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CONFERENCE ON SPACE TECHNOLOGY FOR WATER MANAGEMENT

HOSTED BY THE INTER-AMERICAN INSTITUTE
FOR COOPERATION ON AGRICULTURE

7-10 MAY, SAN JOSÉ, COSTA RICA



MINISTERIO DE
RELACIONES EXTERIORES
Y CULTO

GOBIERNO
DE COSTA RICA



Prince Sultan Bin Abdulaziz
International Prize for Water



**T1S1. Water scarcity: space technologies to monitor precipitation,
soil moisture and drought.**

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CONCLUSIONS

- ❑ There is growing interest in measuring, monitoring precipitation, soil moisture and drought in intermediate and local scale projects.
- ❑ There is a favorable increase in current methodologies and sources of information for measuring and monitoring precipitation, soil moisture and drought.
- ❑ One of the main interests of local governments is in finding faster, more cost-effective processes for studying droughts through risk monitoring platforms.
- ❑ Climate variability phenomena such as El Niño are increasingly motivating their influence and analysis around drought processes.
- ❑ Current analyzes are identifying the possibility of optimizing agricultural productivity with drought-resistant seeds in regions where they are frequently affected by these phenomena.

CONCLUSIONS

- ❑ The research presented showed that there is a common point regarding the urgency of implementing sustainable water management strategies to address the escalating water scarcity challenges.
- ❑ The use of Google Earth Engine (GEE) platform to provide effective monitoring of soil moisture in a time series from 2015 to 2022 through the SMAP Global soil moisture datasets was highlighted.
- ❑ It is recommended to continue increasing collaborative work and creating networks for data management and sharing successful experiences in the evaluation of these variables.



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Thank you

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