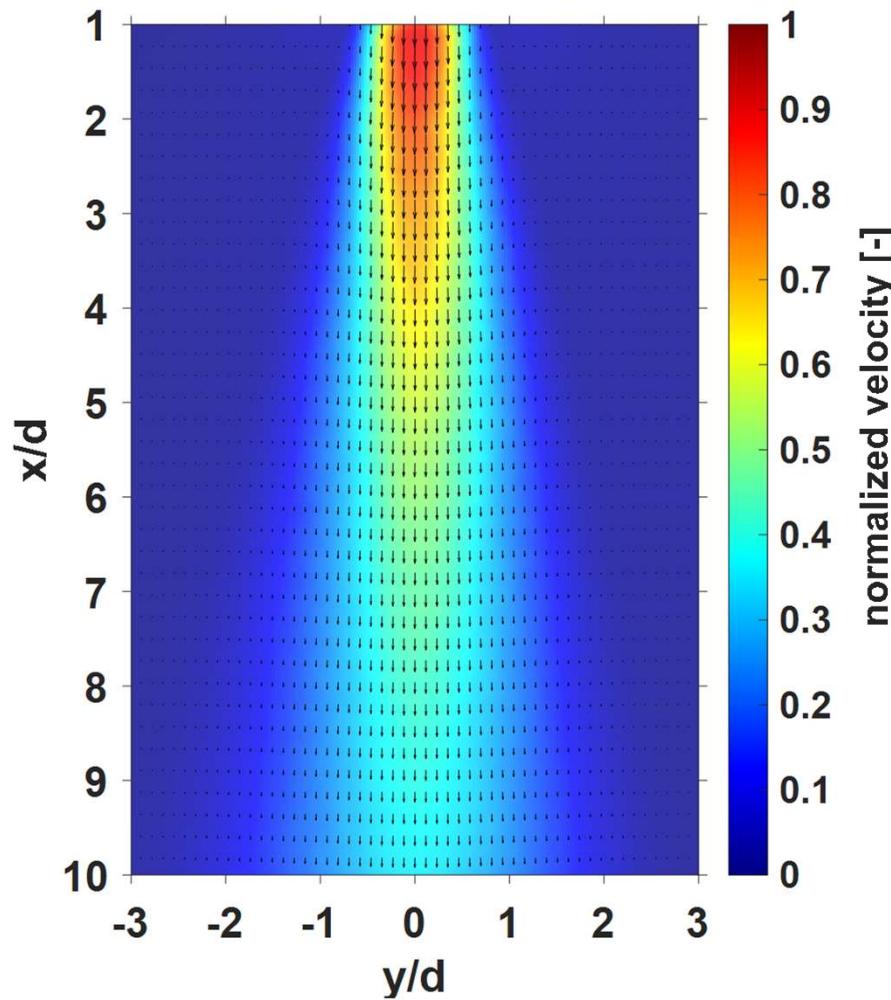


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.81$

normalized velocity field

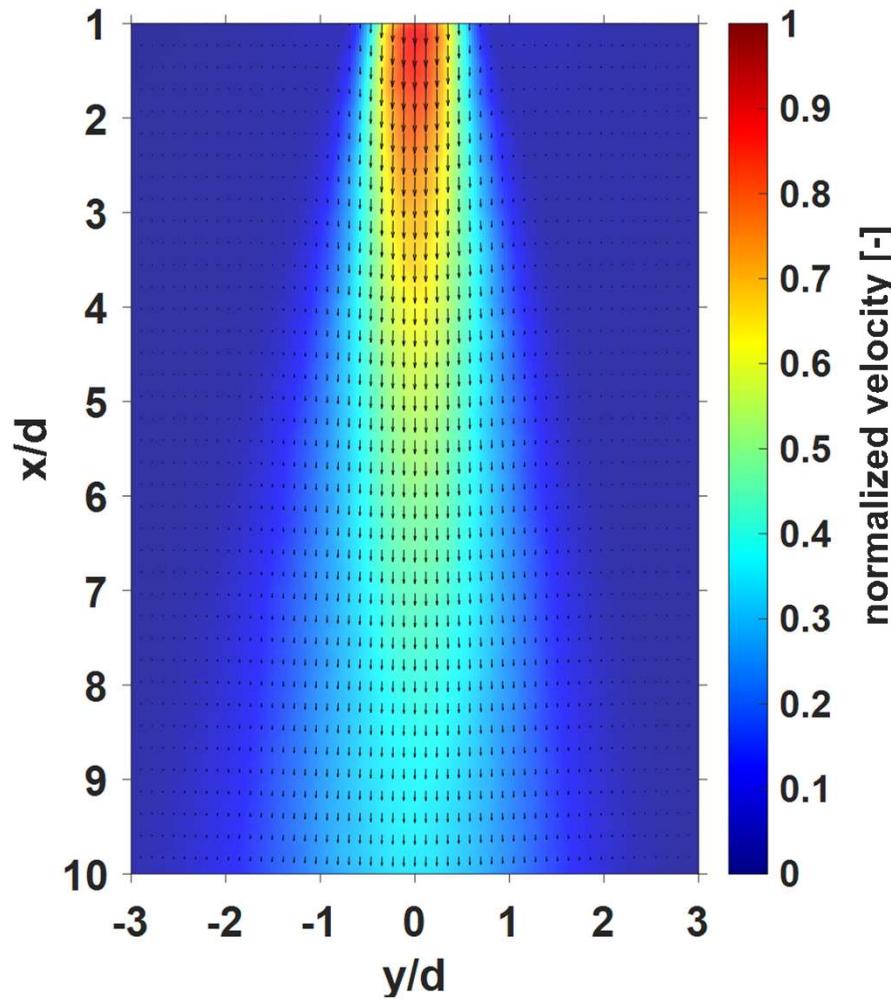


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.74$

normalized velocity field

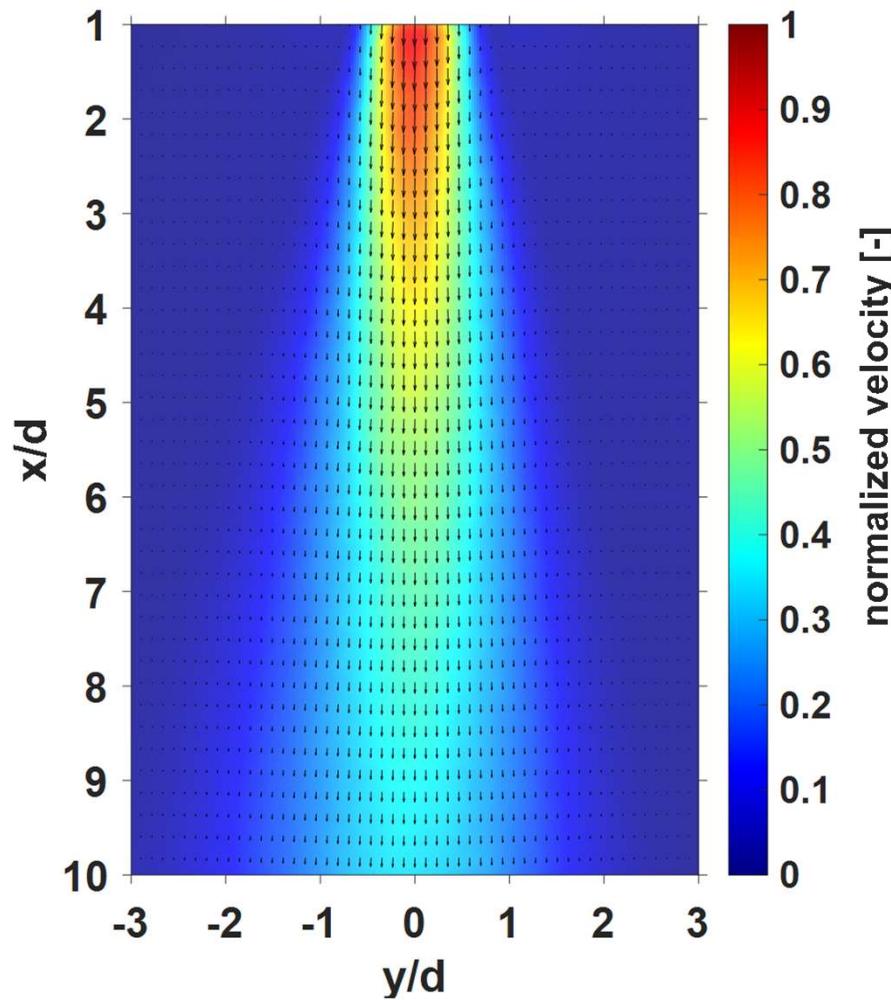


Jasper, S., Hussong, J., Lindken, R.,
**PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions**
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.69$

normalized velocity field

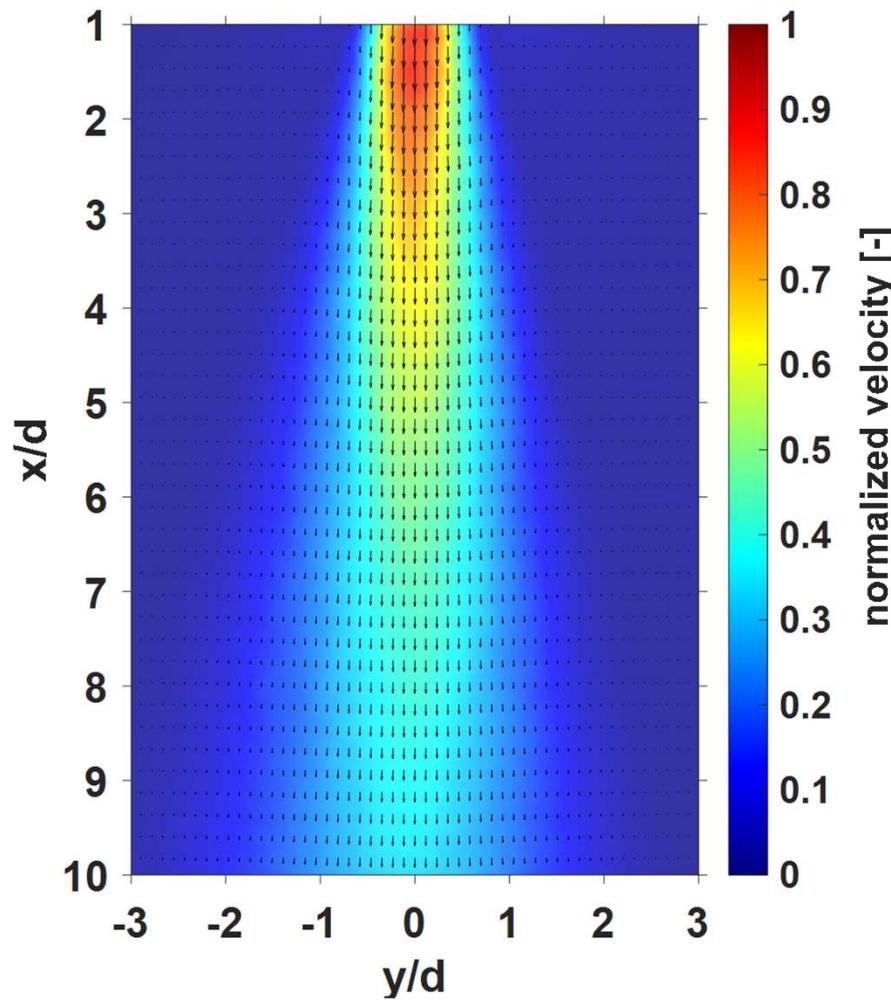


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.57$

normalized velocity field

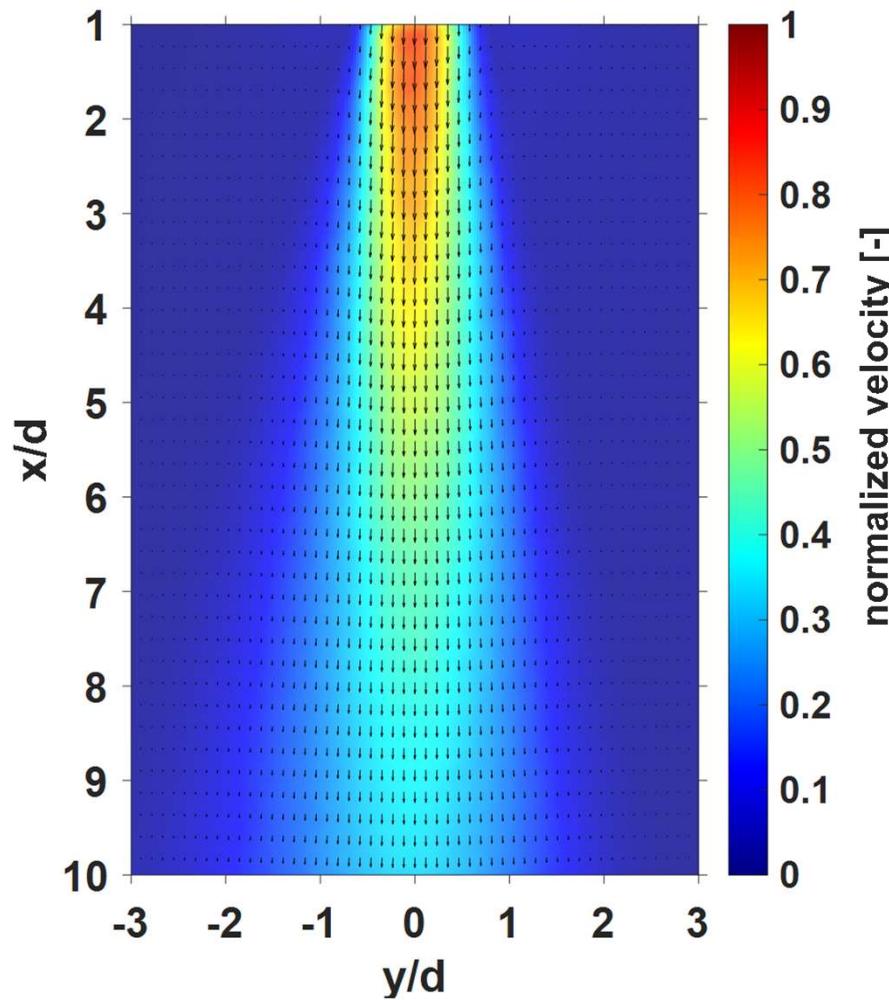


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.46$

normalized velocity field

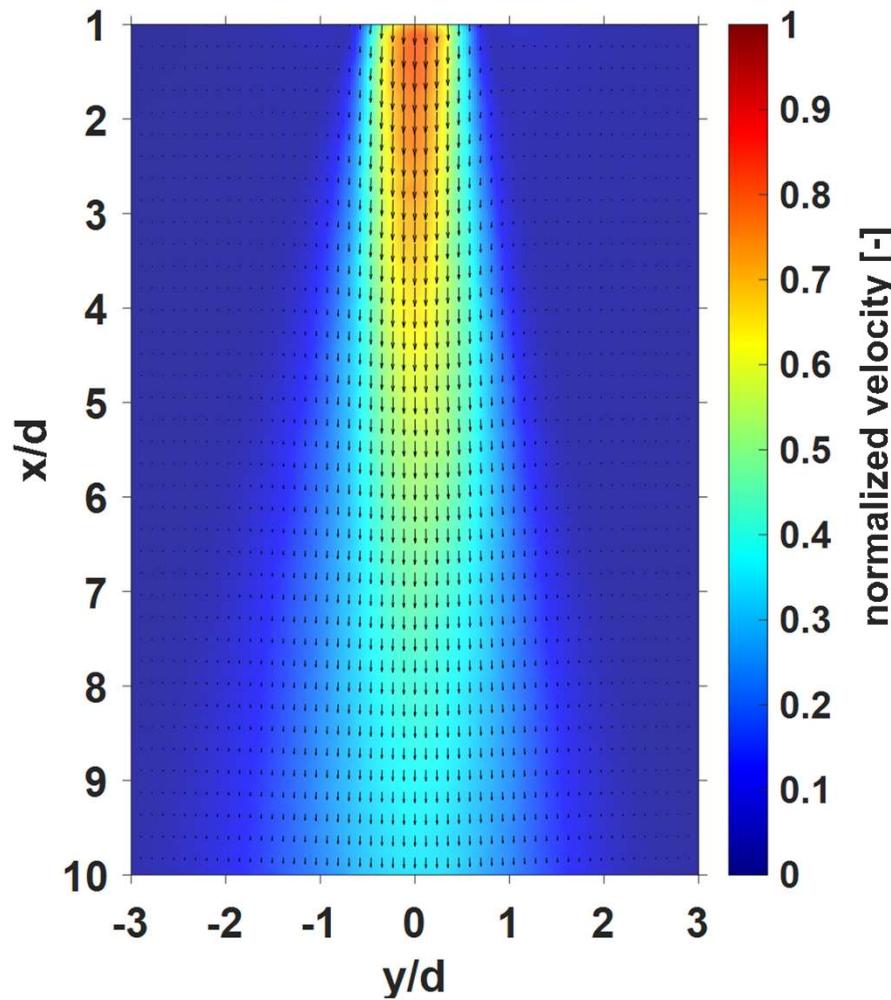


Jasper, S., Hussong, J., Lindken, R.,
PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions
Exp Fluids (2021), Springer.

sapphire nozzle SN1

$\sigma = 0.36$

normalized velocity field



Jasper, S., Hussong, J., Lindken, R.,
**PIV-Investigation of high-Reynoldsnumber submerged
water jets at high pressure ambient conditions**
Exp Fluids (2021), Springer.