

# INTERNATIONAL SUMMER SCHOOL

## YEAR 1 / 2020

Template for Reporting (D.T2.2.3)

Version 1  
06 2021

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

Date and Place of Event: Joint ENVIMAT and  
Cultural Property Protection Summer School  
2020





## Report on International Summer School - Year 1 / 2020

Date: September 28<sup>th</sup> to October 9<sup>th</sup> 2020

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

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

Alfio Gullotta, Carabinieri Command for the Protection of Cultural Heritage (TPC), Italy

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

Daniele Spizzichino, Italian Institute for Environmental Protection and Research (ISPRA), Italy

Elsa Cattani & Elisa Palazzi, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy

Hannes Schramm, Austrian Armed Forces, Austria

Laurie Rush, US Army, Fort Drum, USA

Natalia Rovella, University of Calabria, Italy

Sotiriou Orfeas, National School of Public Administration and Local Government, Greece

Paola De Nuntiis Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy

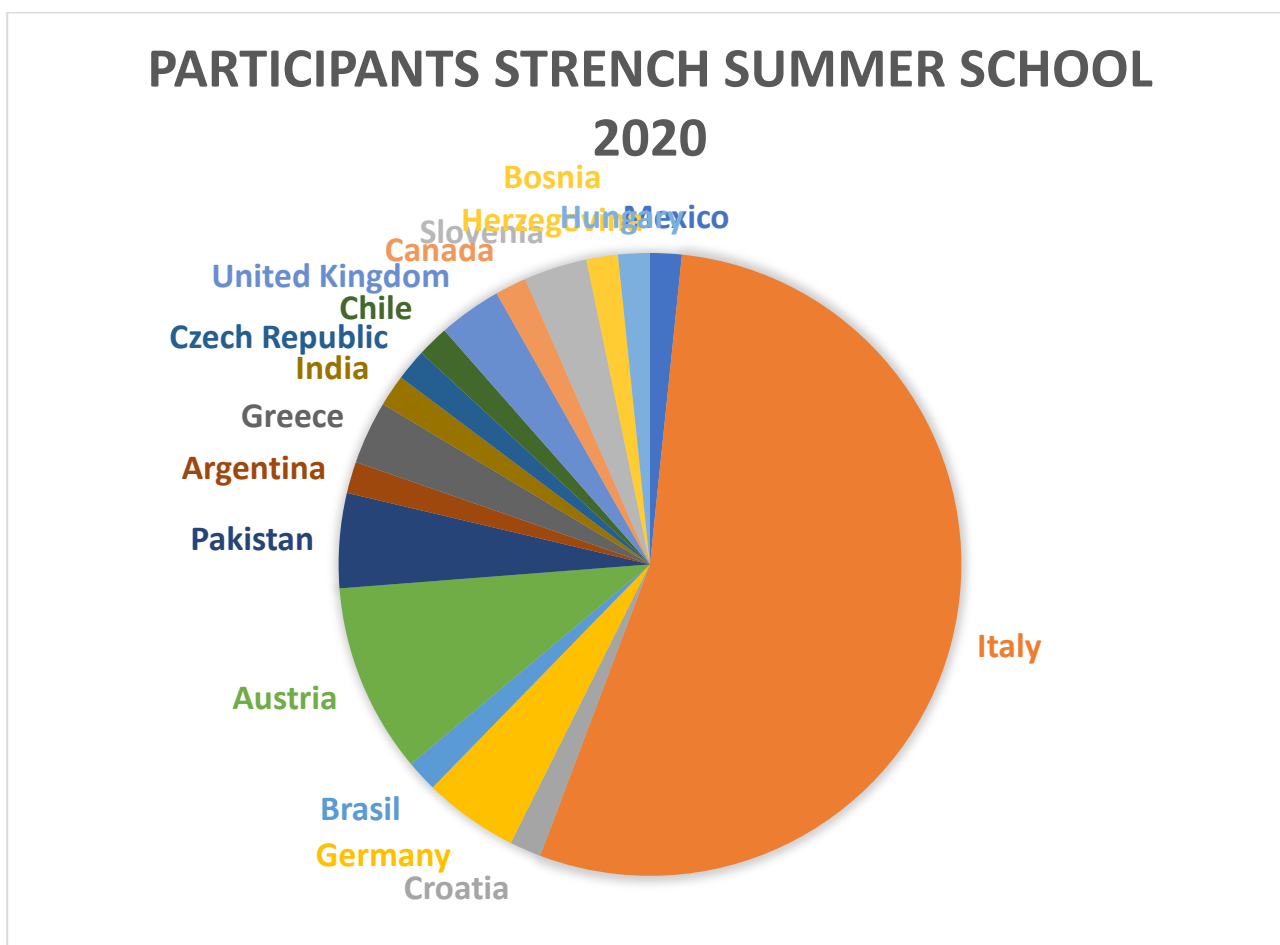
Riccardo Cacciotti, Institute of Theoretical and Applied Mechanics, The Czech Academy of Sciences (ITAM), Czech Republic



3) Participants:

In addition to the 12 lecturers, 55 international students, and 5 STRENCH project partners registered and participated at the summer school.

The diagram shows the geographical dislocation of the participants of the summer school (Italy, Austria, Pakistan, Germany, Greece, United Kingdom, Croatia, Brazil, Argentina, India, Czech Republic, Chile, Canada, Slovenia, Bosnia-Herzegovina, Hungary, and Mexico).





## Topics tackled & links to deliverables/outputs

### Week 1: Sept 28<sup>th</sup> to Oct 1<sup>st</sup> 2020

The first week was planned as slow start into the topic, focusing on cultural heritage and the necessity of protecting it from a number of threats, not only climate change induced ones. This first week gave the participants of the summer school an insight into the holistic approach necessary for cultural heritage protection. The lectures (two hours each as morning or evening lectures) were recorded so that all participants were able to watch them at a time suiting them.

Monday September 28<sup>th</sup>: 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 2020 “*Tools and Strategies for Strengthening Resilience of Cultural Heritage in Climate Change*” (abbr. SU 2020) Ms. Kaiser initiated the SU 2020 by welcoming all participants and lecturers with a presentation on the STRENCH Interreg Project followed by an overview of the SU 2020 programme and a first lecture on the “Threats to- & Resilience of Cultural Heritage” closing with a presentation on administrative and support issues before handing the word to Mr Schramm.

Mr Schramm is an active member of the Austrian Armed Forces who continued with a lecture on “*Cultural Property Protection - Why to protect our Cultural Heritage*” giving the audience an overview on the historical aspects and development of cultural heritage (abbr. CH) protection followed by a definition and elaboration on Cultural Property and CH and closing with threats to Cultural Property and how to deal with them.

Tuesday September 29<sup>th</sup>: Dr. Laurie Rush, US Army, Fort Drum, USA. Lecture on “*Cultural Property Protection (abbr. CPP) in the 21<sup>st</sup> Century, A View from the Most Deployed Division*“. On the second day of the SU 2020 Dr. Rush’ lecture gave further impressions on the work of CPP in the field ranging from WW2 to the present day. Key aspects included real life information on the necessity of cooperation and training to ensure CH protection and the benefits of identifying potentially unknown yet critical CH in warzones while including lessons learned on successful interdisciplinary partnerships for CH protection.

Wednesday September 30<sup>th</sup>: Lt. Col. Alfio Gullotta Carabinieri Command for the Protection of Cultural Heritage (TPC). With his lecture on the “*Italian Model for Cultural Property Protection in Case of Natural Disasters*” Mr. Gullotta introduced the participants with the structure and organization of the Italian Carabinieri. Tasks, fields of operation, international cooperation and examples of real life operations (national & international) including cultural diplomacy were extensively elaborated on before going into detail of heritage rescue and restoration after disaster (such as severe earth quake) as experienced in Central-Italy.

Thursday October 1<sup>st</sup>: Sotiriou Orfeas, National School of Public Administration and Local Government, Greece. As former Police Sergeant and member of the Cultural Heritage (CH) and Antiquities Protection Department of the Greek Police Mr Orfeas presented the topic on “*How*



to protect cultural heritage in peace time”. Laying emphasis on the communication between cultural heritage professionals and law enforcement institutions. Further topics of the Lecture included how antiquities are “stumbled upon” during agricultural activities, the role of organized crime /money laundering, dimensions and sites of CH (objects & monuments) requiring protection by law enforcement.

## **Week 2: Oct 5<sup>th</sup> to Oct 9<sup>th</sup> 2020**

The second week was planned as “online residential” week in which all participants of the summer school were present. The set-up was designed as good mixture between theoretical lectures and practical sessions in which the participants used the tools and methods developed in STRENCH and in capitalised projects on their own practical case studies.

Monday October 5<sup>th</sup>: Alessandra Bonazza, Elsa Cattani, Elisa Palazzi, STRENCH Coordinator, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy. With three experts from the CNR-ISAC presenting on this day the focus lay on CH protection during climate extremes and climate change. The role of satellite observation as well as current trends in climate extremes and phenomenon were elaborated in detail with examples given in oceanic as well as landlocked areas.

Tuesday October 6<sup>th</sup>: , Daniele Spizzichino, Italian Institute for Environmental Protection and Research (ISPRA), Italy & Riccardo Cacciotti, Institute of Theoretical and Applied Mechanics, The Czech Academy of Sciences (ITAM), Czech Republic. Starting with a lecture on the “*Copernicus in support of the safeguarding of Cultural and natural Heritage at risk*” Mr. Spizzichino continued to present on the potential uses of satellite based imagery for CH protection and gave the participants an insight on which satellites are scheduled for deployment and their individual role and data gathering aspects. Mr. Cacciotti followed with a lecture on the “*Vulnerability of cultural heritage: challenges and opportunities for resilience building*” introducing the participants to a mathematically based evaluation of risk and vulnerability of CH aimed towards improving risk management of CH.

Wednesday October 7<sup>th</sup>: Natalia Rovella, University of Calabria, Italy & Alessandro Sardella, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy. As an expert on various building material of CH sites Mr. Rovella held a lecture on “*Building materials for cultural heritage: characterization, damage and protection*” presenting on the various detrition procedures of stone, mortar, plaster and bricks before “diving” into the topic of salt water degradation of CH building materials and the differences in areal vs underwater archaeology. Mr. Sardella followed with a lecture on “*Risk Mapping for the Protection of Cultural Heritage exposed to Climate Extremes*” by presenting the Web-GIS tool (pioneered in the Interreg project ProteCHt2save) to the audience.

Thursday October 8<sup>th</sup> & Friday October 9<sup>th</sup>: Alessandra Bonazza, Paola De Nuntiis, Alessandro Sardella, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy. After a final lecture on “*Managing Cultural Heritage at Risk in a Changing Environment*” the participants were separated into 3 groups for a practical session on utilizing the Web-GIS tool for risk mapping. The group members were assigned according to their professional background and nationality



into the groups with the aim to work on a STRENCH Pilot-Site. Great care was taken to assign the group members to sites of which they do not have any extensive previous knowledge:

- 1) Kastela (HR)
- 2) Ferrara (IT)
- 3) Troja (CZ)

After being transferred into their respective groups, the participants were given assignments based on the usage of the Web-GIS tool and lectures given. The newly obtained knowledge was then applied on their individual CH site.

### **Conclusion:**

Of the participating international students 23 were granted a certificate of attendance for extensive participation and contribution given during lectures and workshops. Of these an 9 obtained 6 ECTS points based on their active participation during the practical sessions held on October 8<sup>th</sup> to 9<sup>th</sup> and for passing an online multiple-choice exam/quiz (accessible solely via their Moodle account). The exam/quiz was based on the content presented during the lectures held in the 1<sup>st</sup> Week (Sept 28<sup>th</sup> to Oct 1<sup>st</sup>) of the Summer School.

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

The lectures themselves as well as practical sessions were well received with positive feedback given verbally at the end of lectures and courses.

### **Expected effects and follow-up**

The lectures and courses aimed towards strengthening the expertise on CH protection and to further endorse the use of satellite-based technology as seen in the Web-GIS tool. Furthermore the 2 week long course has aided in the networking of CH protectors from all around the world since the exchanges within the various groups were perceived as lively and collegial.

A number of participants declared they hoped for an iteration in the future.





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

Link for registration of the SU 2020: <https://www.donau-uni.ac.at/en/university/faculties/education-arts-architecture/departments/building-environment/news---events/events/tools-and-strategies-for-strengthening-resilience-of-cultural-heritage-in-climate-change0.html>

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

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

**SU 2020 Programme Screenshot:**

[www.donau-uni.ac.at/dbu/summeruniversity](http://www.donau-uni.ac.at/dbu/summeruniversity)

interreg CENTRAL EUROPE STRENCH  
UNIVERSITÀ DELLA CALABRIA  
ENVI MAT 2020  
DONAU UNIVERSITÄT KREMS

Danube University KREMS specializes in part-time academic continuing education. As a public university for continuing education, it works with its expertise in teaching and research to overcome societal challenges and tailors its study programs to address them. The master programs and short programs cover nine fields of study and meet the specific requirements of working professionals. With 8.000 students coming from 85 countries, Danube University KREMS combines its many years of experience in university-based continuing education with innovation to provide outstanding quality in research and teaching at an international level. The university holds the AÖ Austria quality seal. Situated 80 km from Vienna in the alluring world heritage region Wachau, Campus KREMS is a highly attractive location.

**Danube University KREMS**  
The University for Continuing Education

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## Joint ENVIMAT and Cultural Property Protection Summer School 2020

Tools and Strategies for strengthening resilience of Cultural Heritage in Climate Change

### Scientific Committee

- > *Alessandra Bonazza, CNR-ISAC*
- > *Anna M. Kaiser, Danube University Krems*
- > *Mauro La Russa, UNICAL*
- > *Alessandro Sardella, CNR-ISAC*

### Organizing Committee

- > *Alessandra Bonazza, CNR-ISAC*
- > *Paola De Nuntis, CNR-ISAC*
- > *Anna M. Kaiser, Danube University Krems*
- > *Alessandro Sardella, CNR-ISAC*
- > *Hannes Schramm, Austrian Armed Forces*

### Week 1

#### Monday 28 September

18:00 – 20:00 Introduction to Summer School and Project STRENCH  
*Anna Kaiser, Programme Director Cultural Property Protection, Danube University Krems, Austria*

Cultural Property Protection – Why to protect our Cultural Heritage  
*Hannes Schramm, Austrian Armed Forces, Austria*

#### Tuesday 29 September

18:00 – 20:00 Cultural Property Protection in the 21<sup>st</sup> Century: A View from the Most Deployed Division  
*Laurie Rush, US Army, Fort Drum, USA*

#### Wednesday 30 September

18:00 – 20:00 Italian Model for Cultural Property Protection in Case of Natural Disasters  
*Alfio Gullotta, Carabinieri Command for the Protection of Cultural Heritage (TPC), Italy*

#### Thursday 1 October

18:00 – 20:00 Cultural Heritage Protection Design: Identification of Threats, Risk and Vulnerability Assessment  
*Orfeas Sotiriou, National School of Public Administration and Local Government, Greece*

### Week 2

#### Monday 5 October

14:30 – 17:00 Introduction  
*Alessandra Bonazza, STRENCH Coordinator, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy*

Cultural Heritage at Risk due to the Impact of Extreme Climate: The Role of the Satellite Observations  
*Elsa Cattani, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy*

Climate Extremes in a Changing Climate  
*Elisa Palazzi, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy*

#### Tuesday 6 October

14:30 – 17:00 Copernicus in Support of the Safeguarding of Cultural and Natural Heritage at Risk  
*Daniele Spizzichino, Italian Institute for Environmental Protection and Research (ISPRA), Italy*

Vulnerability of Cultural Heritage: Challenges and Opportunities for Resilience Building  
*Riccardo Cacciotti, Institute of Theoretical and Applied Mechanics, The Czech Academy of Sciences (ITAM), Czech Republic*

#### Wednesday 7 October

14:30 – 17:00 Building Materials for Cultural Heritage: Characterization, Damage and Protection  
*Natalia Rovella, University of Calabria, Italy*

Risk Mapping for the Protection of Cultural Heritage exposed to Climate Extremes  
*Alessandro Sardella, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy*

#### Thursday 8 October

10:00 – 11:30 Managing Cultural Heritage at Risk in a Changing Environment  
*Alessandra Bonazza, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy*

14:00 – 17:00 Practical Session. WebGIS Tool for Risk Mapping  
*Alessandra Bonazza, Paola De Nuntis, Alessandro Sardella, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy*

#### Friday 9 October

09:30 – 12:30 Practical Session. WebGIS Tool for Risk Mapping  
*Alessandra Bonazza, Paola De Nuntis, Alessandro Sardella, Institute of Atmospheric Sciences and Climate (CNR-ISAC), Italy*



# 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 07<sup>th</sup> to 11<sup>th</sup> 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 7<sup>th</sup> to 11<sup>th</sup> 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 7<sup>th</sup> 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 8<sup>th</sup> 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 Drdäcký, 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 9<sup>th</sup> 2021:** On the 3<sup>rd</sup> 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 10<sup>th</sup> Mountain Division, Fort Drum, USA.

**Thursday June 10<sup>th</sup> 2021:** The fourth day of the SU 2021 was incorporated into the 1<sup>st</sup> **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 11<sup>th</sup> 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 11<sup>th</sup>.

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:



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ENVI MAT  
2021

DONAU UNIVERSITÄT  
KREMS

## Joint ENVIMAT and Cultural Property Protection Summer School 2021

7<sup>th</sup> to 11<sup>th</sup> 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](http://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 1<sup>st</sup> 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

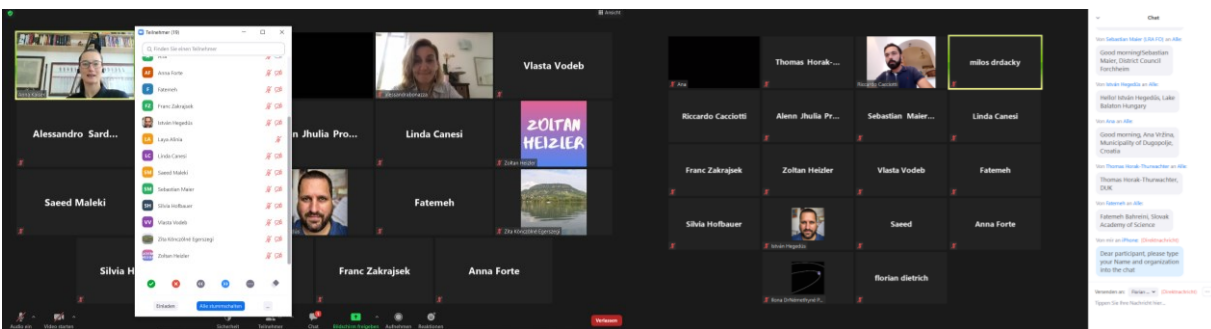
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[www.donau-uni.ac.at/dbu/summerschool](http://www.donau-uni.ac.at/dbu/summerschool)



**SU 2021 Screenshot Program:**

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

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



**SU 2021 Screenshots Syndicate Working Groups:**

