

INTERNATIONAL SUMMER SCHOOL

YEAR 2 / 2021

Template for Reporting (D.T2.2.3)

Version 1
07 2021

Name of PP(s): DUK & CNR-ISAC

Joint ENVIMAT & Cultural Property Protection Summer School
2021 “Risk Management & Protection Strategies for Cultural
Landscapes in Climate Change” (Online)





Report on International Summer School - Year 2 / 2021

Date: June 07th to 11th 2021

Place: Online

Number and categories of participants / target groups

1) Hosts:

- **Danube University Krems DUK (Host)**, Department for Building and Environment, Center for Cultural Property Protection, Anna M. Kaiser
- **Institute of Atmospheric Sciences and Climate - National Research Council of Italy ISAC-CNR (Host)**, Alessandra Bonazza, Paola De Nuntiis, Alessandro Sardella

2) Lecturers (in Alphabetical order):

Alessandra Bonazza, STRENCH Project-Lead, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy

Alessandro Sardella, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy

Anna M. Kaiser, Programme Director for Cultural Property Protection, Danube University Krems, Austria

Christine Rottenbacher, Center for Environmental Sensitivity, Danube University Krems, Austria

Laurie Rush, US Army, Fort Drum, USA

Michaela Ricca, University of Calabria, DiBEST, Italy

Miloš Drdácý, Institute of Theoretical and Applied Mechanics, The Czech Academy of Sciences (ITAM), Czech Republic

Riccardo Cacciotti, Institute of Theoretical and Applied Mechanics, The Czech Academy of Sciences (ITAM), Czech Republic

Stefano Natali, Managing Director Sistema GmbH, Austria

3) Participants:

A total of 39 participants (incl. lecturers) attended the lectures of the Summer School 2021 and actively participated in the syndicate working groups & case studies.



Topics tackled & links to deliverables/outputs

June 7th to 11th 2021:

With a compact 5 day program the SU 2021 laid its main focus on “Risk Management & Protection Strategies for Cultural Landscapes in Climate Change”. In this regard each course day was given a specific focus. Monday: Introduction & Focus on Climate Change Challenges. Tuesday: Focus Vulnerability & Preventive Conservation. Wednesday: Focus Risk Assessment & Management. Thursday: STRENCH international Conference. Friday: Focus Presentations Case Studies Syndicate Working Groups & Closure of SU 2021.

Monday June 7th 2021: Dr. Anna M. Kaiser, Danube University Krems, Center for Cultural Property Protection (Host). As primary spokesperson of the Danube University Krems and Host of the joint ENVIMAT and Cultural Property Protection Summer School 2021 “*Risk Management & Protection Strategies for Cultural Landscapes in Climate Change*” (abbr. SU 2021) Ms. Kaiser initiated the SU 2021 by welcoming all participants and lecturers with a presentation on the STRENCH Interreg Project followed by an overview of the SU 2021 programme before handing over to Alessandra Bonazza from CNR-ISAC for the first lecture of the SU 2021.

Alessandra Bonazza, STRENCH Project-Lead, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy, initiated the series of lectures of the SU 2021 with an hour long presentation on the “*Climate Change Challenges to Cultural Landscapes: Impacts and Approaches for Protection*”. Subsequently transitioning to

Stefano Natali, Managing Director Sistema GmbH, Austria, an expert on remote sensing analysis techniques for environmental monitoring & satellite-collected data who elaborated on the topic of “*Exploring Copernicus Programme for Safeguarding Cultural and Natural Heritage at Risk*” paving the ground for

Alessandro Sardella, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy, who continued with the “*WebGIS Tool for Multi-Risk Assessment of Cultural and Natural Heritage*”

Following the first day’s presentations the lecturers continued to supervise the participants who had decided to participate in the Syndicate Working Groups on Case Studies with a Focus on Climate Change Challenges.

Syndicate Working Groups: Participants who choose to join the Syndicate Working Groups were expected to actively participate by choosing a pilot site (potentially from their country of origin and/or of which they had substantial knowledge of) and applying the presented information on these sites. The various groups were allocated in a matter to ensure a degree of diversity whilst maintaining synergies within the chosen sites in order to enhance the experience of the participants. The groups composition would be maintained for the duration of the course.

Tuesday June 8th 2021: After the first day’s focus on Climate Change Challenges the second day of the SU 2021 laid its focus on Vulnerability and Preventive Conservation by starting with a presentation by Miloš Drdácý, Institute of Theoretical and Applied Mechanics, The Czech Academy



of Sciences (ITAM), Czech Republic, on the *“Impact of natural and man-made Threats on Cultural Heritage”*.

His colleague Riccardo Cacciotti, Institute of Theoretical and Applied Mechanics, The Czech Academy of Sciences (ITAM), Czech Republic, continued with a lecture on the *“Vulnerability Assessment for Cultural Heritage Protection”* before handing the word back to Miloš Drdáký who elaborated on the *“Resilience Preparedness of Cultural Heritage against natural and man-made Disasters”*.

As with the first day of the SU 2021 both lecturers continued their work together with the participants within the Syndicate Working Groups on Case Studies - Focus Vulnerability & Preventive Conversation.

The day was concluded in an evening lecture on the *“Valorisation and Conservation of Underwater Cultural Heritage: Challenge and Perspective”* by Michaela Ricca of the University of Calabria, DiBest, Italy.

Wednesday June 9th 2021: On the 3rd day of the SU 2021 the focus was laid on the Risk Assessment and Management of Cultural Heritage. Starting with a lecture on *“Assessing Threats and Managing Risk for Cultural Heritage”* by Dr. Anna M. Kaiser, Danube University Krems, Center for Cultural Property Protection (Host) who further laid the basis for

Christine Rottenbacher’s, Center for Environmental Sensitivity, Danube University Krems, Austria, presentation on *“Self caused Climate Change in our Cultural Landscapes: How to assess Vulnerabilities of our Landscapes with Rapid Scoring Tools”*.

Anna Kaiser then continued to support the Syndicate Working Groups on Case Studies focusing on Risk Assessment & Management.

The day was closed with an evening lecture *“Spotlight Cultural Property Protection, Host Nation Fort Drum: Protecting Cultural Landscapes in Northern NY”* by the ever so wonderful Ms. Laurie Rush, US Army 10th Mountain Division, Fort Drum, USA.

Thursday June 10th 2021: The fourth day of the SU 2021 was incorporated into the 1st **International STRENCH Conference:** *“Strengthening Resilience of Cultural Heritage at Risk in a Changing Environment”*, covering and discussing highly relevant topics from international experts (ITA, AUT, SLO and CZ) such as:

- 👉 Cooperation for safeguarding Cultural Heritage - Interreg CE current and future programme
- 👉 STRENGTHening resilience of Cultural Heritage at risk in a changing environment through proactive transnational cooperation Interreg CE STRENCH
- 👉 Management tools for protecting Historic CASTel Parks - Interreg CE HICAPS
- 👉 HERitage Resilience Against CLimate Events on Site - H2020 HERACLES
- 👉 Intangible heritage as leverage for adaptation to climate change - Interreg CE CULTURERECOVERY
- 👉 Methodology for vulnerability assessment of cultural heritage at risk
- 👉 WebGIS tool for multi-risk assessment of cultural heritage exposed to climate extreme events



After the Conference came to a closure the Syndicate Working Groups continued with their work while being supervised by Anna M. Kaiser, Programme Director for Cultural Property Protection, Danube University Krems, Austria.

Friday June 11th 2021: The final day of the SU 2021 was concluded by a presentation of all case studies of the participants of the Syndicate Working Groups. Feedback for the participants and final words were provided by Alessandra Bonazza, STRENCH Project-Lead, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy.

Conclusion:

Of the 39 participants (incl. lecturers), who attended and actively participated in the Summer School 2021, 5 earned a 6 ECTS Certificate based on their work performed in the syndicate working groups throughout the SU 2021 and for the final presentations given on Friday June 11th.

All lectures as well as additional literature were uploaded to the Moodle-Platform which remains accessible for all participants.

The lectures themselves as well as practical sessions were well received by the participants with positive feedback given verbally at the end of lectures and courses. A subsequent online survey of the participants regarding their satisfaction of the SU 2021 showed that 81,3 % stated that they were “highly satisfied” with the SU 2021. When asked of their favourite topic presented at the SU 2021 (in reference to the official program) the answers given were spread broadly with a marginal favourite being “Climate Change Challenges to Cultural Landscapes”. Thus the variety of topics chosen for presentation and lecturing during the SU 2021 reflect a well balanced and liked content-mix regarding “Risk Management & Protection Strategies for Cultural Landscapes in Climate Change”.

Expected effects and follow-up

The course content of the SU 2021 enhanced the risk management capabilities of the participants while giving an in depth insight into protection strategies for cultural landscapes in the face of the ongoing climate change. The use of WebGIS tools and other satellite based technology were taught together with vulnerability assessment on existing cultural landscapes and/or objects. Conservational aspects both on land and under water together with lectures on cultural property protection from a civilian and military point of view gave the participants a broad spectrum of knowledge regarding cultural heritage (CH) protection.

As with the previously Summer School the 2021 iteration was an excellent platform for networking of CH protectors from all around the world.

Given the smooth and friction free conduct of the SU 2021 and the very high satisfaction of the participants it can be stated that the SU 2021 was a successful and sustainable training event.



If relevant, annexes (e.g. pictures, media coverage web-links etc.)

Link for registration of the SU 2021: <https://www.donau-uni.ac.at/en/university/faculties/education-arts-architecture/departments/building-environment/news---events/events/2021/risk-management-and-protection-strategies-for-cultural-landscapes-in-climate-change.html>

Link Homepage STRECH: <https://www.interreg-central.eu/Content.Node/STRECH.html>

Web-GIS Tool, Link: <https://www.protecht2save-wgt.eu/>

SU 2021 Card:



Interreg
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STRECH

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2021

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Joint ENVIMAT and Cultural Property Protection Summer School 2021

7th to 11th June 2021 | online
Risk Management and Protection Strategies for Cultural Landscapes in Climate Change

Danube University Krems.
Department for Building and Environment.
www.donau-uni.ac.at/dbu/summerschool




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Joint ENVIMAT and Cultural Property Protection Summer School 2021

Risk Management and Protection Strategies for Cultural Landscapes in Climate Change

The online summer school is part of the EU Interreg Central Europe project STRECH – *Strengthening resilience of cultural heritage at risk in a changing environment through proactive transnational cooperation*, which develops ready to use solutions for assessing climate change effects and protecting cultural heritage and cultural landscapes.

The one-week program focuses on climate change related challenges to landscapes and historic parks, vulnerability assessment and preventive conservation measures for natural and cultural heritage as well as risk management and protection strategies for cultural heritage.

The 1st International Conference of the STRECH project, dealing with enhancing the resilience of cultural heritage at risk in a changing environment (organised as online event) is an integral part of the summer school.

- > Online, hosted via Zoom
- > No course fee
- > In English language
- > 6 ECTS points may be granted for full participation in the programme

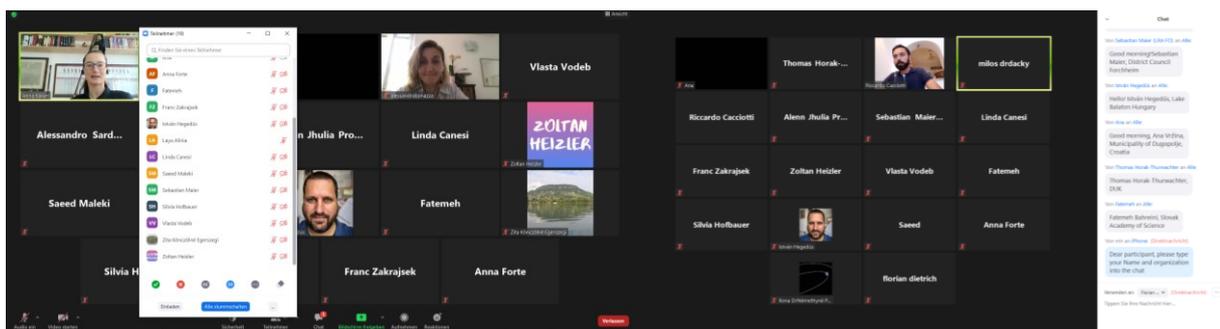
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www.donau-uni.ac.at/dbu/summerschool



SU 2021 Screenshot Program:

<p>PROGRAMME (Time is CEST)</p>		<p>WEDNESDAY, 09 JUNE 2021</p>	
<p>MONDAY, 07 JUNE 2021</p>		<p>0900-1100 <i>Assessing Threats and Managing Risk for Cultural Heritage</i> <i>Anna Kaiser, Danube University Krems (DUK)</i></p>	
<p>0900-0930 <i>Introduction to STRECH and the Summer School (CNR-ISAC & DUK)</i></p>		<p>1100-1200 <i>Self caused Climate Change in our Cultural Landscapes: How to assess Vulnerabilities of our Landscapes with Rapid Scoring Tools</i> <i>Christine Rottenbacher, DUK</i></p>	
<p>0930-1030 <i>Climate Change Challenges to Cultural Landscapes: Impacts and Approaches for Protection</i> <i>Alessandra Bonazza, CNR-ISAC</i></p>		<p>1200-1300 <i>Lunch Break</i></p>	
<p>1030-1130 <i>Exploring Copernicus Programme for Safeguarding Cultural and Natural Heritage at Risk</i> <i>Stefano Natali, SISTEMA</i></p>		<p>1300-1700 <i>Syndicate Working Groups on Case Studies - Focus Risk Assessment & Management</i> <i>Anna Kaiser, DUK</i></p>	
<p>1130-1230 <i>WebGIS Tool for Multi-Risk Assessment of Cultural and Natural Heritage</i> <i>Alessandro Sardella, CNR-ISAC</i></p>		<p>1830 <i>Evening Lecture / Spotlight Cultural Property Protection</i> <i>Host Nation Fort Drum: Protecting Cultural Landscapes in Northern NY</i> <i>Laurie Rush, US Army 10th Mountain Division</i></p>	
<p>1230-1330 <i>Lunch Break</i></p>		<p>THURSDAY, 10 JUNE 2021</p>	
<p>1330-1700 <i>Syndicate Working Groups on Case Studies - Focus Climate Change Challenges</i> <i>Alessandra Bonazza, Alessandro Sardella, CNR-ISAC</i> <i>Stefano Natali, SISTEMA</i></p>		<p>0900-1230 <i>1st International STRECH Conference: Strengthening Resilience of Cultural Heritage at Risk in a Changing Environment</i></p>	
<p>TUESDAY, 08 JUNE 2021</p>		<p>1230-1330 <i>Lunch Break</i></p>	
<p>0900-1000 <i>Impact of natural and man-made Threats on Cultural Heritage</i> <i>Miloš Drdäcký, Institute of Theoretical and Applied Mechanics, Czech Academy of Sciences (ITAM)</i></p>		<p>1330-1700 <i>Syndicate Working Groups on Case Studies - Finalization</i> <i>Anna Kaiser, DUK</i></p>	
<p>1000-1100 <i>Vulnerability Assessment for Cultural Heritage Protection</i> <i>Riccardo Cacciotti, ITAM</i></p>		<p>FRIDAY, 11 JUNE 2021</p>	
<p>1100-1200 <i>Resilience Preparedness of Cultural Heritage against natural and man-made Disasters</i> <i>Miloš Drdäcký, ITAM</i></p>		<p>0900-1200 <i>Presentation of Case Studies</i> <i>Participants of the Summer School</i></p>	
<p>1200-1300 <i>Lunch Break</i></p>		<p>1200-1230 <i>Closure of the Summer School (CNR-ISAC, DUK)</i></p>	
<p>1300-1700 <i>Syndicate Working Groups on Case Studies - Focus Vulnerability & Preventive Conservation</i> <i>Riccardo Cacciotti, Miloš Drdäcký, ITAM</i></p>			
<p>1700-1800 <i>Valorisation and Conservation of Underwater Cultural Heritage: Challenge and Perspective</i> <i>Michela Ricca, University of Calabria, DIBEST</i></p>			

SU 2021 Screenshots Opening Words Day 1 Anna M. Kaiser & Lecture Day 2 Riccardo Cacciotti:



SU 2021 Screenshots Syndicate Working Groups:

