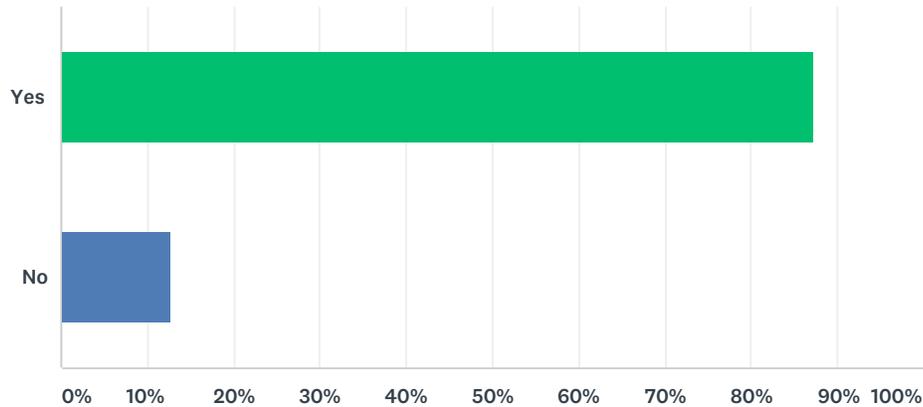


## Q1 Did you attend ICAWS-2017 event in Offenbach (Germany)?

Answered: 39 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	87.18%	34
No	12.82%	5
TOTAL		39

## Q2 Please let us know why you had registered but did not attend ICAWS-2017:

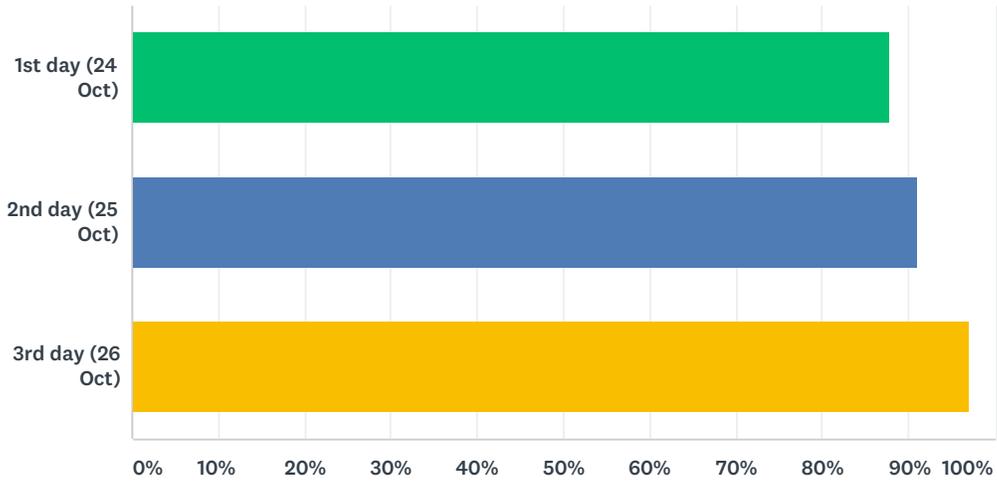
Answered: 5 Skipped: 34

#	RESPONSES	DATE
1	No financial resources.	11/6/2017 12:52 PM
2	I am desired to attend the meeting and give presentation, but unfortunately I can't make this trip because of the visa problem.	11/4/2017 11:57 AM
3	I had an emergency that prevented me from traveling at the last minute	11/3/2017 2:37 PM
4	Funding	11/1/2017 6:15 PM
5	NO APPROVAL FOR THE FUND AND RELEASE FROM MY EMPLOYER FOR ME TO HAVE ATTENDED	11/1/2017 5:46 PM

## Q3 You attended ICAWS-2017 on:

Answered: 33 Skipped: 6

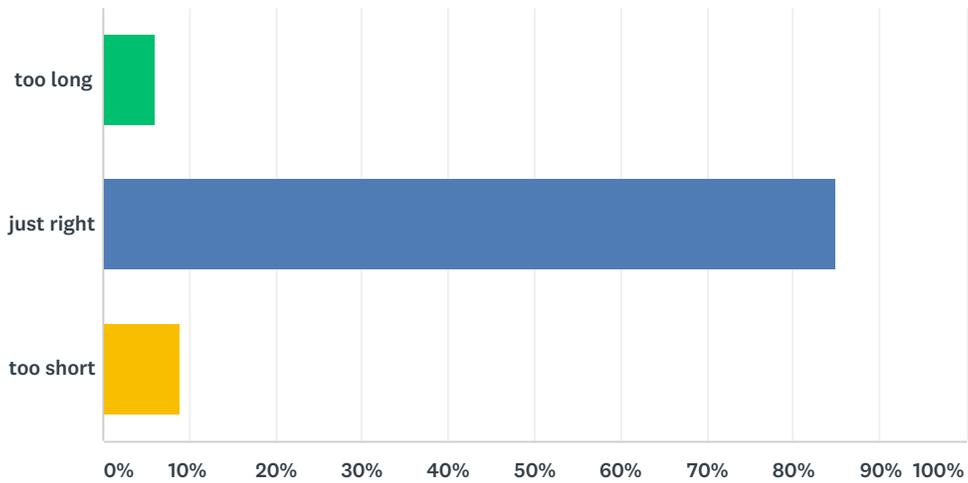
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ANSWER CHOICES	RESPONSES	
1st day (24 Oct)	87.88%	29
2nd day (25 Oct)	90.91%	30
3rd day (26 Oct)	96.97%	32
Total Respondents: 33		

Q4 You found the duration of ICAWS-2017 to be:

Answered: 33 Skipped: 6

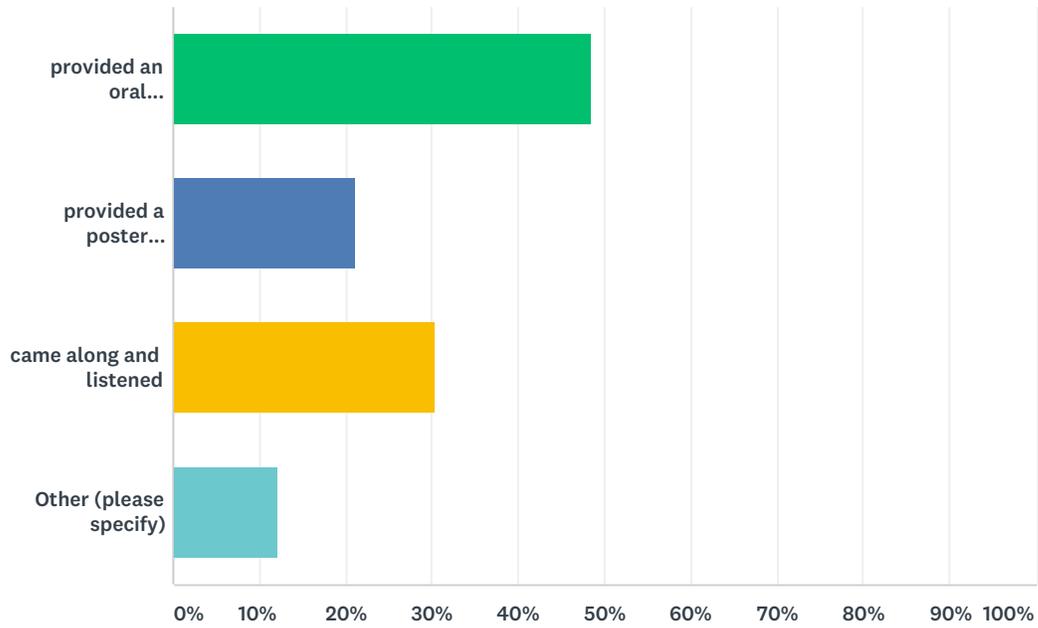


ANSWER CHOICES	RESPONSES	
too long	6.06%	2
just right	84.85%	28
too short	9.09%	3
TOTAL		33

Q5 At ICAWS-2017 you:

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Answered: 33 Skipped: 6



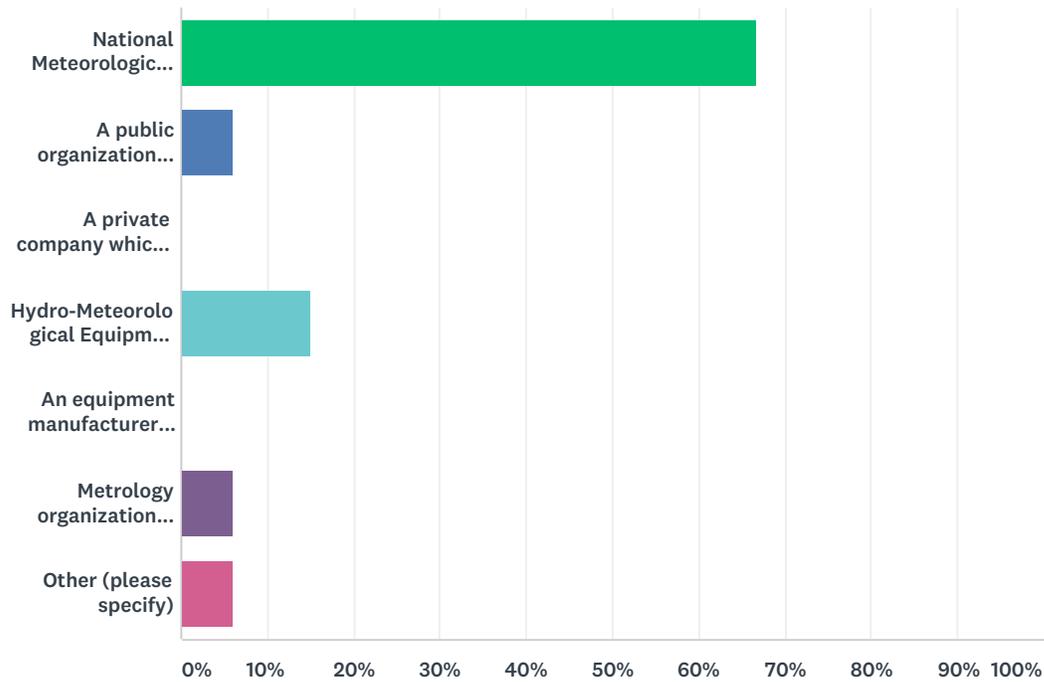
ANSWER CHOICES	RESPONSES
provided an oral presentation	48.48% 16
provided a poster presentation	21.21% 7
came along and listened	30.30% 10
Other (please specify)	12.12% 4
Total Respondents: 33	

#	OTHER (PLEASE SPECIFY)	DATE
1	WMO Secretariat	11/6/2017 1:38 PM
2	as an IPC member	11/6/2017 7:05 AM
3	Discussed and networked with counterpart AWS experts and asked recommendations from WMO and NMHS experts for AWS matters and concerns	11/2/2017 10:12 AM
4	wmo	11/2/2017 8:27 AM

Q6 You are a member of:

Answered: 33 Skipped: 6

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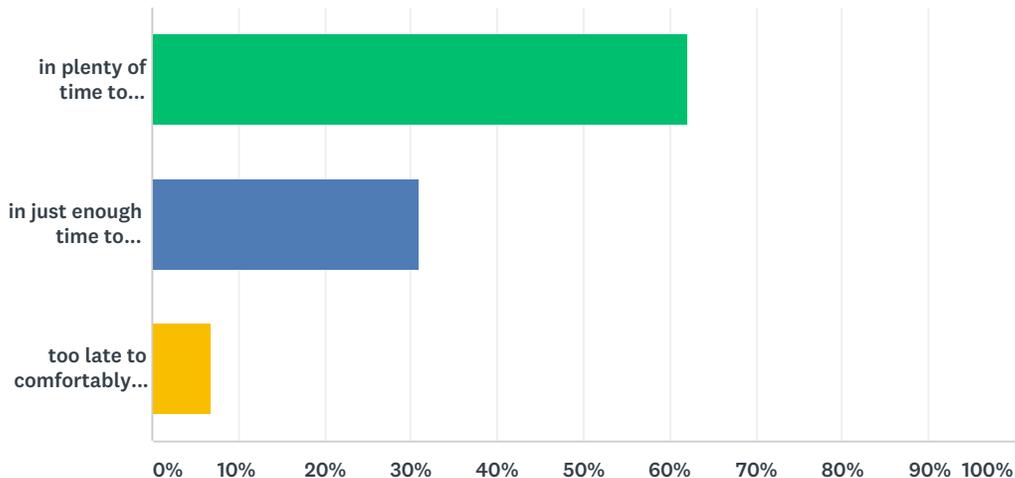
ANSWER CHOICES	RESPONSES
National Meteorological and Hydrological Service (NMHS)	66.67% 22
A public organization/institution which provides meteorological data, but not NMHS	6.06% 2
A private company which provides meteorological data	0.00% 0
Hydro-Meteorological Equipment Industry (HMEI)	15.15% 5
An equipment manufacturer, but not a member of HMEI	0.00% 0
Metrology organization/institution	6.06% 2
Other (please specify)	6.06% 2
<b>TOTAL</b>	<b>33</b>

#	OTHER (PLEASE SPECIFY)	DATE
1	WMO Secretariat	11/6/2017 1:39 PM
2	wmo	11/2/2017 8:28 AM

Q7 You received the first ICAWS-2017 announcement:

Answered: 29 Skipped: 10

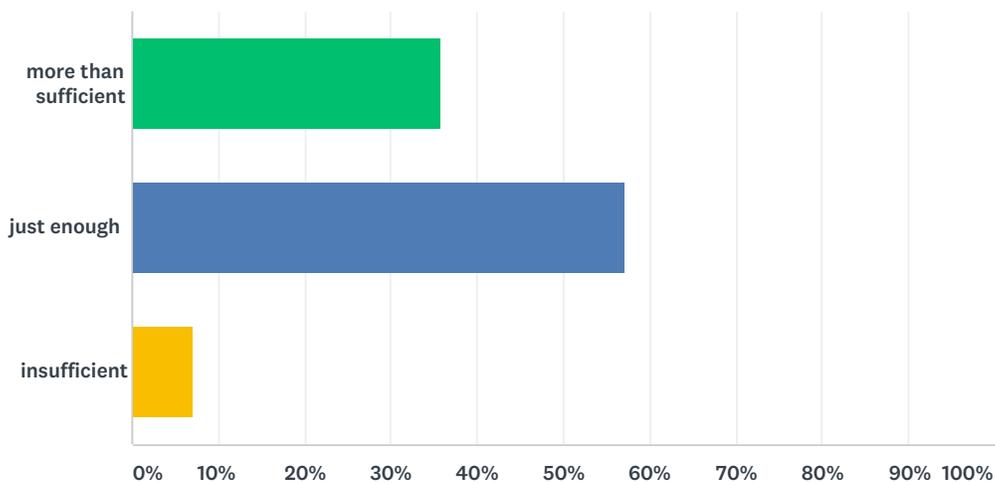
The WMO International Conference on the Automatic Weather Stations (ICAWS - 2017) Feedback Survey



ANSWER CHOICES	RESPONSES	
in plenty of time to organize your participation	62.07%	18
in just enough time to organize your participation	31.03%	9
too late to comfortably organize your participation	6.90%	2
TOTAL		29

Q8 The time allowed for you to submit an abstract for ICAWS-2017 after the first announcement was:

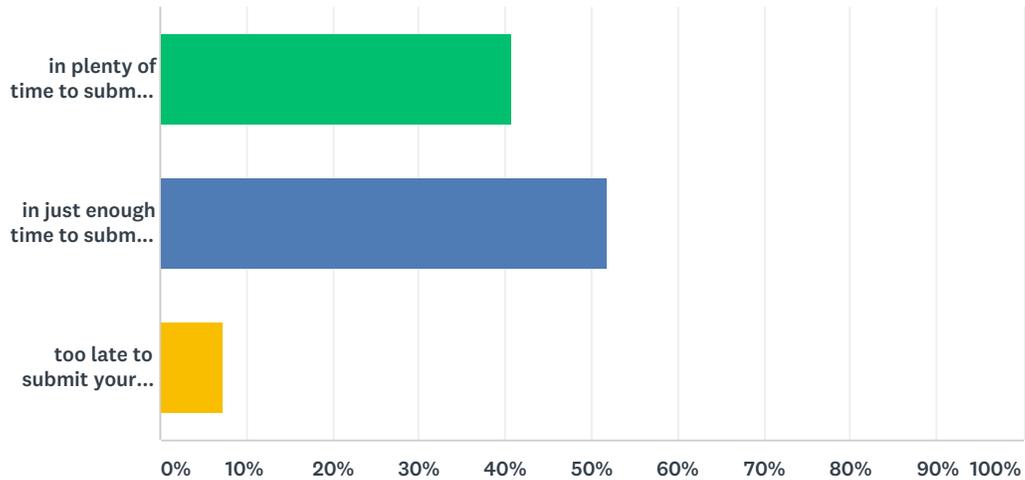
Answered: 28 Skipped: 11



ANSWER CHOICES	RESPONSES	
more than sufficient	35.71%	10
just enough	57.14%	16
insufficient	7.14%	2
TOTAL		28

### Q9 You received the call for full papers and presentations:

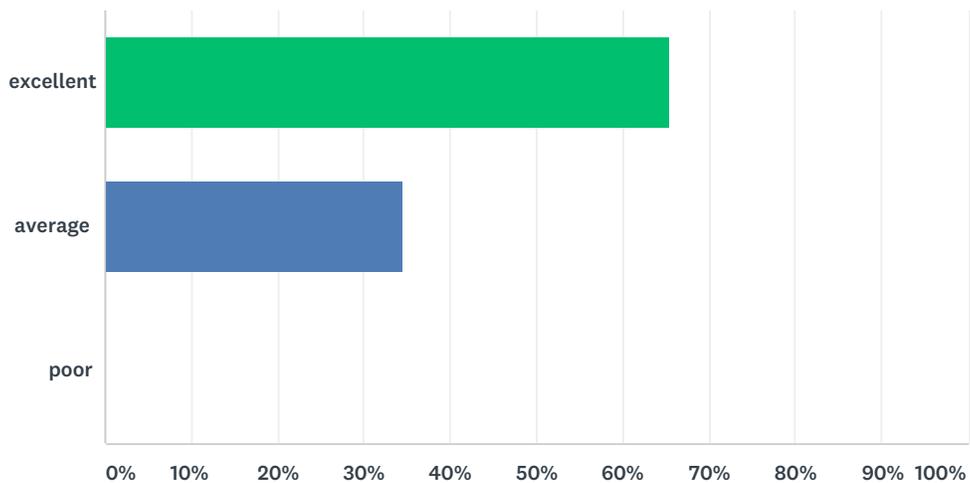
Answered: 27 Skipped: 12



ANSWER CHOICES	RESPONSES	
in plenty of time to submit your paper on time	40.74%	11
in just enough time to submit your paper on time	51.85%	14
too late to submit your paper on time	7.41%	2
TOTAL		27

### Q10 You found the quality of the ICAWS-2017 scientific and technical papers to be:

Answered: 29 Skipped: 10

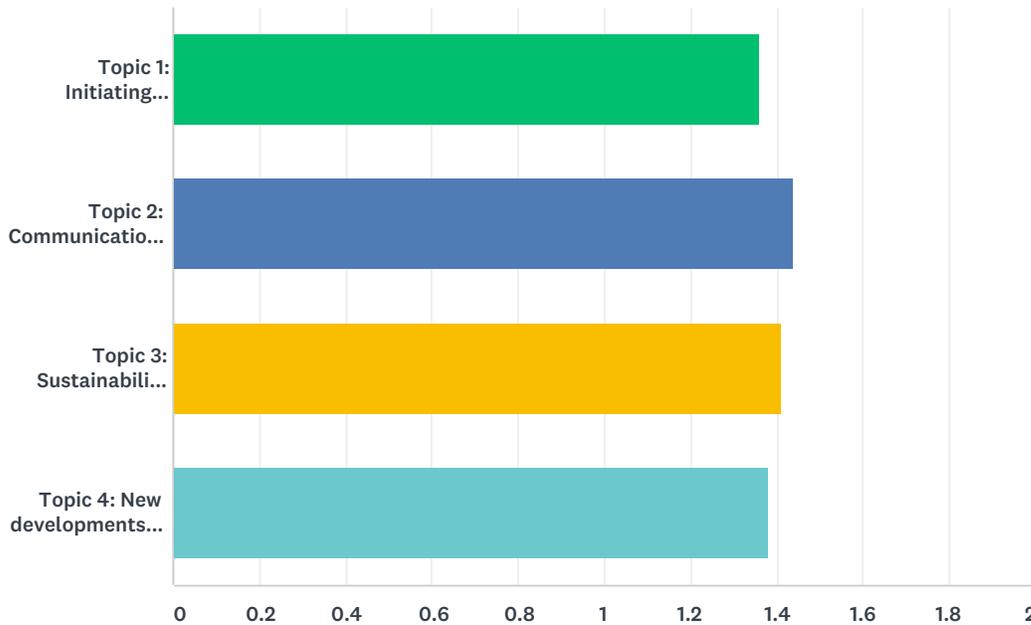


ANSWER CHOICES	RESPONSES	
excellent	65.52%	19

average	34.48%	10
poor	0.00%	0
<b>TOTAL</b>		<b>29</b>

### Q11 You found the session topics to be:

Answered: 29 Skipped: 10



	EXCELLENT	AVERAGE	POOR	TOTAL	WEIGHTED AVERAGE
Topic 1: Initiating automation and supporting migration from manual to automated measurements	64.29% 18	35.71% 10	0.00% 0	28	1.36
Topic 2: Communications, data transmission, encoding, archiving and storage	55.56% 15	44.44% 12	0.00% 0	27	1.44
Topic 3: Sustainability of the measurements	65.52% 19	27.59% 8	6.90% 2	29	1.41
Topic 4: New developments, interoperability, intelligent measurements, and integration	68.97% 20	24.14% 7	6.90% 2	29	1.38

### Q12 What topics would you propose for the next ICAWS event?

Answered: 17 Skipped: 22

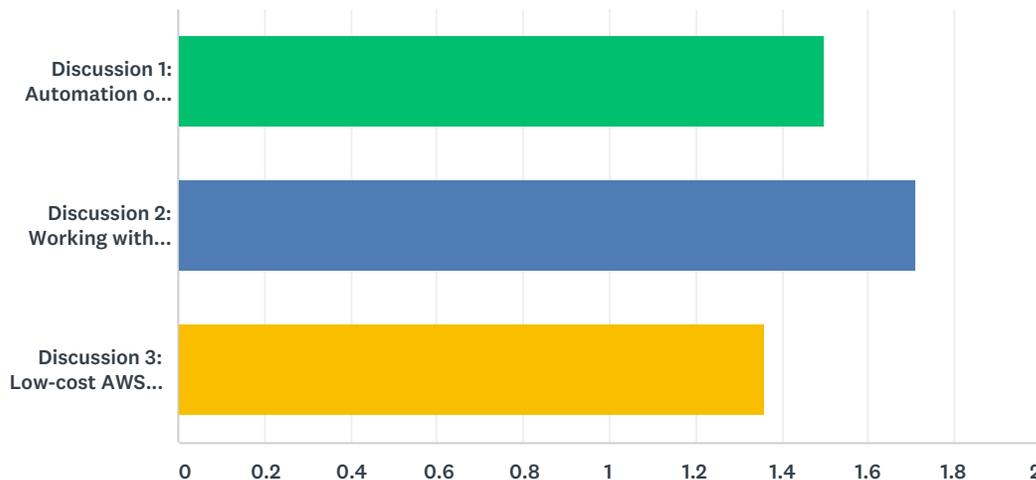
#	RESPONSES	DATE
1	Statistical methods that can be performed with meteorological data.	11/7/2017 3:37 PM
2	Comparison of the best AWSs on the market. Pros and cons of each. Also help in choosing individual instruments to be deployed in AWSs.	11/6/2017 11:43 AM

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3	Sustainability is a good topic, but there were almost no talk that really dealt with it. Sustainability, as in: climate change issue, lowering consumption and our greed: including greed for data. We have enough data for another 20-30 lifetimes to deal with. We should focus on quality and down-scaling. Not on faster, more, bigger. It shall collapse eventually. (But that is also fine, I guess.)	11/6/2017 10:33 AM
4	Intelligent architecture of AWS	11/6/2017 7:51 AM
5	none, the topics were very correct and specific	11/5/2017 3:16 PM
6	Data correction method	11/3/2017 6:56 AM
7	Similar topics. Perhaps a bit more on inter comparisons of instruments and methods. Siting classification.	11/2/2017 1:39 PM
8	I hope that discussions about best practices including guidance on the establishment, operation and maintenance of Automatic Weather Stations be made an integral part of the ICAWS event.	11/2/2017 10:27 AM
9	New technologies based on LPWAN such as LoraWan and Sigfox	11/2/2017 9:37 AM
10	More topics on applications of automatic weather station applications	11/1/2017 9:26 PM
11	Interoperability and the use of the IOT	11/1/2017 6:07 PM
12	Standardizations on AWS (i.e sensor interfaces, sensor protocols, communication protocols, tender specifications, ...)	11/1/2017 4:55 PM
13	User requirements versus WMO standards Examples of cross-organizational projects both successful and failed	11/1/2017 4:51 PM
14	I think mentioned topics in general meet demands of the hydrometeorological services.	11/1/2017 4:18 PM
15	Metadata handling Systematic calibration procedures, as a part of metadata	11/1/2017 3:51 PM
16	Calibration procedures	11/1/2017 3:41 PM
17	On developing user requirements	11/1/2017 3:21 PM

## Q13 You found the discussion sessions to be:

Answered: 29 Skipped: 10



	EXCELLENT	AVERAGE	POOR	TOTAL	WEIGHTED AVERAGE
Discussion 1: Automation of measurements - training needs and competences	60.71% 17	28.57% 8	10.71% 3	28	1.50
Discussion 2: Working with non-NMHS (partner) data	46.43% 13	35.71% 10	17.86% 5	28	1.71

Discussion 3: Low-cost AWSs - opportunity of threat to meteorological measurements	67.86%	28.57%	3.57%	28	1.36
	19	8	1		

## Q14 What topics would you propose for discussion sessions for the next ICAWS event?

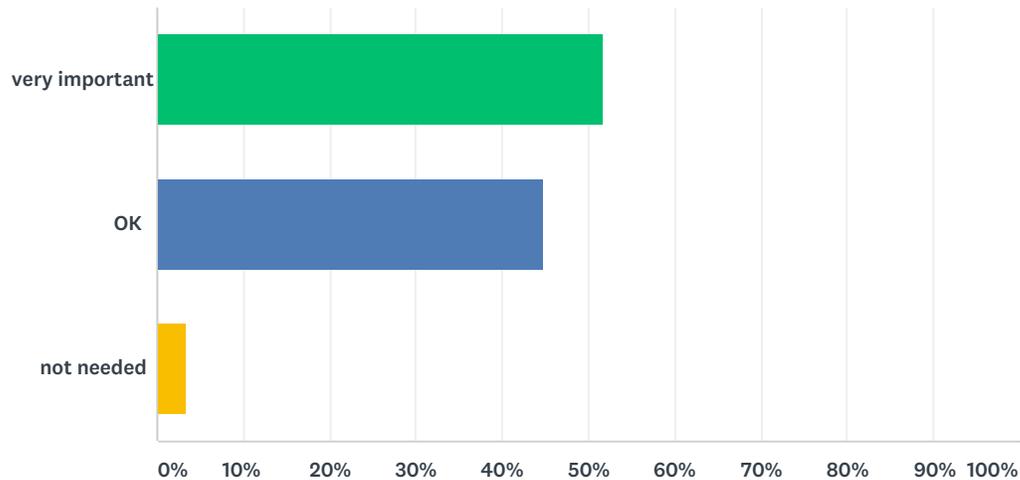
Answered: 14 Skipped: 25

#	RESPONSES	DATE
1	Updating of the new meteorological variables that have entered the market of automatic meteorological stations in the last year (for example).	11/7/2017 3:37 PM
2	Help with deciding on instrumentation.	11/6/2017 11:43 AM
3	Say: "How do we tackle climate change in our field of expertise?"	11/6/2017 10:33 AM
4	maintenance issues and experiences; application of data; new tech	11/6/2017 7:51 AM
5	none, the topics were very correct and specific	11/5/2017 3:16 PM
6	How to improve the quality of observation data	11/3/2017 6:56 AM
7	Training and needs.	11/2/2017 1:39 PM
8	I hope that WMO could come up with best practices and maintenance techniques derived from CIMO guidance as recommended by the experts group / CIMO. Migration and standardization of AWS for a particular climate zone including recommended specifications. Recommendations for the establishment of "All-in-One" AWS, criteria for site selection and exposure.	11/2/2017 10:27 AM
9	in some occasions panel discussions lost focus on the subject	11/2/2017 7:45 AM
10	Application driven observations.	11/1/2017 9:26 PM
11	1) Remote AWS (RAWS) where telemetry and power are not readily available. 2) The value of less capable or less accurate "in-fill" AWS. 3) Emerging measurements of interest to NHMS.	11/1/2017 6:07 PM
12	The discussions topics were interesting but the individuals selected for the panels were not always correct and the group seemed too big to achieve a decent discussion with those more comfortable speaking English doing most of the talking. I would like to suggest breaking the group into smaller discussion groups that could then present their primary points after a 30 minute time period. This would have the additional benefit of helping people to get to know each other.	11/1/2017 4:51 PM
13	Practical issues of exploitation of stations of different kinds.	11/1/2017 4:18 PM
14	Data users' needs - as a part of RRR process How implementing technical requirements of WIGOS (with some background information for everyone)	11/1/2017 3:51 PM

## Q15 You found 2-min poster presentations to be:

Answered: 29 Skipped: 10

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ANSWER CHOICES	RESPONSES	
very important	51.72%	15
OK	44.83%	13
not needed	3.45%	1
TOTAL		29

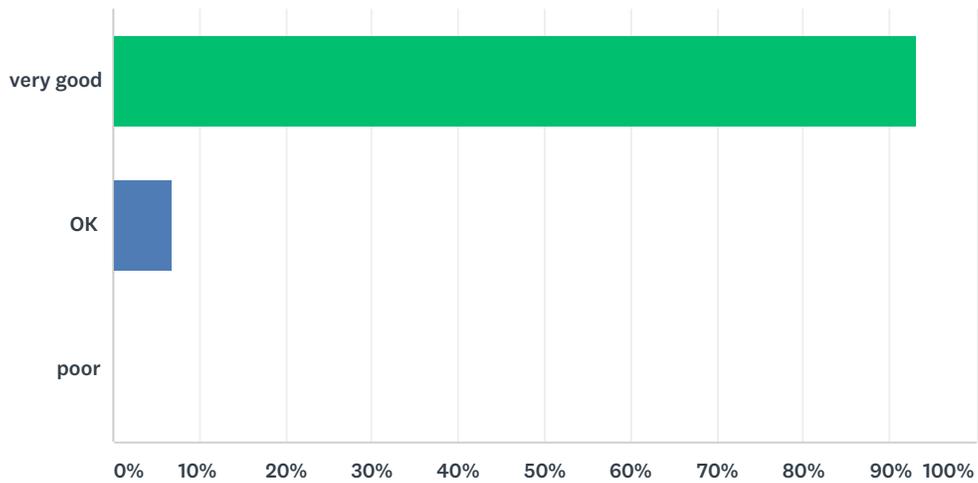
### Q16 What suggestions can you provide that might help us to improve the scientific balance and content of the next ICAWS?

Answered: 9 Skipped: 30

#	RESPONSES	DATE
1	I consider important a balance between what is done every day and what we could project into the future. For example: to show how our meteorological services work and how we could improve our capabilities based on what we have.	11/7/2017 3:37 PM
2	Scientific comparison of different types rainfall/wind/temp/hum measurement instruments.	11/6/2017 11:43 AM
3	As in all such events, we need more interaction. Not only between those who already know each other or are more communicative. In a way it is too much information with no time to digest and question.	11/6/2017 10:33 AM
4	invitation of companies that provide the products of the automatic stations, to compare different technologies	11/5/2017 3:16 PM
5	Perhaps a bit more on inter comparisons of instruments and methods.	11/2/2017 1:39 PM
6	I hope that there could be discussions of operational experiences from NMHS's from different climate zones and with the expert panel devoting some time in the assessment of the existing network setup.	11/2/2017 10:27 AM
7	Longer poster sessions	11/1/2017 9:26 PM
8	Encourage attendees from North America: NOAA, Environment Canada, Mexico (ConAgua)	11/1/2017 6:07 PM
9	I have no proposals.	11/1/2017 4:18 PM

### Q17 You found the conference facilities for ICAWS-2017 to be:

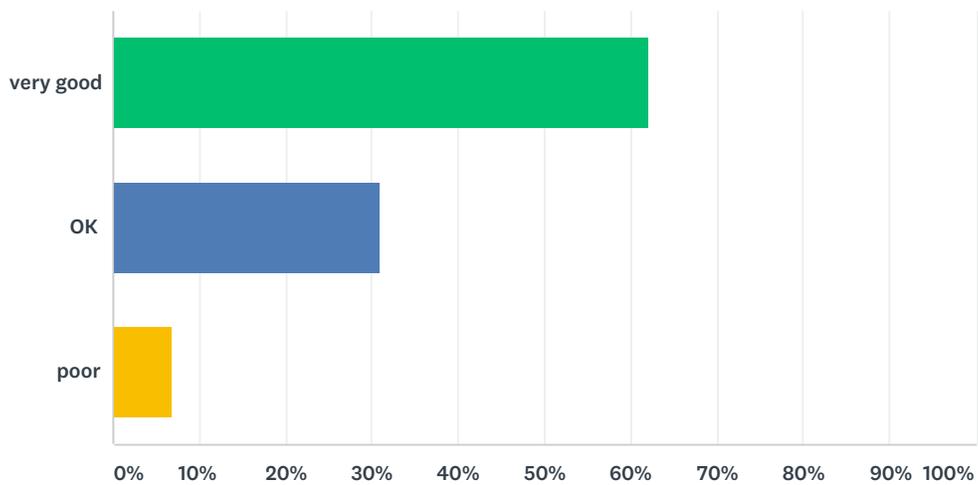
Answered: 29 Skipped: 10



ANSWER CHOICES	RESPONSES	
very good	93.10%	27
OK	6.90%	2
poor	0.00%	0
TOTAL		29

### Q18 You found the poster location and layout for ICAWS-2017 to be:

Answered: 29 Skipped: 10

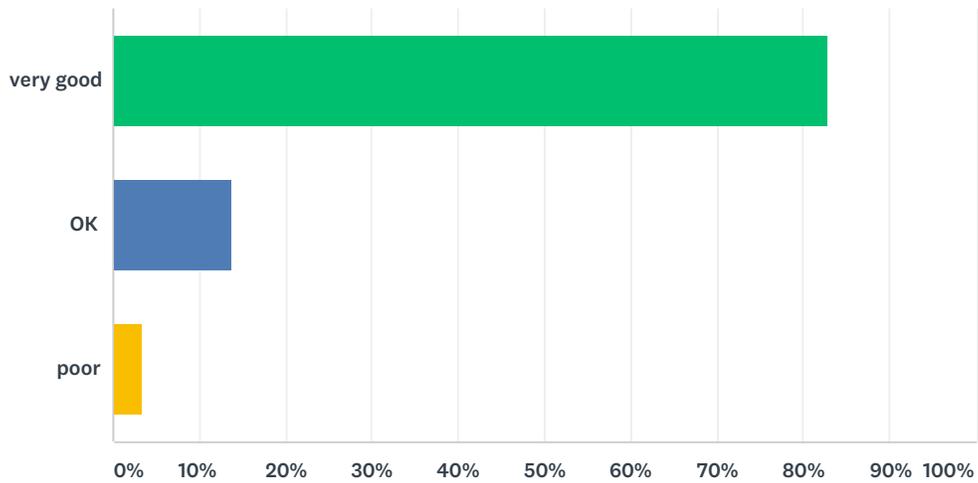


ANSWER CHOICES	RESPONSES	
very good	62.07%	18
OK	31.03%	9
poor	6.90%	2
TOTAL		29

### Q19 You found the refreshment/meal accessibility to be:

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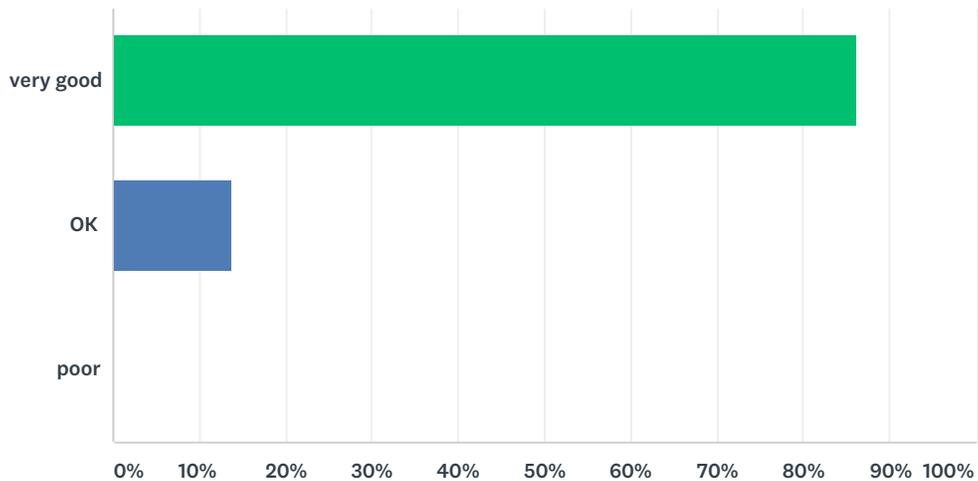
Answered: 29 Skipped: 10



ANSWER CHOICES	RESPONSES	
very good	82.76%	24
OK	13.79%	4
poor	3.45%	1
TOTAL		29

Q20 You found overall access to the venue to be:

Answered: 29 Skipped: 10



ANSWER CHOICES	RESPONSES	
very good	86.21%	25
OK	13.79%	4
poor	0.00%	0
TOTAL		29

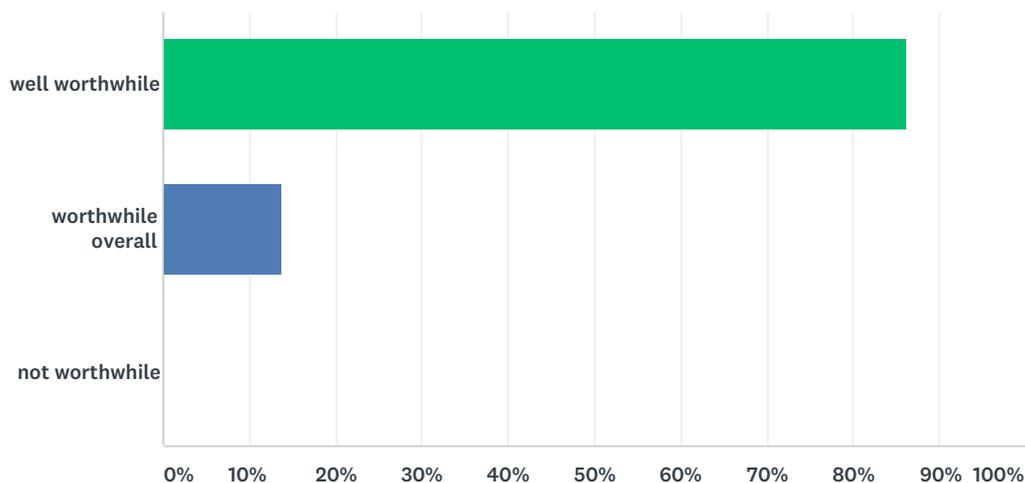
## Q21 What suggestions can you provide that might help us to improve the venue for the next ICAWS-2017 event?

Answered: 11 Skipped: 28

#	RESPONSES	DATE
1	In the case of my country, the difficulty lies in the investment of the trip. You have always been known for offering hospitality and excellent attention.	11/7/2017 3:37 PM
2	Meditation room :D	11/6/2017 10:33 AM
3	in my opinion it was very good	11/5/2017 3:16 PM
4	I believe that a similar venue like that of DWD with the same facilities be recommended.	11/2/2017 10:27 AM
5	Make sure that there is no fair in town so that closeby hotels are affordable.	11/2/2017 6:51 AM
6	Bigger poster area	11/1/2017 9:26 PM
7	Venue was perfect!	11/1/2017 4:55 PM
8	Tables would have helped. Many people were writing on pads of paper or using laptops and that was awkward with only chairs.	11/1/2017 4:51 PM
9	I have no proposals	11/1/2017 4:18 PM
10	Maybe closer developing countries, so not in Europe	11/1/2017 3:51 PM
11	Unfortunately accommodation was expensive due to event clash, but this could not be anticipated. Maybe co-locate with a Met Equipment conference?	11/1/2017 3:21 PM

## Q22 Overall, you found your participation at ICAWS-2017 to be:

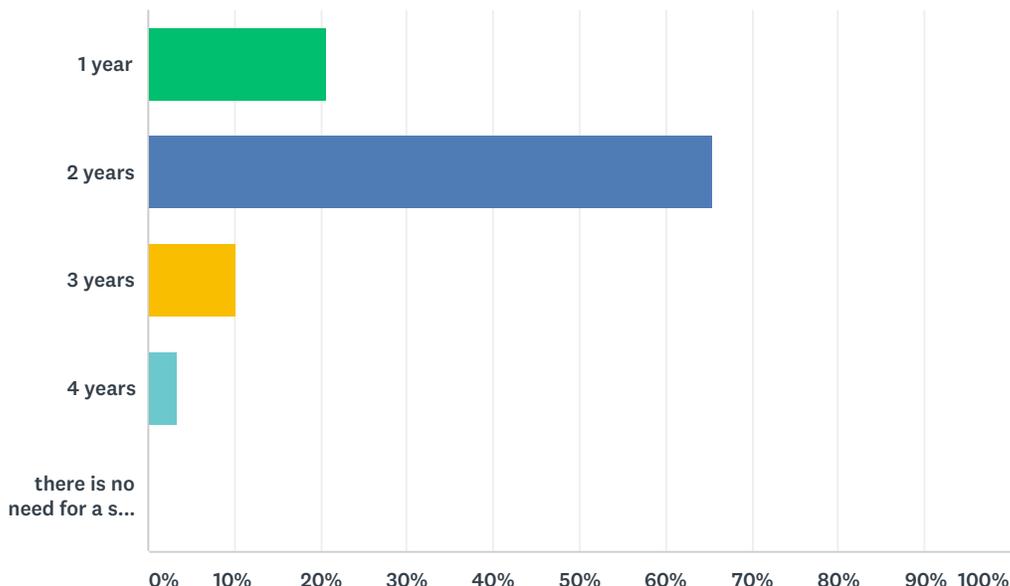
Answered: 29 Skipped: 10



ANSWER CHOICES	RESPONSES	
well worthwhile	86.21%	25
worthwhile overall	13.79%	4
not worthwhile	0.00%	0
TOTAL		29

## Q23 In your view, the next ICAWS should be organized in:

Answered: 29 Skipped: 10



ANSWER CHOICES	RESPONSES	
1 year	20.69%	6
2 years	65.52%	19
3 years	10.34%	3
4 years	3.45%	1
there is no need for a such conference.	0.00%	0
<b>TOTAL</b>		<b>29</b>

## Q24 If you have additional and specific suggestions for the improvement of any aspects of ICAWS, please share them with us.

Answered: 8 Skipped: 31

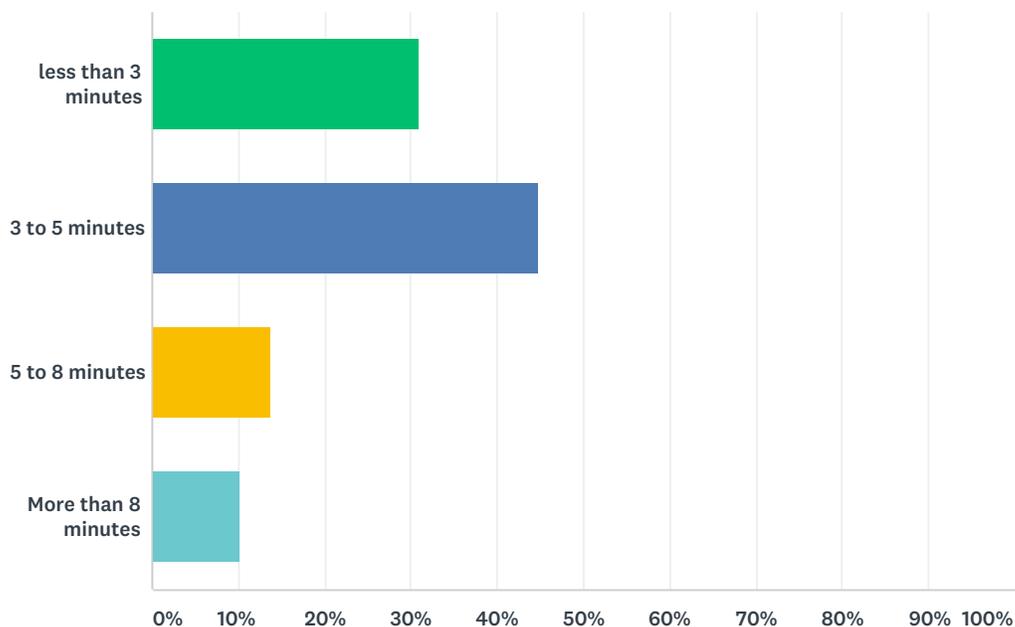
#	RESPONSES	DATE
1	I could mention to ease the equipment connectors (computers, tables, etc).	11/7/2017 3:37 PM
2	Maybe, less presentations about each individual country's AWSs, and more about how different systems measure weather, and how they differ in quality/cost/location.	11/6/2017 11:43 AM
3	More info on possibility of some kind of local bike-based commuting :) Less flying involved, if possible. Less meat. No plastic. (That was cool, actually). Giving example how could we live to address climate change in real life: it is not about the measurements any more - that part is done. To be the bright example of scientific community. To spread the message. Such things - since we are gathering mostly on expenses of our people.	11/6/2017 10:33 AM
4	compare the different technologies between countries to observe which is the most efficient and effective	11/5/2017 3:16 PM

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5	I believe that manufacturers or technology integrators should also participate much more in order to arrived at a common point with users (NMHS). Discussions can be expounded more on how AWS can be more weather resilient, cost effective and easy to maintain.	11/2/2017 10:27 AM
6	Schedule it to precede or follow the MetExpo2019 event. This will encourage attendance for those who have to travel. Should be scheduled for the years when the TECO conference is not on (2019,2021,...).	11/1/2017 6:07 PM
7	Again the very limited skills in english language of some participants (especially presenters) reduced significantly the value of some very interesting presentations. Maybe its possible to ask the national organisations to send presenters with adequate knowledge of the english language.	11/1/2017 4:55 PM
8	Organization of these conferences should be one of the priority of WMO.	11/1/2017 4:18 PM

## Q25 Thank you! Please let us know how long it took you to complete the survey

Answered: 29 Skipped: 10



ANSWER CHOICES	RESPONSES
less than 3 minutes	31.03% 9
3 to 5 minutes	44.83% 13
5 to 8 minutes	13.79% 4
More than 8 minutes	10.34% 3
<b>TOTAL</b>	<b>29</b>

## Q26 Please let us know how we can change things so that you will participate at ICAWS next time.

Answered: 4 Skipped: 35

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#	RESPONSES	DATE
1	I'm a meteorologist, I work at INMET. Knowing the models and techniques applied in data QC is necessary to improve the quality of information. In INMET, I monitor the data with a color map to check for inappropriate data ...	11/6/2017 1:20 PM
2	Nothing. Next time I will be prepared for this in advance.	11/4/2017 12:14 PM
3	Prompt communication, also if funding can be enhanced for participants from developing and less developed countries as I had to push my NMHS had to get funding although unfortunately i didn't travel at the last minute due to some unforeseen personal occurrence	11/3/2017 2:44 PM
4	BY STRONG ADVOCACY FOR ITS IMPORTANCE TO MY AGENCY AND PROFESSION	11/1/2017 5:48 PM