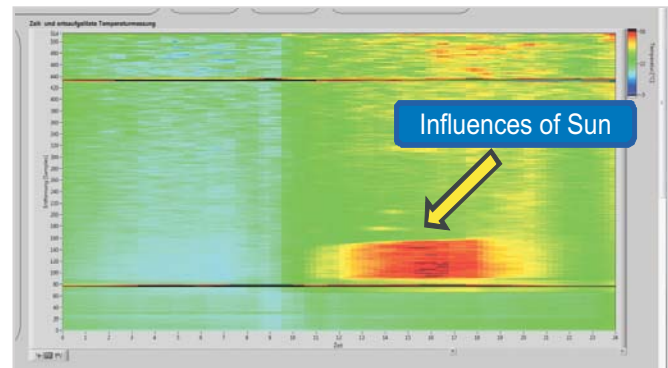


Distributed Temperature Sensing (DTS) - 532 nm



*Reference Project:
Application of a 532 nm
DTS-System for Cable Monitoring
at Terminal Cranes (HHLA Container
Terminal Altenwerder, CTA)*

Inlet: Microchip Laser (Crylas)



*Distributed Temperature Sensing for 24 hours
x-axis: time; y-axis: fiber section; colour: temperature*

System Specification

System

Applied Fiber	Single and Multimode
Wavelength	532 nm
Measurement Range	500 m
Accuracy	±5.0°C
Temperature Resolution	2.0°C @ 500 m
Spatial Resolution	1.0 meter
Sampling Resolution	0.1 meter

Light source

Microchip Laser (Crylas)	532 nm
Laser Safety Class	2
Repetition Rate	20 kHz
Pulse Width	1.3 ns

Detector

Applied Detector	Photomultiplier
------------------	-----------------

Contact

Fraunhofer Heinrich Hertz Institute

Dr. Martin Angelmahr
Am Stollen 19B, Haus 3, 38640 Goslar, Germany

Phone: +49 (5321) 6855 - 132
Mail: martin.angelmahr@hhi.fraunhofer.de

Partners

