

Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Schweizer Armee  
Führungsunterstützungsbasis FUB

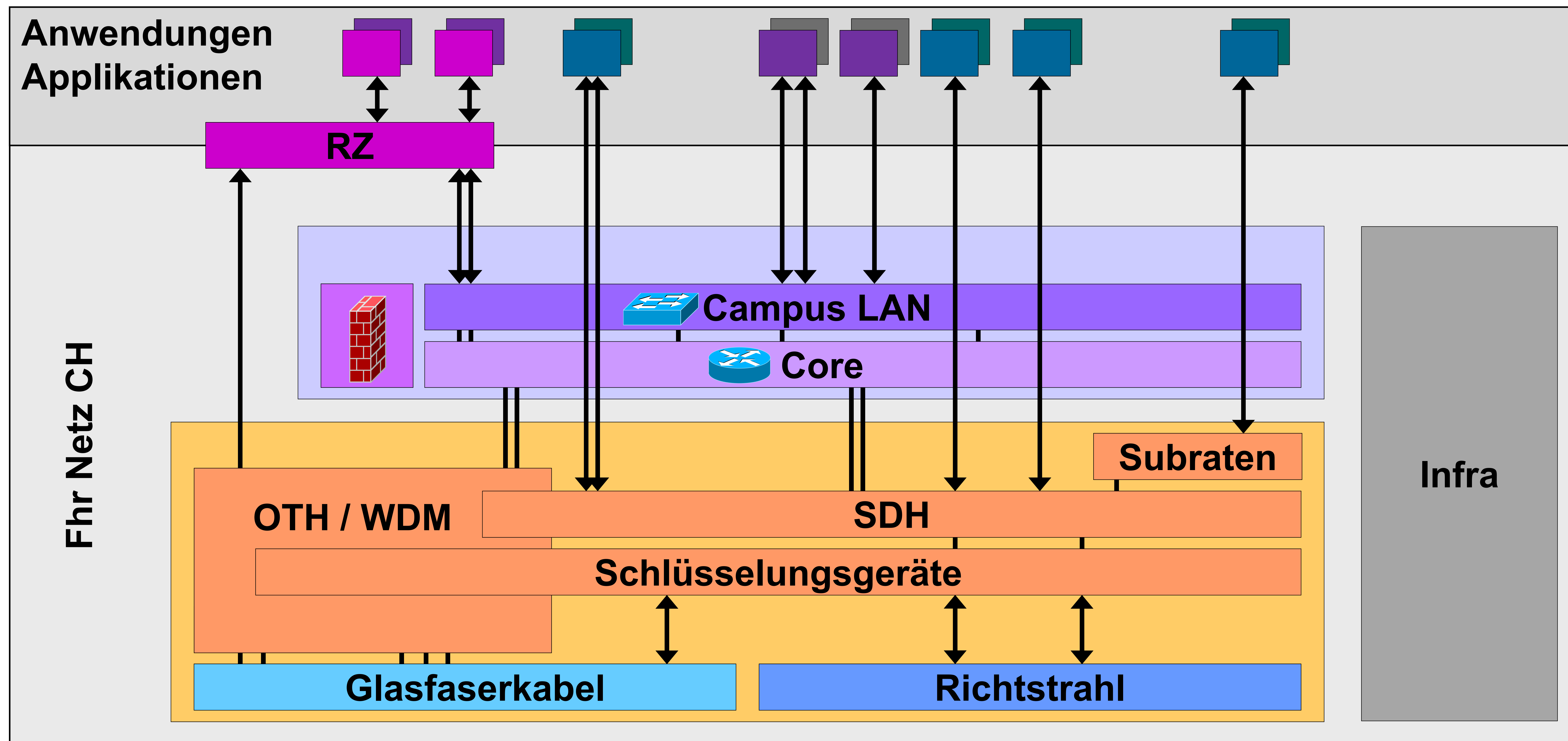


**"Alles unter einem  
Dach - im OSS Portal"**

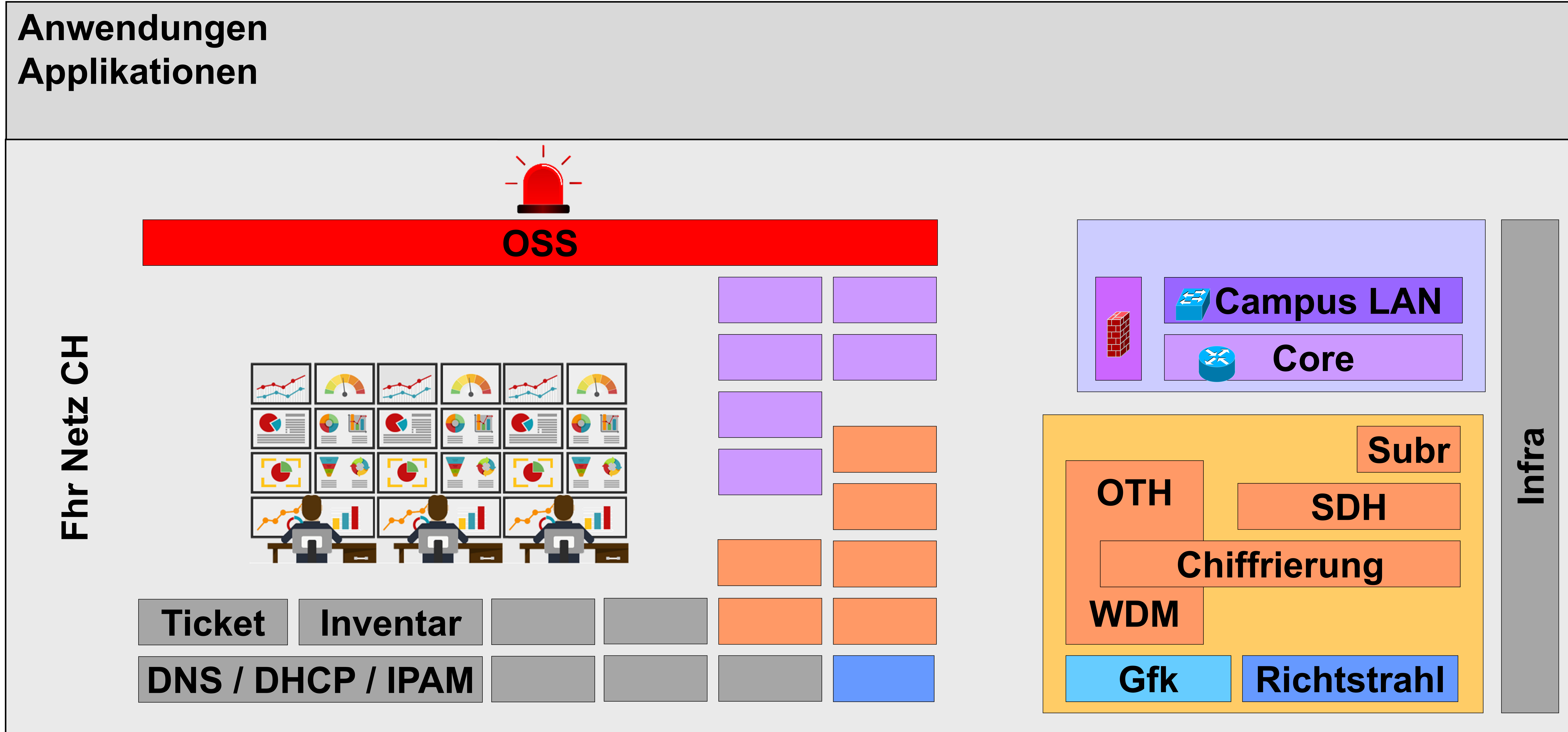
Führungsnetz Schweiz, Tobias Kirchhofer, 27.10.21



# Führungsnetz Schweiz - Technologien



# Führungsnetz Schweiz - NMS OSS



**General**

ToDo 525

Acknowledged 57

Incident Main 0

Incident All 60

Suppressed 146

Maintenance 0

Blacklisted 1

Unknown 109

All Events 906

**OSS**

EMS / NMS & OSS-Server 3

Documentati 44

**Security**

Security 0

Encryption 0

**VPN**

VMPLS Datacenter 102

VMPLS Perimeter 0

VMPLS Campus 23

VMPLS Core 25

ADDC Campus 0

Network Services 0

MNC 0

DCN 0

**IMFS FN**

ToETH 8

Vermittler 0

BSG 93 0

R 905 0

**BIC**

AdB MPLS 87

AdB Firewall 0

BIC MPLS 0

**Infrastructure**

DPS 3

Alarmbox 2

IPS (EsMeter) 0

ATS 0

**Carrier**

ECDB RCA 52

MSN / SDH 118

WDM 0

OTH blue 154

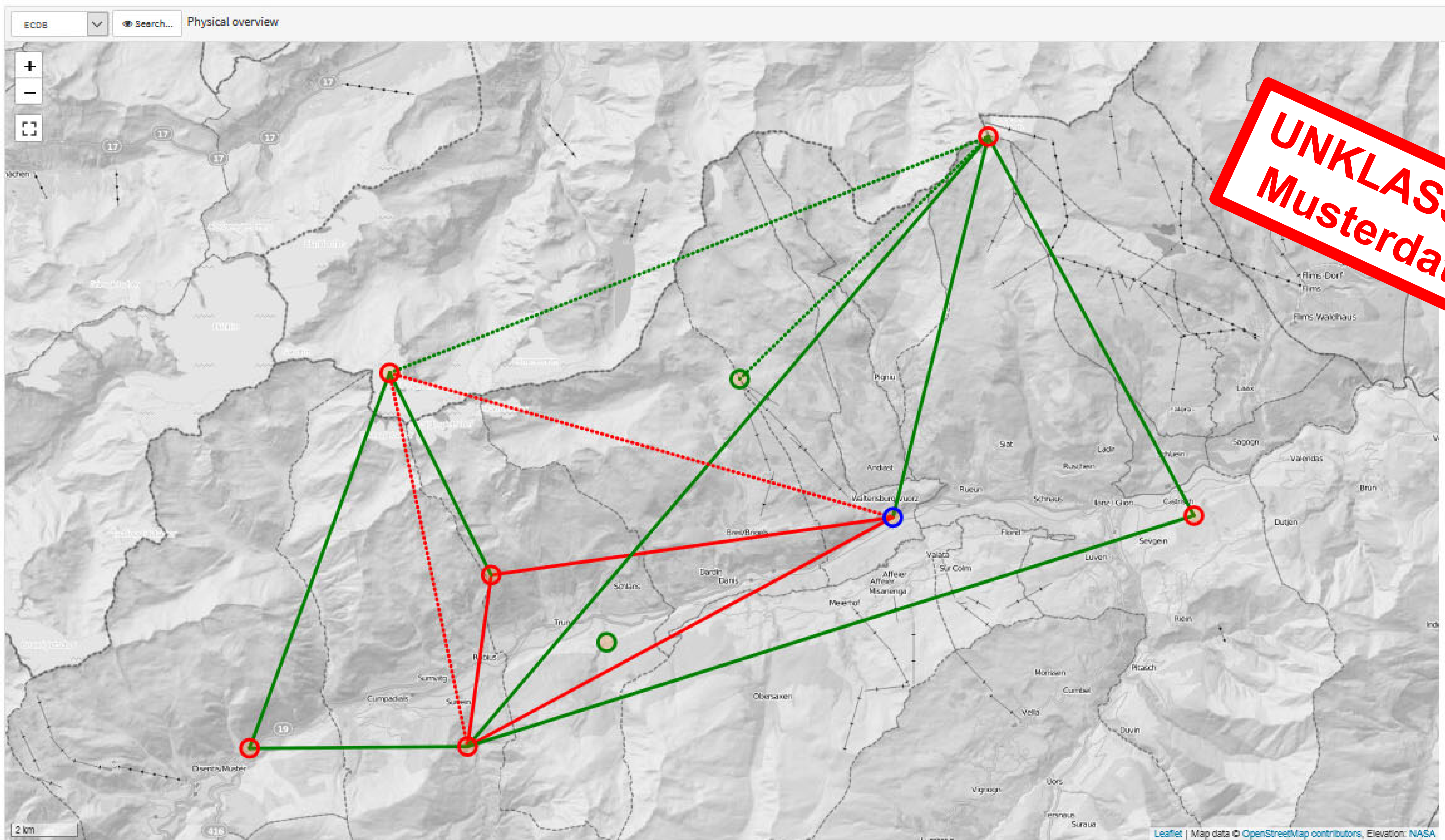
OTH green 0

Subrate 0

Microwave 0

Sync 1

Modem & Converter 1

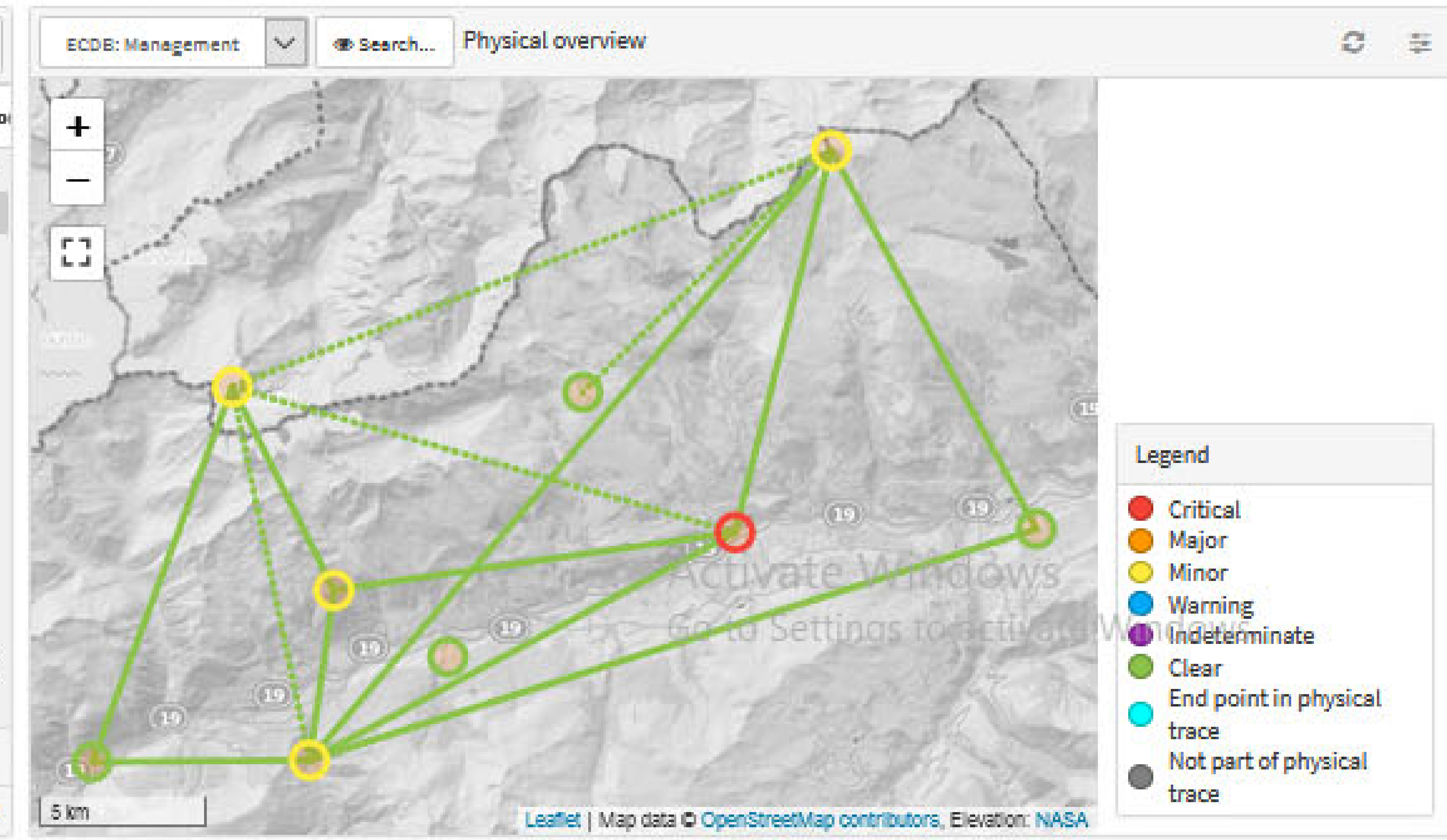


**Legend**

- Red circle: Root cause
- Blue circle: Correlated
- Yellow circle: Unspecified
- Green circle: No events
- Cyan circle: End point in physical trace
- Grey circle: Not part of physical trace

Full text filter (over all columns)

Node	Location	First Occurrence	Last Occurrence	Summary	Tally	DisplayFilter	Agent	ConnectionId	SystemAcknowle	BlackListed	Severity
a23027aa-cpe-01	a23027aa	2021-10-01 20:18:00	2021-10-25 22:22:30	BGP Peer Connection Idle. ( BGP Peer: 10.6.38.238 )	52025	VMPLS Core	cisco-CISCO-BGP4-MIB		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:17:39	2021-10-25 22:22:30	BGP Peer Connection Idle. ( BGP Peer: 10.6.38.238 )	52024	VMPLS Core	cisco-CISCO-BGP4-MIB		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:17:39	2021-10-25 22:22:30	BGP Peer Connection Idle. ( BGP Peer: 10.6.38.238 )	52023	VMPLS Core	IETF-BGP4-MIB		No	Unset	Major
a51023aa-bm1-01	a51023aa	2021-10-19 22:41:09	2021-10-25 22:22:28	Communications Alarm, Loss of Pointer STS/HO Path, Object [STM64AU4-1-1-3-1-	327	MSN / SDH	OMS-1350-EML		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:18:12	2021-10-25 22:22:28	BGP Peer Connection Idle. ( BGP Peer: 10.6.40.30 )	52045	VMPLS Core	cisco-CISCO-BGP4-MIB		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:18:12	2021-10-25 22:22:28	BGP Peer Connection Idle. ( BGP Peer: 10.6.40.30 )	52045	VMPLS Core	cisco-CISCO-BGP4-MIB		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:18:11	2021-10-25 22:22:28	BGP Peer Connection Idle. ( BGP Peer: 10.6.40.30 )	52043	VMPLS Core	IETF-BGP4-MIB		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:18:04	2021-10-25 22:22:23	BGP Peer Connection Idle. ( BGP Peer: 10.6.37.74 )	52021	VMPLS Core	cisco-CISCO-BGP4-MIB		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:18:04	2021-10-25 22:22:23	BGP Peer Connection Idle. ( BGP Peer: 10.6.37.74 )	52021	VMPLS Core	cisco-CISCO-BGP4-MIB		No	Unset	Major
a23027aa-cpe-01	a23027aa	2021-10-01 20:18:03	2021-10-25 22:22:23	BGP Peer Connection Idle. ( BGP Peer: 10.6.37.74 )	52021	VMPLS Core	IETF-BGP4-MIB		No	Unset	Major
a23028aa-zd4-01	a23028aa	2021-10-14 10:55:13	2021-10-25 22:22:17	DPS non-urgent Alarm: Tamb_NUA [32808] Set Total Alarms set=1	15883	DPS	DESCH-P3C3-BASE-MIB		No	Unset	Major
a23028aa-zd4-01	a23028aa	2021-08-31 21:48:44	2021-10-25 22:22:17	DPS urgent Alarm: 3 Urgent RFA (26) Set Total Alarms set=1	76409	DPS	DESCH-P3C3-BASE-MIB		No	Unset	Critical



**Legend**

- Red circle: Critical
- Orange circle: Major
- Yellow circle: Minor
- Blue circle: Warning
- Purple circle: Indeterminate
- Green circle: Clear
- Cyan circle: End point in physical trace
- Grey circle: Not part of physical trace



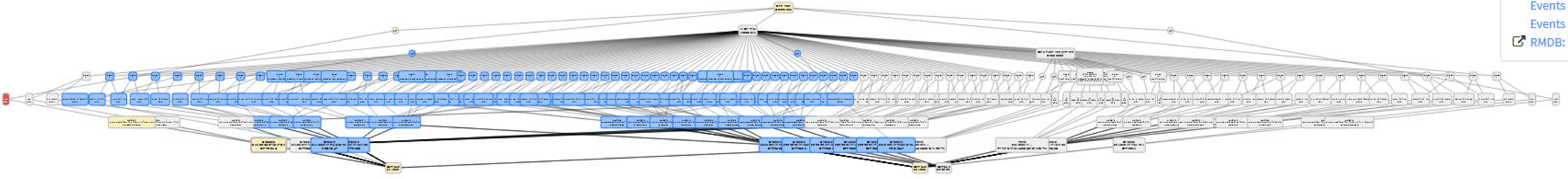
Select... OTH Path: 09999992

Show Signal Path Show Node IDs

- Root cause
- Correlated
- Unspecified
- Events in children
- Reduced (no events below)
- EP End Point
- XC Cross connect
- NAP Network access point

a11022AA-vo1-01

- RMDB: Navigator
- RMDB: Signal Trace
- RMDB: Entity
- AEL: Campus
- AEL: Node
- Events on Node
- Events in Campus
- RMDB: Campus



Full text filter (over all columns)

Node a11022AA-vo1-01 [Color filters: red, orange, yellow, blue, purple, green]

Node	Location	First Occurrence	Last Occurrence	Summary	Tally	DisplayFilter	Agent	ConnectionId	SystemAcknowledge	BlackListed	Severity
a11022aa-vo1-01	a11022aa	2021-10-13 15:57:36	2021-10-13 15:57:36	09000065, LOS, los: Loss of Signal entity=port-u1/20 severity=major;portType:ety...	2	OTH blue	ECI-ALARM-MIB	851(1)	No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:57:36	2021-10-13 15:57:36	09000071, LOS, los: Loss of Signal entity=port-u1/1 severity=major;portType:ety4...	1	OTH blue	ECI-ALARM-MIB	853(1)	No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	„ LOS, los: Loss of Signal entity=port-u7/11 severity=major;portType:otu4, Elemer...	2	OTH blue	ECI-ALARM-MIB	1055(1),1056(1)	No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	LOS, los: Loss of Signal entity=port-u6/21 severity=major;portType:otu4, Element...	2	OTH blue	ECI-ALARM-MIB		No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	„ Rx Signal Power Low, rxSignalPowerLow: Input signal power lower than predete...	2	OTH blue	ECI-ALARM-MIB	1110		Unset	Minor
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	„ otucLof, otucLof: OTUC Lof entity=port-u5/11 severity=major;portType:otuc2, El...	2	OTH blue	ECI-ALARM-MIB	1110			
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	LOS, los: Loss of Signal entity=port-u13/5 severity=major;portType:ety1g, Element...	4	OTH blue	ECI-ALARM-MIB				
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	09999992, LOS, los: Loss of Signal entity=port-u13/4 severity=major;portType:ety...	4	OTH blue	ECI-ALARM-MIB	10...			
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	LOS, los: Loss of Signal entity=port-u13/31 severity=major;portType:ety1ge, Elem...	4	OTH blue	ECI-ALARM-MIB				

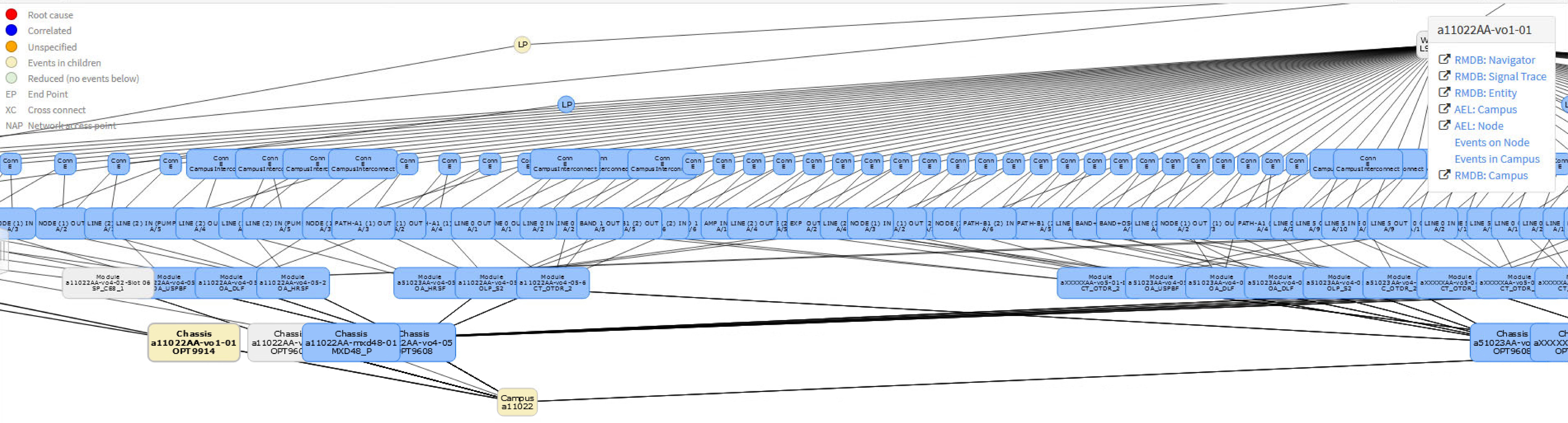
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Musterdaten Labor**



Select... OTH Path: 09999992

Show Signal Path Show Node IDs

- Root cause
- Correlated
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Full text filter (over all columns)

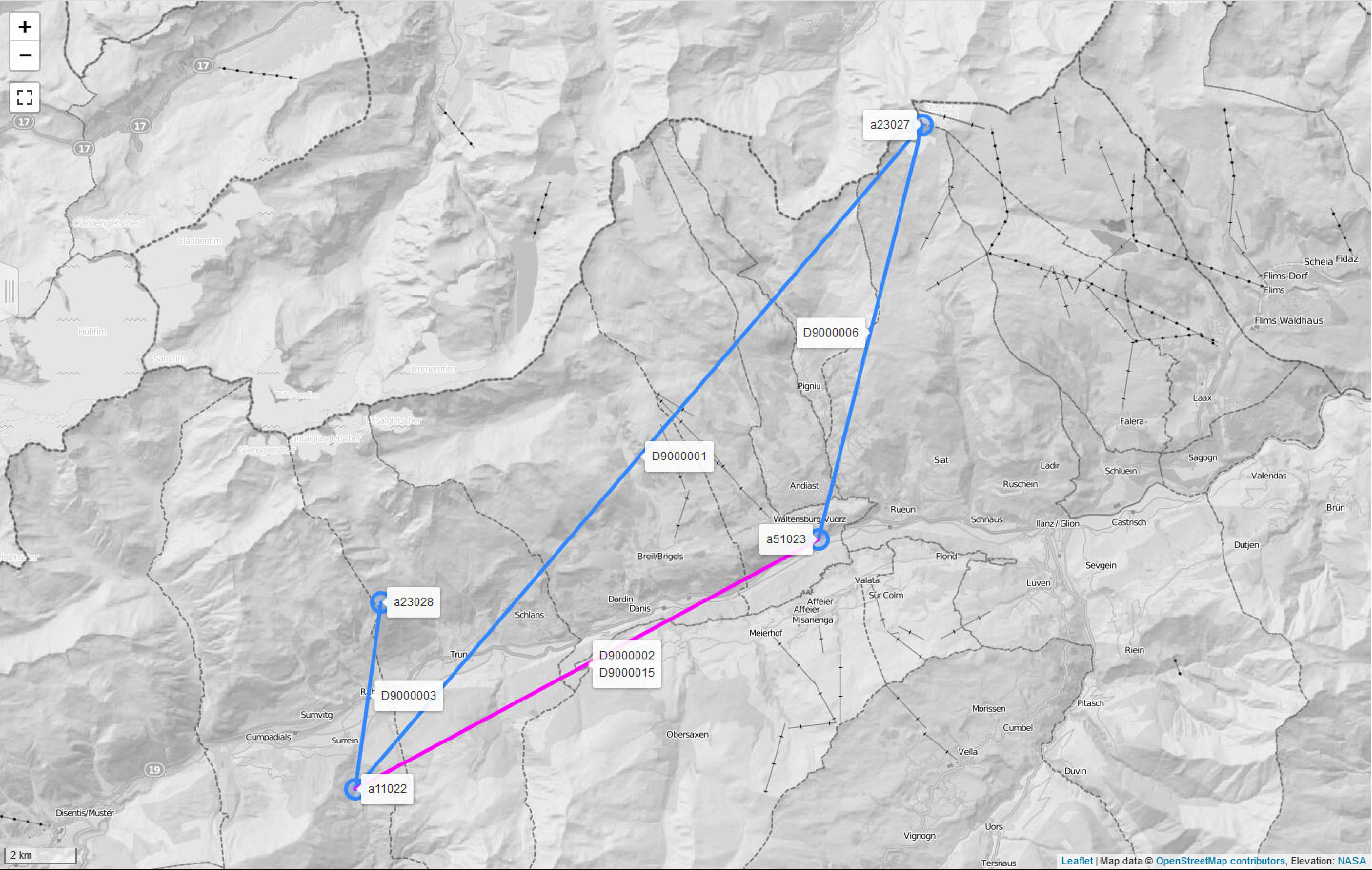
Node a11022AA-vo1-01 [Color selection icons]

Node	Location	First Occurrence	Last Occurrence	Summary	Tally	DisplayFilter	Agent	ConnectionId	SystemAcknowledge	BlackListed	Severity
a11022aa-vo1-01	a11022aa	2021-10-13 15:57:36	2021-10-13 15:57:36	09000065, LOS, los: Loss of Signal entity=port-u1/20 severity=major;portType:ety...	2	OTH blue	ECI-ALARM-MIB	851(1)	No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:57:36	2021-10-13 15:57:36	09000071, LOS, los: Loss of Signal entity=port-u1/1 severity=major;portType:ety4...	1	OTH blue	ECI-ALARM-MIB	853(1)	No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	.. LOS, los: Loss of Signal entity=port-u7/11 severity=major;portType:otu4, Elemer...	2	OTH blue	ECI-ALARM-MIB	1055(1),1056(1)	No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	LOS, los: Loss of Signal entity=port-u6/21 severity=major;portType:otu4, Element...	2	OTH blue	ECI-ALARM-MIB		No	Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	.. Rx Signal Power Low, rxSignalPowerLow: Input signal power lower than predete...	2	OTH blue	ECI-ALARM-MIB	1110		Unset	Minor
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	.. otuLof, otuLof: OTUC Lof entity=port-u5/11 severity=major;portType:otuc2, El...	2	OTH blue	ECI-ALARM-MIB	1110		Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	LOS, los: Loss of Signal entity=port-u13/5 severity=major;portType:ety1g, Element...	4	OTH blue	ECI-ALARM-MIB			Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	09999992, LOS, los: Loss of Signal entity=port-u13/4 severity=major;portType:ety...	4	OTH blue	ECI-ALARM-MIB	10...		Unset	Major
a11022aa-vo1-01	a11022aa	2021-10-13 15:46:57	2021-10-13 15:57:36	LOS, los: Loss of Signal entity=port-u13/31 severity=major;portType:ety1ge, Eleme...	4	OTH blue	ECI-ALARM-MIB			Unset	Major

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WDM Search...



a11022 - a51023

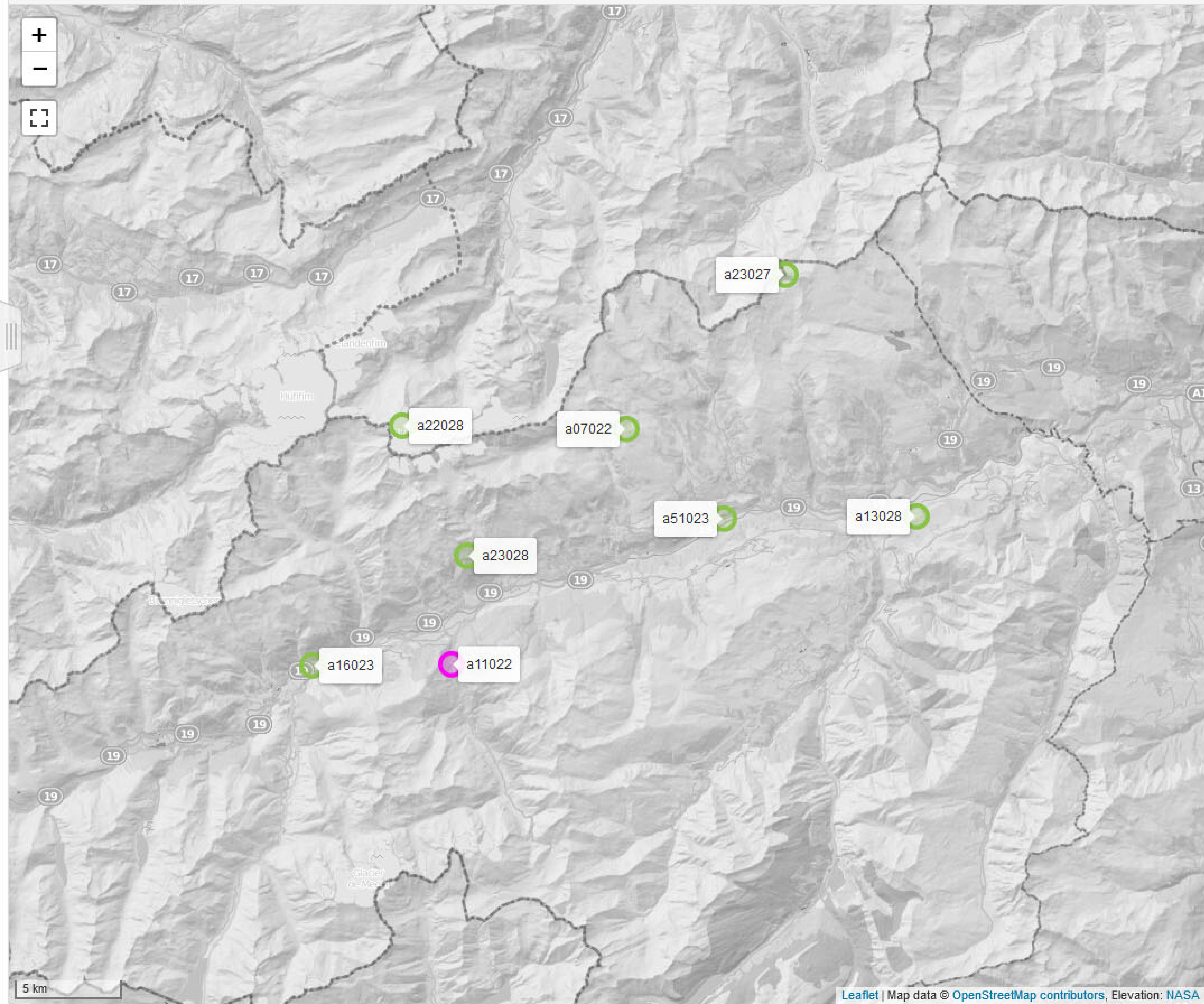
Links

- D9000002
  - D9000002
  - D9000002
- D9000015
  - D9000015
  - D9000015

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Monitoring: Temperature



Base layer

- OSM Grayscale + elevation
- OSM Grayscale
- OSM Bright
- OSM

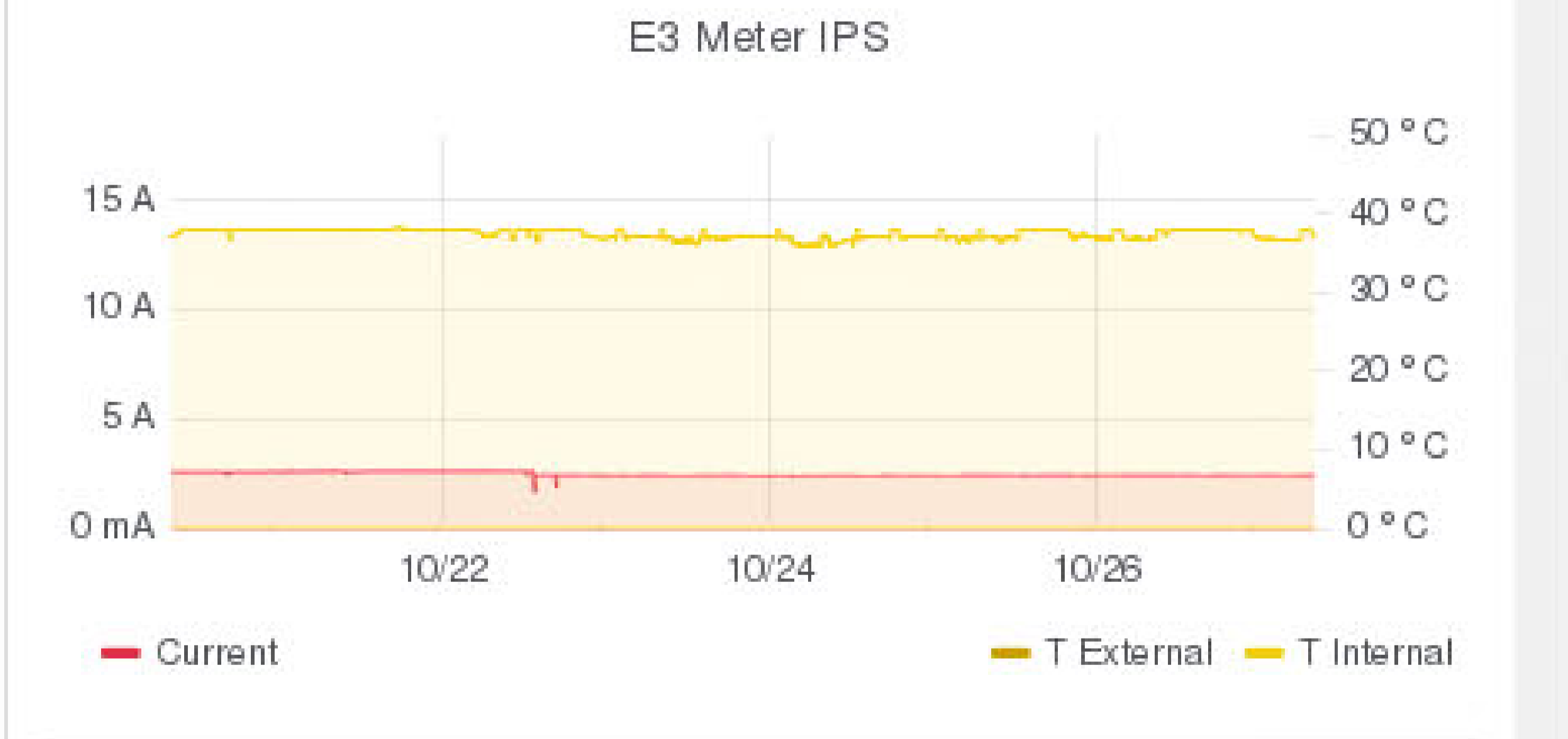
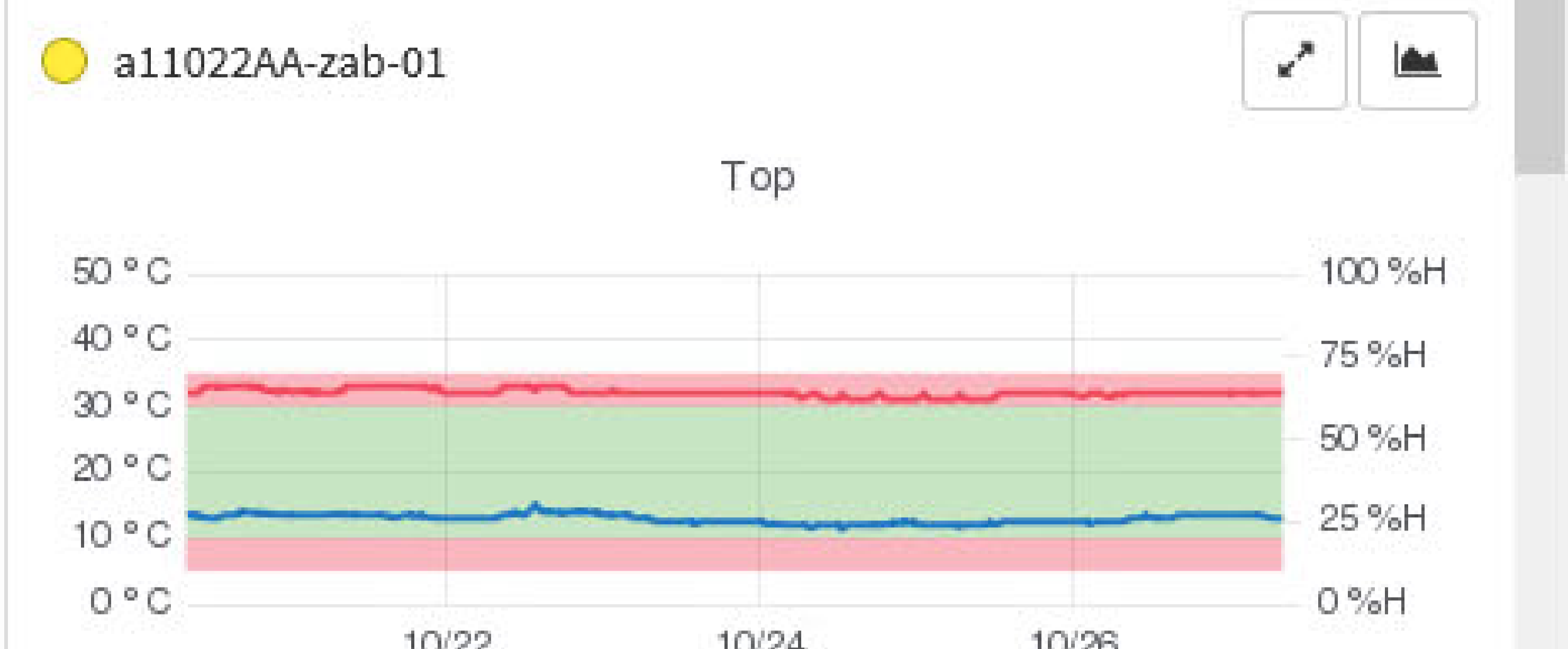
Static labels

- Campus

Show devices

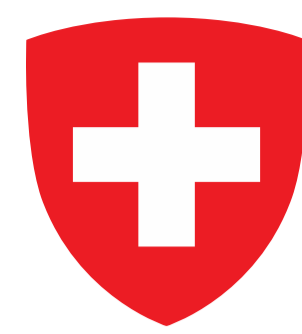
- E3 Meter IPS
- DPS
- Alarmbox

Monitoring - a11022 Hide all graphs



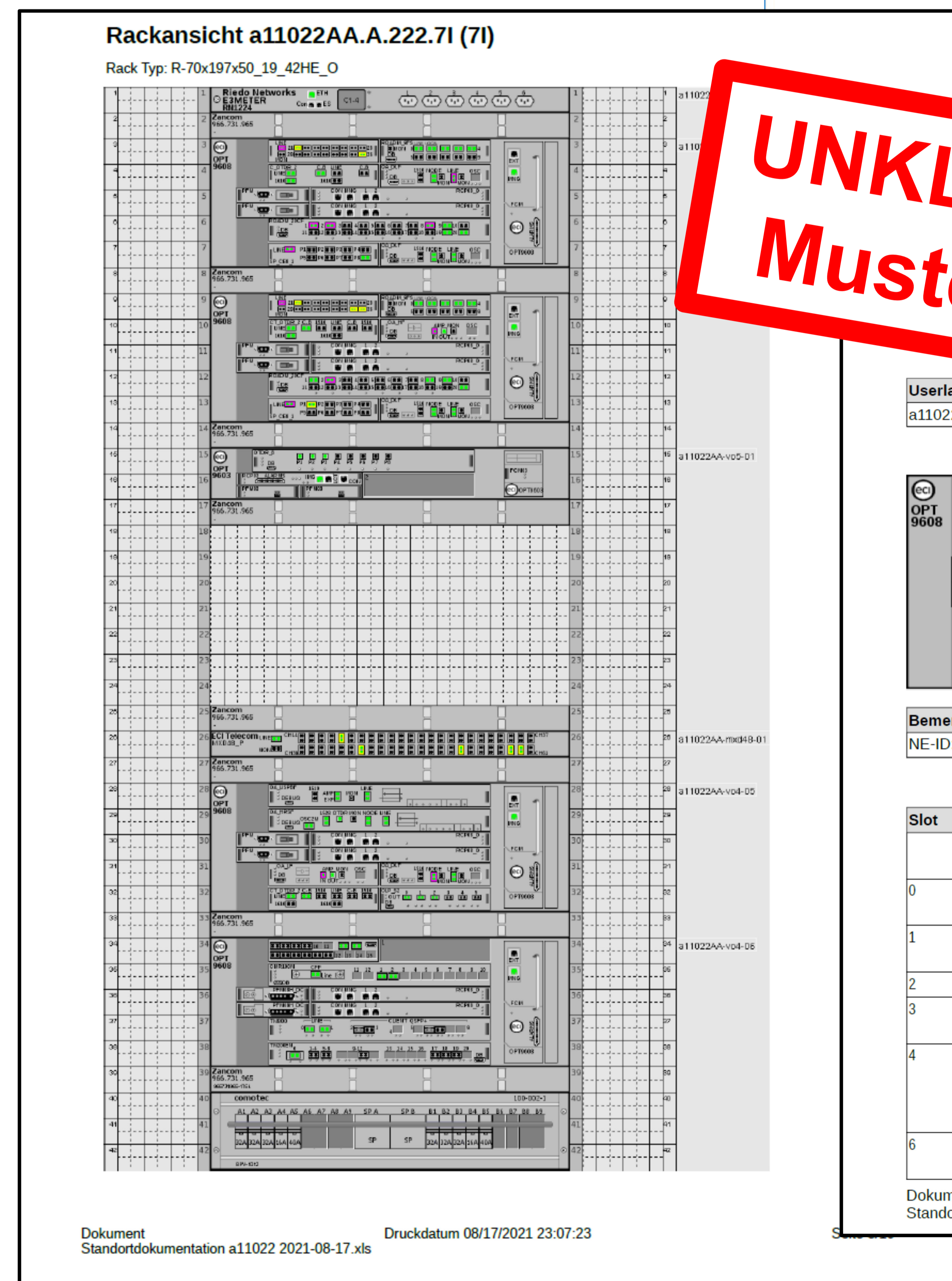
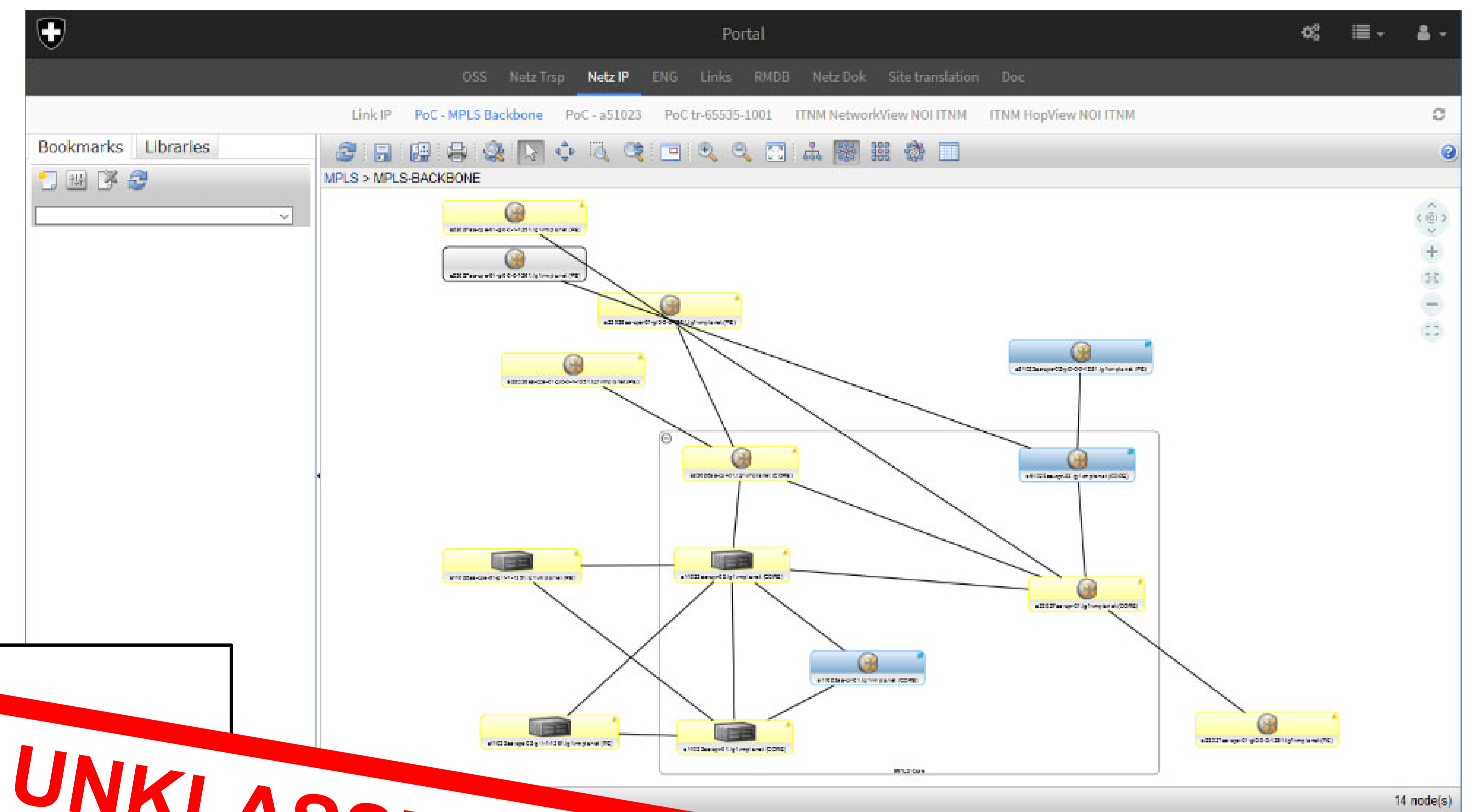
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# Maintenance / EIS

- Überwachung logischer Netze L2/L3
- Device-Access ...
- Maintenance
- Event Information System
- Reports / Pläne
- ...



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 Musterdaten Labor**

OPT9608

Userlabel	Location	Equipment Name	Einbauposition
a11022AA-vo4-02	a11022AA		3.0

Bemerkungen  
 NE-ID: 3

Slot	Modul Typ / SAP Nr.	Bezeichnung	IP-Adresse	IPAM IP	Bemerkung / Default Gateway
	OPT9608 2578.3604	ECI Telecom - Apollo OPT9608, Optimized multi-layer transport platform	10.7.68.12/24	10.7.68.12/24	Default Gateway: 10.7.68.1
0	MXD16 2578.3658	ECI Telecom - OPT9624/OPT9608/Artemis, DWDM Mux/DeMux card for 16 ch			LINE 0 OUT: 5dB
1	ROADM_9FS 2578.3695	ECI Telecom - OPT96xx, 9-Degree flexgrid ROADM (single slot)			
2	C_OTDR_2	ECI Telecom - OPT96xx/Artemis, Optical card			
3	OA_DLF 2578.3665	ECI Telecom - OPT96xx, Variable gain EDFA-based amplifier			LINE (2) IN: 4dB
4	ROADM_20CF 2578.3688	ECI Telecom - OPT9624/OPT9608/OPT9603, 20-degree double slot ROADM			2 B DEG (OUT): 4dB 1 B DEG (OUT): 4dB 8 A DEG (IN): 4dB 8 B DEG (OUT): 4dB
6	SP_CE8_1 2578.3697	ECI Telecom - OPT96xx/Artemis, 1 x 8 splitter/coupler card			LINE (0) OUT: 7dB

Dokument  
 Standortdokumentation a11022 2021-08-17.xls  
 Druckdatum 08/17/2021 23:07:23  
 Seite 6/10

## Eigenentwicklung INETUM