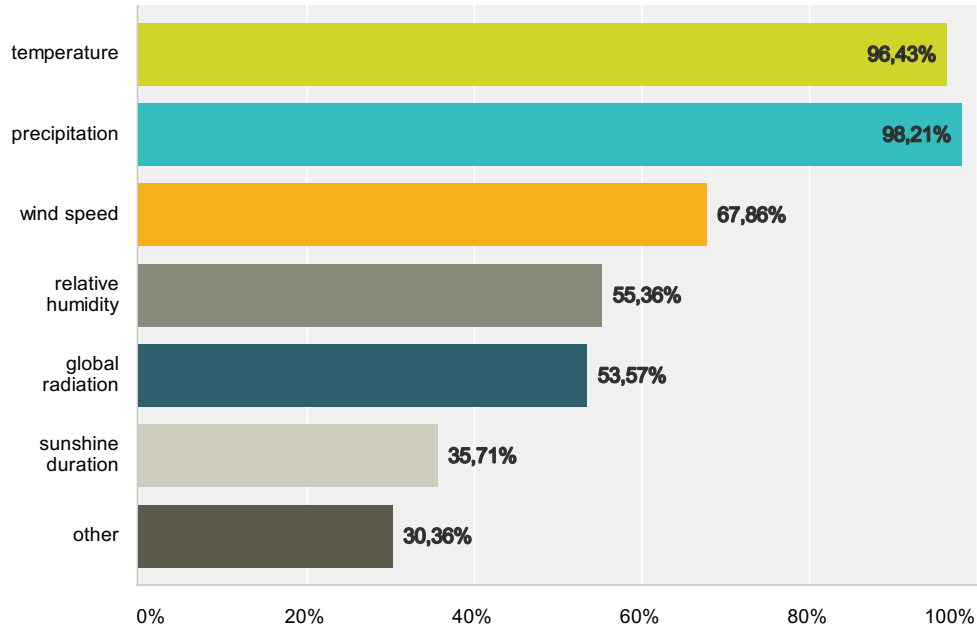## Q1 What are the meteorological variables you usually work with ? (optimal case)
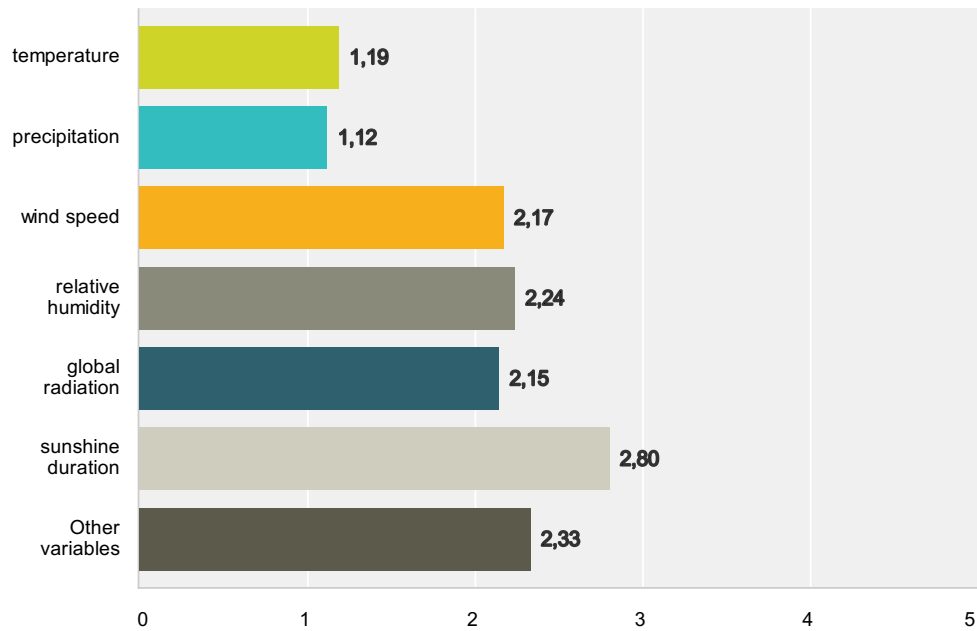
Beantwortet: 56 Übersprungen: 6

Antwortmöglichkeiten	Beantwortungen	
temperature	**96,43%**	54
precipitation	**98,21%**	55
wind speed	**67,86%**	38
relative humidity	**55,36%**	31
global radiation	**53,57%**	30
sunshine duration	**35,71%**	20
other Beantwortungen	**30,36%**	17
Befragte gesamt: 56		

Q2 How important are these meteorological variables for your work?

	very important	important	nice to have	unimportant	I don't know	Gesamt	Durchschnittliche Bewertung
temperature	**84,48%** 49	**13,79%** 8	**0%** 0	**1,72%** 1	**0%** 0	58	1,19
precipitation	**87,93%** 51	**12,07%** 7	**0%** 0	**0%** 0	**0%** 0	58	1,12
wind speed	**24,53%** 13	**35,85%** 19	**33,96%** 18	**3,77%** 2	**1,89%** 1	53	2,17
relative humidity	**21,57%** 11	**35,29%** 18	**37,25%** 19	**3,92%** 2	**1,96%** 1	51	2,24
global radiation	**22%** 11	**44%** 22	**24%** 12	**6%** 3	**4%** 2	50	2,15
sunshine duration	**8,33%** 4	**25%** 12	**39,58%** 19	**22,92%** 11	**4,17%** 2	48	2,80
Other variables	**21,88%** 7	**21,88%** 7	**31,25%** 10	**9,38%** 3	**15,63%** 5	32	2,33

Q3 Do you make use of threshold indices like degree warming days, probability for precipitation exceeding 50mm/day or others?
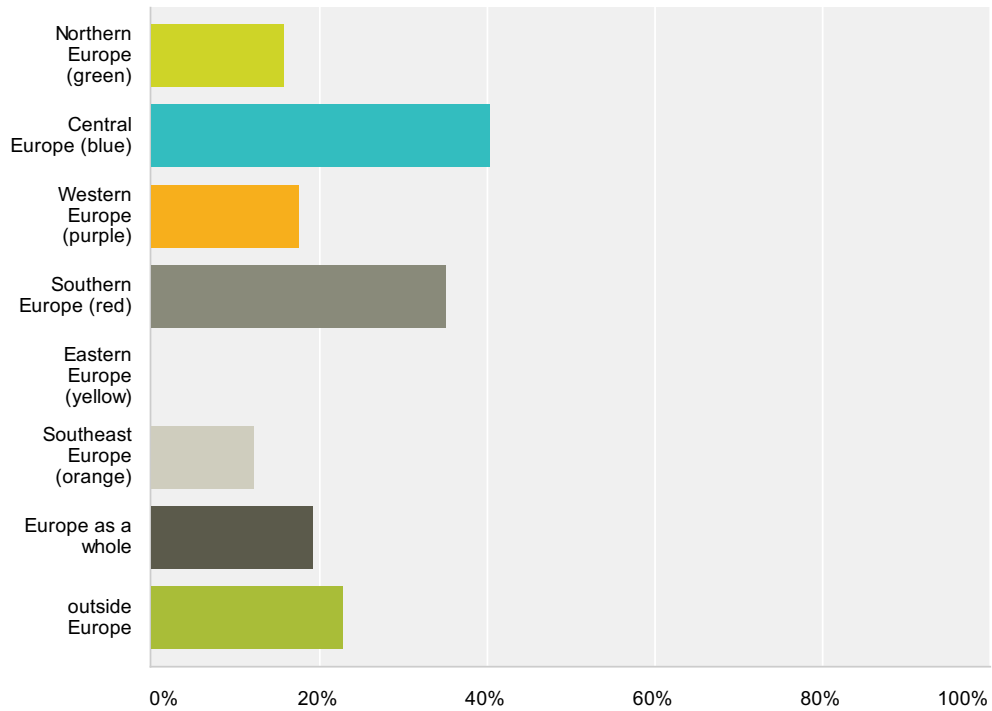
Beantwortet: 56   Übersprungen: 6
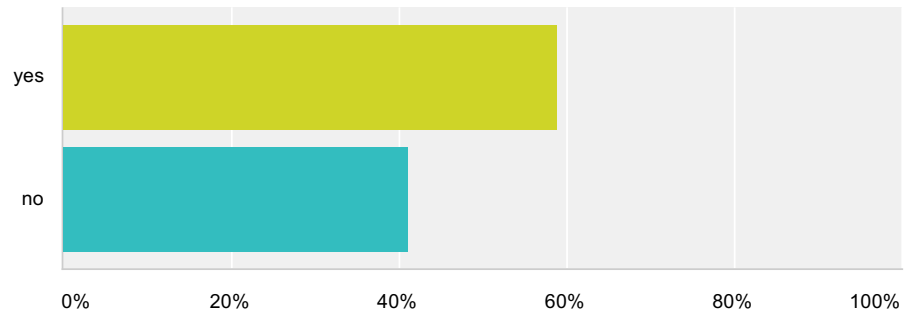
Antwortmöglichkeiten	Beantwortungen	
yes	**58,93%**	33
no	**41,07%**	23
Gesamt		56

Q4 If yes, which threshold indices to do typically use?

Beantwortet: 31   Übersprungen: 31

## Q5 What is your main region of interest? Please refer to the structure indicated by the adjoining figure.

Beantwortet: 57   Übersprungen: 5

Antwortmöglichkeiten	Beantwortungen	
Northern Europe (green)	**15,79%**	9
Central Europe (blue)	**40,35%**	23
Western Europe (purple)	**17,54%**	10
Southern Europe (red)	**35,09%**	20
Eastern Europe (yellow)	**0%**	0
Southeast Europe (orange)	**12,28%**	7
Europe as a whole	**19,30%**	11
outside Europe **Beantwortungen**	**22,81%**	13
Befragte gesamt: 57		

Q6 What is the elevation of your research region?

Beantwortet: 55   Übersprungen: 7
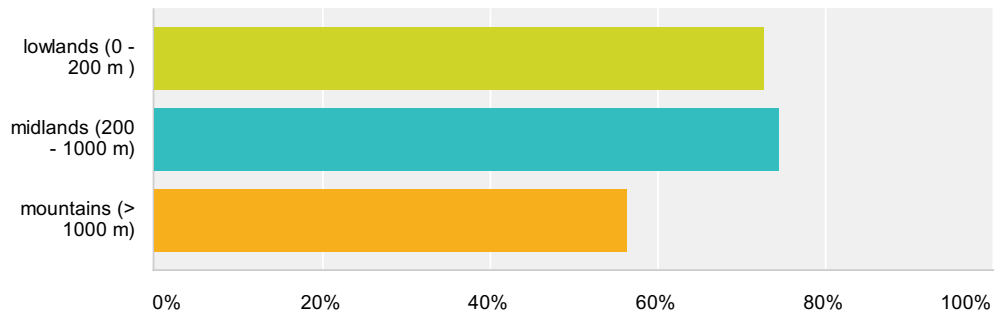
Antwortmöglichkeiten	Beantwortungen	
lowlands (0 - 200 m)	**72,73%**	40
midlands (200 - 1000 m)	**74,55%**	41
mountains (> 1000 m)	**56,36%**	31
Befragte gesamt: 55		

Q7 What is the accuracy of the variables obtained from climate models you are currently working with or you would like to work with? (optimal case)
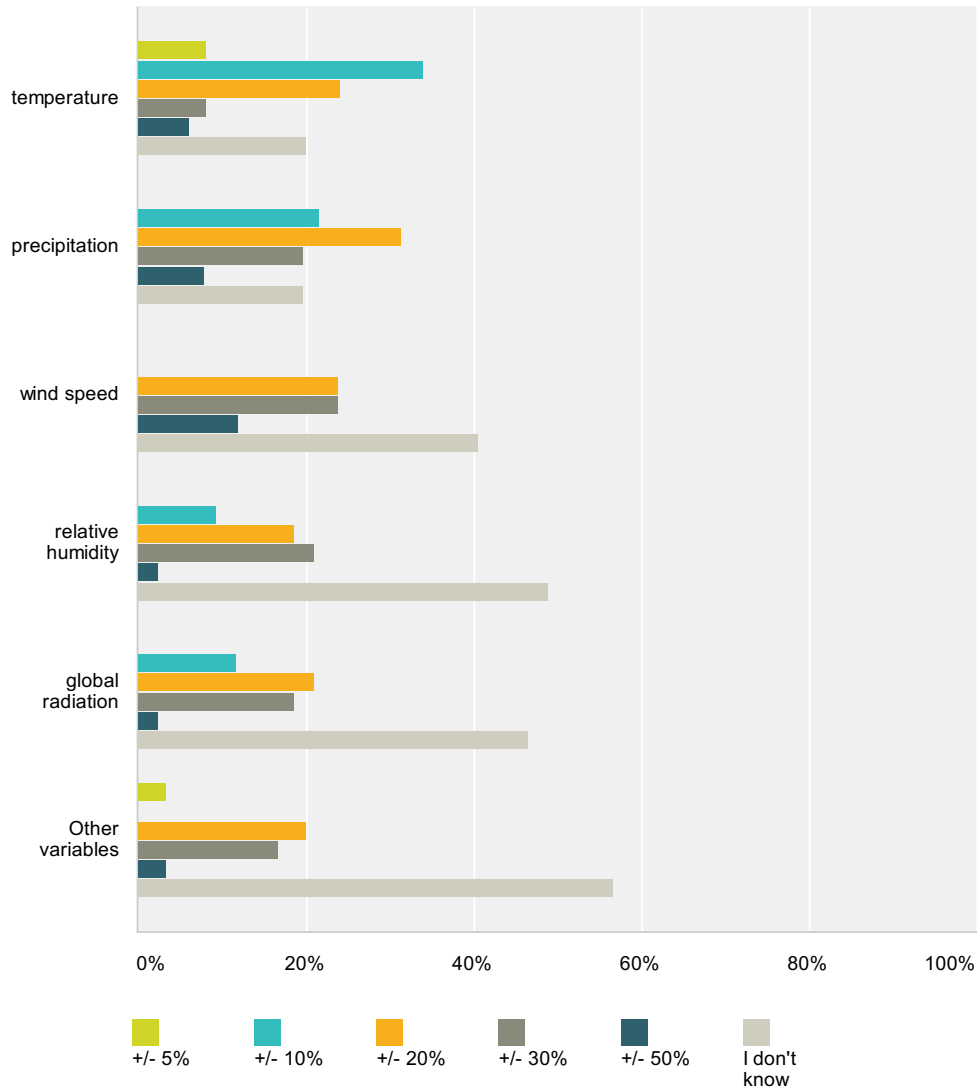
Beantwortet: 52   Übersprungen: 10
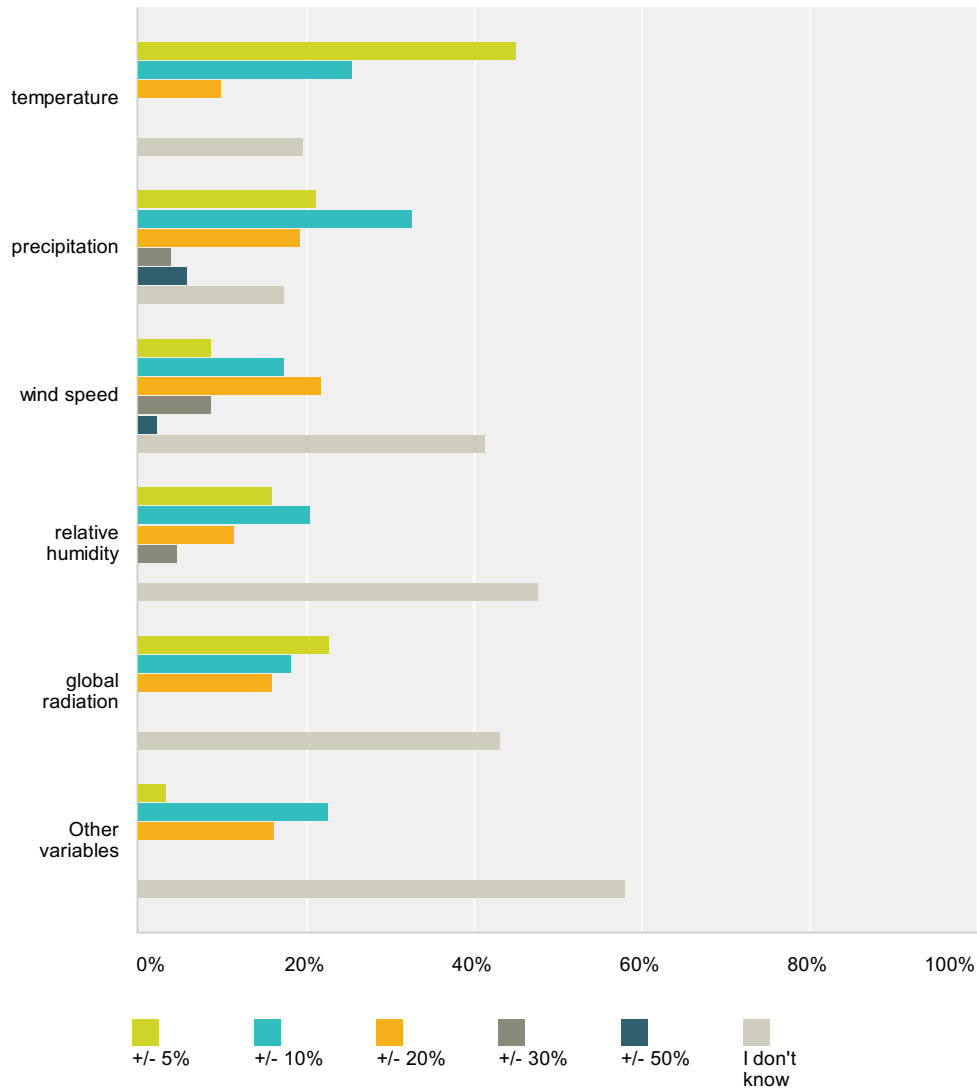
	+/undefined 5%	+/undefined 10%	+/undefined 20%	+/undefined 30%	+/undefined 50%	I don't know	Gesamt
temperature	45,10% 23	25,49% 13	9,80% 5	0% 0	0% 0	19,61% 10	51
precipitation	21,15% 11	32,69% 17	19,23% 10	3,85% 2	5,77% 3	17,31% 9	52
wind speed	8,70% 4	17,39% 8	21,74% 10	8,70% 4	2,17% 1	41,30% 19	46
relative humidity	15,91% 7	20,45% 9	11,36% 5	4,55% 2	0% 0	47,73% 21	44
global radiation	22,73% 10	18,18% 8	15,91% 7	0% 0	0% 0	43,18% 19	44
Other variables	3,23% 1	22,58% 7	16,13% 5	0% 0	0% 0	58,06% 18	31

Q8 What is the worst accuracy of the variables obtained by climate models or observations you can still working with and receive reasonable results? (minimum requirements)
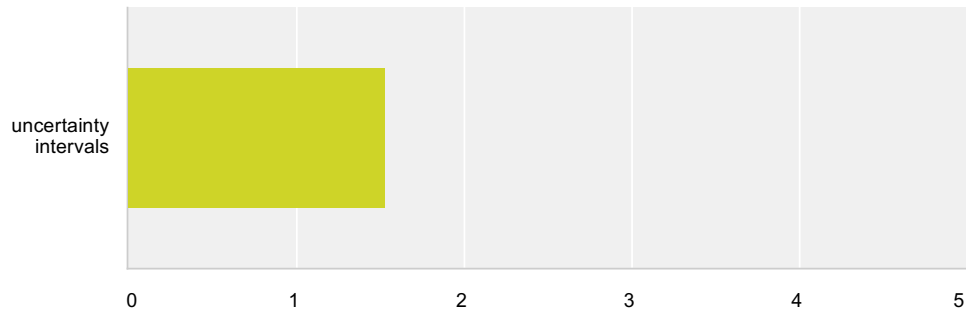
Beantwortet: 51   Übersprungen: 11

	+/undefined 5%	+/undefined 10%	+/undefined 20%	+/undefined 30%	+/undefined 50%	I don't know	Gesamt
temperature	**8%** 4	**34%** 17	**24%** 12	**8%** 4	**6%** 3	**20%** 10	50
precipitation	**0%** 0	**21,57%** 11	**31,37%** 16	**19,61%** 10	**7,84%** 4	**19,61%** 10	51
wind speed	**0%** 0	**0%** 0	**23,81%** 10	**23,81%** 10	**11,90%** 5	**40,48%** 17	42
relative humidity	**0%** 0	**9,30%** 4	**18,60%** 8	**20,93%** 9	**2,33%** 1	**48,84%** 21	43
global radiation	**0%** 0	**11,63%** 5	**20,93%** 9	**18,60%** 8	**2,33%** 1	**46,51%** 20	43
Other variables	**3,33%** 1	**0%** 0	**20%** 6	**16,67%** 5	**3,33%** 1	**56,67%** 17	30

## Q9 How useful are uncertainties of climate data expressed e.g. in uncertainy intervals (example to the right)?

Beantwortet: 54   Übersprungen: 8

	very usefull	usefull	not usefull	confusing	don't know	Gesamt	Durchschnittliche Bewertung
uncertainty intervals	**50%** 27	**44,44%** 24	**3,70%** 2	**0%** 0	**1,85%** 1	54	1,53

Q10 Do you actually use uncertainty intervals for your work?

Beantwortet: 54   Übersprungen: 8
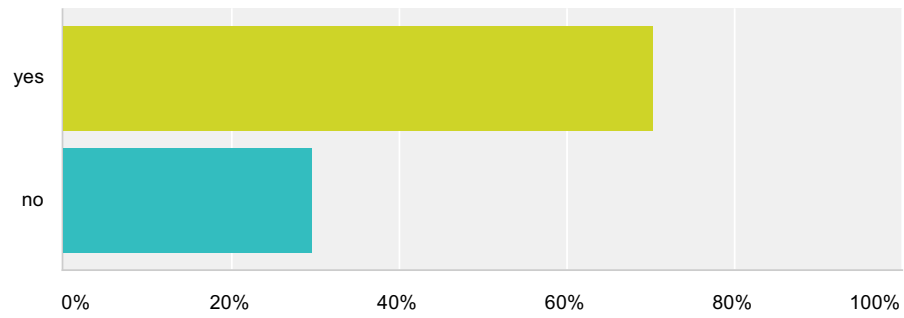
Antwortmöglichkeiten	Beantwortungen	
yes	**70,37%**	38
no	**29,63%**	16
Gesamt		54

Q11 If yes, how would you like uncertainties to be expressed? What do you use?

Beantwortet: 35   Übersprungen: 27

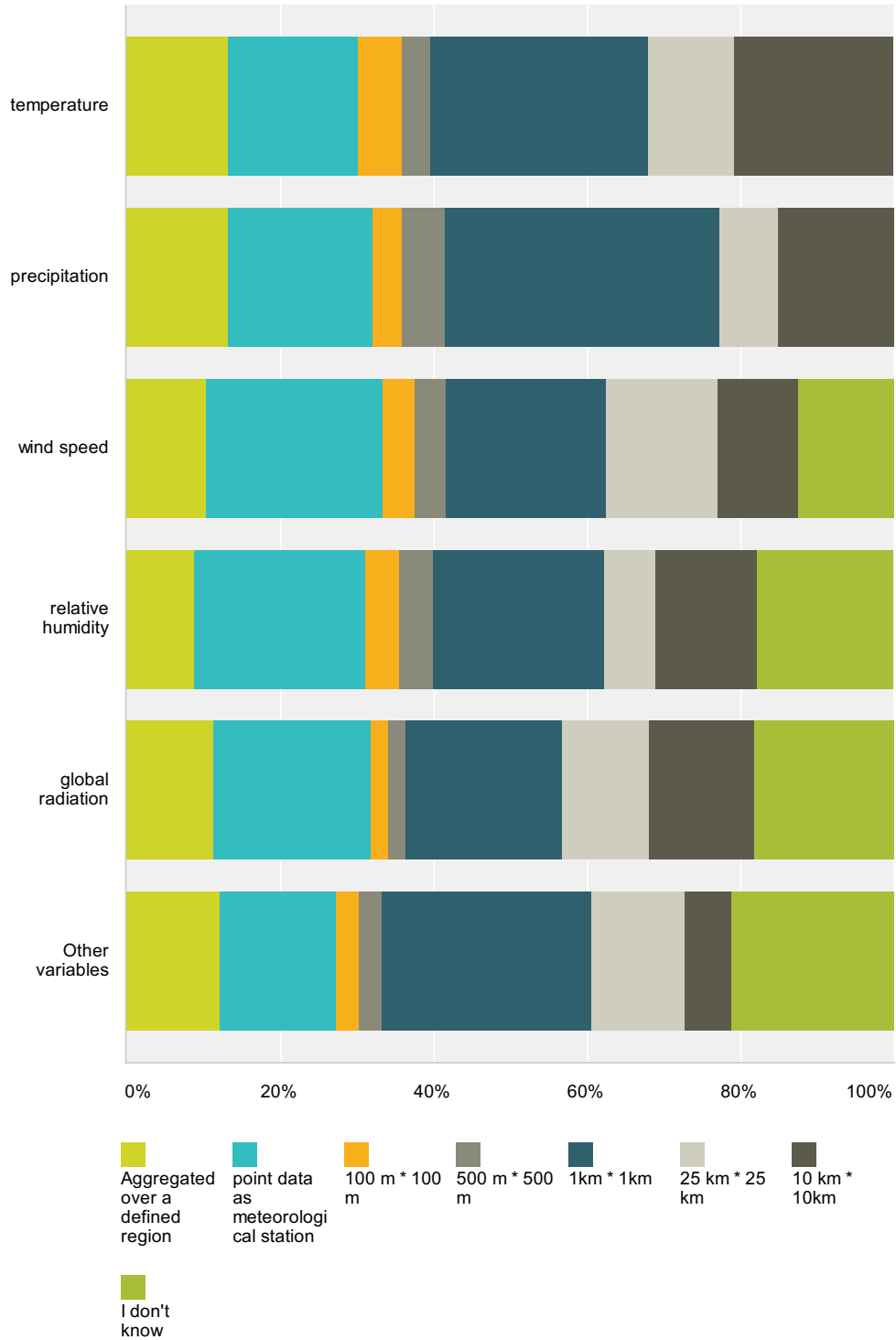## Q12 Do probability distributions suffice your research needs?

Beantwortet: 54   Übersprungen: 8
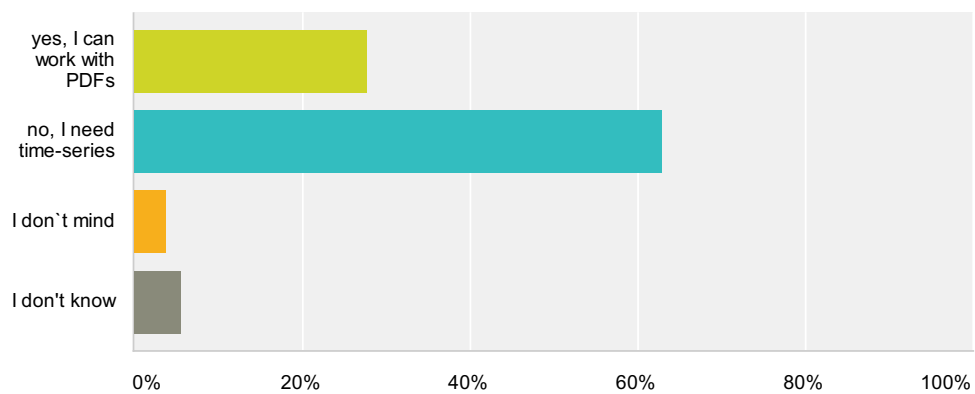
Antwortmöglichkeiten	Beantwortungen	
yes, I can work with PDFs	**27,78%**	15
no, I need time-series	**62,96%**	34
I don`t mind	**3,70%**	2
I don't know	**5,56%**	3
Gesamt		54

Q13 What spatial resolution of climate data do you need?

Beantwortet: 54   Übersprungen: 8

	Aggregated over a defined region	point data as meteorological station	100 m * 100 m	500 m * 500 m	1km * 1km	25 km * 25 km	10 km * 10km	I don't know	Gesamt
temperature	13,21% 7	16,98% 9	5,66% 3	3,77% 2	28,30% 15	11,32% 6	20,75% 11	0% 0	53
precipitation	13,21% 7	18,87% 10	3,77% 2	5,66% 3	35,85% 19	7,55% 4	15,09% 8	0% 0	53

wind speed	**10,42%** 5	**22,92%** 11	**4,17%** 2	**4,17%** 2	**20,83%** 10	**14,58%** 7	**10,42%** 5	**12,50%** 6	48
relative humidity	**8,89%** 4	**22,22%** 10	**4,44%** 2	**4,44%** 2	**22,22%** 10	**6,67%** 3	**13,33%** 6	**17,78%** 8	45
global radiation	**11,36%** 5	**20,45%** 9	**2,27%** 1	**2,27%** 1	**20,45%** 9	**11,36%** 5	**13,64%** 6	**18,18%** 8	44
Other variables	**12,12%** 4	**15,15%** 5	**3,03%** 1	**3,03%** 1	**27,27%** 9	**12,12%** 4	**6,06%** 2	**21,21%** 7	33

Q14 What temporal resolution of climate data do you need?

Beantwortet: 53   Übersprungen: 9
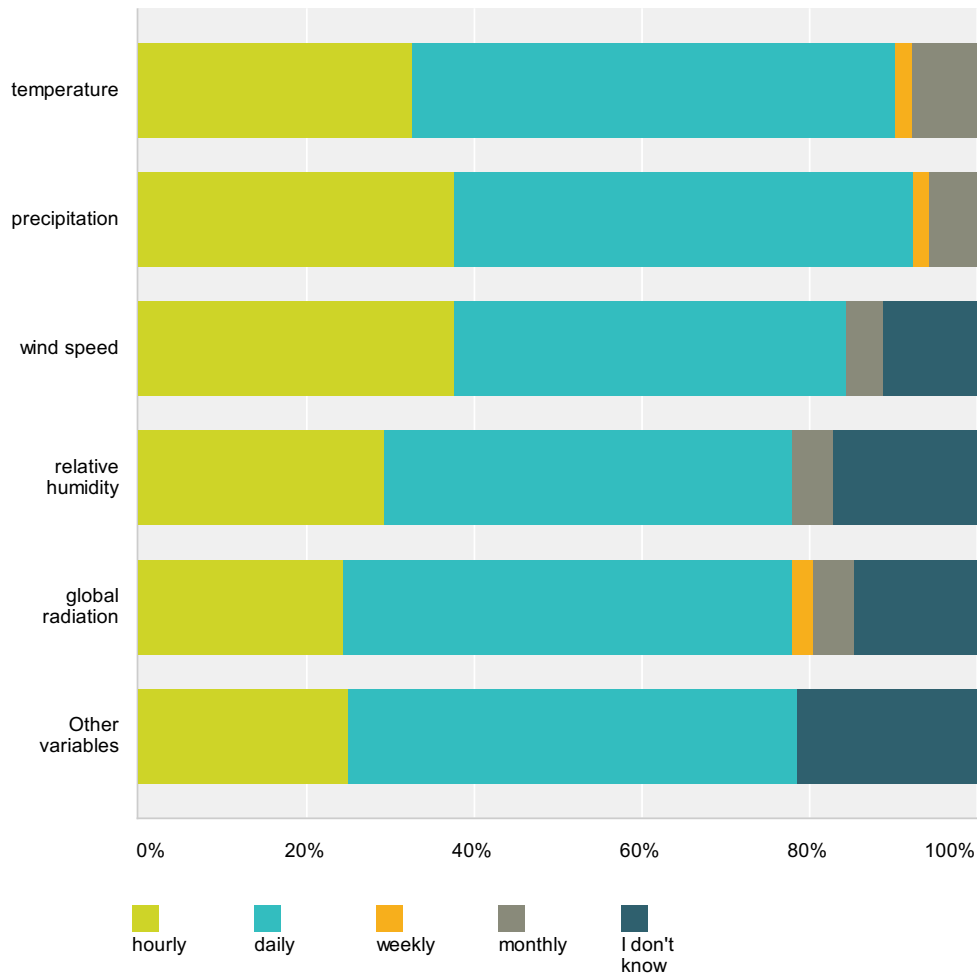
	hourly	daily	weekly	monthly	I don't know	Gesamt
temperature	**32,69%** 17	**57,69%** 30	**1,92%** 1	**7,69%** 4	**0%** 0	52
precipitation	**37,74%** 20	**54,72%** 29	**1,89%** 1	**5,66%** 3	**0%** 0	53
wind speed	**37,78%** 17	**46,67%** 21	**0%** 0	**4,44%** 2	**11,11%** 5	45
relative humidity	**29,27%** 12	**48,78%** 20	**0%** 0	**4,88%** 2	**17,07%** 7	41
global radiation	**24,39%** 10	**53,66%** 22	**2,44%** 1	**4,88%** 2	**14,63%** 6	41
Other variables	**25%** 7	**53,57%** 15	**0%** 0	**0%** 0	**21,43%** 6	28

Q15 What time scales of variability are you interested in?

Beantwortet: 53   Übersprungen: 9
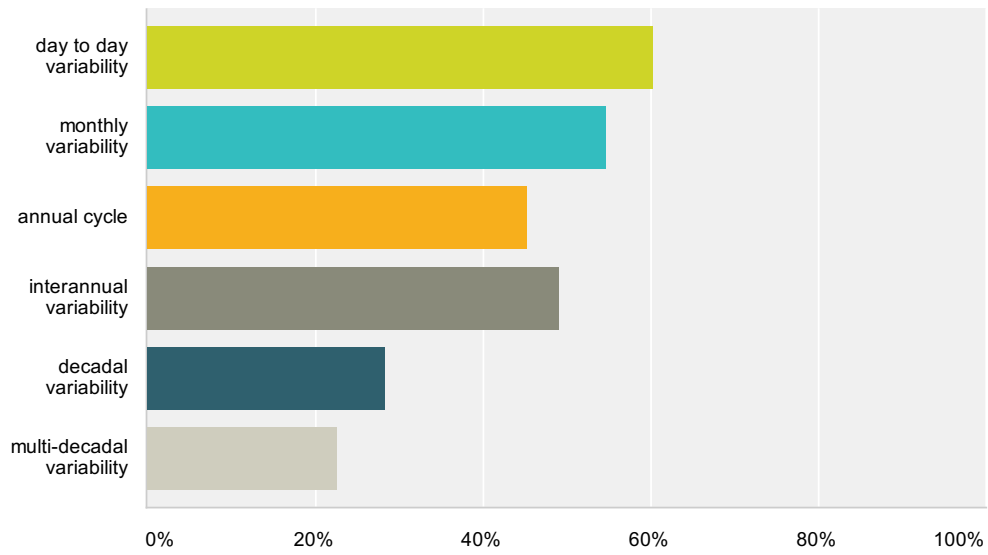
Antwortmöglichkeiten	Beantwortungen	
day to day variability	**60,38%**	32
monthly variability	**54,72%**	29
annual cycle	**45,28%**	24
interannual variability	**49,06%**	26
decadal variability	**28,30%**	15
multi-decadal variability	**22,64%**	12
Befragte gesamt: 53		

Q16 How important for your research are?

Beantwortet: 54   Übersprungen: 8
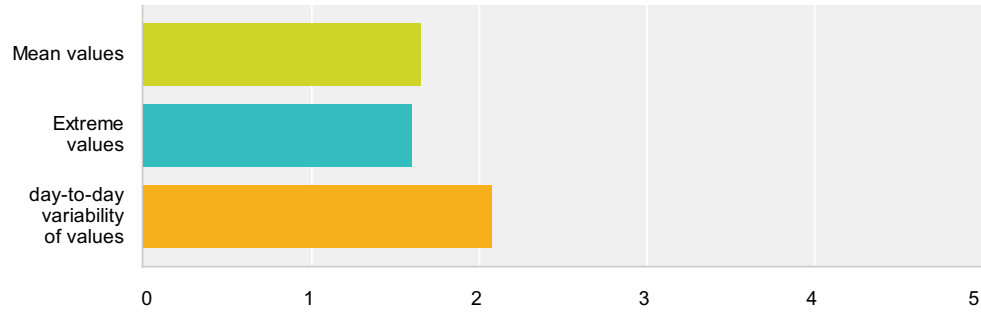
	very important	important	less important	unimportant	Gesamt	Durchschnittliche Bewertung
Mean values	**44,23%** 23	**46,15%** 24	**9,62%** 5	**0%** 0	52	1,65
Extreme values	**58,49%** 31	**24,53%** 13	**15,09%** 8	**1,89%** 1	53	1,60
day-to-day variability of values	**26%** 13	**44%** 22	**26%** 13	**4%** 2	50	2,08

Q17 If extreme values are important for your work are those extreme values mainly related to

Beantwortet: 47   Übersprungen: 15
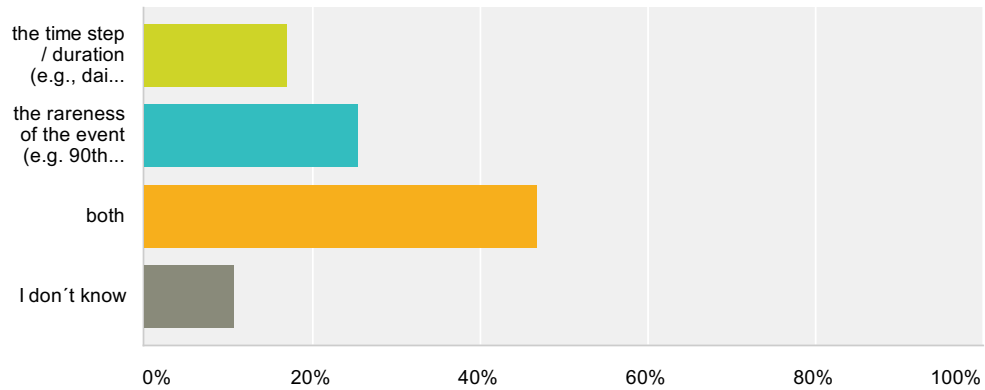
Antwortmöglichkeiten	Beantwortungen	
the time step / duration (e.g., daily event, 5 day event, month for a heat wave or similar)	**17,02%**	8
the rareness of the event (e.g. 90th percentily, 95th percentile, 10 year return level, 100 year return level)	**25,53%**	12
both	**46,81%**	22
I don´t know	**10,64%**	5
Gesamt		47

Q18 How important for your research are spatial and temporal dependencies of variables?

Beantwortet: 53   Übersprungen: 9
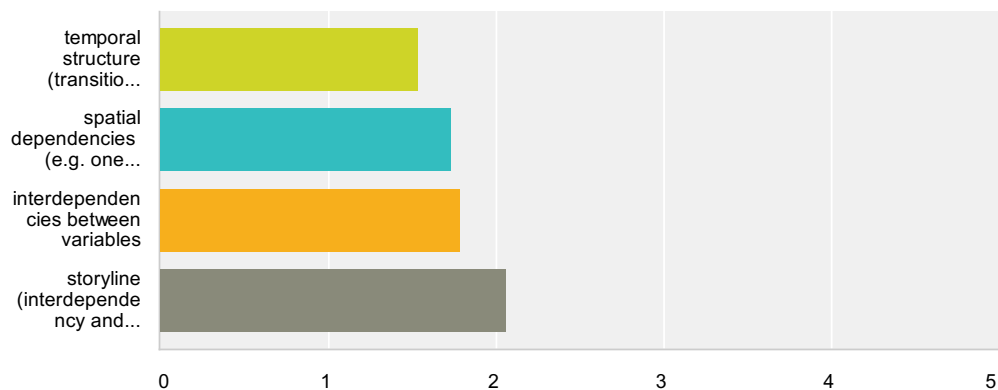
	very important	important	less important	unimportant	Gesamt	Durchschnittliche Bewertung
temporal structure (transition between wet/dry day, persistence of wet/dry days, etc)	**57,69%** 30	**32,69%** 17	**7,69%** 4	**1,92%** 1	52	1,54
spatial dependencies (e.g. one region wet, adjacent region dry)	**41,51%** 22	**45,28%** 24	**11,32%** 6	**1,89%** 1	53	1,74
interdependencies between variables	**38,46%** 20	**46,15%** 24	**13,46%** 7	**1,92%** 1	52	1,79
storyline (interdependency and temporal structure (rain-on-snow))	**29,79%** 14	**38,30%** 18	**27,66%** 13	**4,26%** 2	47	2,06

Q19 What are your preferred data format you would like to receive climate data?
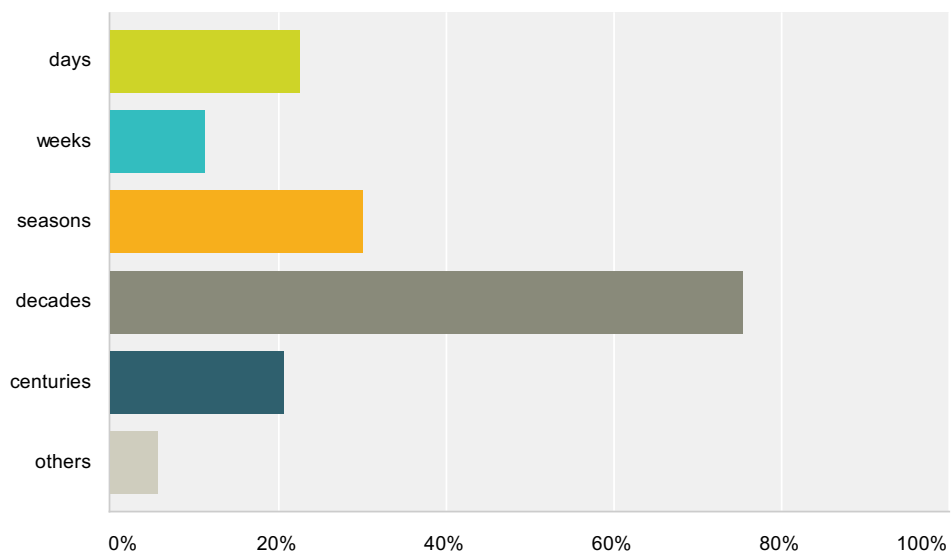
Beantwortet: 49   Übersprungen: 13
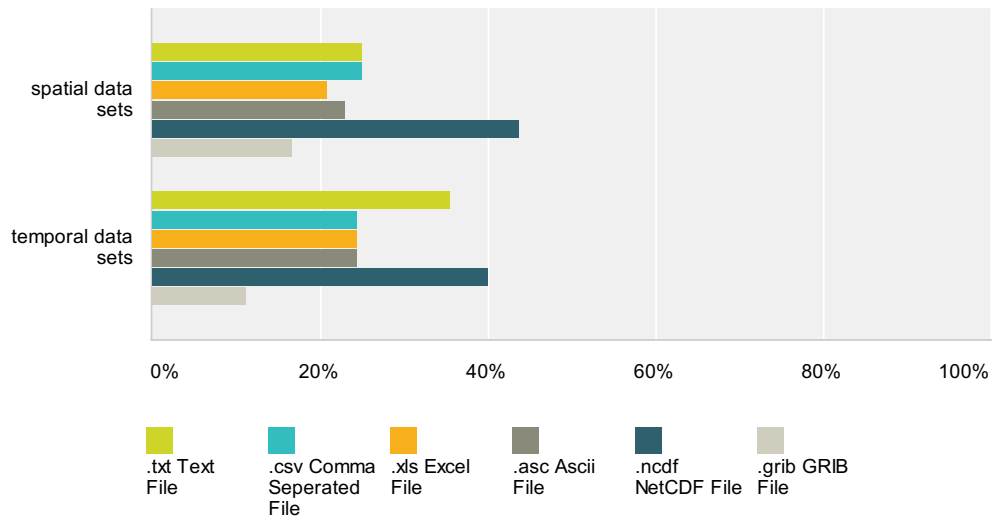
.txt Text File | .csv Comma Seperated File | .xls Excel File | .asc Ascii File | .ncdf NetCDF File | .grib GRIB File

	.txt Text File	.csv Comma Seperated File	.xls Excel File	.asc Ascii File	.ncdf NetCDF File	.grib GRIB File	Befragte gesamt
spatial data sets	**25%** 12	**25%** 12	**20,83%** 10	**22,92%** 11	**43,75%** 21	**16,67%** 8	48
temporal data sets	**35,56%** 16	**24,44%** 11	**24,44%** 11	**24,44%** 11	**40%** 18	**11,11%** 5	45

Q20 What is your planning horizon or your simulation period?

Beantwortet: 53   Übersprungen: 9

Antwortmöglichkeiten	Beantwortungen	
days	**22,64%**	12
weeks	**11,32%**	6
seasons	**30,19%**	16
decades	**75,47%**	40
centuries	**20,75%**	11
others **Beantwortungen**	**5,66%**	3
Befragte gesamt: 53		

Q21 Is there a season you are interested in most?

Beantwortet: 54   Übersprungen: 8
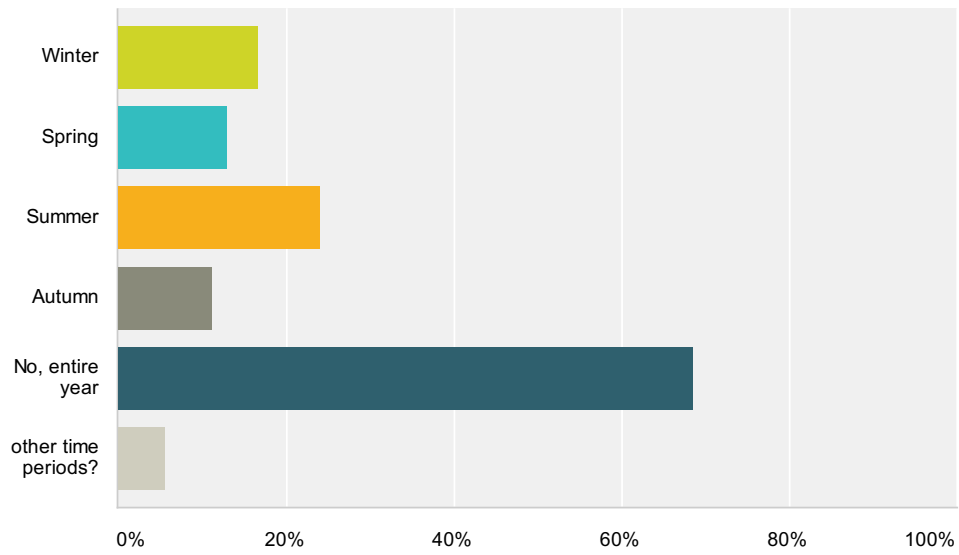
Antwortmöglichkeiten	Beantwortungen	
Winter	**16,67%**	9
Spring	**12,96%**	7
Summer	**24,07%**	13
Autumn	**11,11%**	6
No, entire year	**68,52%**	37
other time periods? **Beantwortungen**	**5,56%**	3
Befragte gesamt: 54		

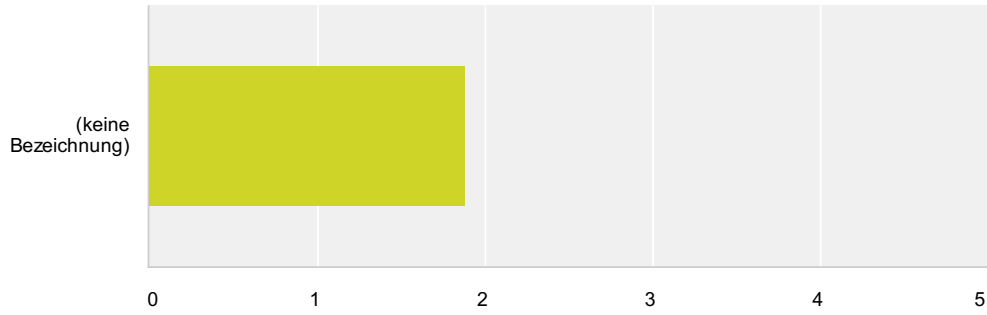## Q22 Do you just need data or would you also appreciate to get some guidance along with the data

Beantwortet: 54   Übersprungen: 8
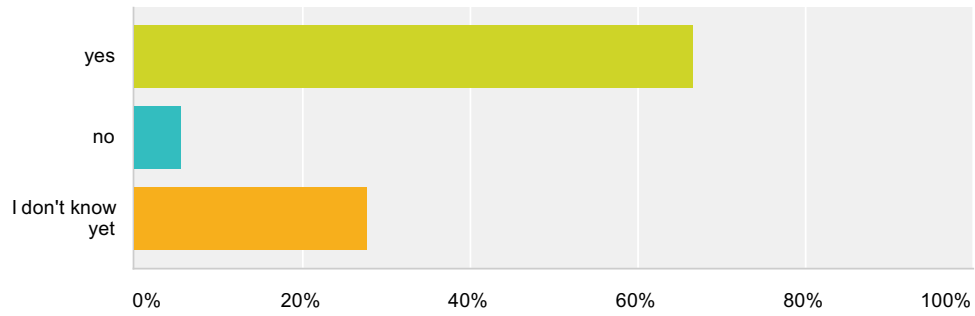
Antwortmöglichkeiten	Beantwortungen	
yes	**66,67%**	36
no	**5,56%**	3
I don't know yet	**27,78%**	15
Gesamt		54

Q23 How well do you think downscaling can meet your needs?

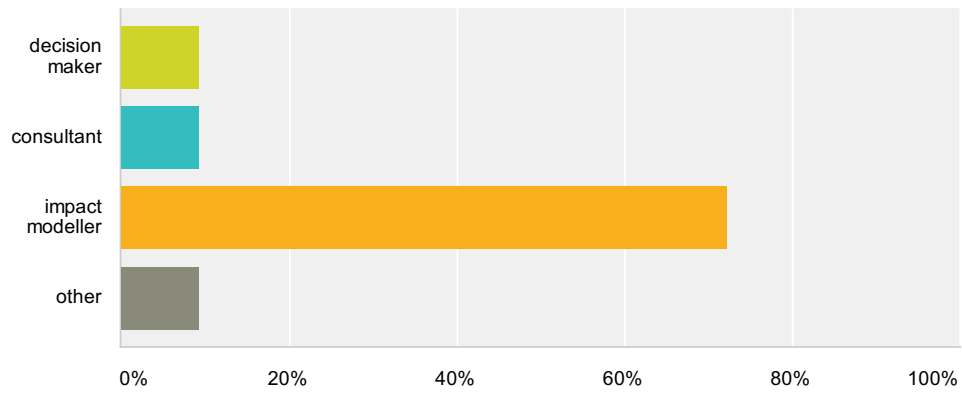Beantwortet: 50   Übersprungen: 12

	very well	well	more or less	not realy	not at all	Gesamt	Durchschnittliche Bewertung
(keine Bezeichnung)	**40%** 20	**32%** 16	**28,00%** 14	**0%** 0	**0%** 0	50	1,88

Q24 What kind of end-user would you consider yourself?

Beantwortet: 54   Übersprungen: 8

Antwortmöglichkeiten	Beantwortungen	
decision maker	**9,26%**	5
consultant	**9,26%**	5
impact modeller	**72,22%**	39
other **Beantwortungen**	**9,26%**	5
Gesamt		54

Q25 What is your main field of work?

Beantwortet: 54   Übersprungen: 8

## Questionaire on end-user needs for downscaled climate scenario data
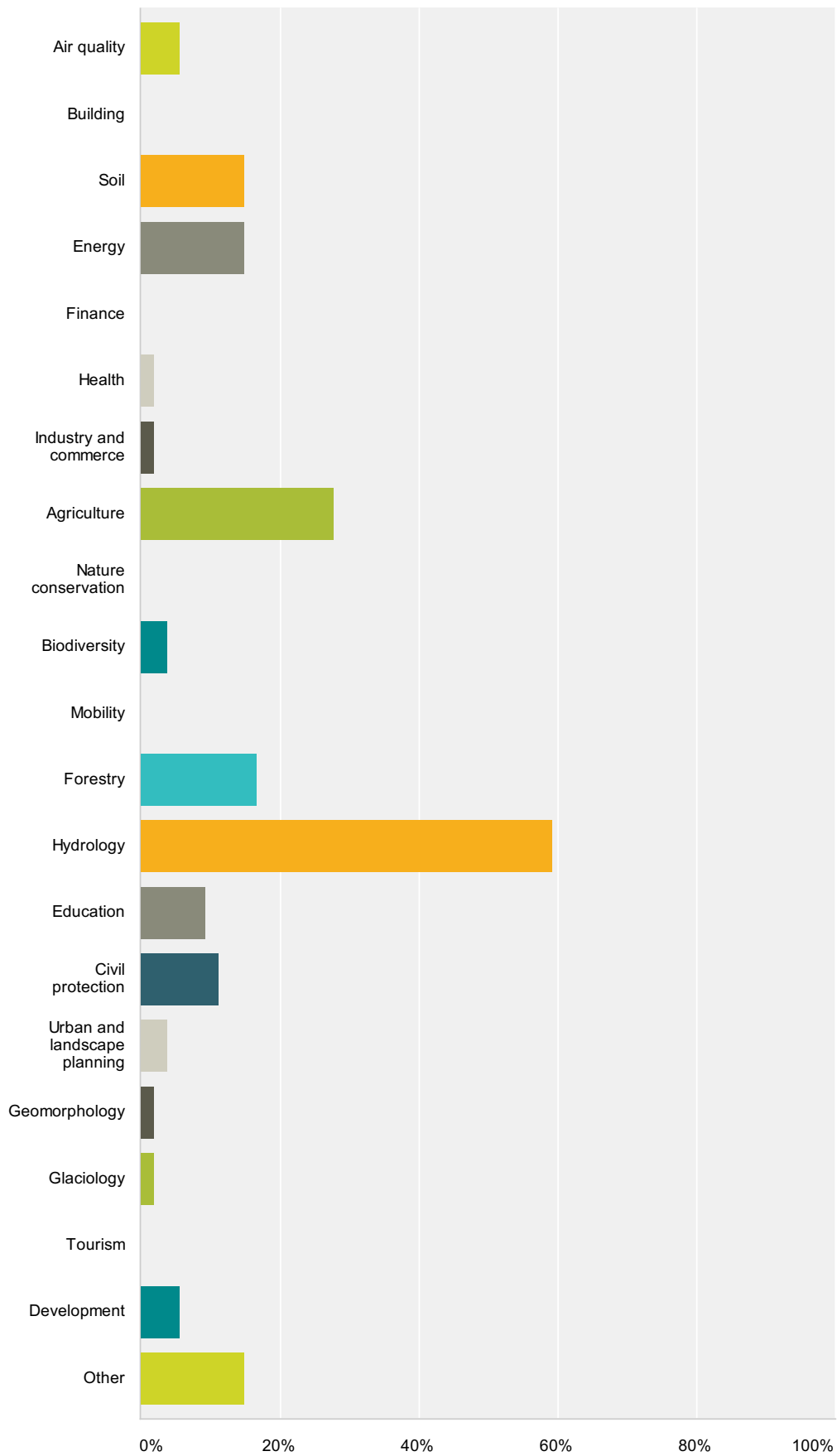
Antwortmöglichkeiten	Beantwortungen	
Air quality	**5,56%**	3
Befragte gesamt: 54		

Building	0%	0
Soil	14,81%	8
Energy	14,81%	8
Finance	0%	0
Health	1,85%	1
Industry and commerce	1,85%	1
Agriculture	27,78%	15
Nature conservation	0%	0
Biodiversity	3,70%	2
Mobility	0%	0
Forestry	16,67%	9
Hydrology	59,26%	32
Education	9,26%	5
Civil protection	11,11%	6
Urban and landscape planning	3,70%	2
Geomorphology	1,85%	1
Glaciology	1,85%	1
Tourism	0%	0
Development	5,56%	3
Other **Beantwortungen**	14,81%	8
Befragte gesamt: 54		

Q26 What is your affilliation?

Beantwortet: 54 Übersprungen: 8
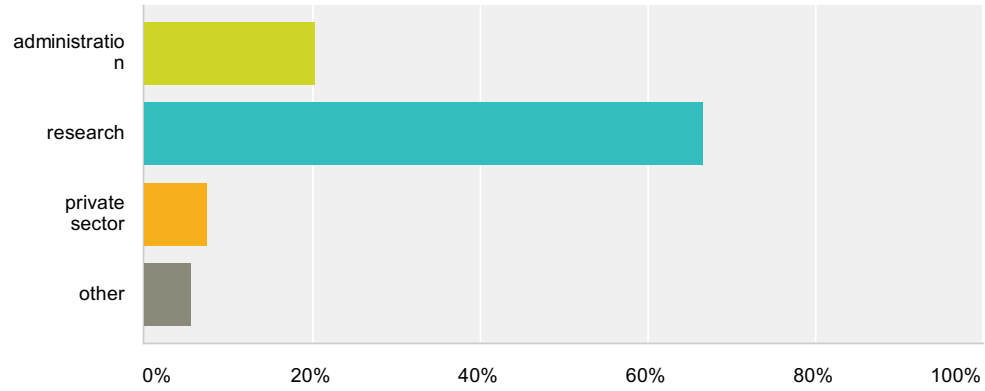
Antwortmöglichkeiten	Beantwortungen	
administration	**20,37%**	11
research	**66,67%**	36
private sector	**7,41%**	4
other **Beantwortungen**	**5,56%**	3
Gesamt		54

Q27 If you want to be informed on the proceeding of VALUE please enter your Email-adress:

Beantwortet: 29   Übersprungen: 33