

IGUR Annual Meeting 2021

Minutes

Time: 1.00 p.m. – 2.30 p.m. UTC, Friday 29 October 2021

Location: Zoom (virtual)

Participants:

Daniel Schertzer, ENPC, Paris, France (incoming IGUR chairman)
Simon Beecham, University of South Australia, Adelaide, Australia (outgoing chairman of IGUR)
Thomas Einfalt (IGUR secretary, minutes)
Karsten Arnbjerg-Nielsen, Danish Technical University, Lyngby, Denmark
Remco van der Beek, SMHI, Sweden
Martin Fencl, Czech Technical University, Prague, Czech Republic
Auguste Gires, ENPC, Paris, France
Nandan Shetty, Charleston University, South Carolina, USA
Søren Thorndahl, Aalborg University, Denmark
Remko Uijlenhoet, TU Delft, The Netherlands

1. Welcome

Simon Beecham (outgoing chairman of IGUR), Daniel Schertzer (incoming chairman of IGUR) and Thomas Einfalt (secretary of IGUR) welcomed the participants. Simon quickly recalled that he had thoroughly enjoyed the two full terms (2x3 years) that he has chaired IGUR and welcomed Daniel as incoming chairman and congratulated him on his election. Daniel thanked Simon for all that he has accomplished during these terms.

2. Round Table

Next, the participants briefly presented themselves, their institution and their main activities. This rather illustrated the diversity of IGUR's activities. Remko Uijlenhoet recalls that he was replacing Maire-Claire ten Veldhuis, associate professor of the same department.

3. Minutes of previous meeting

There were no remarks to the minutes of the last meeting (virtual) on 9 April 2021, which have been posted that month. Thus, the minutes were approved.

4. Recent activities

4.1 meetings of special interest for IGUR, inc. ICUD 2021

Thomas, Martin, Karsten, Søren mentioned their participation to ICUD 2021, including chairing sessions (Martin, Karsten, Thomas). Overall, it seems that it was not the same as an in-person conference despite the organisers did their very best and they were great assistance to presenters and chairpersons.

4.2 general discussion on recent extreme events (Australia, Germany, US, France,...)

Daniel supposed that many of us have been interviewed on the recent heavy rainfall events and their probable connection with climate change.

Simon testified that it was maybe the first year in Australia that heavy rainfall became a topical conversation in the context of climate change, which previously had been rather limited to temperature increase.

Thomas reported that there has been a lot of discussion at different levels on the unprecedented torrential rainfalls as well as the fact that warning did not arrive whereas they should have arrived. In Germany, there were more than 180 casualties. Two statistical features: the events were above a one-hundred-year return period and, according to a joint study by Oxford University and the Postdam Institute for Climate, they were nine time more important than without climate change.

Nandan reported that despite most reports on US events were on coasts, there had been impressive inland events such a "derecho" on Iowa, a kind of inland hurricane, which destroyed for instance his aunt's hometown.

In France, Daniel reported that although being used to the recurrence of the so-called Mediterranean events, with heavy rainfall higher than 500 mm/day and considerable damages, it now seems there are other intense events not only located in the South East part of France, unfortunately not yet studied.

Remko pointed out that the aforementioned event over Germany severely affected Belgium and southern Netherlands. The latter draw a lot of attention because it was the first time that this region was heavily struck by a pluvial flood with a lot of damages, while being used to fluvial or coast flooding. This raises a lot of interesting scientific and engineering questions.

Overall, this series of events makes a case for action.

4.3 general discussion on the impacts of Covid on urban rainfall activities, conversely IGUR expertise to struggle with Covid?

The discussion was first focused on the impacts of COVID-19 on scientific activities ranging from teaching to planned IGUR activities. Numerous impacts were reported:

- 2020 IGUR meeting was delayed for a year and the 2021 one was rather lately reduced to be virtual as well as the ICUD 2021. This has particular impact on the connections inside of our community (Thomas).
- Financial impacts: they should not be underestimated (Simon), e.g. no international student exchanges are financed with important consequences to universities, reduced conference funding with consequences for societies that organise them
- Multiple difficulties for students due to lockdowns and limited interactions

- Long-term effects, longer than Covid: reduced travels and develop hybrid conferences, more generally we will not come back to the previous situations (Simon). It might be useful to think in our group about these effects
- Effect on geophysics: e.g. no field trips and lack of data collection (Daniel)

Daniel reported that they had special sessions at EGU, AGU and AOGS on COVID-19, the most recent one is that he co-organised at AGOGS 2021, whose brief is going to be soon published in the proceedings. Impacts on geophysics were reported as quite large, especially in geology. Among geophysical expertise that could be useful to struggle with Covid, a unifying approach of disaster management was discussed, e.g., between COVID-19 and flooding management with the common aim to overcome the lack of rapid and coordinated response. There will be again a special session on Covid at EGU.

5. News from JCUD

JCUD was solicited long time ago to participate to our meeting, in particular to bring fresh news about future plans. Unfortunately, miscommunication between the outgoing and incoming committees made it fails.

6. Future activities

Meetings

- UDM22 (Urban Drainage Modelling) will take place from 10 - 12 January 2022 in Costa Mesa, California, USA (<https://udm2022.org/>)
- Weather Radar and Hydrology will take place in Nanjing, China in 2022. The date is not set yet. Currently, abstracts should be submitted until 10 December 2021 (<http://www.wrah-china.com/>)
- At EGU 2022 (3-8 April), there will be a special session on Geoscience and health during the Covid-19 pandemic <https://meetingorganizer.copernicus.org/EGU22/session/43600>.
- ERAD 2022 (European Conference on Radar in Meteorology and Hydrology) will take place in Locarno, Switzerland (<https://www.erad2022.ch/>) from August 29th to September 2nd, 2022. It was postponed for two years, Thomas, Remco and Remko will participate in it. Urs German and Alexis Berne are the main organisers.
- Urban Rain 2022 (<https://urbanrain.ethz.ch/>): many participants are in favour of a skiing time selection, i.e. in early December 2022. Others are not extremely keen on skiing – this needs to be taken into account for planning. The venue is also discussed, since Pontresina is more remote than Saint Moritz, the original venue of Urban Rain. This could be a problem in the present situation. Thomas will contact Peter about the present status. → Update: news will come around Easter – nothing can be set now due to rising infection numbers
- The 11th edition of Novatech will be held in Lyon in 2023.

Potential joint papers

Following the general discussions on

- i. recent rainfall extremes and pluvial floods

ii. Covid 19 pandemic and urban rainfall research

Daniel Schertzer proposed a reflection to join forces for potential papers on both topics based on the IGUR experience to do it, e.g. climate and radar measurement, respectively coordinated by Patrick Willems and Thomas at that time.

Simon strongly supports these proposals. Remko mentioned that several groups in Belgium, Germany, and the Netherlands are already working on the first topic, in particular the one of Patrick who should be contacted. → Update: A first contact was done, the main issue is the availability of potential contributors. Daniel mentions that radar maintenance shortcomings seem to be COVID consequences.

As a conclusion, both initiatives are confirmed and will be launched by emails.

Other activities

On the initiative of Czech Technical University CTU, the OPENSENSE COST action on opportunistic precipitation measurements has been successfully submitted and funded (<https://www.cost.eu/actions/CA20136/>). It started in August 2021.

Objectives are to make data from different sources and devices openly available and to maintain a comparable quality standard (Martin). This could be a good opportunity to meet in-person, hopefully.

7. Potential improvements of IGUR organisation

Daniel Schertzer launched a number of facts and questions on which IGUR could think over:

- A call to join IGUR on the website, but membership is not so clear
- In particular, practice has led to two different lists (members, RAIN-L mailing list)
- Also suggestions to have honorary members
- A limited diversity (admittedly due to a general heritage in technological domains) despite the rule limiting the membership to two per country
- How to better value the commitment of IGUR members?
- A larger committee using the RAIN-L mailing list
- Provide open data overviews and strategies
- Potentially provide open algorithms

Some response elements could take hold on the JCUD statutes, which are presently not available because they are under revision. Anyway, preliminary suggestions could be to have:

- An executive committee (with given restriction) and a committee at large, possibly an honorary committee
- Define task forces: topical targets, as well as for recurrent tasks (e.g., web, blog, data, social networks).

By the way, we have to thank Martin for maintaining alone the IGUR website (<http://igur.org/>). These items need to be discussed and advanced in the coming months until the next IGUR meeting. Martin agrees in a general manner and emphasises that, if the general goals are rather clear the website, it is not so clear what we are actually doing, who should be contacted, what are the

midterm objectives or common activities. Thomas believes that common workshops and working groups could be important, in particular to prepare COST actions. Simons insists that we should not put too many barriers to memberships. A revision of the lists should be performed to be sure that nobody is forgotten, as well as to take out those who are no longer interested.

8. Any other business

Possible links between IGUR and the OPENSENSE COST action were again discussed. Daniel mentioned that he contacted the coordinator Bareš Vojtěch, who recalled that the membership to the action is on a personal basis. Martin believes that this action will be a good opportunity to make available many data sets. Auguste suggests to make available disdrometer data, that are less common than rain gauge data, or to provide where they are available. Martin just got the information from Meteo-France that OPERA data are now available. It is concluded that a group should be working on the question of open data, what are available and what are interesting. This should also concern open algorithms.

The next IGUR meeting is intended to be held during UrbanRain22 in Switzerland.

Lübeck / Paris, November 24 /December 27, 2021