

# Sistema de Información sobre Sequias para el sur de Sudamérica



Sistema de Informações sobre Secas  
no Sul da América do Sul

# Bridging the gap between climate information producers and users

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# Who are we?

- Drought Information System for southern South America (SISSA for the Spanish acronym).
- Developed by six member countries of the Regional Climate Center for Southern South America. Argentina, Bolivia, Brazil, Chile, Paraguay, Uruguay.
  - Drought was identified as the main hazard among all six countries.

# Objectives

1. **Monitoring** and **prediction** of the occurrence, intensity, spatial extensión and temporal evolution of Drought in Southamerica.
2. Forecast the **magnitude** of the expected impacts of droughts on sensitive sectors.
3. Identify actions that could improve the **planning**, **preparation** and **response** of stakeholders.
4. Contribute to **risk management governance** through collaborative development of national drought preparedness and response policies.
5. **Improve institutional capacities** to produce and share timely, relevant and actionable information on droughts in southern South America.
6. Disseminate SISSA activities and raise awareness among authorities and actors in sectors sensitive to drought about the importance of planning and proactive preparation prior to the occurrence of droughts.

# Training

- The complexity of drought requires a broad spectrum of talents and disciplines to study and manage it.
- Main training focus: producers and disseminators of information on drought and mitigation of its impacts.
  - Personnel of Meteorological Services, Ministries of Agriculture, Research Institutes
  - Civil sector organizations (farmer organizations, cooperatives).
- Online webinars (4).
- Strategic partnership: Regional Training Center from Argentina.



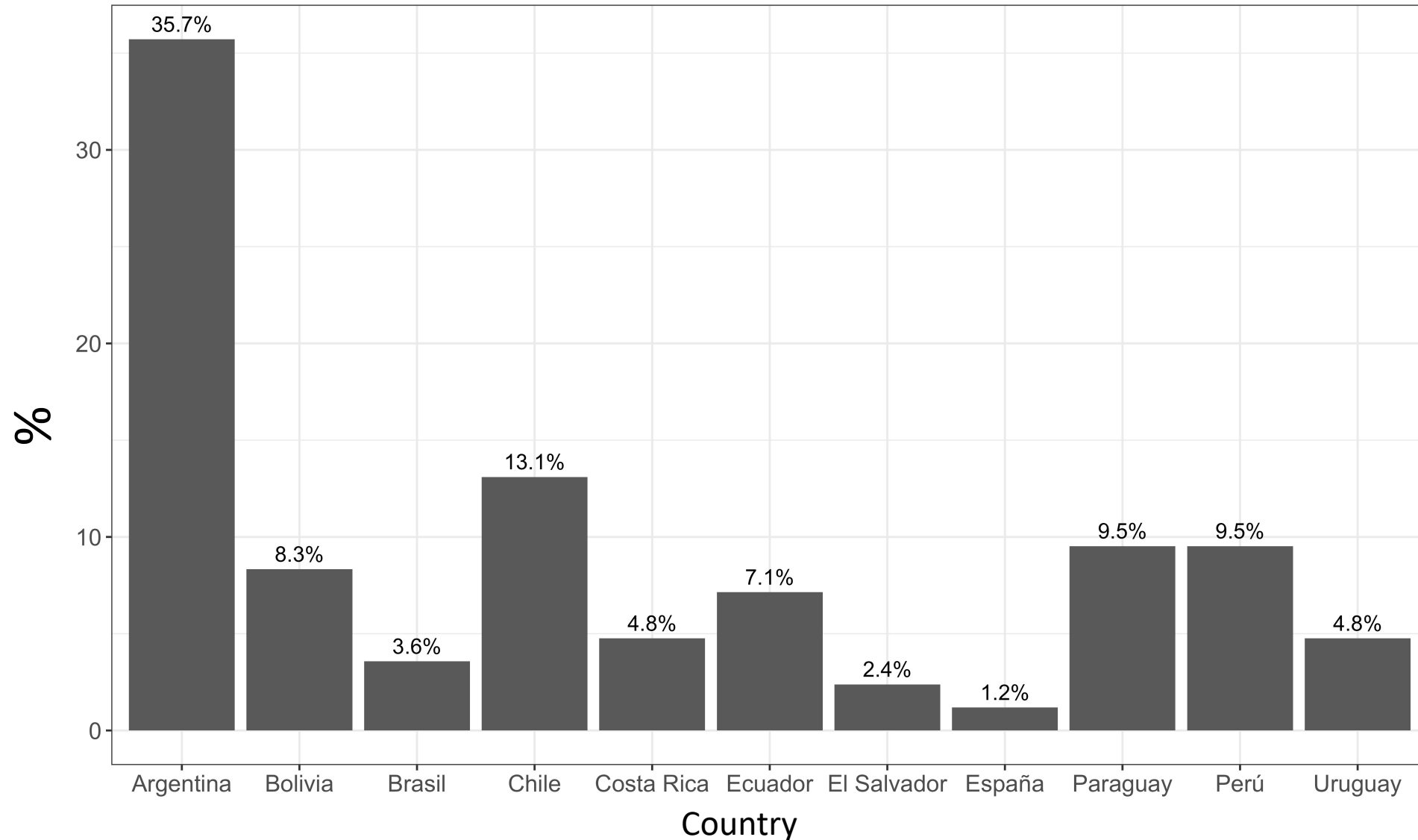
# Online webinars

1. Direct contact with potential users
2. Different topics
  1. Introduction to the API developed by SISSA
  2. Drought hazard probabilistic assesment
  3. Virtual tour of the webpage
3. Reach an interdisciplinary audience to cover most of the areas that are related to drought.
4. Each webinar was divided into halves.
  1. Introduction mainly unidirectional
  2. Open discussion followed with attendees

# Impact assesment

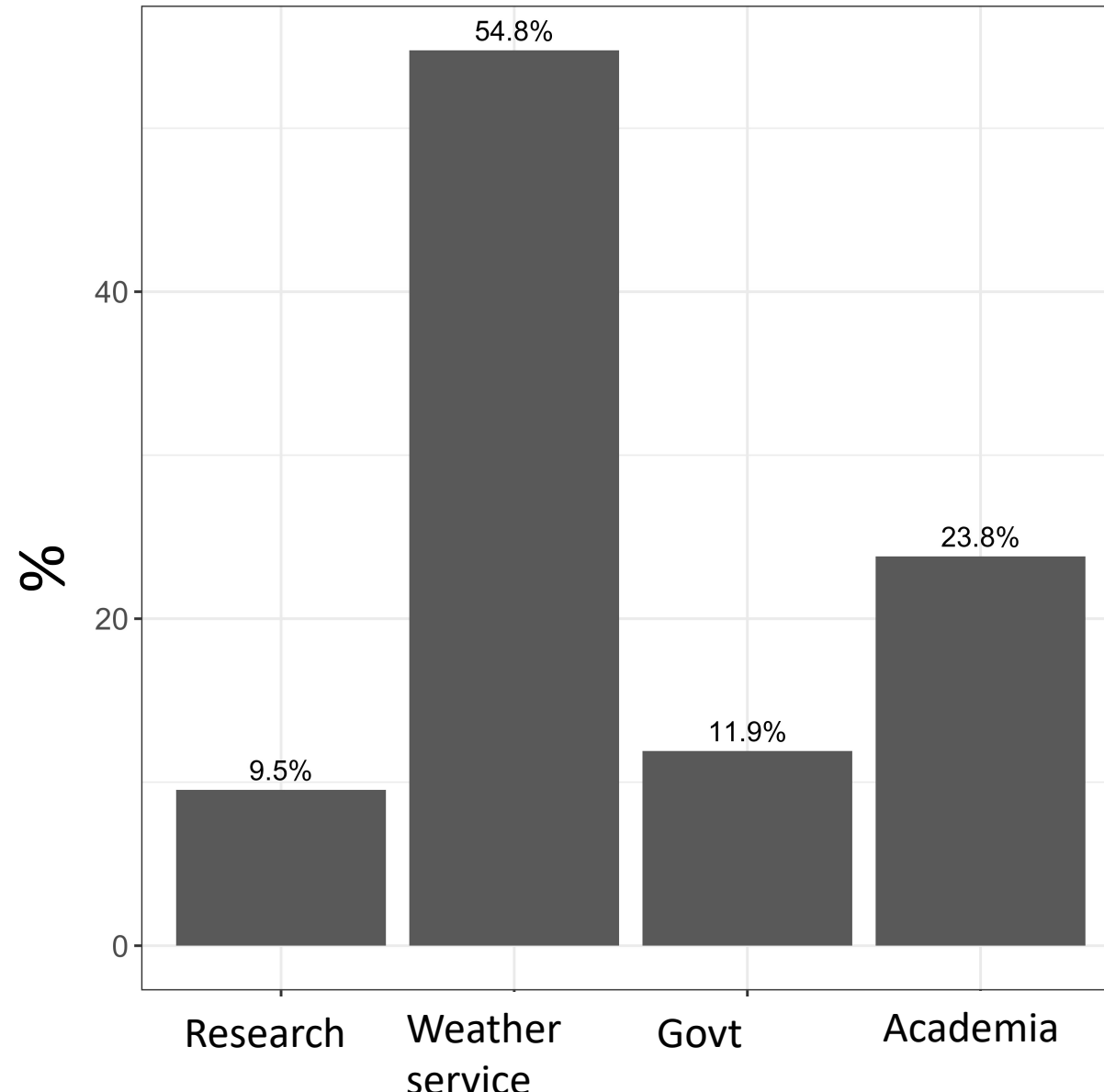
- Average of 120 attendees. From 70 in the first to 170 in the last.
- Over 20 countries were present
- Broad audience: Research Institutions, Weather Services, Academia, Government

# Impact assesment: Countries of the attendees

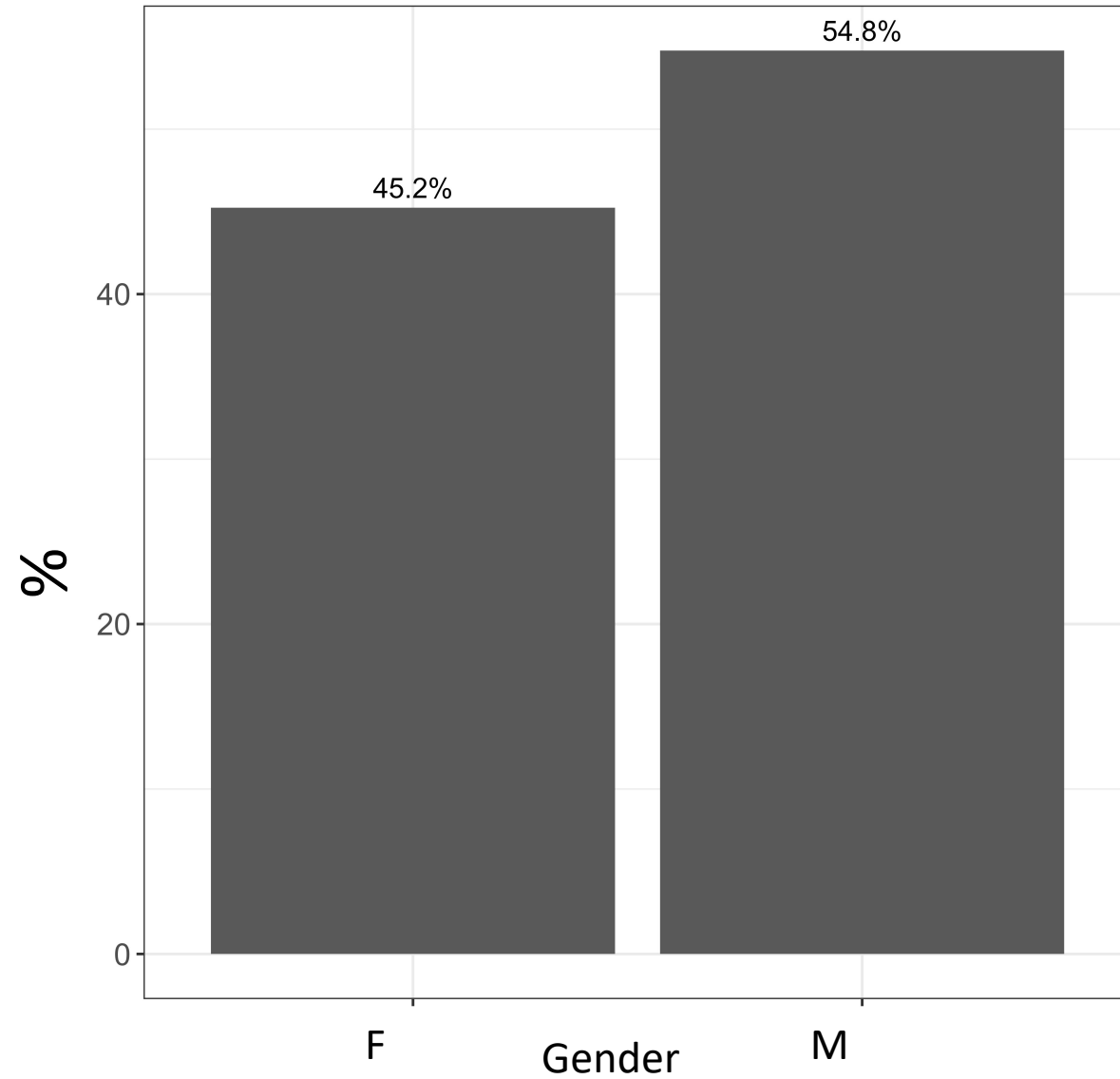




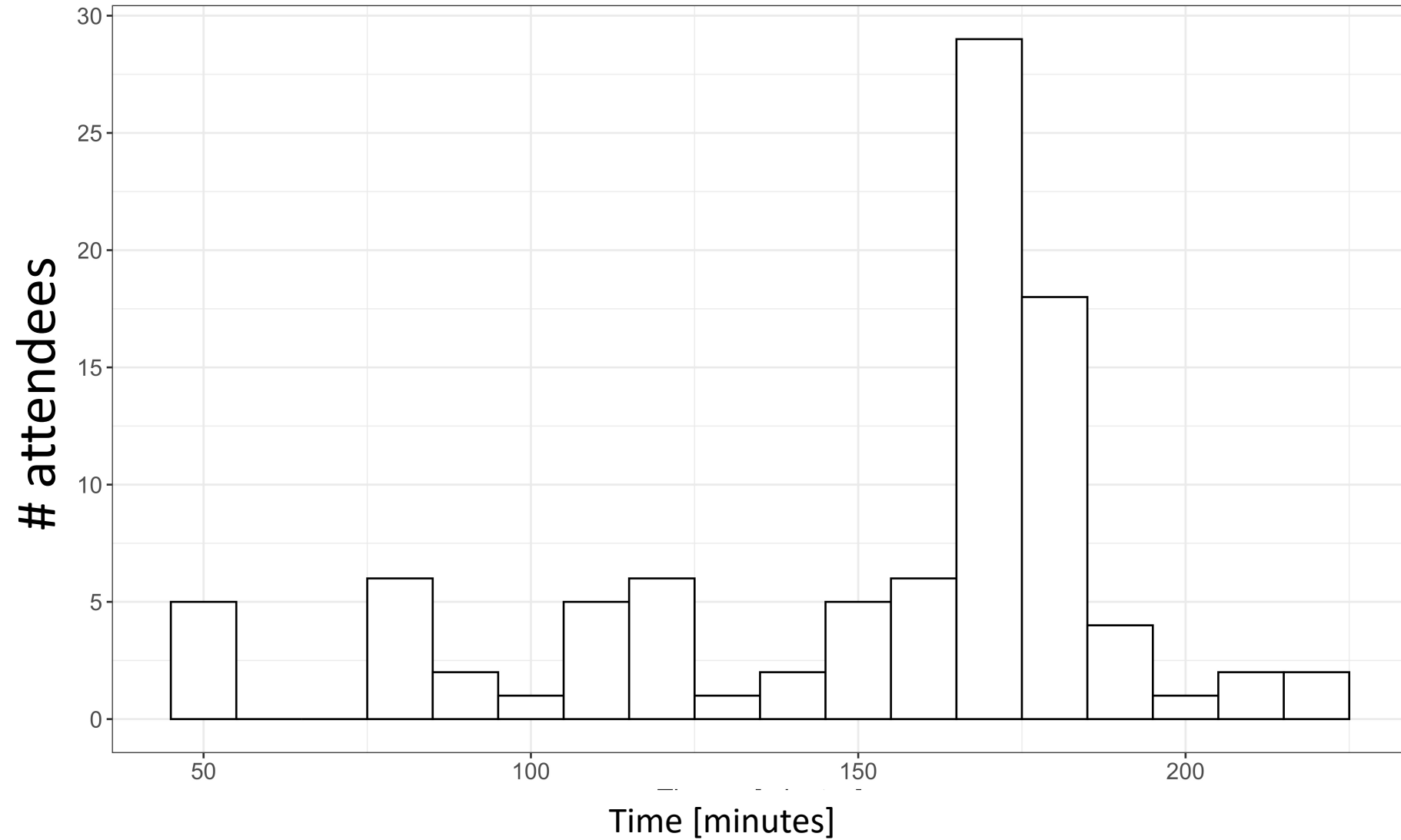
# Impact assesment: Institution of the attendees



# Impact assesment: Gender of the attendees



# Impact assesment: Connection time



# Lessons learned

- Interdisciplinary attendees enrich the discussion
- Interaction strengthens the relationship with users
  - Tailor-made visualization for different purposes
- Interaction between participants created a new network of scientists and stakeholders to develop new services
- Practical activities are challenging with large groups

# Challenges

- How can we maintain an active and engaged community?
- Are MOOCs a good alternative for sharing codes and scripts?
- How can we reach farmers/individuals and engage them the in weather monitoring?
- Are webinars about case studies more gripping for a general audience?

# Introduction to the API developed by SISSA

- Link:

- <https://sissa.crc-sas.org/blog/2020/10/20/webinario-sobre-el-uso-de-api-de-sissa/>

- Slides:

- <https://github.com/CRC-SAS/web-services-r/blob/master/workshop/Presentacion-2020-10-30.pptx>

- R code:

- <https://github.com/CRC-SAS/web-services-r>

- Video:

- Part 1: <https://www.youtube.com/watch?v=hsD8C6lE18o>
- Part 2: <https://www.youtube.com/watch?v=VFfeCeugxos>

# Stochastic weather generator

- Link:
  - <https://sissa.crc-sas.org/blog/2020/12/29/webinario-sobre-generadores-estocasticos-de-series-climaticas/>
- Slides:
  - [https://github.com/CRC-SAS/weather-generator/blob/gamwgen/workshop/docs/Presentacion\\_Webinario\\_generador.pdf](https://github.com/CRC-SAS/weather-generator/blob/gamwgen/workshop/docs/Presentacion_Webinario_generador.pdf)
- R code:
  - <https://github.com/CRC-SAS/weather-generator.git>
- Video:
  - Part 1: <https://www.youtube.com/watch?v=GQbi9ODrIH8>
  - Part 2: <https://www.youtube.com/watch?v=XGxpRKX0tzY>

# Standardized drought indices and dry events identification and recurrence

- Link:
  - <https://sissa.crc-sas.org/blog/2021/04/19/materiales-de-webinario-calculo-de-indices-estandarizados-de-sequia-y-el-analisis-multivariado-de-eventos-secos-para-la-caracterizacion-de-la-amenaza-de-sequia/>
- Slides:
  - [https://github.com/CRC-SAS/indices-eventos/blob/master/Presentacion\\_Webinario\\_eventos.pdf](https://github.com/CRC-SAS/indices-eventos/blob/master/Presentacion_Webinario_eventos.pdf)
- R code:
  - <https://github.com/CRC-SAS/indices-eventos>
- Video:
  - Part 1: <https://www.youtube.com/watch?v=9QQ3Jrnw1tg>
  - Part 2: <https://www.youtube.com/watch?v=xp3u0iAxN6k>



# Virtual tour of the webpage

- Link:

- <https://sissa.crc-sas.org/blog/2021/05/04/webinario-exploracion-de-productos-de-monitoreo-de-sequia-desarrollados-por-el-sissa/>

- Slides:

- [https://sissa.crc-sas.org/wp-content/uploads/2021/05/Webinario\\_Productos\\_SISSA\\_20200514.pdf](https://sissa.crc-sas.org/wp-content/uploads/2021/05/Webinario_Productos_SISSA_20200514.pdf)

- Video:

- Part 1: <https://www.youtube.com/watch?v=HWdXtuVy4NA>
- Part 2: <https://www.youtube.com/watch?v=RpuCdWTK33k&t=2s>