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A survey of the perceptions  
of regional political decision makers  
concerning climate change and adaptation  
in the German Baltic Sea region

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*and*

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# A survey of the perceptions of regional political decision makers concerning climate change and adaptation in the German Baltic Sea region

by

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and  
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## **Abstract**

This survey is an assessment of the perceptions of climate change and adaptation strategies held by regional political decision makers on the German Baltic Sea coast. It was undertaken within the frame of the project RADOST (Regional Adaptation Strategies for the German Baltic Sea Coast; [www.klimzug-radost.de](http://www.klimzug-radost.de)). Results from the survey of decision makers supplement a previous survey of scientists working on such issues in the Baltic regions, (SurBACC 2010: A survey of the perspectives of climate scientists concerning climate change and climate science in the Baltic Sea basin, available as International BALTEX Secretariat Publication Series, No. 48, October 2010). The two surveys enable a comparison concerning the similarities between the knowledge produced and the knowledge consumed, although such a comparison is not contained herein. Concerning communications of knowledge of climate change, science per se rated far below television or newspapers as a source of information for political decision makers. From the information employed in the construction of perceptions, the regional political decision makers were inclined to perceive the threat of climate change as more immanent than scientists. Priorities and hindrances concerning adaptation strategies are also indicated in the data.

## **Rationale for the survey**

In the past few years, science communication, especially for regional users of knowledge concerning climate change, has become a prominent issue. This has resulted in a significant number of 'Climate Information Centers' being established, with the goal of providing such information on a meaningful regional basis so as to assist regional decision makers on matters concerning adaptation to climate change. To date there seems to be little in terms of evaluation of the match between knowledge production, knowledge dissemination and knowledge consumption.

In conducting the survey, two objectives were met. First, using a large sample of regional decision makers, we explore, through the use of survey research, issues of compatibility between needs and availability of information. Topics include sources of information, perceived regional adaptation priorities, decision maker perceptions of what would make information more useable, barriers to adaptation implementation projects, and the influence of science in the determination of decisions, to name a few issues among many. Second, the survey assisted in building bridges for further communication with coastal authorities, for example, on the German Baltic Sea coast regarding local and regional responses to climate change.

Results from the survey of decision makers supplement a previous survey of scientists working on such issues in the Baltic regions (SurBACC 2010: A survey of the perspectives of climate scientists concerning climate change and climate science in the Baltic Sea basin, available as International BALTEX Secretariat Publication Series, No. 48, October 2010). The two surveys enable a comparison concerning the similarities between the knowledge produced and the knowledge disseminated, although such a comparison is not contained herein.

It is hoped that the combination of the two reports might provide a platform on which to build a more meaningful dialogue between climate science production, climate

science dissemination and climate science utilization at the regional level, enabling economic and efficient adaptation strategies.

## The Survey Sample

The survey sample consisted of two groups of individuals. The first group (constituting the overwhelming majority of those targeted) consisted of the heads of local governments in the German states of Schleswig-Holstein and Mecklenburg-Vorpommern. The local governments targeted included cities, *Gemeinden* (municipalities) and *Ämter* (larger administrative divisions consisting of multiple *Gemeinden* and/or cities). Only those local governments located within the Baltic Sea drainage basin were targeted. The individuals targeted typically held the position of *Bürgermeister* (mayor) or *Amtsvorsteher* (superintendent of an *Amt*). These positions provide a survey sample of political stakeholders operating at a local level, while still possessing sufficiently significant decision-making power. This sampling method is known as saturation sampling. Saturation sampling attempts to survey all identifiable targets and overcomes the lack of reliable sampling frames.

In total 1364 such potential respondents were identified. Once the local governments had been identified, e-mail contacts for the appropriate individuals were collected. This process consisted of two steps: Firstly, e-mail addresses were collected through internet-based research (e.g. the collection of those contacts made publically online through the websites of the relevant *Ämter* or *Gemeinden*). Secondly, in situations where a single contact e-mail address was listed for all of the *Gemeinden* within a single *Amt*, a brief e-mail was sent outlining the intention of the survey and requesting further contact information. A total of 535 unique e-mail contacts for the *Bürgermeister* and *Amtsvorsteher*s were identified through this process. Additionally, 789 *Gemeinden* listed contact e-mail addresses that they shared with other *Gemeinden* in their *Amt*. No contact address whatsoever was found for 40 of the initially targeted potential respondents. The effective mailout consisted of 1110 email invitations. The response rate was 103, approximately 9%.

A response rate of 9% for an online survey is not unusually low. Hamilton (no date given) produced a white paper that analyzed 199 surveys. The total response rate of these surveys, calculated using the total number of surveys sent out in the 199 surveys and the total number of responses for the 199 surveys was 13.35%. He noted that large invitations lists (>1000), tend to be associated with lower individual response rates. Harris Interactive, a well established organization specializing in web-based surveys, used a convenience sample of 70,932 California residents in a survey of attitudes towards healthcare. As with the survey in this analysis, an e-mail was sent to potential respondents with a link to a web survey and non-respondents received one reminder email. The response rate for the Harris Interactive survey was 2%. Holbrook et al (2007) concluded that a low response rate does not necessarily equate to a lower level of accuracy but simply indicates a risk of lower accuracy.

The response categories available to respondents was a range of 1 to 7 with a value of 1 being an indication of 'very inadequate' and a value of 7 being 'very adequate' or 'very much' and 'not at all'. In other words, in a scale of 1 to 7 a value of 1 represents one extreme possibility and a value of 7 represents the opposite extreme position. The

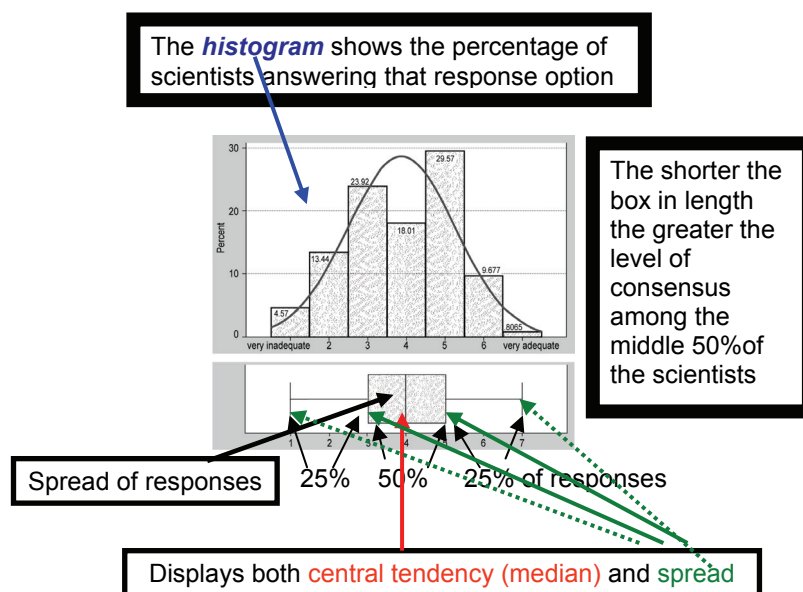


values are intentionally subjective. What we attempt to capture is the *perceptions* of a large body of decision makers at the time of the survey.

## Presentation of Results

The data are presented as histogram, which, when applicable, includes the category 'don't know'. Histograms are presented as percentage of respondents. A histogram shows the *shape* of the distribution, how often different values occur, how much spread or variability there is in the values and which values are most typical. Data is also presented as box-plots. Boxplots illustrate the median, spread and data values, providing a visual assessment of the degree of consensus. Lowest and highest values are indicated by 'whiskers' extending from the boxes. The boxes contain the 50% of total values falling between the 25<sup>th</sup> and 75<sup>th</sup> percentile, meaning that 50% of the cases have values within the box, 25% have values larger than the upper boundary and 25% have values less than the lower boundary. The length of the box indicates how much spread there is in the data values within the middle 50 percentile. If, for example, one box is much longer than another then the data values in the longer box have more variability. The length of the box is considered to suggest consensus and the location of the box to represent assessment. The median is in the middle of the box only if the distribution is symmetric. If the median line is closer to the left of the box than to the right of the box the data are skewed in that direction, meaning that there are more cases towards that end of the distribution. If the median is closer to the right of the box then tail of the distribution is towards those values. By focusing on the middle 50<sup>th</sup> percentile, extreme perceptions are separated from the conservative perception represented in the shaded box. A visual explanation of a box-plot and histogram is given in Figure 1.

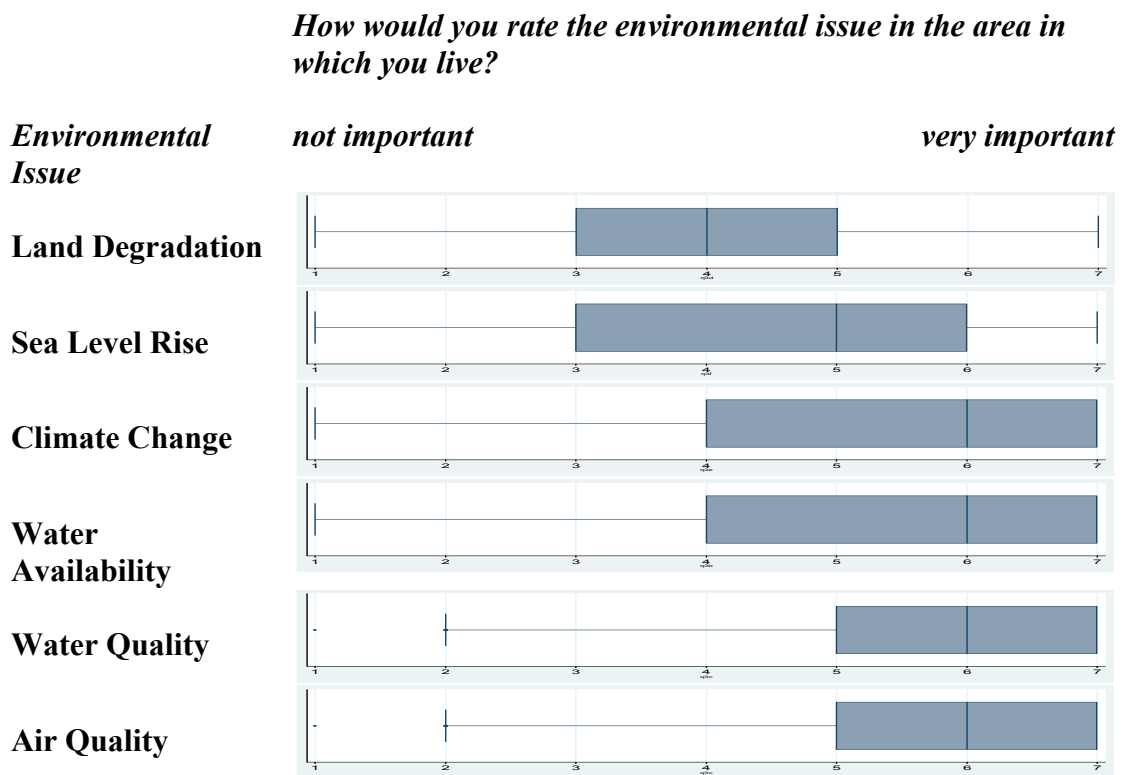
**Figure 1. Box Plots**



## Summary of Results

The summary of results is presented only in the form of box plots. Histograms, box plots and descriptive statistics for all variables are presented in Appendix 1. Respondents were given the choice of three issues of concern for their region: Economic conditions, environmental conditions and social conditions. The rating of these resulted in economic conditions being the primary concern, environmental conditions given second rank and social conditions being deemed the least important of the three. The ranking of environmental issues only are presented in Figure 1.

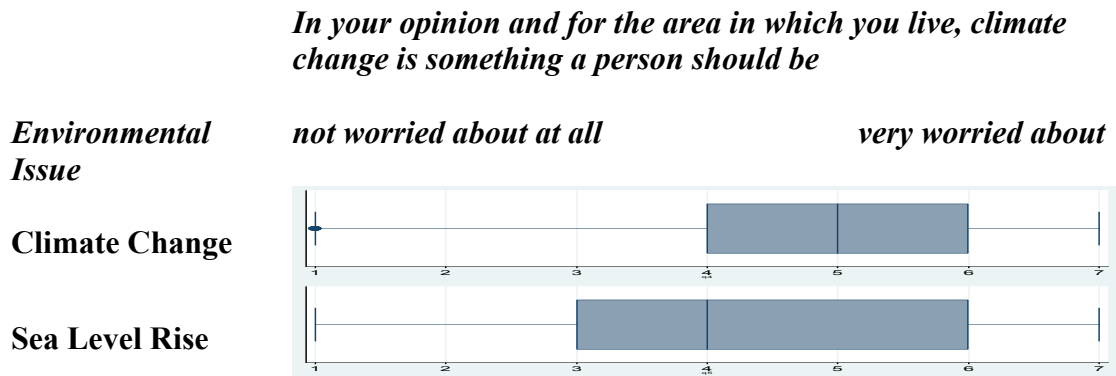
**Figure 2: Regional Political Decision Makers Ranking of Environmental Issues on the German Baltic Sea Coast**



As can be seen in Figure 2, sea level rise is given less prominence than climate change, and climate change is ranked less important than water and air quality. While climate change ranked as very important the spread of the box suggests that not everyone in the middle 50<sup>th</sup> percentile shares the same opinion. In short, while all perceptions in the middle 50<sup>th</sup> and the 75<sup>th</sup> percentiles tend to agree that climate change is an important issue there is considerable disagreement as to *how* important it is. Only the 75<sup>th</sup> (25% of respondents) percentile assigned sea level the highest level of importance.

Nonetheless, respondents were asked how concerned they should be over climate change and sea level rise. Results are presented in Figure 3.

**Figure 3. Concern Over Climate Change and Sea Level Rise**

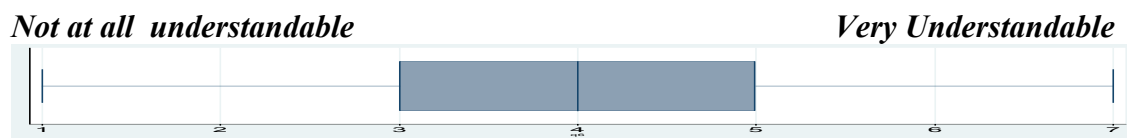


The data suggests that the regional political decision makers for the German Baltic coast see a need to worry about both sea level and climate change but do not indicate that the highest level of worry is necessary. There is less agreement about the need to worry about sea level than there is for climate change.

In an effort to determine how these perceptions were reached, respondents were asked about the utility of science. These results are presented in Figure 4.

**Figure 4. Political Decision Makers and the Utility of Science**

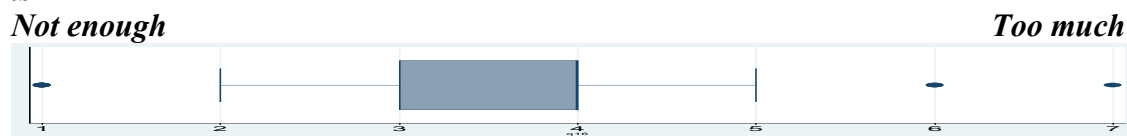
*The results of science that you refer to in order to make decisions are often:*



*The results of science that you refer to in order to make decisions are often:*



*Input from science in your jurisdiction, concerning adaptation measures and policies is*



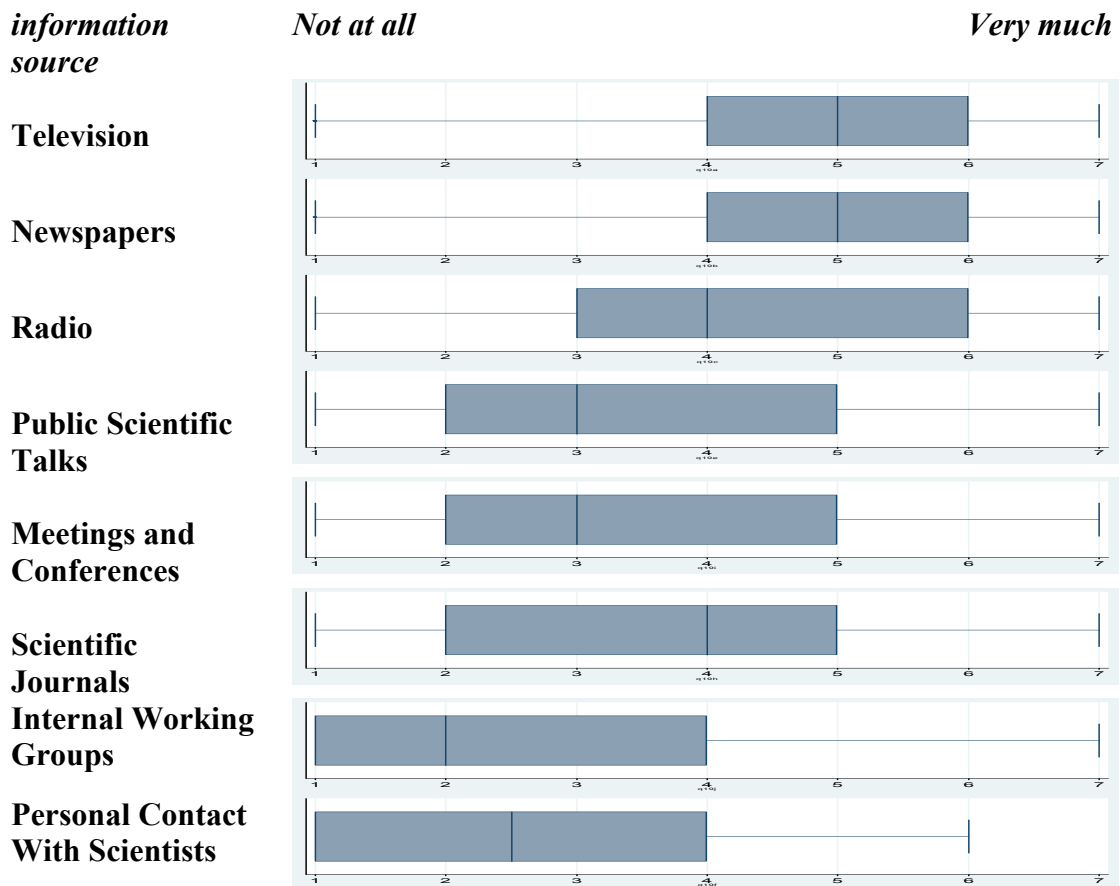
*How much are your decisions influenced by scientific findings*



As the data in Figure 4 indicates, regional political decision makers seem to have some difficulty in understanding information coming from science, and as a consequence find the information only of relative importance in the decision making process. Nonetheless, respondents claimed that scientific findings did have an *influence* on decisions. This implies that other sources of information are consulted. To this end, respondents were asked as the nature of their sources of information and knowledge. The results are presented in Figure 5.

**Figure 5. Sources of Information Used in the Decision Processes of Regional Political Decision Makers**

*How much do you use the following sources of information in shaping adaptation decisions and policy?*



It is evident that sources of information most readily consulted are public media, the least consulted, personal contact with scientists. This is in spite of efforts of scientific outreach programs. The awareness and utility of two such efforts are presented in Figure 6.

**Figure 6. Scientific Outreach and Decision Makers Utilization**

The 'Norddeutsches Klimabüro' opened in 2008 with the purpose of providing understandable regional climate information for regional stakeholders in northern Germany. For your work, the 'Norddeutsches Klimabüro' is

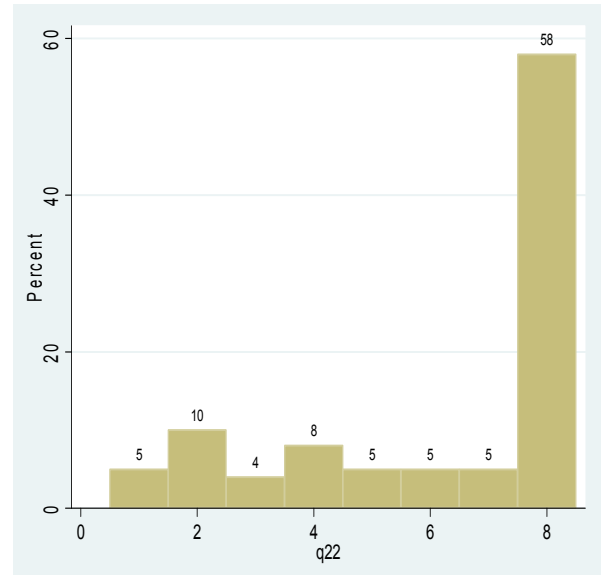
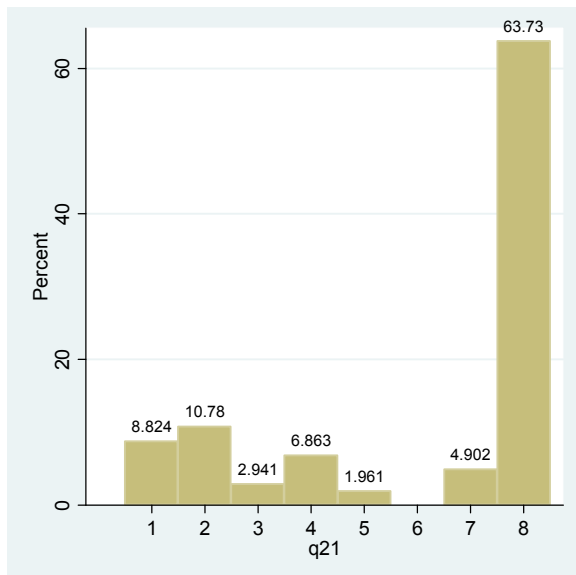
not useful at all 1 2 3 4 5 6 7 very useful

8 = I am not aware of the 'Norddeutsches Klimabüro'

The 'Norddeutscher KlimaAtlas' is available on the internet. The website states: „Mit dem Norddeutschen KlimaAtlas möchten wir Sie über den aktuellen Forschungsstand zum möglichen künftigen Klimawandel in Norddeutschland informieren“. For your work, the 'Norddeutscher KlimaAtlas' is

no help at all 1 2 3 4 5 6 7 very helpful

8 = I am not aware of the 'Norddeutscher KlimaAtlas'

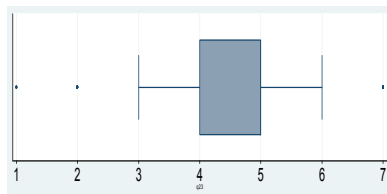
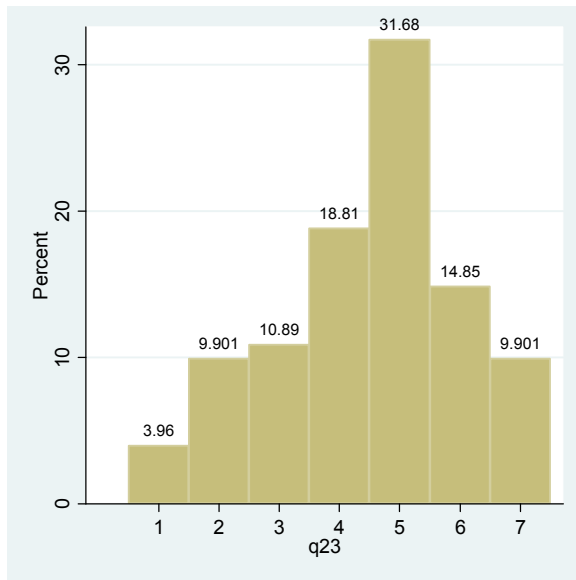


It seems that most regional political decision makers in the German Baltic region are not aware of the outreach programs and those that are do not find the programs to be very helpful. This suggests a misunderstanding between those that produce scientific knowledge and those that consume scientific knowledge (see Figure 34-35, Appendix 1). Nonetheless, it is perceived that adaptation measures are necessary (Figure 7).

**Figure 7. Perceptions of the Necessity of Adaptation Measures**

**In your region, do you think adaptation measures are**

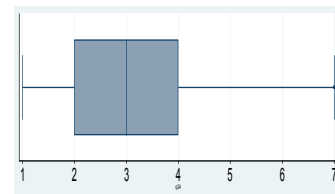
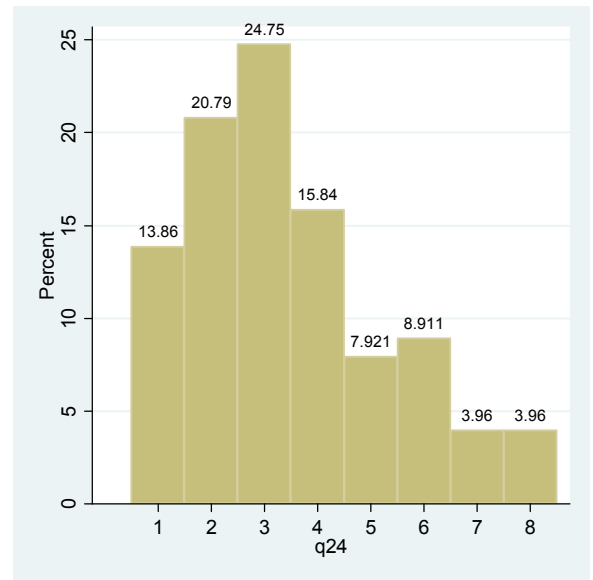
**not really necessary at all 1 2 3 4 5 6 7 very necessary**



**In your region, do you think adaptation measures must be taken**

**immediately 1 2 3 4 5 6 7 sometime in the future.**

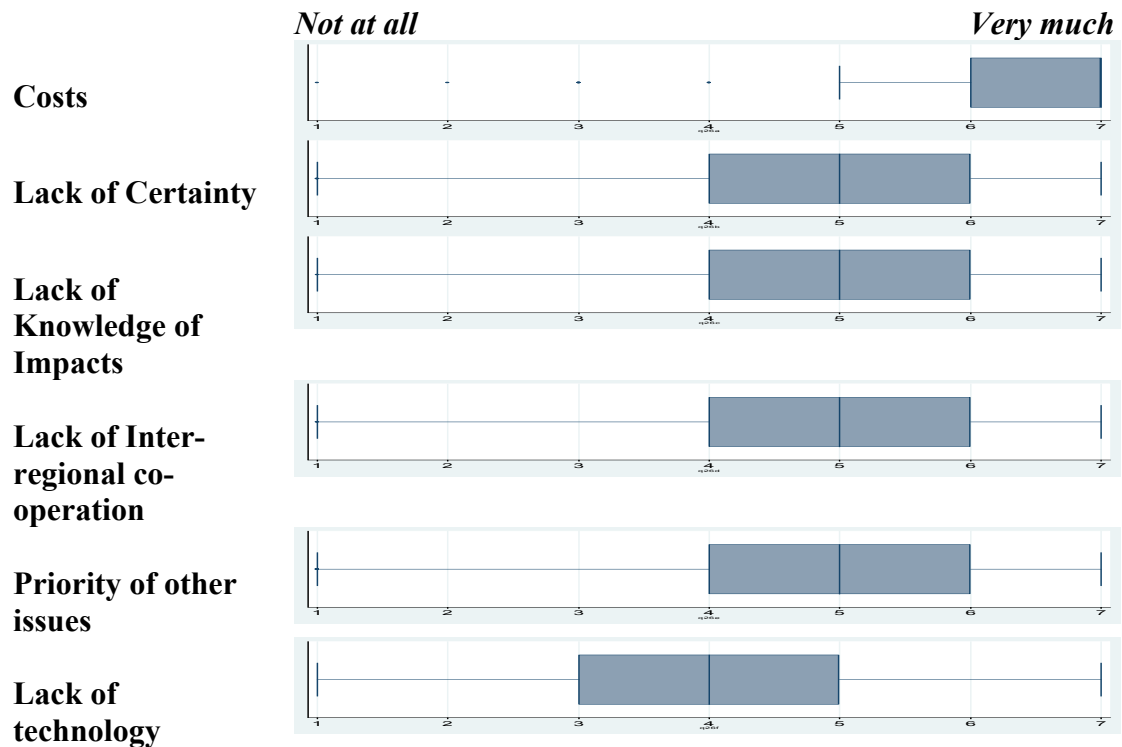
**8 adaptation measures are not necessary**



It would seem that adaptations measures are perceived of as more necessary than not, but that adaptation strategies should begin very soon. However, as seems in Figure 8, a number of issued seem to hinder the implementation of adaptation strategies.

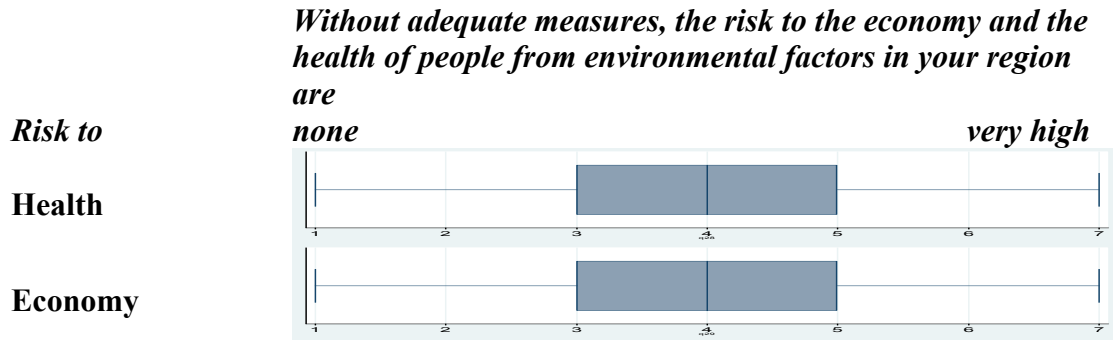
### Figure 8. Hindrance to the Implementation of Regional Adaptation Strategies.

In your opinion, if adaptation measures are necessary, how much do the following concerns prevent adequate adaptation measures from being put into place?



Not surprisingly, costs play the major role in preventing the implementation of adaptation strategies. This is difficult to reconcile with the oft heard claim that things that benefit the environment benefit the economy, or, it may simply be the disjunction among the time frames of economics, politics and environmental change. However, without adequate adaptation measures, the risks to the economy and the health of the population are not seen as too high (Figure 9).

### Figure 9. Risks to Regional Economy and Population Health Without Adaptation Measures

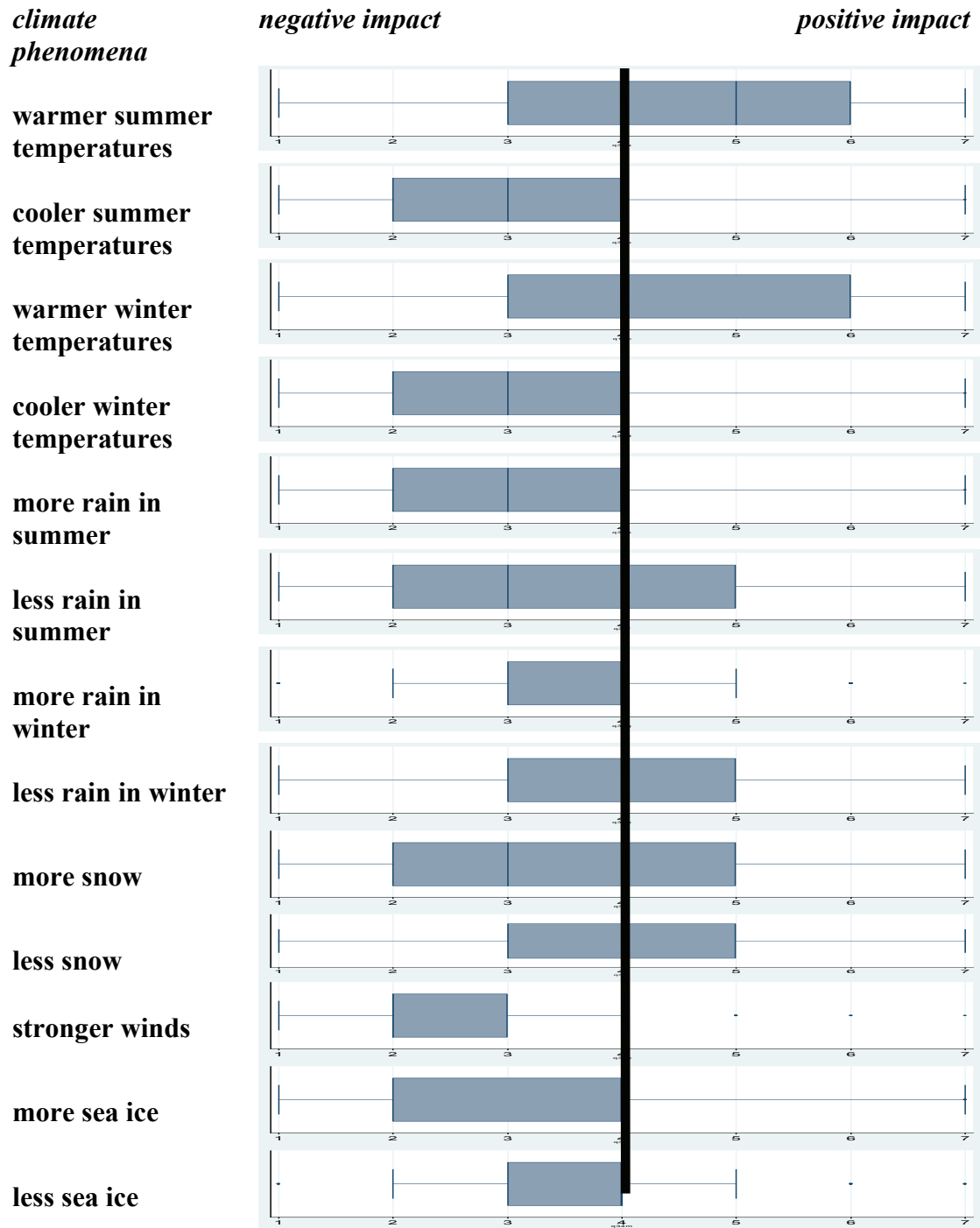


When asked about specific climate change impacts, regional political decision makers expressed a mixed picture, with some variables perceived to have both positive and negative implications. That is, so decision makers perceived a negative impact and some a positive impact generated by the same climate phenomena. This is evident in the charts in Figure 10, where the box in the box plot extends from the negative side of the plot to the positive side of the plot.



**Figure 10. Assessing Individual Climate Change Impacts**

*If they occurred, how would the following environmental changes have an impact in your region?*



Warmer summers, warmer winters, dryer summers, dryer winters and both more snow and less snow are perceived of as having some positive, as well as negative, impacts. Both warmer summer temperatures and warmer winter temperatures are perceived of as the potential for greater positive impacts than negative impacts. Cooler temperatures in summer and winter, more rain in summer and winter, stronger winds, more sea ice and less sea ice are all perceived of as having only negative impacts. All of these phenomena are to some degree claimed to have been observed (see Figures 65-83, Appendix A). To some degree, all are also expected to occur (see Figures 84-102, Appendix A). Unfortunately, the awareness of how to adapt to these changing conditions is, for the most part, minimal (see Figures 103-121, Appendix A).

In summary, the communication between science and regional political decision makers is in need of improvement. Decision makers seem to be mixed as to whether positive or negative outcomes will result from climate change and are lacking in knowledge of how to combat negative impacts, for example, for which concrete adaptation measures might exist. However, economic conditions seem to be given priority over environmental conditions.

Appendix A contains box-plots, histograms and descriptive statistics of all variables contained in the survey. All questions and response options are presented in both English and German.

## **APPENDIX A**



## **Demographics**



**Table 1.** Wie würden Sie Ihr zentrales berufliches Aufgabenfeld beschreiben? (z.B. Landwirtschaft, Fischerei, öffentliche Versorgung (Energie, Wasser), zentrale Infrastruktur (Straßen, Küstenschutz)?

*If you were to describe the main focus of your job, (i.e. agriculture, fisheries, public utilities (electric, water), superstructure (roads, coastal defense), etc. what would it be*

Landwirtschaft /Energieproduktion	1	1.1 %
Öffentliche Versorgung/Verwaltung Bürgermeister	1	1.1 %
Zentrale Infrastruktur, Verwaltung	1	1.1 %
Gemeinschaft für jung und alt attraktiv machen.	1	1.1 %
Ehrenamtlicher Amtsvorsteher, Problem regenerative		
Energiegewinnung Landwirtschaft, Infrastruktur	1	1.1 %
Angestellter-Dienstleistungsbereich	1	1.1 %
Ländliche Kommunalpolitik	1	1.1 %
Bürgermeister in einer ländlich strukturierten Gemeinde mit 14		
Ortsteilen	1	1.1 %
Ehrenamtliche Bürgermeisterin der Gemeinde Selent ,in etlichen		
Vereinen ehrenamtlich tätig (Rentnerin)	1	1.1 %
Dienstleistung	1	1.1 %
Ruheständler, ehrenamtlicher Bürgermeister und Amtsvorsteher	1	1.1 %
Fischerei, öffentliche Versorgung	1	1.1 %
Öffentliche Versorgung und Zentrale Infrastruktur	1	1.1 %
Gemeinde ist geprägt von Landwirtschaft und Tourismus	1	1.1 %
Bürgermeister einer ehrenamtlich verwalteten amtsangehörigen		
Gemeinde	1	1.1 %
Öffentlicher Dienst, Wissenschaftlicher Gerätebau	1	1.1 %
Öffentliche Verwaltung	1	1.1 %
Zentrale Infrastruktur	1	1.1 %
Wirtschaft und Bauer	1	1.1 %
Naturwissenschaftler, Universität	1	1.1 %
Tourismus	1	1.1 %
Bgm.einer 387-Seelen-Gemeinde.Vorhanden sind: Wasserwerk,		
Landwirtschaft, Bio-Schlachtereie	1	1.1 %
Öffentlichkeitsarbeit, Kommunalpolitik	1	1.1 %
Bis zum Eintritt in den Vorruhestand war ich ca. 30 Jahre in der		
Energiewirtschaft tätig.	1	1.1 %
Landwirtschaft und zentrale Infrastruktur	1	1.1 %
Touristikleiter	1	1.1 %
Öffentliche Versorgung	1	1.1 %
Landwirtschaft, Küstenschutz	1	1.1 %
Landwirtschaft, Bürgermeister der Gemeinde Hasselberg	1	1.1 %
Im Amt Güstrow-Land sind wir für 14 amtsangehörige		
Gemeinden auf allen Aufgabenfeldern zuständig.	1	1.1 %
Bürgermeister in der Nähe Schwerins	1	1.1 %
Zentrale Infrastruktur	1	1.1 %
Früher Verwaltung	1	1.1 %

Infrastruktur für Wirtschaft und Bevölkerung, öffentliche Verwaltung	1	1.1 %
Bildung	1	1.1 %
Kommunale Versorgung	1	1.1 %
Öffentliche Versorgung mit Verwaltungsdienstleistungen	1	1.1 %
Forstwirtschaft	1	1.1 %
Straßen, Entsorgung, Küstenschutz	1	1.1 %
Gemeindevertreter und Vorsitzender des Umwelt-, Bau- und Abwasserausschusses der Gemeinde Strande	1	1.1 %
Gebäudeunterhaltung und Neubau von kommunalen Gebäuden	1	1.1 %
Sicherstellung der öffentlichen Infrastruktur unter Beachtung der natürlichen Lebensgrundlagen	1	1.1 %
Total	94	100 %

Missing Cases = 9

Response Percent = 91.3 %



**Figure 1.** Welches Problem in Ihrer Region sollte Ihrer Ansicht nach langfristig die größte Priorität haben?

die Wirtschaftsbedingungen (z.B. Arbeitslosigkeit)  
 die sozialen Bedingungen (z.B. Armut)  
 die Umweltbedingungen (z.B. Umweltveränderungen)

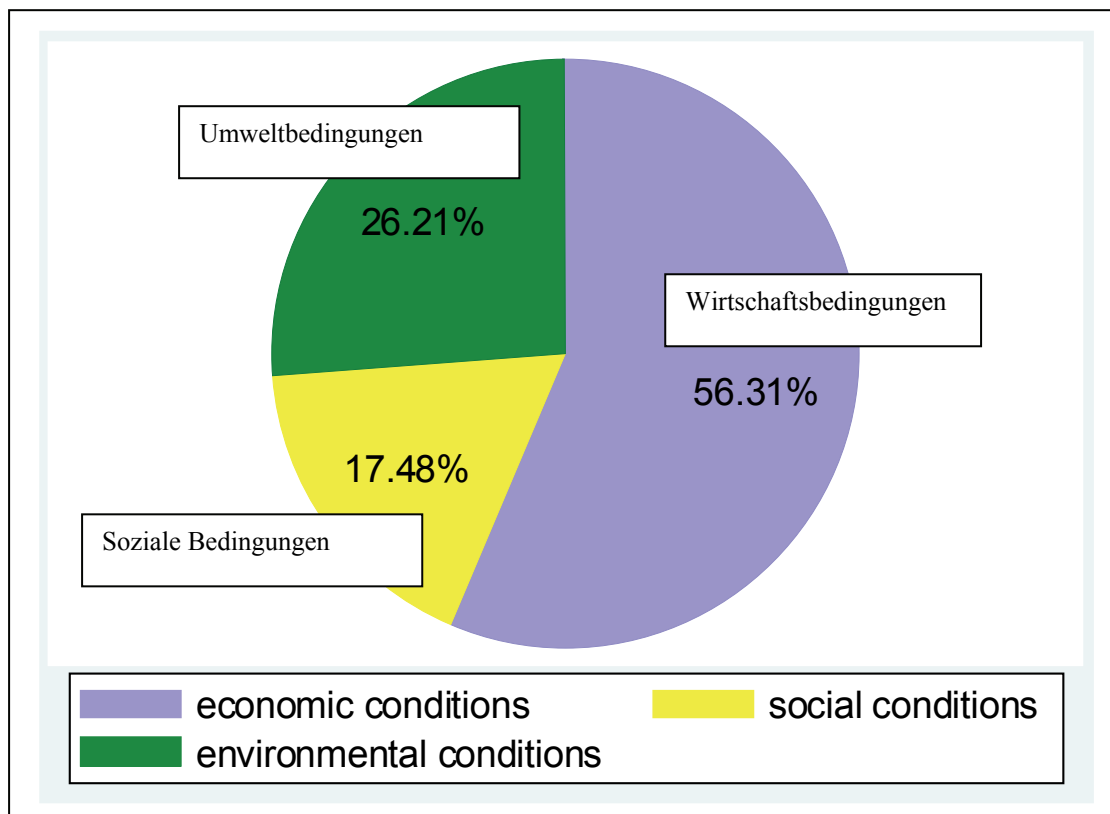
*In your opinion, the main long-term problem that should be given priority in the area in which you live is*

1. *economic conditions (unemployment issues for example)*
2. *social conditions (poverty for example)*
3. *environmental conditions (environmental impacts for example)*

	Number	Percent
die Wirtschaftsbedingungen (z.B. Arbeitslosigkeit)	58	56.3 %
die sozialen Bedingungen (z.B. Armut)	18	17.5 %
die Umweltbedingungen (z.B. Umweltveränderungen)	27	26.2 %
Total	103	100.0 %

Missing Cases = 1

Response Percent = 99.0 %

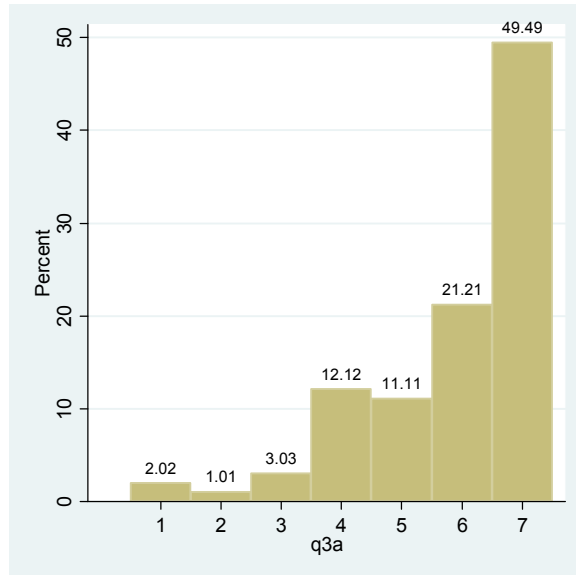




## **Environmental Concern**

**Figure 2.** Wenn wir uns nur auf Umweltthemen konzentrieren: Wie bewerten Sie die folgenden Themen in Ihrer Region?

*If we limit the problem to environmental issues, would you rate the environmental issue in the area in which you live?*



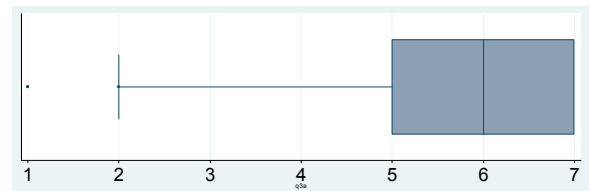
**Wasserqualität:**

nicht wichtig 1 2 3 4 5 6 7 sehr wichtig

*Water quality:*

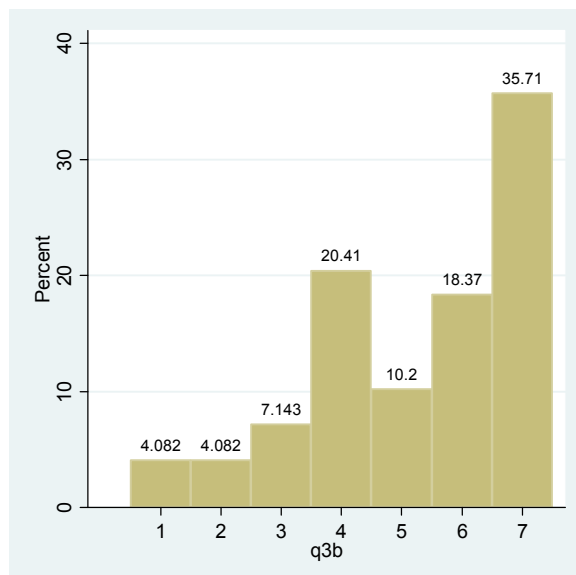
*not important 1 2 3 4 5 6 7 very important*

Mean estimation	Number of obs	= 99	
	Mean	Std. Err.	[95% Conf. Interval]
q3a	5.909091	.1436421	5.624038 6.194144



**Figure 3.** Wenn wir uns nur auf Umweltthemen konzentrieren: Wie bewerten Sie die folgenden Themen in Ihrer Region?

*If we limit the problem to environmental issues, would you rate the environmental issue in the area in which you live?*



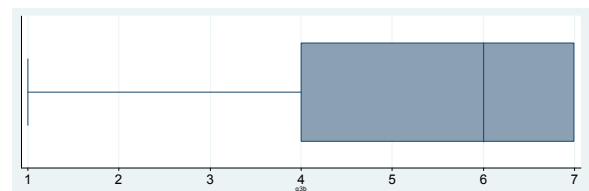
**Wasserverfügbarkeit**

nicht wichtig 1 2 3 4 5 6 7 sehr wichtig

*water availability*

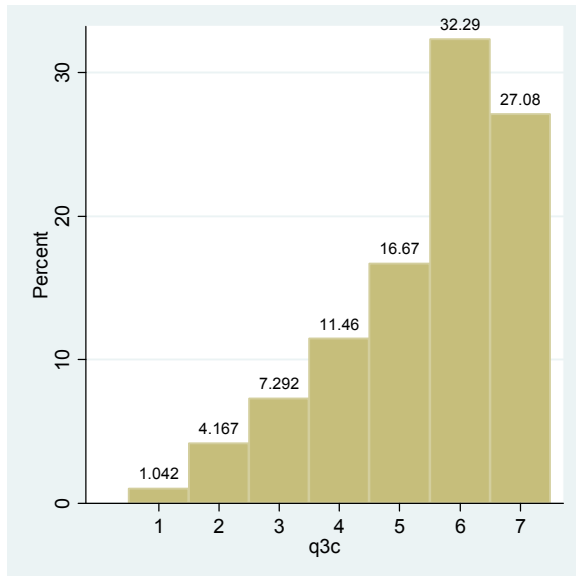
*not important 1 2 3 4 5 6 7 very important*

Mean estimation	Number of obs	= 98	
	Mean	Std. Err.	[95% Conf. Interval]
q3b	5.265306	.1773825	4.913251 5.617361



**Figure 4.** Wenn wir uns nur auf Umweltthemen konzentrieren: Wie bewerten Sie die folgenden Themen in Ihrer Region?

*If we limit the problem to environmental issues, would you rate the environmental issue in the area in which you live?*



**Luftqualität**

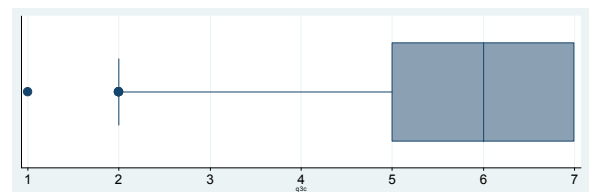
nicht wichtig 1 2 3 4 5 6 7 sehr wichtig

*air quality*

*not important 1 2 3 4 5 6 7 very important*

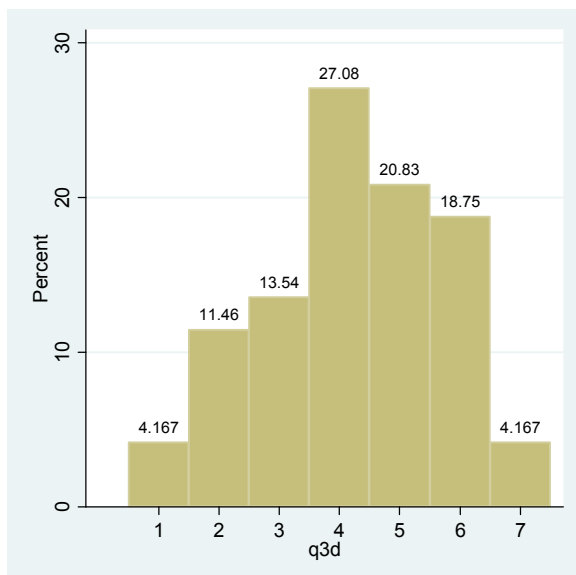
Mean estimation                      Number of obs = 96

	Mean	Std. Err.	[95% Conf. Interval]
q3c	5.4375	.1508837	5.137958 5.737042



**Figure 5.** Welches Problem in Ihrer Region sollte Ihrer Ansicht nach langfristig die größte Priorität haben?

*If we limit the problem to environmental issues, would you rate the environmental issue in the area in which you live?*



**Landdegradierung**

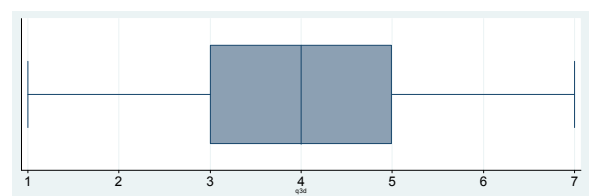
nicht wichtig 1 2 3 4 5 6 7 sehr wichtig

*land degradation*

*not important 1 2 3 4 5 6 7 very important*

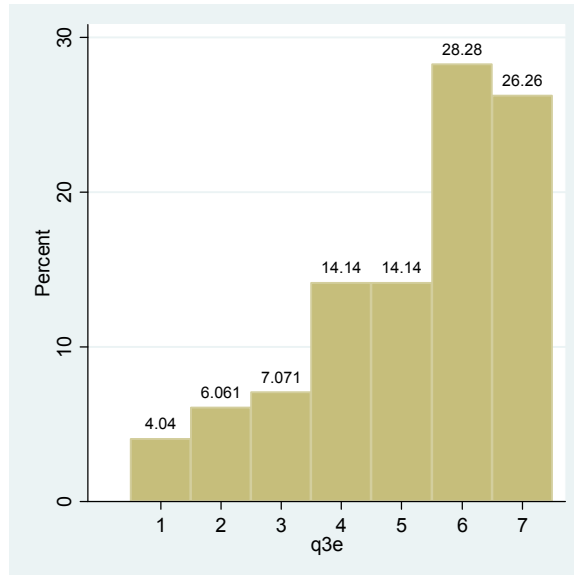
Mean estimation                      Number of obs = 96

	Mean	Std. Err.	[95% Conf. Interval]
q3d	4.21875	.1540414	3.912939 4.524561



**Figure 6.** Welches Problem in Ihrer Region sollte Ihrer Ansicht nach langfristig die größte Priorität haben?

*If we limit the problem to environmental issues, would you rate the environmental issue in the area in which you live?*



### Klimawandel

nicht wichtig 1 2 3 4 5 6 7 sehr wichtig

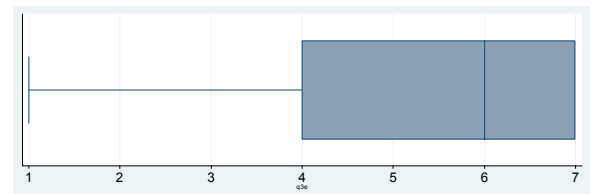
*climate change*

*not important 1 2 3 4 5 6 7 very important*

Mean estimation                      Number of obs = 99

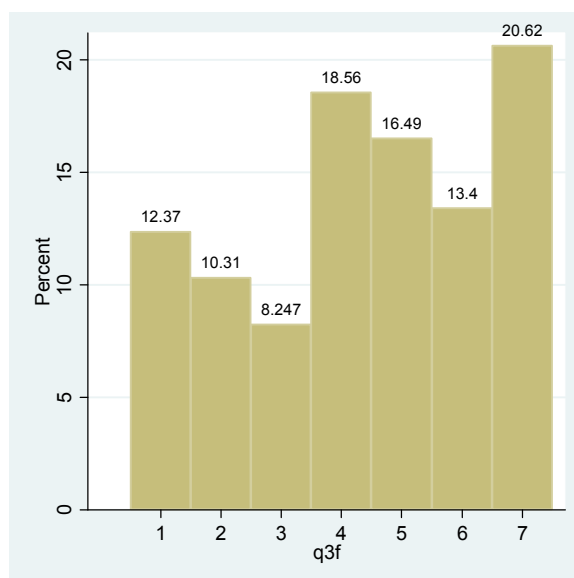
-----  
Mean   Std. Err.   [95% Conf. Interval]

q3e| 5.181818   .1725096   4.839478   5.524158



**Figure 7.** Welches Problem in Ihrer Region sollte Ihrer Ansicht nach langfristig die größte Priorität haben?

*If we limit the problem to environmental issues, would you rate the environmental issue in the area in which you live?*



### Meeresspiegelanstieg

nicht wichtig 1 2 3 4 5 6 7 sehr wichtig

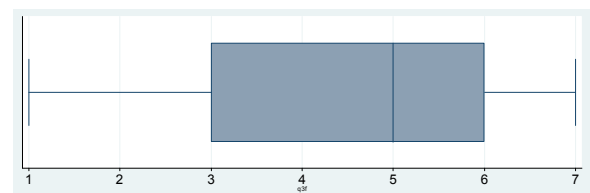
*sea level rise*

*not important 1 2 3 4 5 6 7 very important*

Mean estimation                      Number of obs = 97

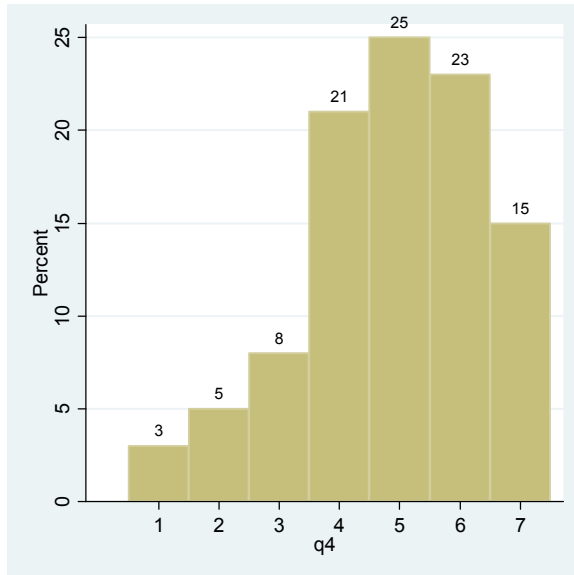
-----  
Mean   Std. Err.   [95% Conf. Interval]

q3f| 4.391753   .2044168   3.985988   4.797517



**Figure 8.** Ihrer Meinung nach, und bezogen auf Ihre Region, muss einen der Klimawandel ...

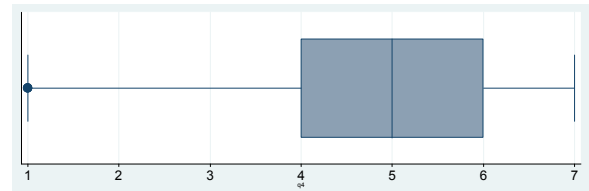
*In your opinion and for the area in which you live, climate change is something a person should be ...*



überhaupt nicht beunruhigen 1 2 3 4 5 6 7  
sehr beunruhigen

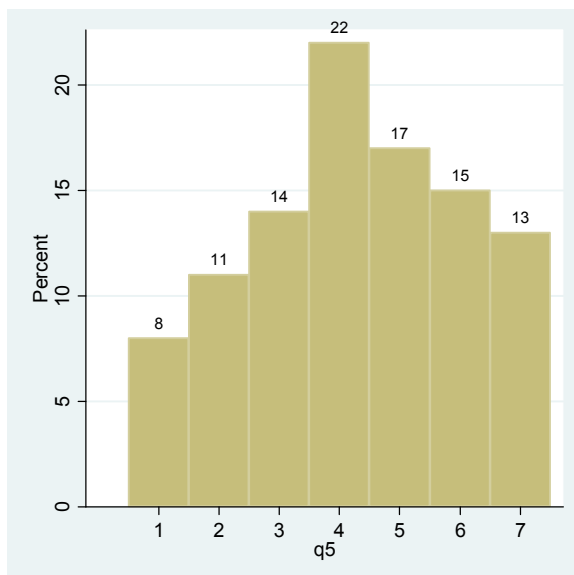
*not worried about at all 1 2 3 4 5 6 7 very worried about*

Mean estimation		Number of obs = 100	
	Mean	Std. Err.	[95% Conf. Interval]
q4	4.89	.1516875	4.589019 5.190981



**Figure 9.** Ihrer Meinung nach, und bezogen auf Ihre Region, muss einen der Meeresspiegelanstieg...

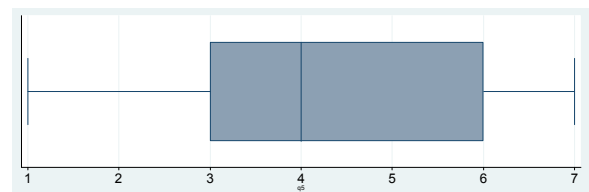
*I In your opinion and for the area in which you live, sea level rise is something a person should be...*



überhaupt nicht beunruhigen 1 2 3 4 5 6 7  
sehr beunruhigen

*not worried about at all 1 2 3 4 5 6 7 very worried about*

Mean estimation		Number of obs = 100	
	Mean	Std. Err.	[95% Conf. Interval]
q5	4.26	.1790096	3.904806 4.615194







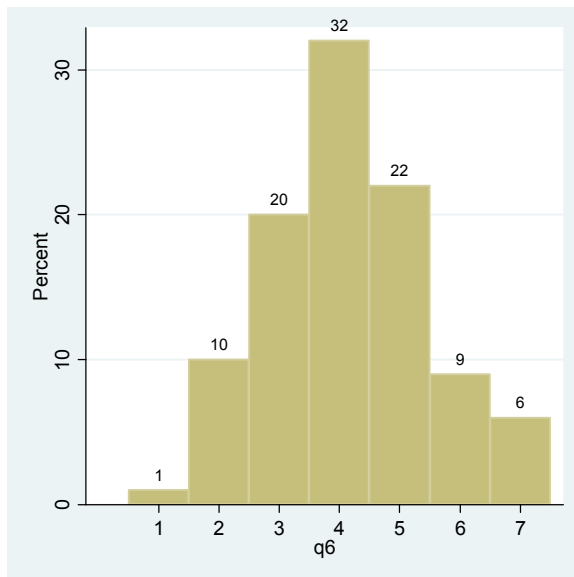
## **Communications**

**Als nächstes würden wir Sie gerne fragen, welche Erfahrungen Sie in der Kommunikation mit Wissenschaftlern gemacht haben, und welche Erfahrungen Sie speziell mit wissenschaftlichen Informationen zum Klimawandel und zur Anpassung an die Auswirkungen des Klimawandels gemacht haben.**

*We would now like to ask you some questions about your experience with communications with scientists and scientific information related to climate change and adaptation to climate change impacts.*

**Figure 10.** Die wissenschaftlichen Ergebnisse, auf die Sie sich bei der Entscheidungsfindung berufen, sind oft:

*The results of science that you refer to in order to make decisions are often:*

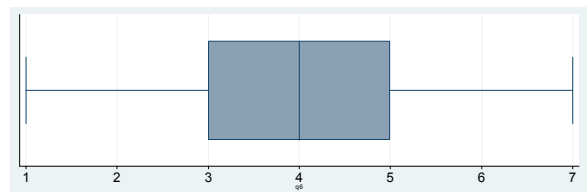


überhaupt nicht verständlich 1 2 3 4 5 6 7  
sehr gut verständlich

*not at all understandable 1 2 3 4 5 6 7 very understandable*

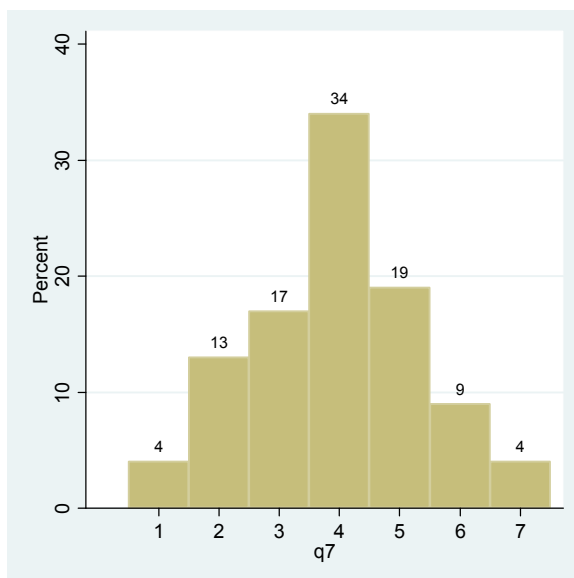
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q6	4.15	.134371	3.883379 4.416621



**Figure 11.** Die wissenschaftlichen Ergebnisse, auf die Sie sich bei der Entscheidungsfindung berufen, sind oft:

*The results of science that you refer to in order to make decisions are often:*



für die Entscheidungsfindung nicht zu  
gebrauchen

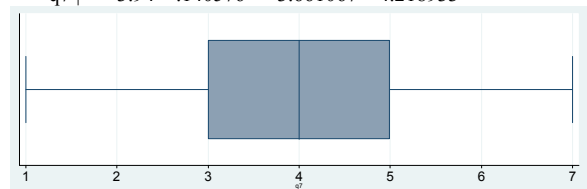
1 2 3 4 5 6 7

für die Entscheidungsfindung sehr gut zu  
gebrauchen

*of little use for decision making - of great use for decision making*

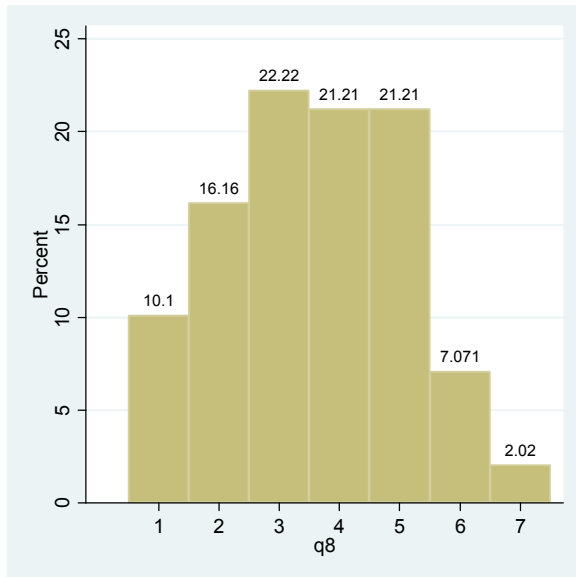
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q7	3.94	.140576	3.661067 4.218933



**Figure 12.** Wie würden Sie die Kommunikation zwischen denjenigen beschreiben, die praktische Entscheidungen im Umweltbereich treffen (wie Sie selbst), und den Wissenschaftlern, die umweltbezogenes Wissen produzieren?

*How would you describe the general communications between those involved in making practical decisions concerning the environment, such as yourself, and those scientists generating knowledge relevant to environmental issues?*

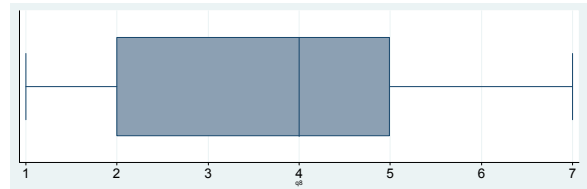


sehr schlecht 1 2 3 4 5 6 7 sehr gut

very poor 1 2 3 4 5 6 7 very good

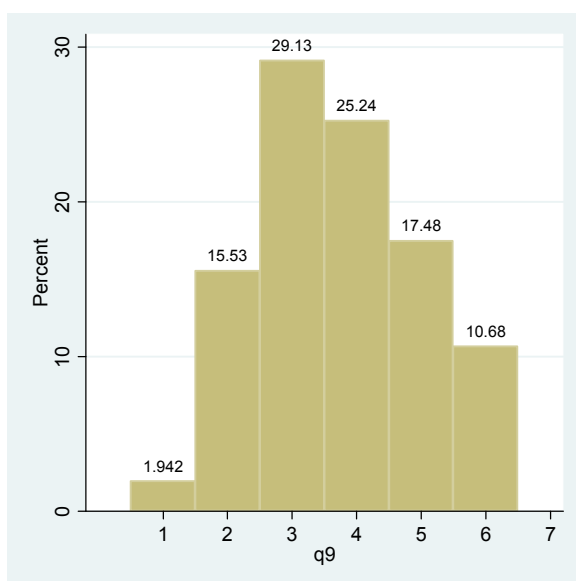
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q8	3.565657	.152057	3.263904	3.867409



**Figure 13.** Wissenschaftler wissen, welche Informationen Sie benötigen, um effektive politische Maßnahmen und Handlungen einzuleiten:

*Scientists know what information you need to design effective policy and take appropriate actions*

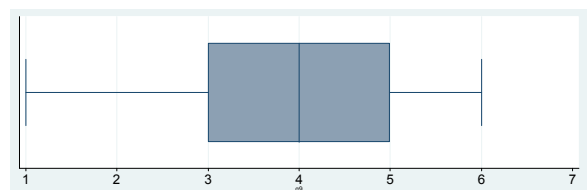


nie 1 2 3 4 5 6 7 immer

never 1 2 3 4 5 6 7 always

Mean estimation                      Number of obs = 103

	Mean	Std. Err.	[95% Conf. Interval]	
q9	3.728155	.125847	3.478538	3.977772





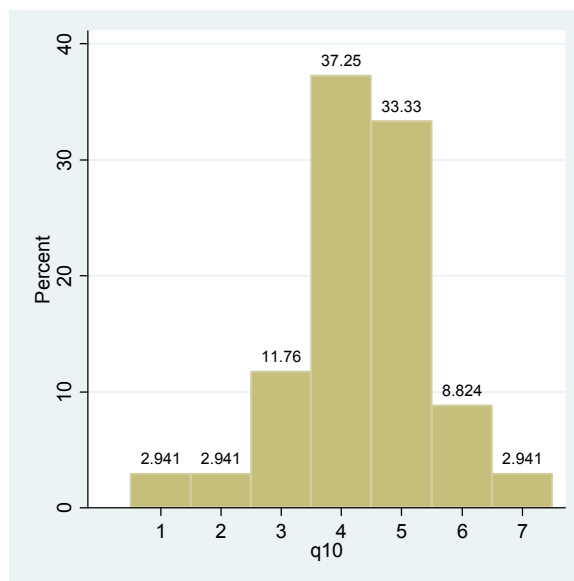
## **Decision Making Considerations**

**Als nächstes möchten wir Sie fragen, welche Aspekte Sie bei umweltbezogenen Entscheidungen berücksichtigen.**

*We would now like to ask you a few questions about what you take into consideration when making decisions about environmental issues*

**Figure 14.** In der Wissenschaft und in den Medien finden sich oft gegensätzliche Positionen zu umweltbezogenen Informationen. Die ‚Skeptiker‘ sagen "kein Grund zur Unruhe", während die ‚Schwarzseher‘ sagen "wir schweben in großer Gefahr". Wenn überhaupt, welche dieser beiden Positionen beeinflusst Ihre Entscheidungsfindung stärker? Der Wert 4 gibt an, dass keine der beiden Meinungen Ihre Entscheidungsfindung beeinflusst.

*In science and in the media, environmental information often tends to include two opposing accounts. The ‘skeptics’ claim there is no need for alarm and the ‘alarmists’ tend to say we are in great danger. If at all, which of these two positions has the greater influence on the decisions you make? A value of 4 indicates that neither position has any influence on decision making*

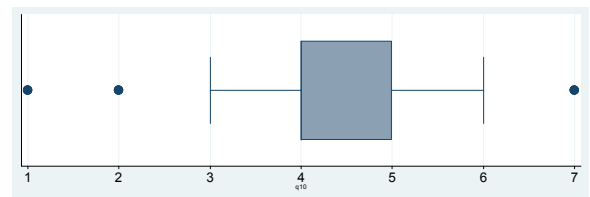


Kein Grund zur Unruhe 1 2 3 4 5 6 7 Wir  
schweben in großer Gefahr

no need for alarm 1 2 3 4 5 6 7 we are in great  
danger

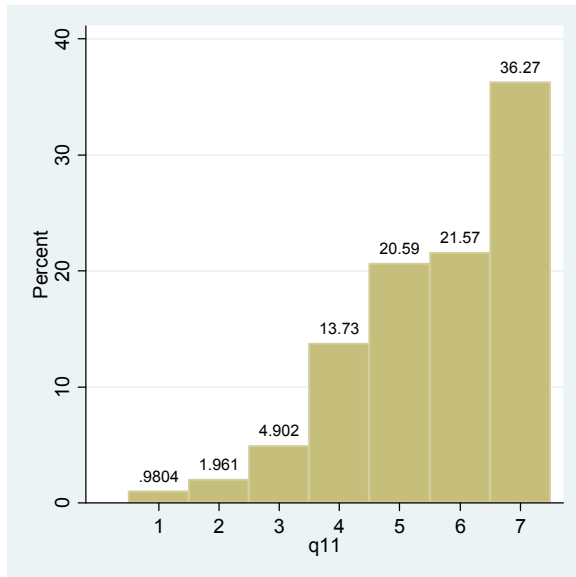
Mean estimation                      Number of obs = 102

	Mean	Std. Err.	[95% Conf. Interval]
q10	4.333333	.1151783	4.104851 4.561816



**Figure 15.** Derzeit wird viel über die möglichen Vorteile diskutiert, die sich aus der Einbeziehung der Öffentlichkeit in die Lösung von Umweltproblemen ergeben können. Ihrer Meinung nach sollte die Öffentlichkeit:

*Recently there has been considerable discussion concerning the benefits of including the insights of the general public in resolving environmental issues. In your opinion, the general public should be*

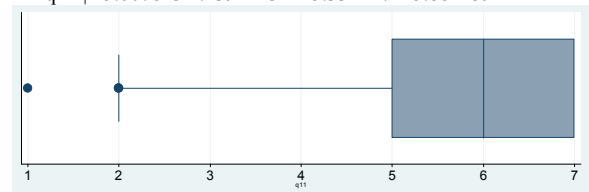


Kein Grund zur Unruhe 1 2 3 4 5 6 7 Wir schweben in großer Gefahr

*no need for alarm 1 2 3 4 5 6 7 we are in great danger*

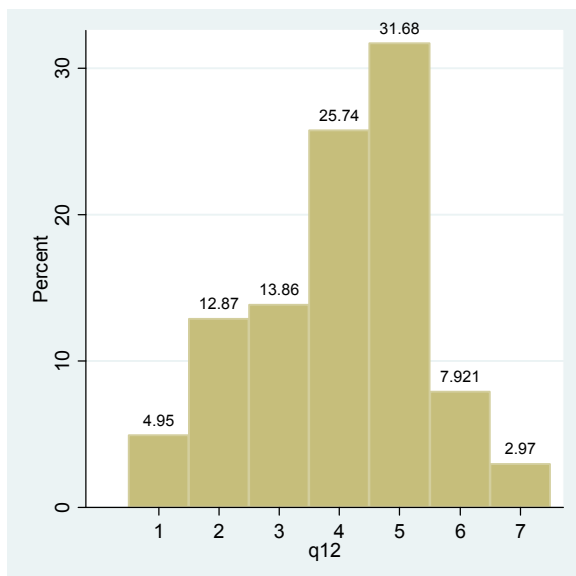
Mean estimation                      Number of obs = 102

	Mean	Std. Err.	[95% Conf. Interval]
q11	5.607843	.1394423	5.331227 5.884459



**Figure 16.** Inwieweit werden Ihre Entscheidungen von Informationen beeinflusst, die von Umweltschützern bereitgestellt werden?

*How much are your decisions influenced by the information provided by activist environmental groups?*

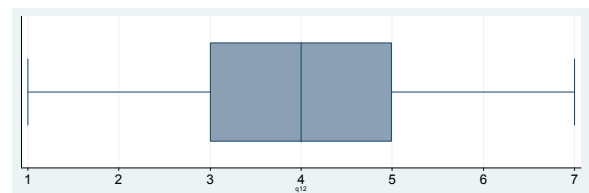


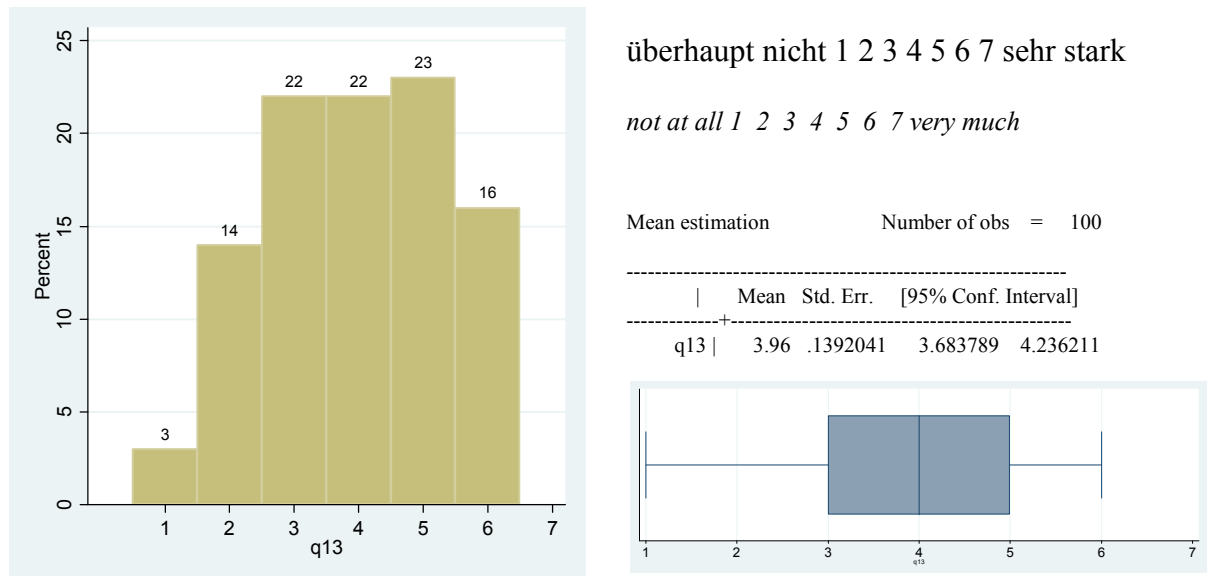
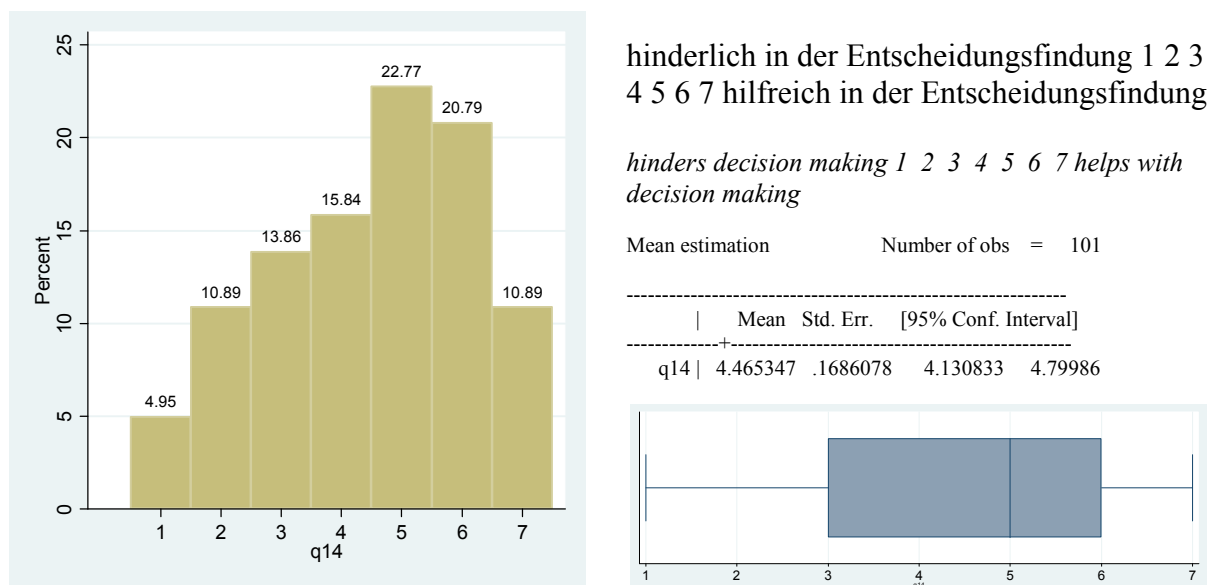
überhaupt nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

Mean estimation                      Number of obs = 101

	Mean	Std. Err.	[95% Conf. Interval]
q12	4.019802	.1414075	3.739254 4.30035

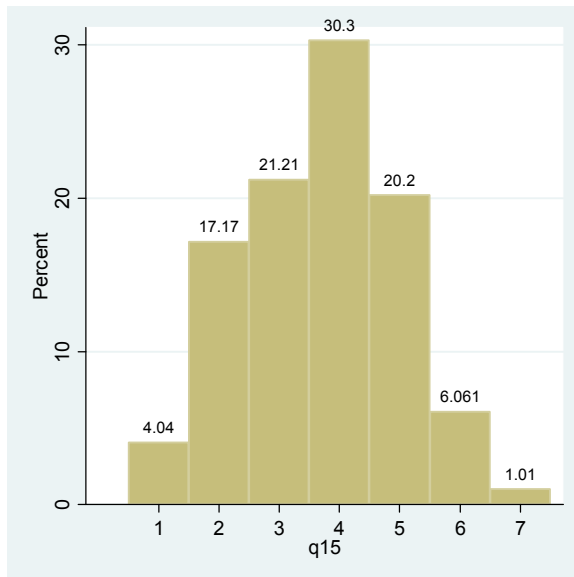


**Figure 17.** Inwieweit werden Ihre Entscheidungen von der öffentlichen Meinung beeinflusst?*How much are you decisions influenced by the opinion of the general public?***Figure 18.** Wenn Sie politische Aktivitäten erarbeiten oder umsetzen, wie schätzen Sie dabei die Kommunikation mit öffentlichen Akteuren ein?*When designing or attempting to implement policy, communications with public stakeholders*



**Figure 19.** Wie schätzen Sie den öffentlichen Input zu Klimapolitik und Anpassungsmaßnahmen an den Klimawandel in Ihrem Aufgabenbereich ein?

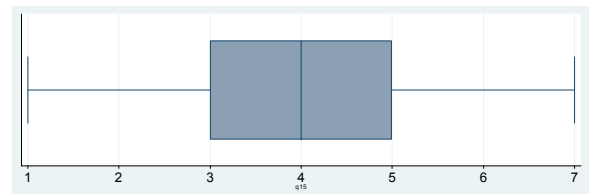
*Input from the public in your jurisdiction, concerning adaptation measures and policies, is*



nicht genug 1 2 3 4 5 6 7 zu viel  
 not enough 1 2 3 4 5 6 7 too much

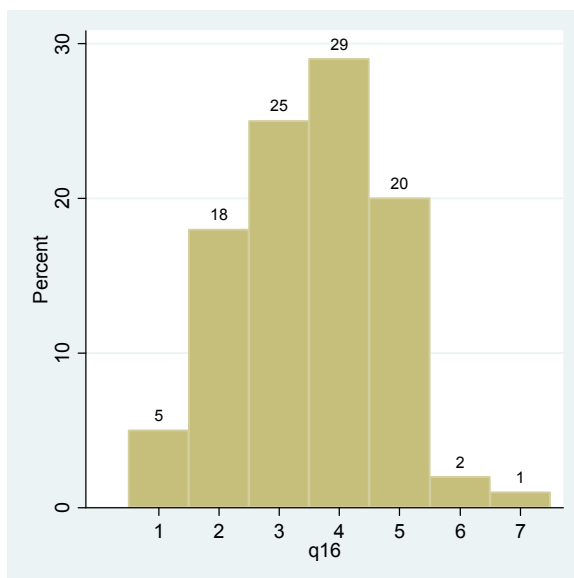
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]
q15	3.676768	.1314558	3.415898 3.937637



**Figure 20.** Wie schätzen Sie den wissenschaftlichen Input zu Klimapolitik und Anpassungsmaßnahmen an den Klimawandel in Ihrem Aufgabenbereich ein?

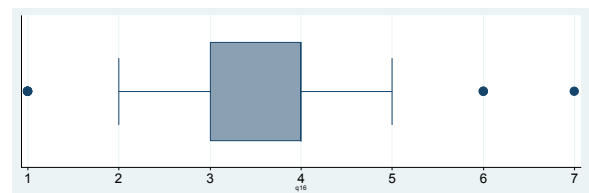
*Input from science in your jurisdiction, concerning adaptation measures and policies, is*



nicht genug 1 2 3 4 5 6 7 zu viel  
 not enough 1 2 3 4 5 6 7 too much

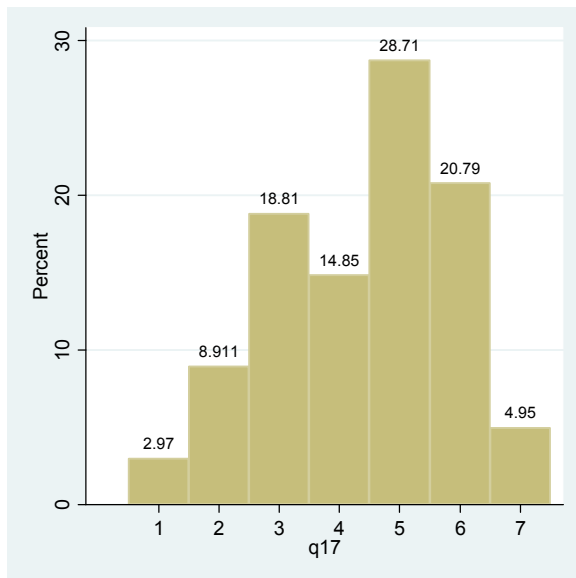
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q16	3.51	.1251222	3.26173 3.75827



**Figure 21.** Wie stark wirken sich wissenschaftliche Ergebnisse auf Ihre Entscheidungen aus?

*How much are your decisions influenced by scientific findings?*

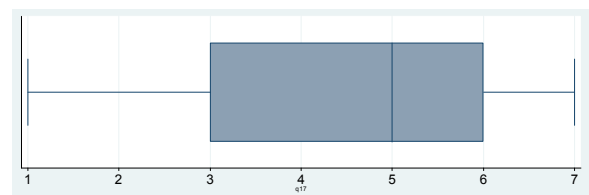


überhaupt nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

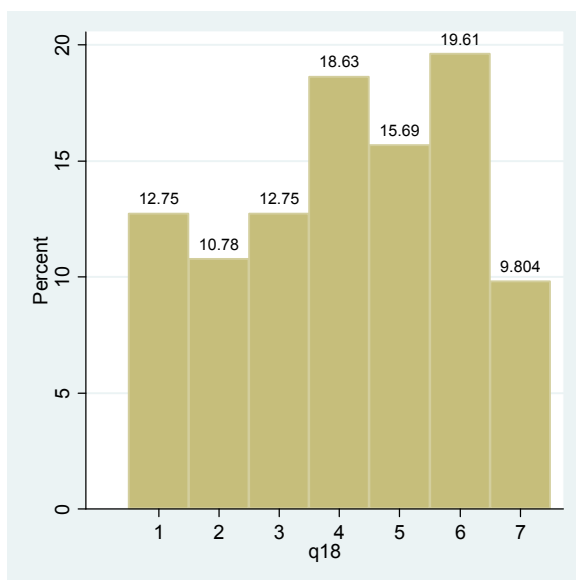
Mean estimation                      Number of obs = 101

	Mean	Std. Err.	[95% Conf. Interval]	
q17	4.39604	.1489762	4.100475	4.691604



**Figure 22.** Auf was sollten sich Politik und Handlung im Bereich Klimawandel und Meeresspiegelanstieg konzentrieren?

*Concerning climate change and sea level rise, policy and action should focus on*

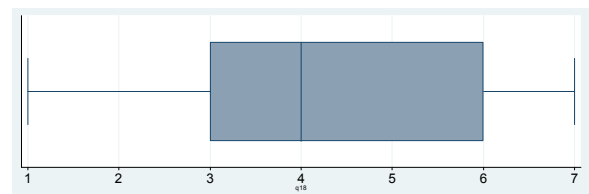


Schadensminderung 1 2 3 4 5 6 7 Anpassung

*mitigation 1 2 3 4 5 6 7 adaptation*

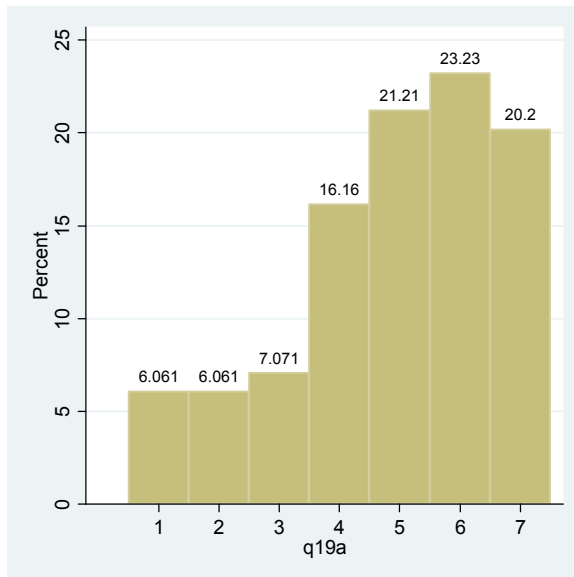
Mean estimation                      Number of obs = 102

	Mean	Std. Err.	[95% Conf. Interval]	
q18	4.117647	.186568	3.747546	4.487748



**Figure 23.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen? Fernsehen

*How much do you use the following sources of information in shaping adaptation decisions and policy? Television*

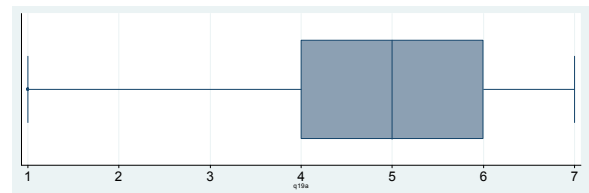


gar nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

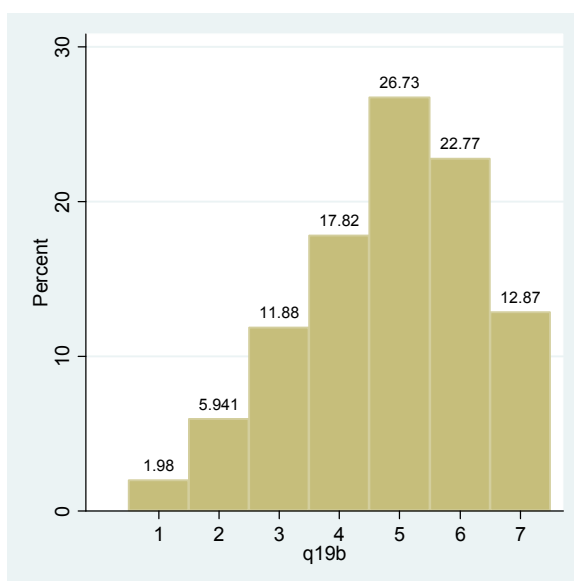
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q19a	4.909091	.1747224	4.56236	5.255822



**Figure 24.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen? Zeitungen

*How much do you use the following sources of information in shaping adaptation decisions and policy? Newspapers*

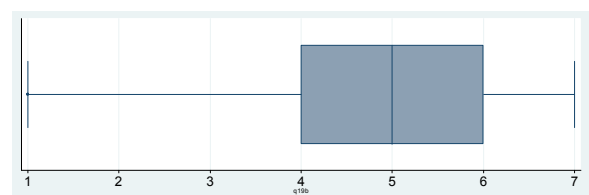


gar nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

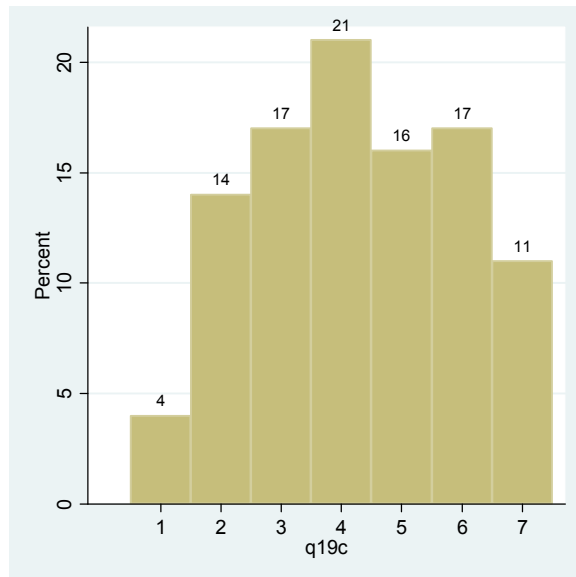
Mean estimation                      Number of obs = 101

	Mean	Std. Err.	[95% Conf. Interval]	
q19b	4.811881	.1487325	4.5168	5.106962



**Figure 25.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen?  
Radio

*How much do you use the following sources of information in shaping adaptation decisions and policy? Radio*

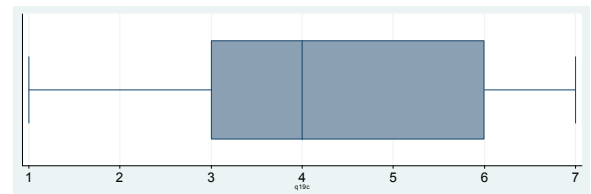


gar nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

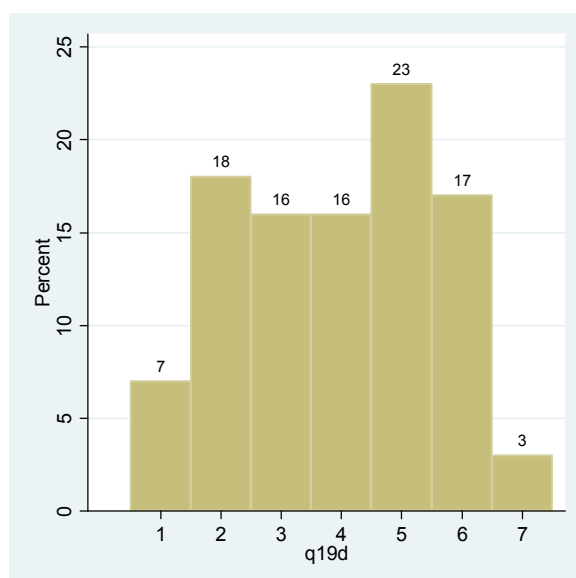
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q19c	4.26	.1697413	3.923196 4.596804



**Figure 26.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen?  
Bücher

*How much do you use the following sources of information in shaping adaptation decisions and policy? Books*

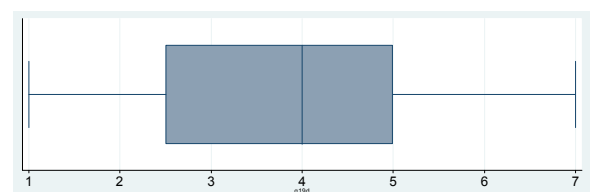


gar nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

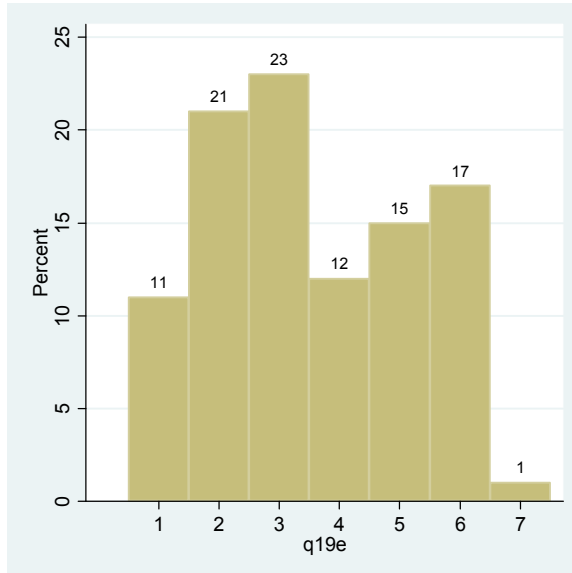
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q19d	3.93	.1646883	3.603223 4.256777



**Figure 27.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen?  
öffentliche wissenschaftliche Vorträge

*How much do you use the following sources of information in shaping adaptation decisions and policy? public scientific talks*

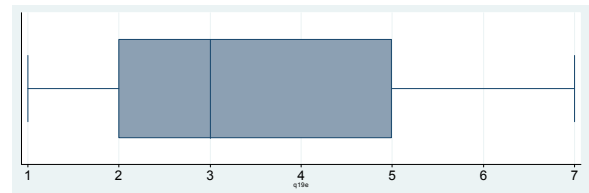


gar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

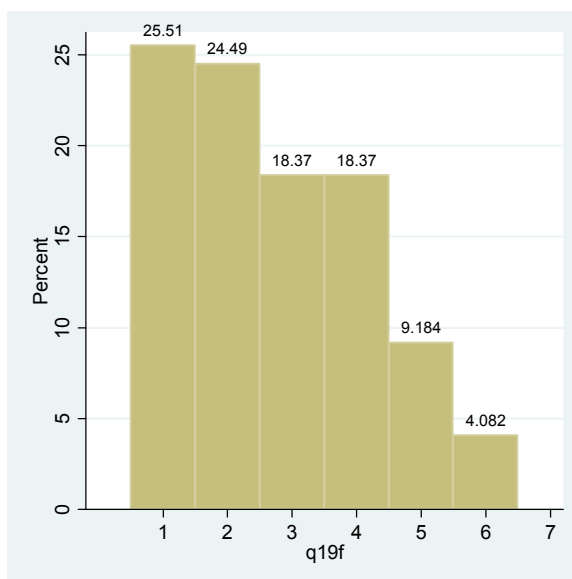
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]	
q19e	3.54	.1672233	3.208193	3.871807



**Figure 28.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen?  
Ausstellungen und Museen

*How much do you use the following sources of information in shaping adaptation decisions and policy? Exhibitions and museums*

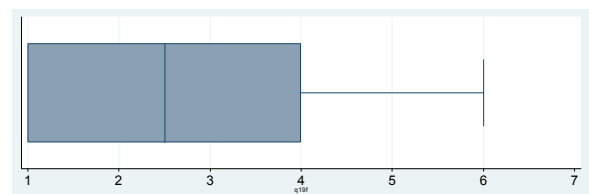


gar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

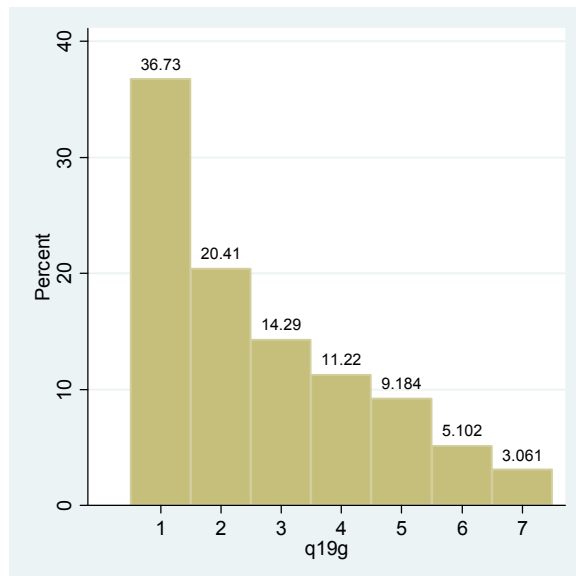
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]	
q19f	2.734694	.1476024	2.441744	3.027644



**Figure 29.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen? Persönlicher Kontakt zu Wissenschaftlern

*How much do you use the following sources of information in shaping adaptation decisions and policy? Personal contact with scientists?*

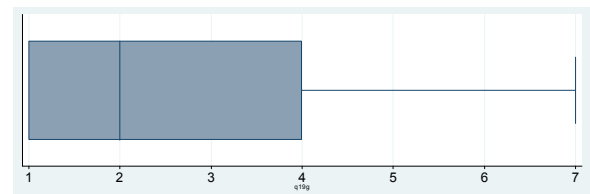


gar nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

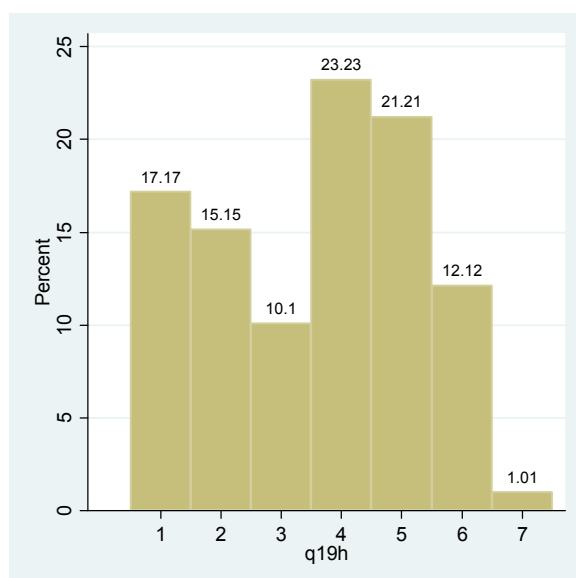
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]
q19g	2.632653	.1748961	2.285533 2.979773



**Figure 30.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen? Wissenschaftliche Publikationen

*How much do you use the following sources of information in shaping adaptation decisions and policy? Scientific journals*

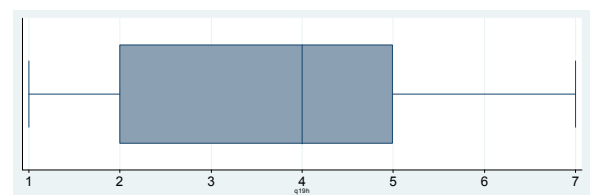


gar nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

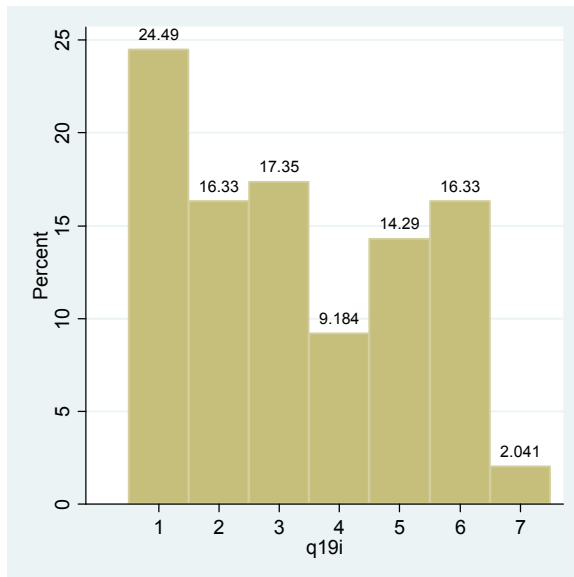
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]
q19h	3.565657	.1705857	3.227135 3.904178



**Figure 31.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen? Treffen und Konferenzen

*How much do you use the following sources of information in shaping adaptation decisions and policy? Meetings and conferences*

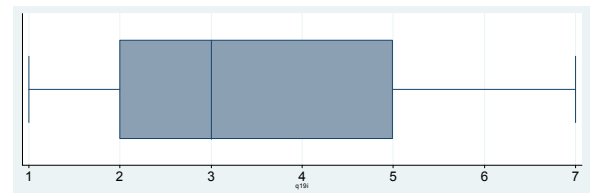


gar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

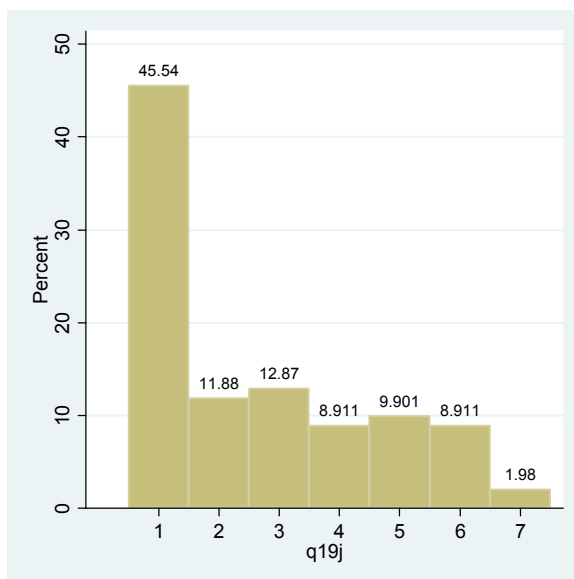
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]	
q19i	3.295918	.1903462	2.918134	3.673703



**Figure 32.** Wie stark nutzen Sie die folgenden Informationsquellen, um bezüglich der Anpassung an den Klimawandel zu Entscheidungen und politischen Strategien zu gelangen? Interne Arbeitsgruppen

*How much do you use the following sources of information in shaping adaptation decisions and policy? Internal working groups*

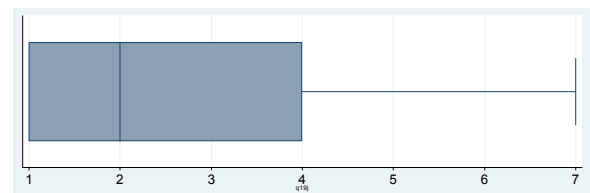


gar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

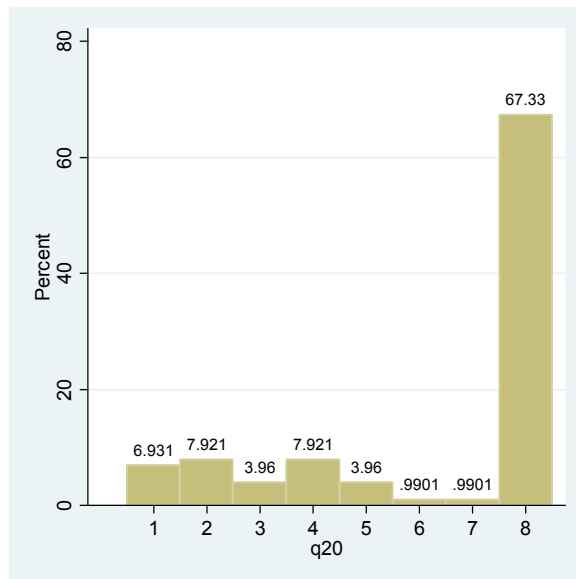
Mean estimation                      Number of obs = 101

	Mean	Std. Err.	[95% Conf. Interval]	
q19j	2.60396	.1840572	2.238796	2.969125



**Figure 33.** 2008 wurde ein Bericht veröffentlicht, der sich mit vielen klimarelevanten Themen im Ostseeraum auseinandersetzt. Der Bericht heißt "Assessment of Climate Change for the Baltic Sea Basin" und wird häufig schlicht als BACC-Bericht bezeichnet. Wie hilfreich ist der BACC-Bericht für Sie in Ihrer Arbeit?

*In 2008 a report was published by BALTEX. The report was a comprehensive assessment of things related to climate change as they pertain to the Baltic region. The report was called 'Assessment of Climate Change for the Baltic Sea Basin and is often referred to simply as the BACC Report. For your work the BACC Report is*



überhaupt keine Hilfe 1 2 3 4 5 6 7 sehr  
hilfreich

8 Ich kenne den BACC-Bericht nicht

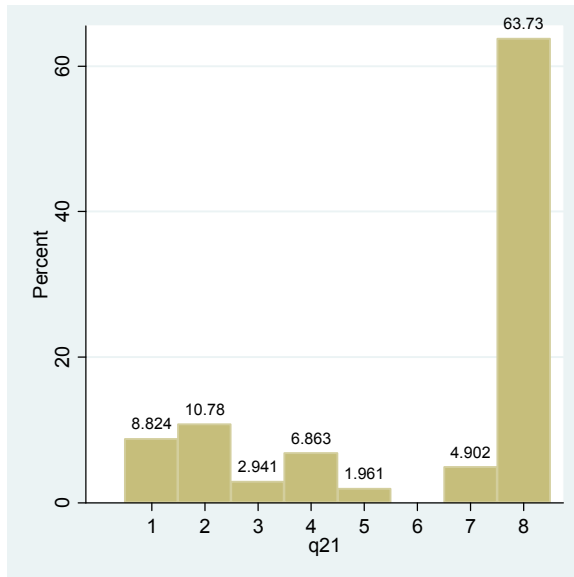
*not useful at all 1 2 3 4 5 6 7 very useful*

*8 I am not aware of the BACC Report*



**Figure 34.** Das Norddeutsche Klimabüro wurde 2008 eröffnet, um regionale Klimainformationen verständlich aufzubereiten und regionale Akteure zu informieren. Wie hilfreich ist das Norddeutsche Klimabüro für Sie in Ihrer Arbeit?

*The Norddeutsche Klimabüro opened in 2008 with the purpose of providing understandable regional climate information for regional stakeholders in northern Germany. For your work, the Norddeutsche Klimabüro is*



überhaupt keine Hilfe 1 2 3 4 5 6 7 sehr hilfreich

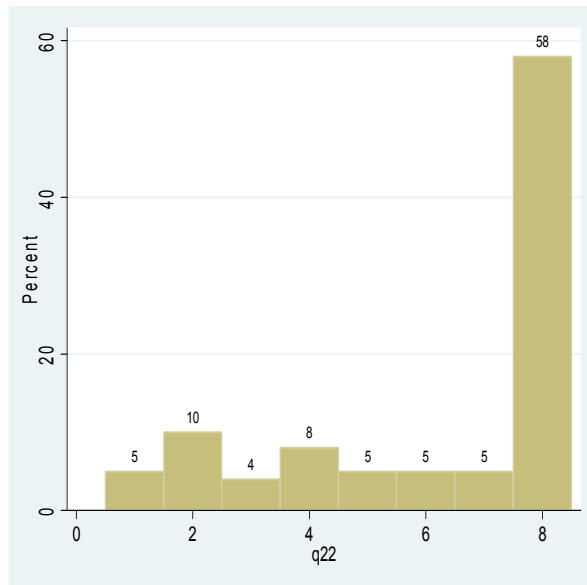
8 Ich kenne den Norddeutsche Klimabüro

not useful at all 1 2 3 4 5 6 7 very useful

8 I am not aware of the Norddeutsche Klimabüro

**Figure 35.** Der Norddeutsche Klimaatlas ist im Internet zugänglich. Auf der Webseite steht: 'Mit dem Norddeutschen Klimaatlas möchten wir Sie über den aktuellen Forschungsstand zum möglichen künftigen Klimawandel in Norddeutschland informieren'. Wie hilfreich ist der Norddeutsche Klimaatlas für Sie in Ihrer Arbeit?

*The Norddeutscher Klimaatlas is available on the internet. The website states 'Mit dem Norddeutschen Klimaatlas möchten wir Sie über den aktuellen Forschungsstand zum möglichen künftigen Klimawandel in Norddeutschland informieren. For your work, the Norddeutscher Klimaatlas is*



überhaupt keine Hilfe 1 2 3 4 5 6 7 sehr hilfreich

8 = Ich kenne den Norddeutschen Klimaatlas nicht

no help at all 1 2 3 4 5 6 7 very helpful

8 = I am not aware of the Norddeutschen Klimaatlas

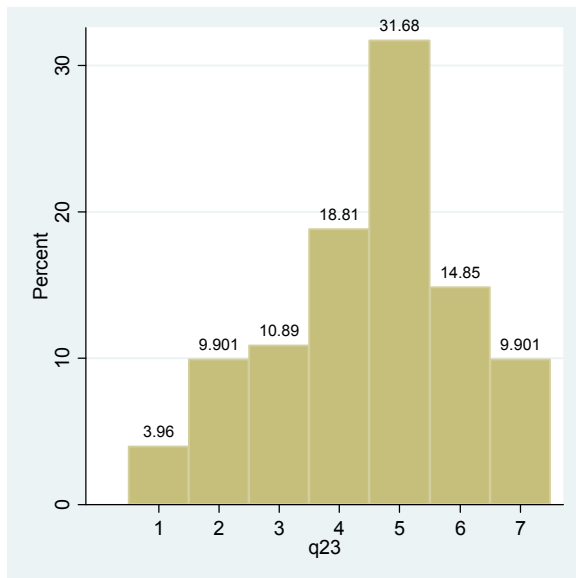
## **Impacts and Adaptation Strategies**

**Als nächstes würden wir Sie gerne zu Umweltveränderungen und Anpassungsmaßnahmen in ihrer Region befragen.**

*We would now like to ask you about environmental impacts and adaptation measures in the area where you live.*

**Figure 36.** Wie notwendig, glauben Sie, sind Anpassungsmaßnahmen in Ihrer Region?

*In your region, do you think adaptation measures are*



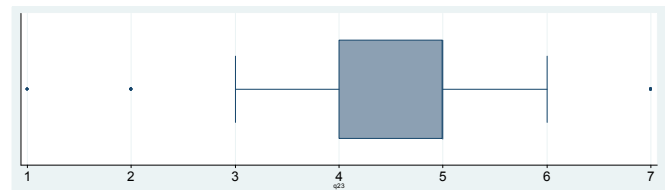
gar nicht notwendig 1 2 3 4 5 6 7 sehr notwendig

*not really necessary at all 1 2 3 4 5 6 7 very necessary*

Mean estimation                      Number of obs = 101

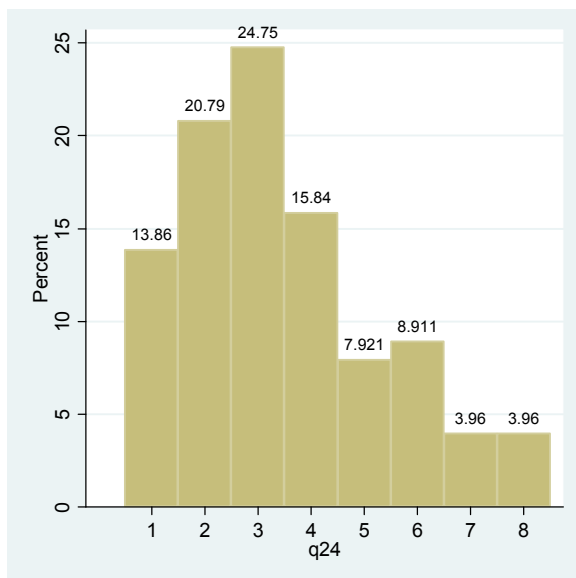
---

	Mean	Std. Err.	[95% Conf. Interval]	
q23	4.485149	.1558203	4.176005	4.794292



**Figure 37.** Ab welchem Zeitpunkt, glauben Sie, müssen Anpassungsmaßnahmen in Ihrer Region durchgeführt werden?

*In your region, do you think adaptation measures must be taken*



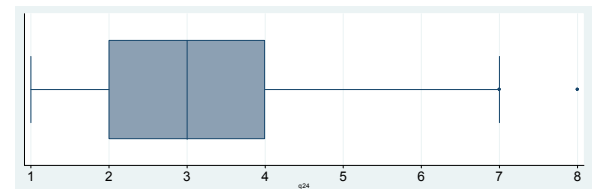
sofort 1 2 3 4 5 6 7 irgendwann in der Zukunft 8 Anpassungsmaßnahmen sind nicht nötig

*adaptation measures are not necessary immediately 1 2 3 4 5 6 7 sometime in the future. 8 adaptation measures are not necessary*

Mean estimation                      Number of obs = 101

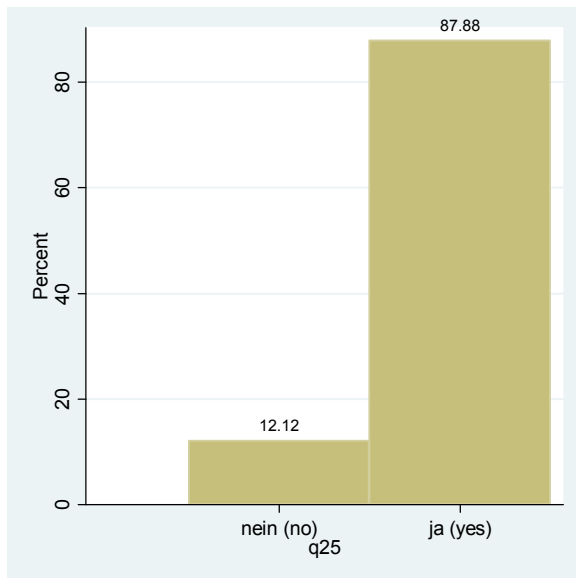
---

	Mean	Std. Err.	[95% Conf. Interval]	
q24	3.455446	.1859015	3.086622	3.824269



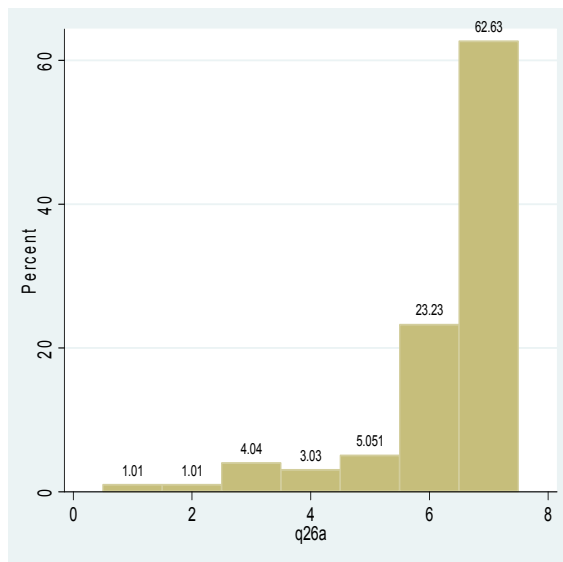
**Figure 38.** Sind Anpassungsmaßnahmen nötig?

*Are adaptation measures necessary?*



**Figure 39.** Angenommen, Anpassungsmaßnahmen sind notwendig: Wie stark wird deren Umsetzung von den folgenden Aspekten behindert? Kosten

*In your opinion, if adaptation measures are necessary, how much do the following concerns prevent adequate adaptation measures from being put into place? Costs*

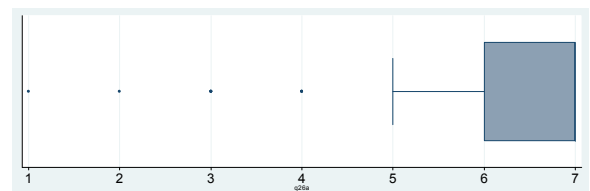


gar nicht 1 2 3 4 5 6 7 sehr stark

*not at all 1 2 3 4 5 6 7 very much*

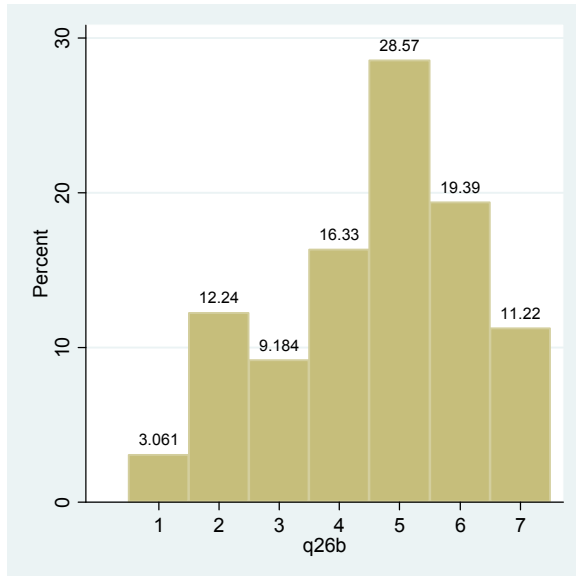
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]
q26a	6.30303	.1230534	6.058835 6.547226



**Figure 40.** Angenommen, Anpassungsmaßnahmen sind notwendig: Wie stark wird deren Umsetzung von den folgenden Aspekten behindert? Unsicherheit, ob es Veränderungen geben wird

*In your opinion, if adaptation measures are necessary, how much do the following concerns prevent adequate adaptation measures from being put into place? Lack of certainty if impacts will occur*

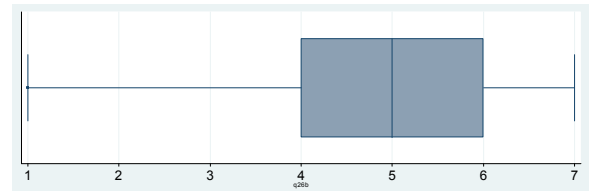


gar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

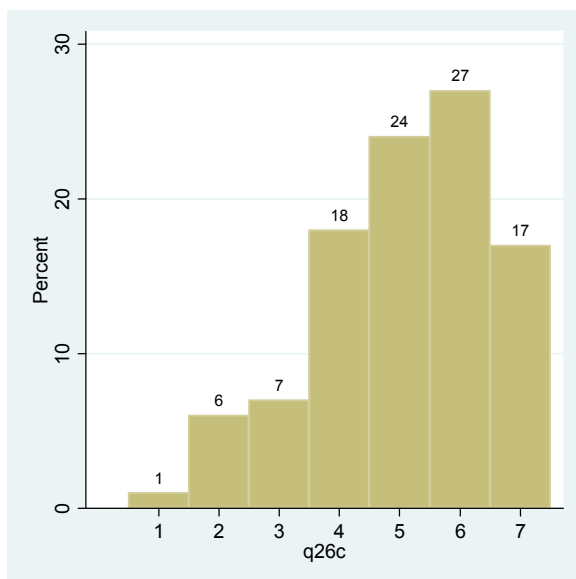
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]
q26b	4.581633	.1634132	4.257303 4.905963



**Figure 41.** Angenommen, Anpassungsmaßnahmen sind notwendig: Wie stark wird deren Umsetzung von den folgenden Aspekten behindert? Mangelndes Wissen über die Art der Veränderungen

*In your opinion, if adaptation measures are necessary, how much do the following concerns prevent adequate adaptation measures from being put into place? Lack of knowledge about impacts*

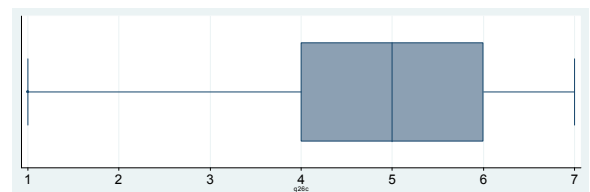


gar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

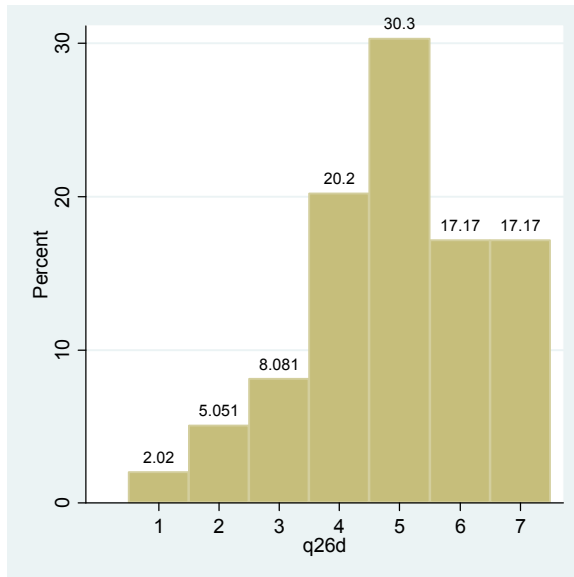
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q26c	5.07	.1458206	4.78066 5.35934



**Figure 42.** Angenommen, Anpassungsmaßnahmen sind notwendig: Wie stark wird deren Umsetzung von den folgenden Aspekten behindert? Mangelnde interregionale Zusammenarbeit

*In your opinion, if adaptation measures are necessary, how much do the following concerns prevent adequate adaptation measures from being put into place? Lack of interregional cooperation*

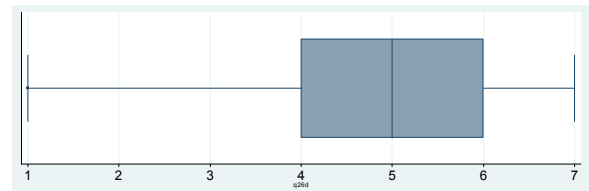


ar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

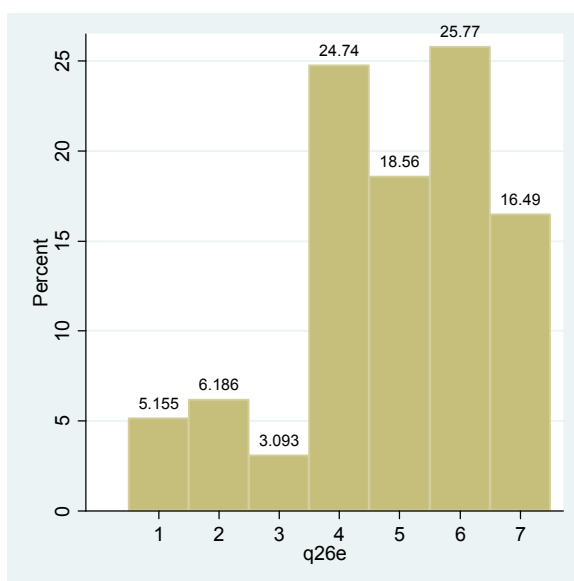
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q26d	4.919192	.1482925	4.62491	5.213474



**Figure 43.** Angenommen, Anpassungsmaßnahmen sind notwendig: Wie stark wird deren Umsetzung von den folgenden Aspekten behindert? Andere Themen sind wichtiger

*In your opinion, if adaptation measures are necessary, how much do the following concerns prevent adequate adaptation measures from being put into place? Priority of other issues*

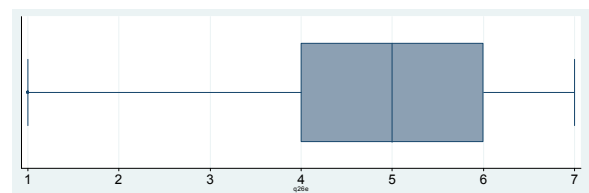


ar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

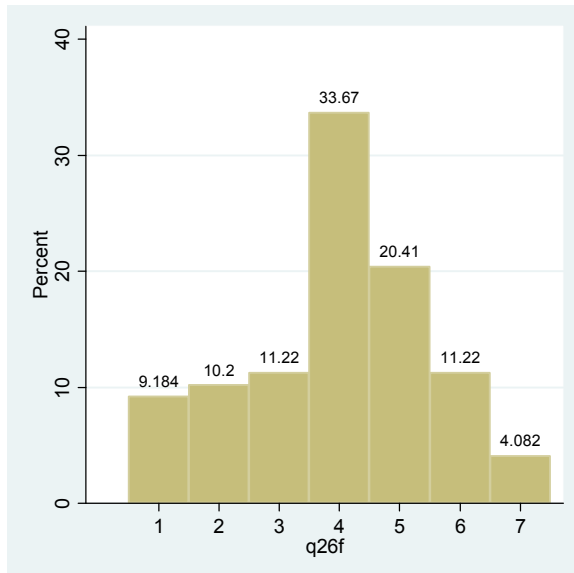
Mean estimation                      Number of obs = 97

	Mean	Std. Err.	[95% Conf. Interval]	
q26e	4.886598	.1663719	4.556352	5.216844



**Figure 44.** Angenommen, Anpassungsmaßnahmen sind notwendig: Wie stark wird deren Umsetzung von den folgenden Aspekten behindert? Mangel an nutzbarer Technologie

*In your opinion, if adaptation measures are necessary, how much do the following concerns prevent adequate adaptation measures from being put into place? Lack of useable technology*

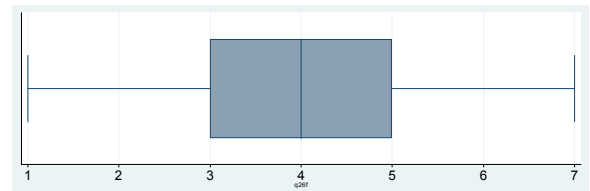


gar nicht 1 2 3 4 5 6 7 sehr stark

not at all 1 2 3 4 5 6 7 very much

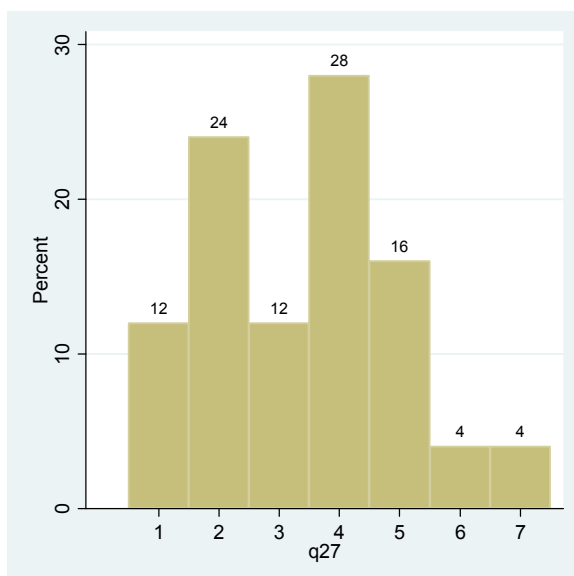
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]
q26f	3.959184	.1561681	3.649233 4.269134



**Figure 45.** Wie bewerten Sie die politischen Leitlinien und Programme, die Ihrer Region eine nachhaltige Zukunft sichern sollen?

*The programs and policies put into place to maintain a sustainable future for the region in which you live are*

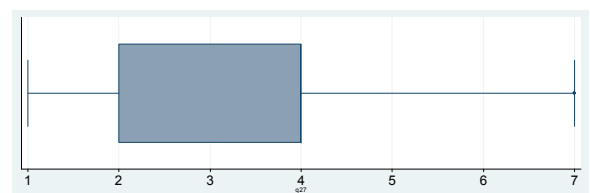


sehr unzureichend 1 2 3 4 5 6 7 vollkommen ausreichend

very inadequate 1 2 3 4 5 6 7 very adequate

Mean estimation                      Number of obs = 100

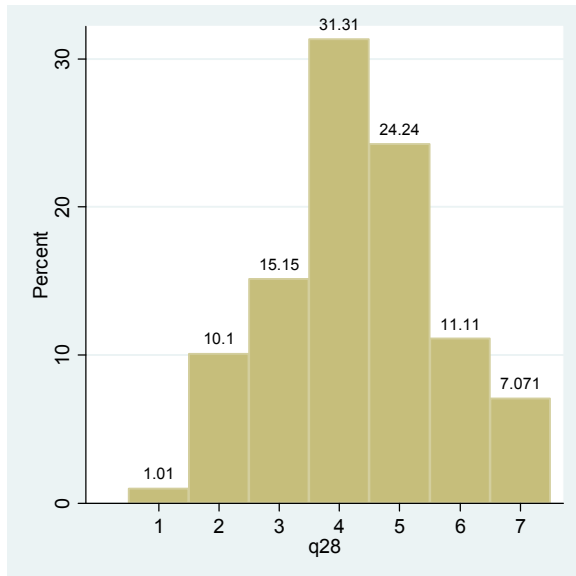
	Mean	Std. Err.	[95% Conf. Interval]
q27	3.4	.1582735	3.085951 3.714049





**Figure 46.** Ohne angemessene Maßnahmen ist das Risiko, das von Umweltfaktoren für Leben und Gesundheit der Menschen in Ihrer Region ausgeht:

*Without adequate measures, the risk to lives and health of people from environmental factors in your region is*

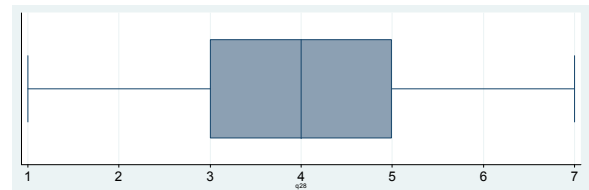


nicht existent 1 2 3 4 5 6 7 sehr hoch

none 1 2 3 4 5 6 7 very high

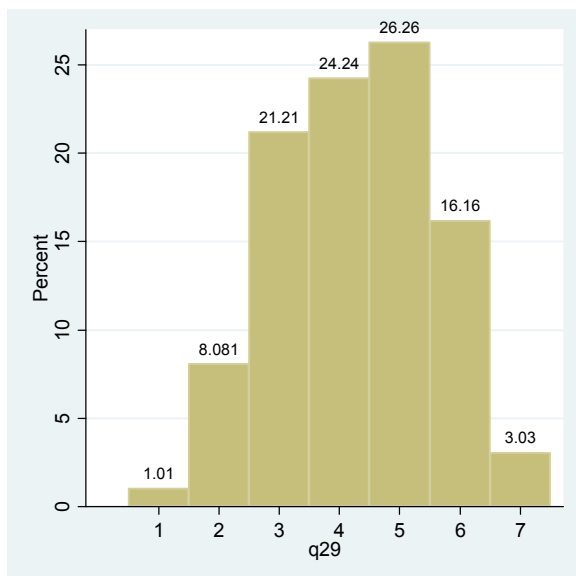
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q28	4.292929	.1386483	4.017786	4.568072



**Figure 47.** Ohne angemessene Maßnahmen ist das wirtschaftliche Risiko, das in Ihrer Region von Umweltfaktoren ausgeht:

*Without adequate measures, the risk to the economy from environmental factors in your region is*

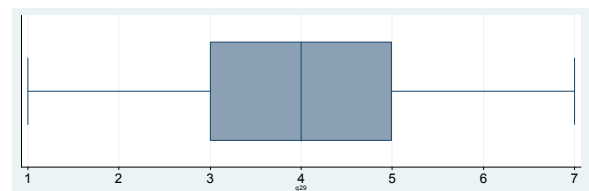


nicht existent 1 2 3 4 5 6 7 sehr hoch

none 1 2 3 4 5 6 7 very high

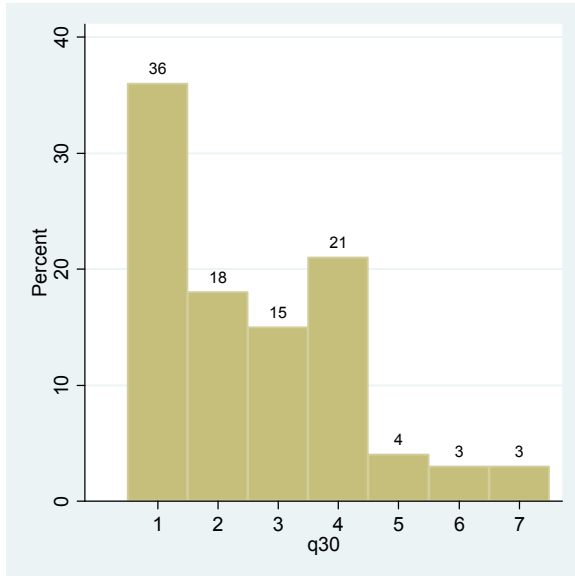
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q29	4.272727	.1330069	4.00878	4.536675



**Figure 48.** Das Konzept des "Integrierten Küstenzonenmanagements" ist in letzter Zeit viel diskutiert worden. Integriertes Küstenzonenmanagement wird oft als eine gemeinschaftliche Aufgabe beschrieben, die eine Abstimmung zwischen Wissenschaft, politischen Entscheidungsträgern und öffentlichen Akteursgruppen erfordert. In Ihrer Region ist integriertes Küstenzonenmanagement:

*Recently there has been much talk of, and research undertaken, pertaining to the concept of 'integrated coastal zone management'. It is claimed that integrated coastal zone management should involve the coordinated efforts of science, policy decision makers and public stakeholder groups. In your region, integrated coastal zone management is*

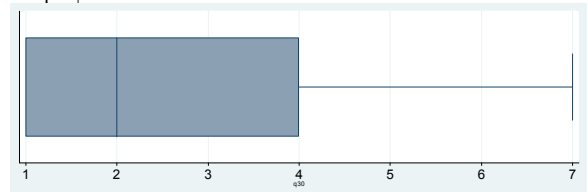


nicht existent 1 2 3 4 5 6 7 voll in die Entscheidungsfindung integriert

*nonexistent 1 2 3 4 5 6 7 fully incorporated into decision making*

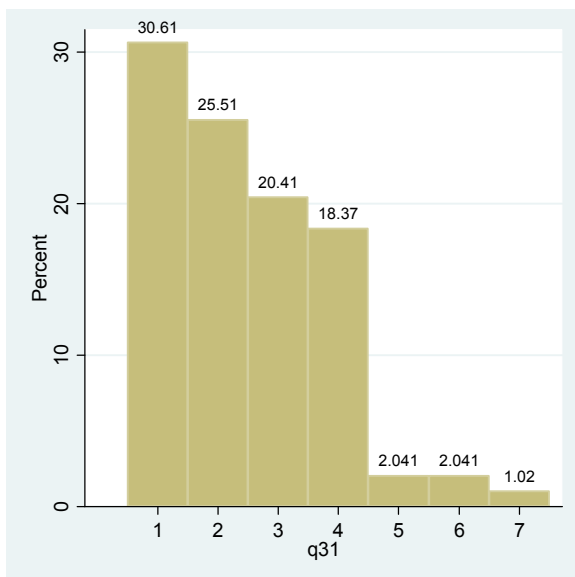
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q30	2.6	.161433	2.279682 2.920318



**Figure 49.** Angenommen Anpassungsstrategien sind notwendig: Welche Ausrichtung sollten diese Ihrer Ansicht nach haben?

*In your opinion, adaptive strategies, should they be necessary, should be*

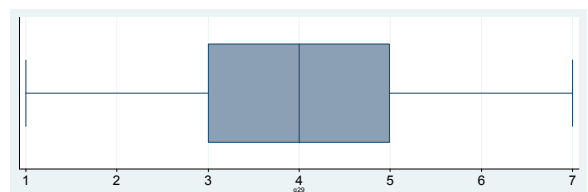


pro-aktiv (vor der Auswirkung) 1 2 3 4 5 6 7  
reaktiv (nach der Auswirkung)

*proactive (before the impact) 1 2 3 4 5 6 7  
reactive (after the impact)*

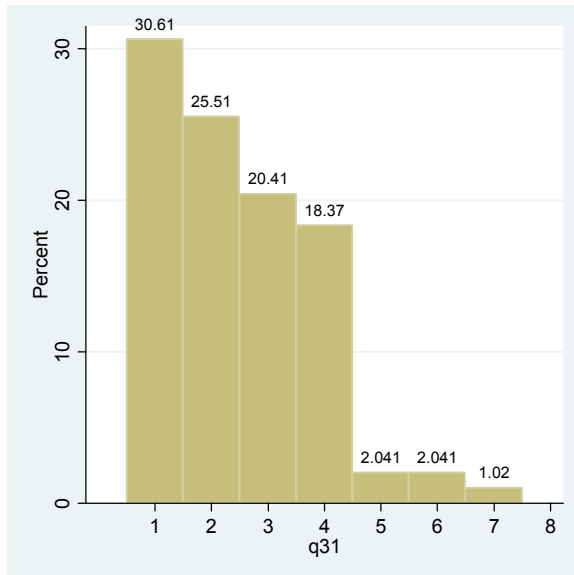
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]
q31	2.459184	.1361986	2.188867 2.7295



**Figure 50.** Wie wichtig ist die Zusammenarbeit mit anderen Regionen bei der Entwicklung von eigenen regionalen Anpassungsstrategien?

*How important is it to cooperate with other regions in trying to establish adaptation strategies, if they are necessary, for your regions*

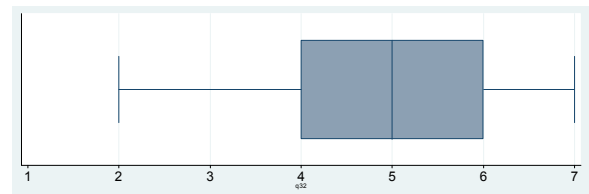


gar nicht wichtig 1 2 3 4 5 6 7 sehr wichtig  
Es sind keine Anpassungsmaßnahmen  
notwendig 8

*not important at all 1 2 3 4 5 6 7 very important  
adaptation measures are not necessary 8*

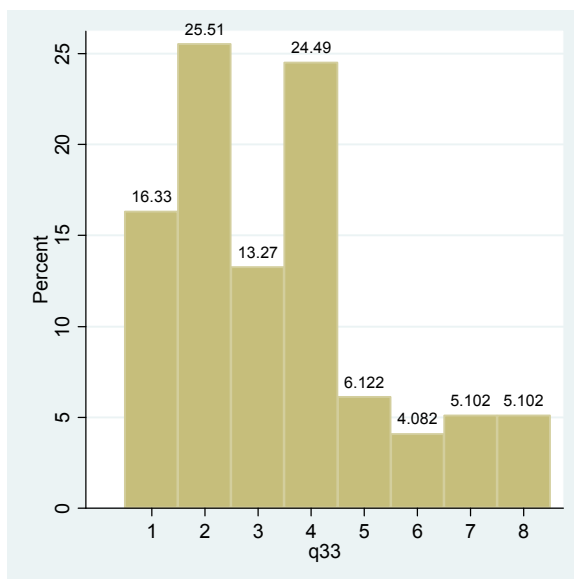
Mean estimation (q32 < 8) Number of obs = 92

	Mean	Std. Err.	[95% Conf. Interval]
q32	5.184783	.1432752	4.900184 5.469381



**Figure 51.** Wie würden Sie die Zusammenarbeit mit anderen Regionen bei der Entwicklung von eigenen regionalen Anpassungsstrategien einschätzen?

*The amount of cooperation with other regions concerning adaptation strategies in your region is*

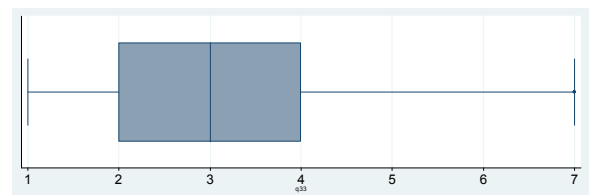


ungenügend 1 2 3 4 5 6 7 zu viel  
Es sind keine Anpassungsmaßnahmen  
notwendig 8

*not enough 1 2 3 4 5 6 7 too much  
adaptation measures are not necessary 8*

Mean estimation (q33 < 8) Number of obs = 93

	Mean	Std. Err.	[95% Conf. Interval]
q33	3.11828	.1715163	2.777633 3.458926





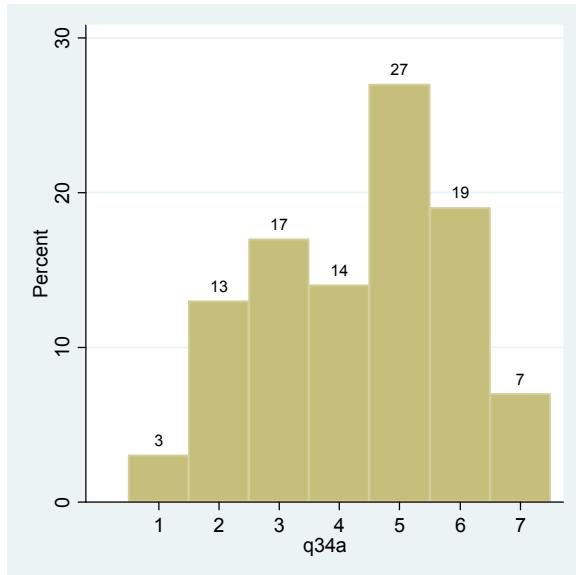
## **Perceptions of Environmental Threat**

**Als nächstes würden wir gerne wissen, wie Sie spezifische umweltbezogene Risiken in Ihrer Umgebung einschätzen.**

*We would now like to ask your opinion about specific environmental threats to the area in which you live*

**Figure 52.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): wärmere Temperaturen im Sommer

*If they occurred, how would the following environmental changes have an impact in your region? warmer summer temperatures*

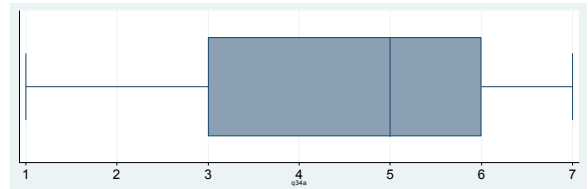


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

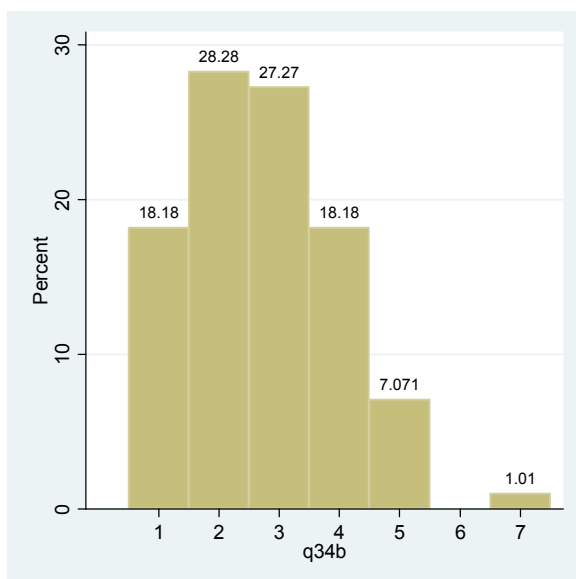
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]
q34a	4.34	.1590502	4.02441 4.65559



**Figure 53.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): kühlere Temperaturen im Sommer

*If they occurred, how would the following environmental changes have an impact in your region? cooler summer temperatures*

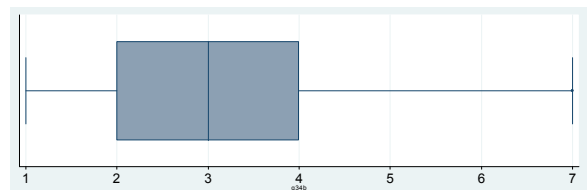


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

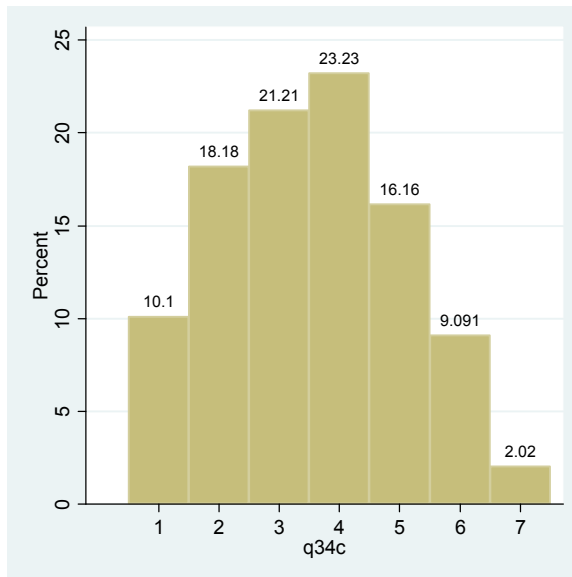
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]
q34b	2.717172	.1260212	2.467087 2.967257



**Figure 54.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): wärmere Temperaturen im Winter

*If they occurred, how would the following environmental changes have an impact in your region? warmer winter temperatures*

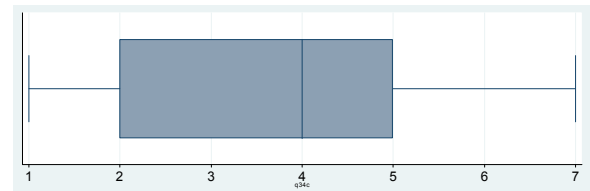


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

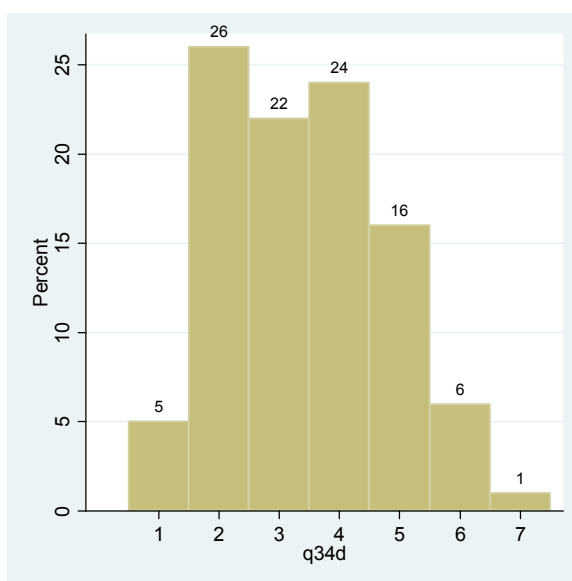
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q34c	3.525253	.1541987	3.21925	3.831255



**Figure 55.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): kühlere Temperaturen im Winter

*If they occurred, how would the following environmental changes have an impact in your region? cooler winter temperatures*

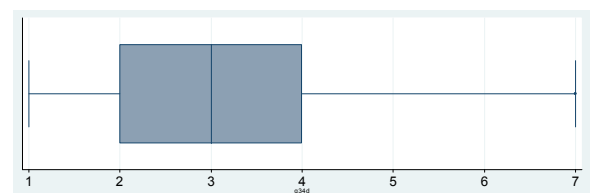


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

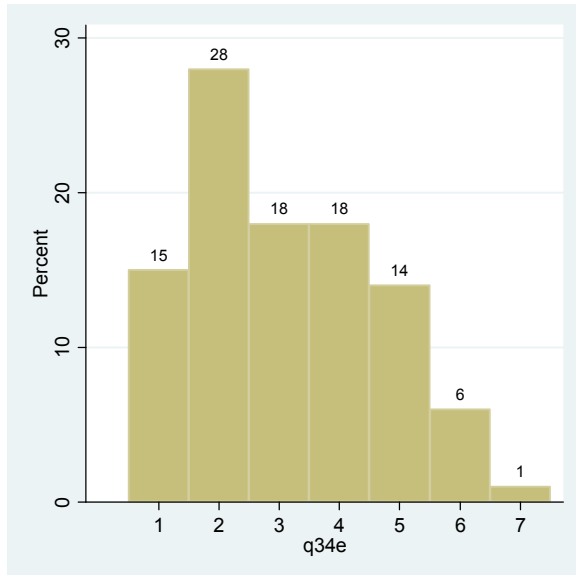
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]	
q34d	3.42	.1372015	3.147763	3.692237



**Figure 56.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): mehr Regen im Sommer

*If they occurred, how would the following environmental changes have an impact your region? more rain in summer*

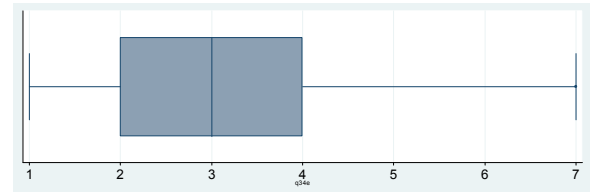


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

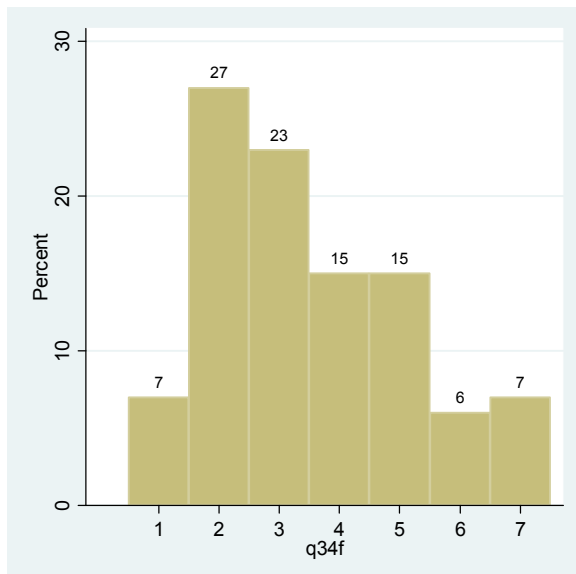
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]	
q34e	3.1	.1527525	2.796906	3.403094



**Figure 57.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): weniger Regen im Sommer

*If they occurred, how would the following environmental changes have an impact in your region? less rain in summer*

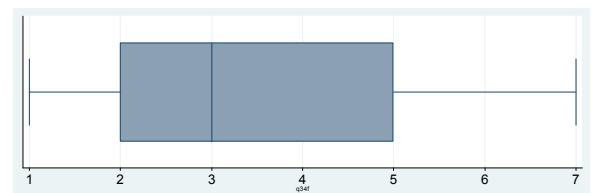


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

Mean estimation                      Number of obs = 100

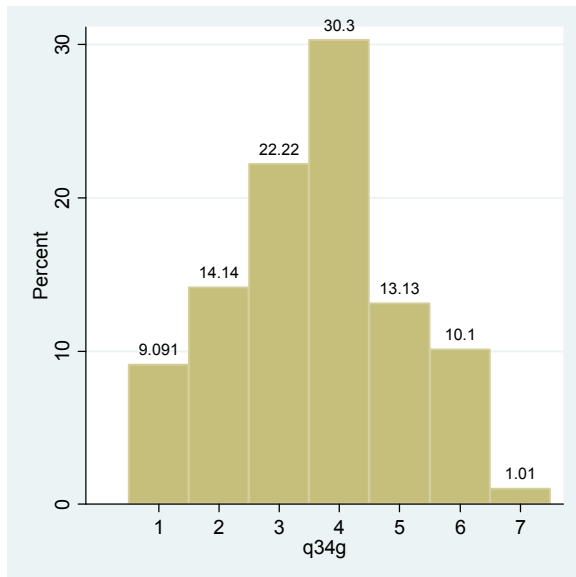
	Mean	Std. Err.	[95% Conf. Interval]	
q34f	3.5	.1654501	3.171711	3.828289





**Figure 58.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): mehr Regen im Winter

*If they occurred, how would the following environmental changes have an impact in your region? more rain in winter*

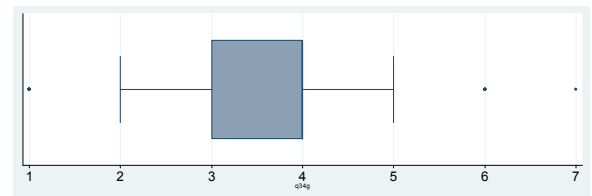


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

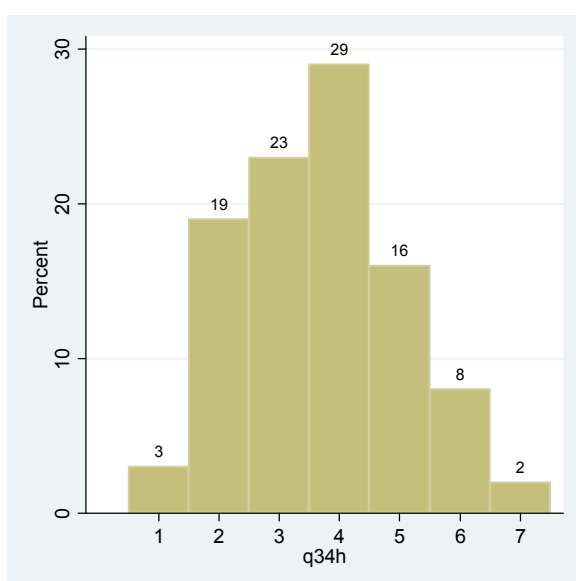
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q34g	3.585859	.1450127	3.298086	3.873632



**Figure 59.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): weniger Regen im Winter

*If they occurred, how would the following environmental changes have an impact in your region? less rain in winter*

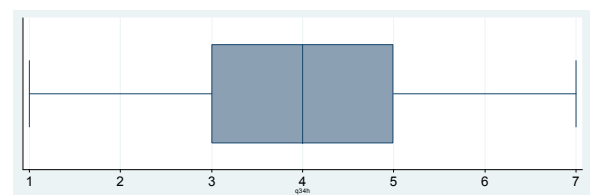


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

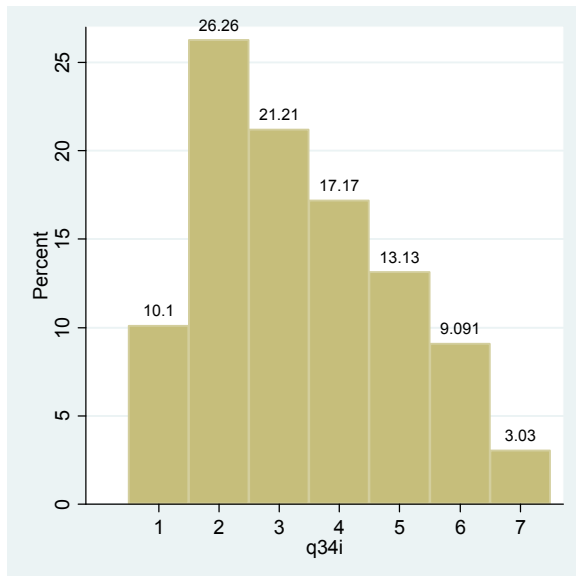
Mean estimation                      Number of obs = 100

	Mean	Std. Err.	[95% Conf. Interval]	
q34h	3.68	.1354976	3.411143	3.948857



**Figure 60.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): mehr Schnee

*If they occurred, how would the following environmental changes have an impact in your region? more snow*

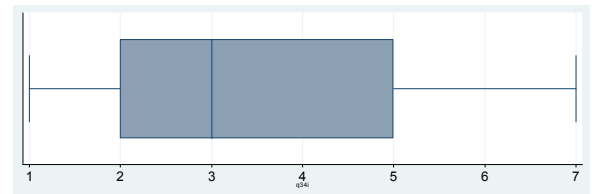


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

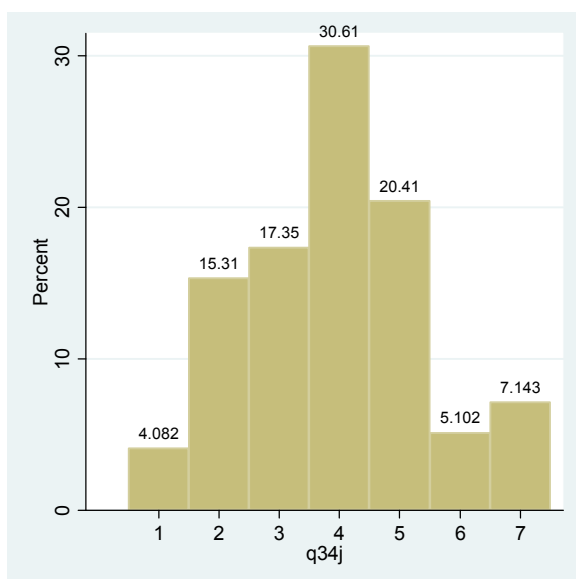
Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]	
q34i	3.363636	.1608154	3.044503	3.682769



**Figure 61.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): weniger Schnee

*If they occurred, how would the following environmental changes have an impact in your region? less snow*

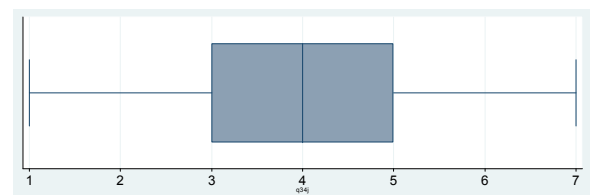


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

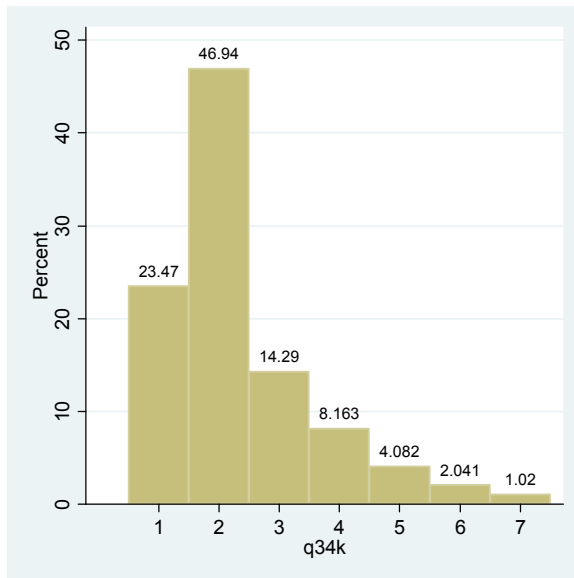
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]	
q34j	3.918367	.1505118	3.619643	4.217092



**Figure 62.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): stärkerer Wind

*If they occurred, how would the following environmental changes have an impact in your region? stronger winds*

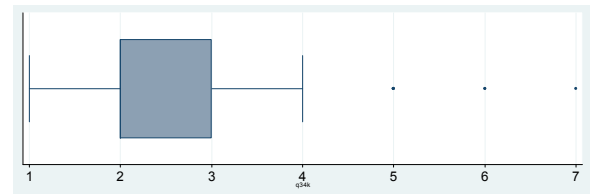


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

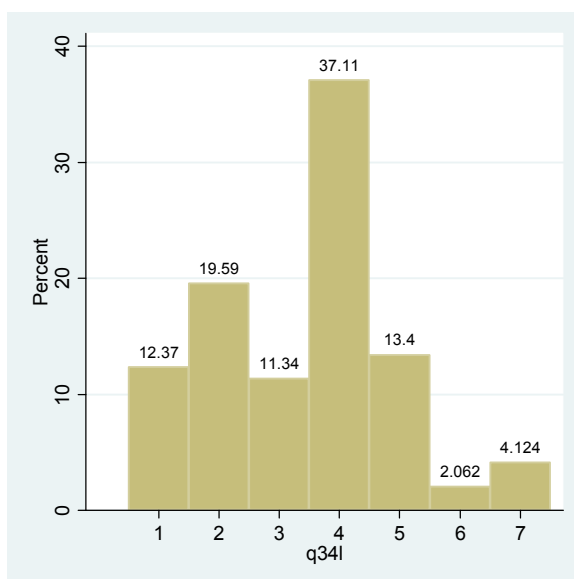
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]	
q34k	2.326531	.1262643	2.075931	2.57713



**Figure 63.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): mehr Meereis

*If they occurred, how would the following environmental changes have an impact in your region? more sea ice*

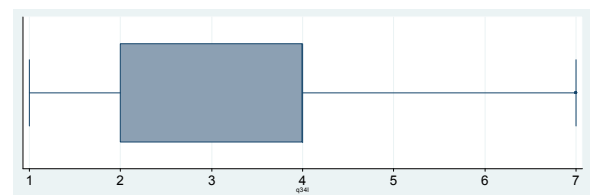


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

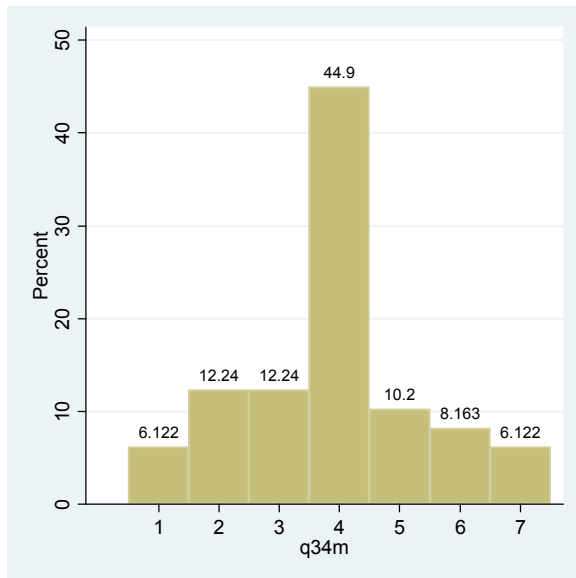
Mean estimation                      Number of obs = 97

	Mean	Std. Err.	[95% Conf. Interval]	
q34l	3.42268	.1535904	3.117806	3.727555



**Figure 64.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie schätzen Sie die Auswirkungen auf Ihre Region ein? (Der Wert 4 steht für "keine Auswirkung"): weniger Meereis

*If they occurred, how would the following environmental changes have an impact in your region? less sea ice*

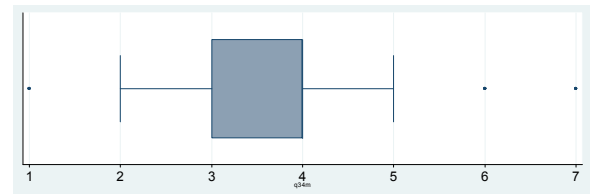


negativ 1 2 3 4 5 6 7 positiv  
Der Wert 4 steht für "keine Auswirkung")

*negative 1 2 3 4 5 6 7 positive  
a value of 4 indicates no impact*

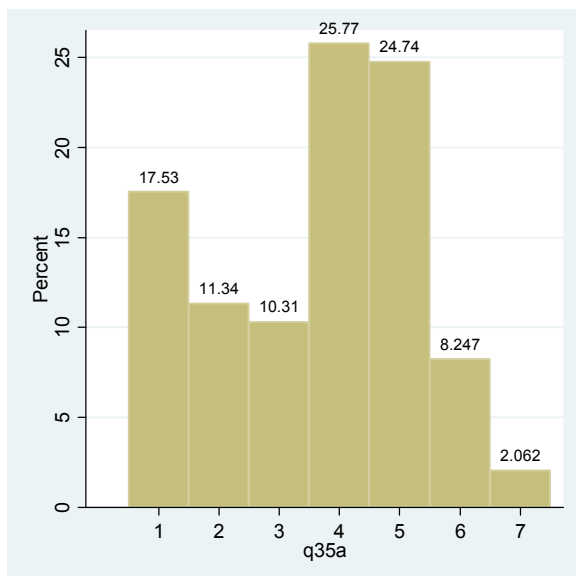
Mean estimation                      Number of obs = 98

	Mean	Std. Err.	[95% Conf. Interval]	
q34m	3.897959	.1482699	3.603684	4.192234



**Figure 65.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? wärmere Temperaturen im Sommer

*Are there signs that the following have already happened in the area where you live: warmer summer temperatures*

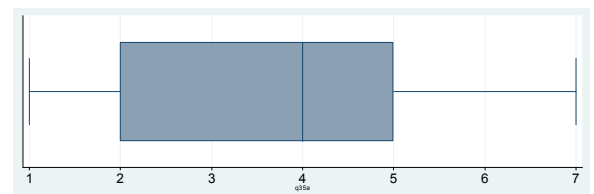


keine 1 2 3 4 5 6 7 sehr deutliche

*not at all 1 2 3 4 5 6 7 very much*

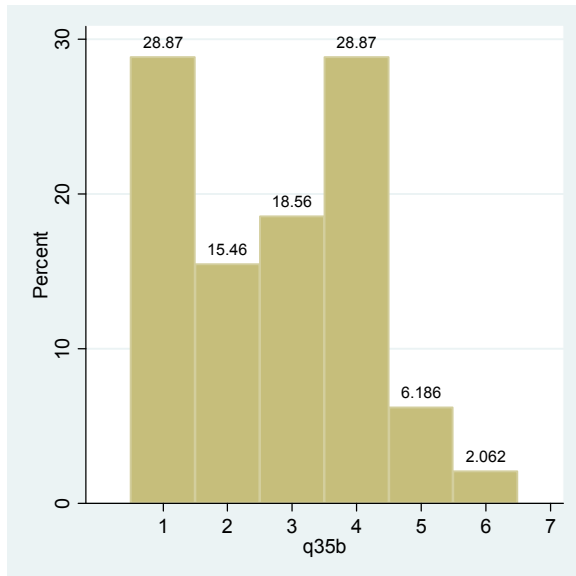
Mean estimation                      Number of obs = 97

	Mean	Std. Err.	[95% Conf. Interval]	
q35a	3.618557	.1692941	3.282511	3.954603



**Figure 66.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? kühlere Temperaturen im Sommer

*Are there signs that the following have already happened in the area where you live: cooler summer temperatures*

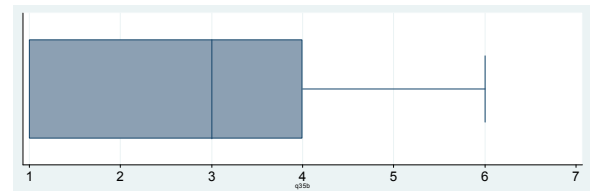


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

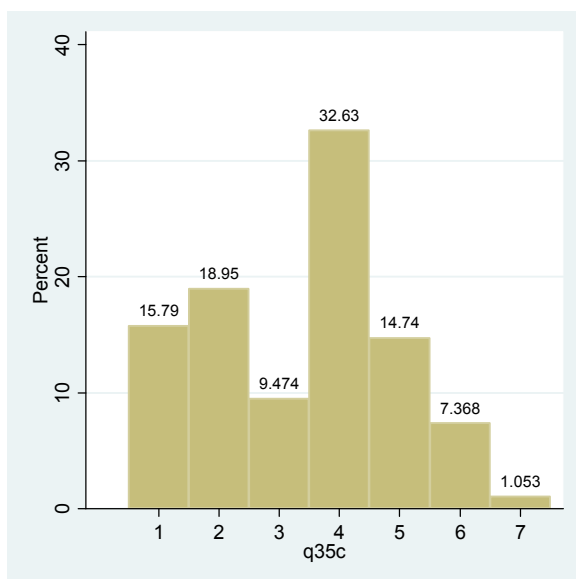
Mean estimation                      Number of obs = 97

	Mean	Std. Err.	[95% Conf. Interval]
q35b	2.742268	.1430509	2.458314 3.026222



**Figure 67.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? wärmere Temperaturen im Winter

*Are there signs that the following have already happened in the area where you live: warmer winter temperatures*

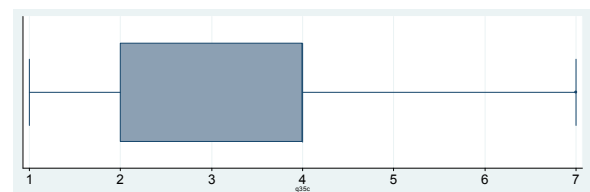


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

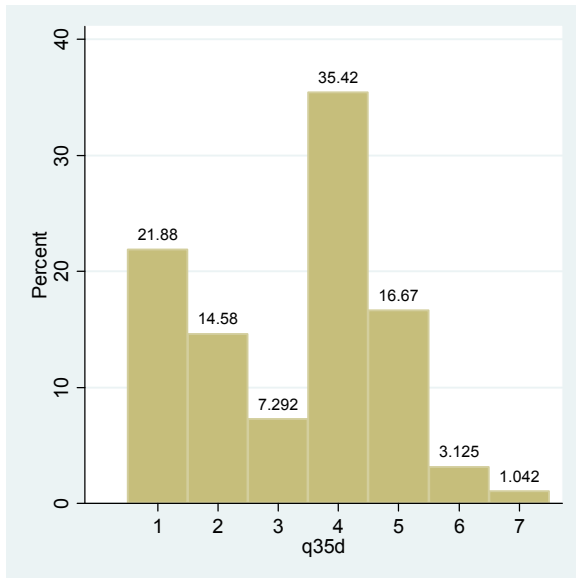
Mean estimation                      Number of obs = 95

	Mean	Std. Err.	[95% Conf. Interval]
q35c	3.378947	.1606112	3.06005 3.697845



**Figure 68.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? kühlere Temperaturen im Winter

*Are there signs that the following have already happened in the area where you live: cooler winter temperatures:*

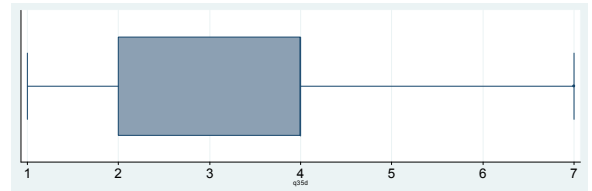


keine 1 2 3 4 5 6 7 sehr deutliche

*not at all 1 2 3 4 5 6 7 very much*

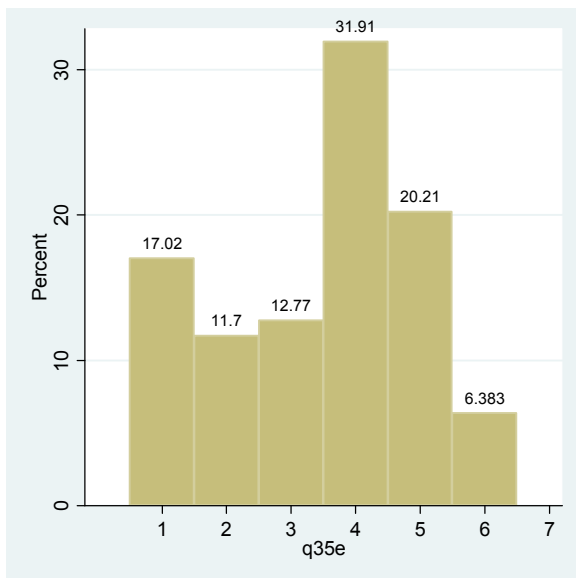
Mean estimation                      Number of obs = 96

	Mean	Std. Err.	[95% Conf. Interval]	
q35d	3.239583	.160006	2.921931	3.557235



**Figure 69.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? mehr Regen im Sommer

*Are there signs that the following have already happened in the area where you live: more rain in summer*

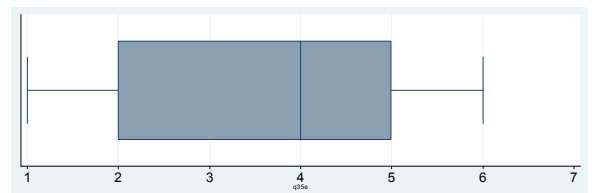


keine 1 2 3 4 5 6 7 sehr deutliche

*not at all 1 2 3 4 5 6 7 very much*

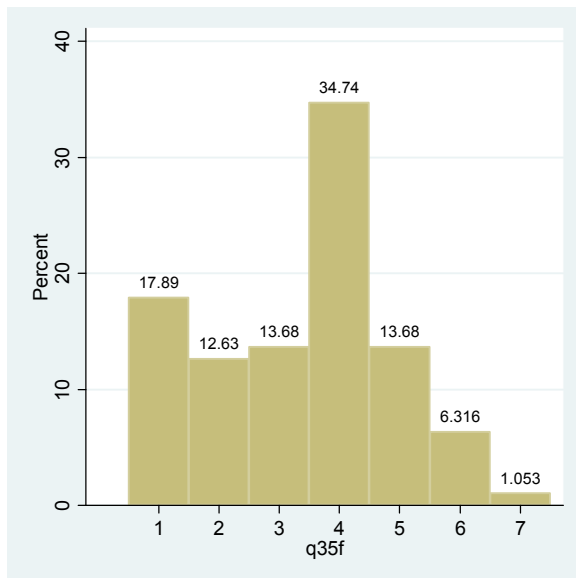
Mean estimation                      Number of obs = 94

	Mean	Std. Err.	[95% Conf. Interval]	
q35e	3.457447	.1569447	3.145786	3.769108



**Figure 70.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? weniger Regen im Sommer

*Are there signs that the following have already happened in the area where you live: less rain in summer*

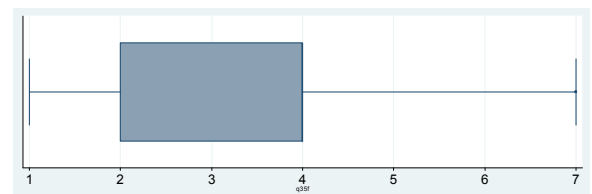


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

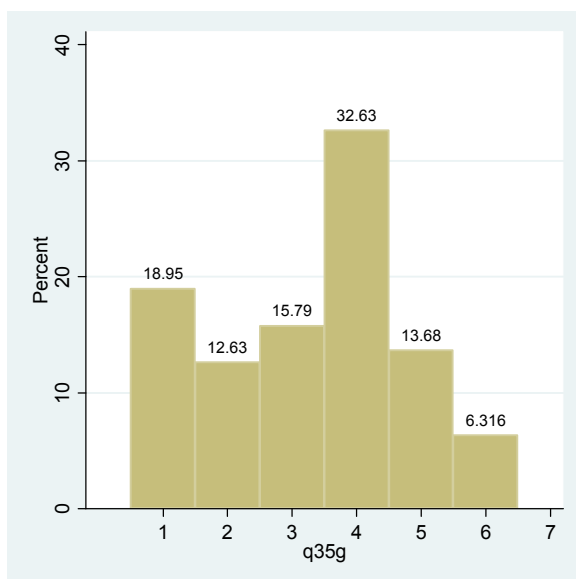
Mean estimation                      Number of obs = 95

	Mean	Std. Err.	[95% Conf. Interval]
q35f	3.368421	.157708	3.055288 3.681554



**Figure 71.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? mehr Regen im Winter

*Are there signs that the following have already happened in the area where you live: more rain in winter*

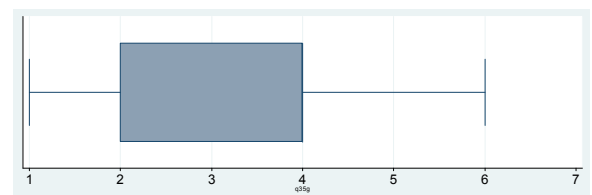


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

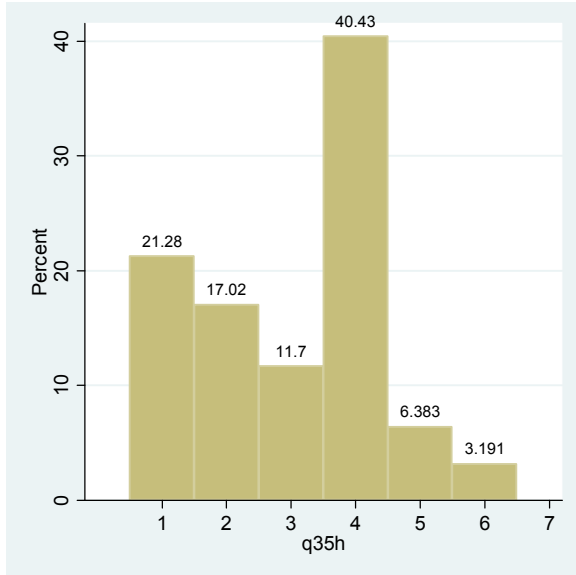
Mean estimation                      Number of obs = 95

	Mean	Std. Err.	[95% Conf. Interval]
q35g	3.284211	.1545598	2.977328 3.591093



**Figure 72.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? weniger Regen im Winter

*Are there signs that the following have already happened in the area where you live: less rain in winter*

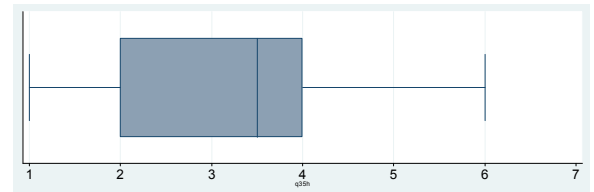


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

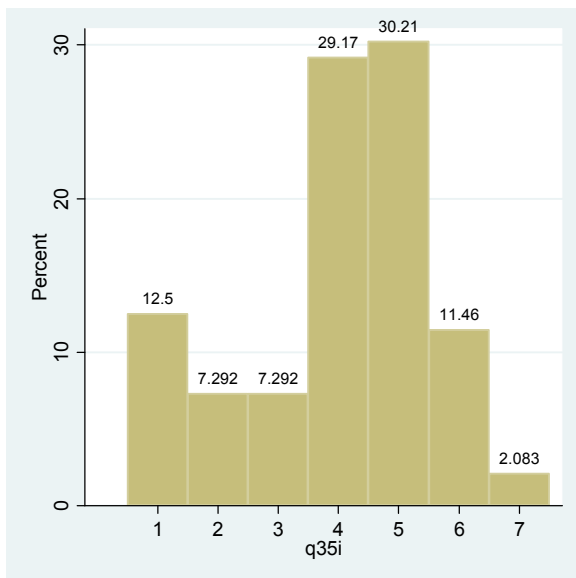
Mean estimation                      Number of obs = 94

	Mean	Std. Err.	[95% Conf. Interval]
q35h	3.031915	.1454347	2.74311 3.320719



**Figure 73.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? . mehr Schnee

*Are there signs that the following have already happened in the area where you live: more snow*

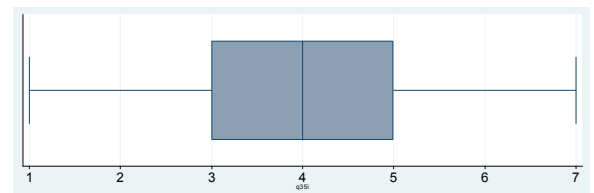


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

Mean estimation                      Number of obs = 96

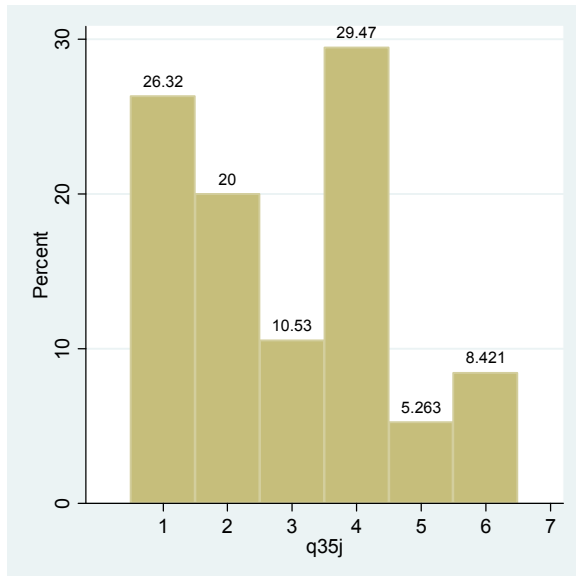
	Mean	Std. Err.	[95% Conf. Interval]
q35i	4	.1601808	3.682001 4.317999





**Figure 74.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? weniger Schnee

*Are there signs that the following have already happened in the area where you live: less snow*

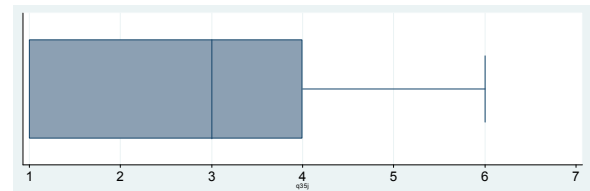


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

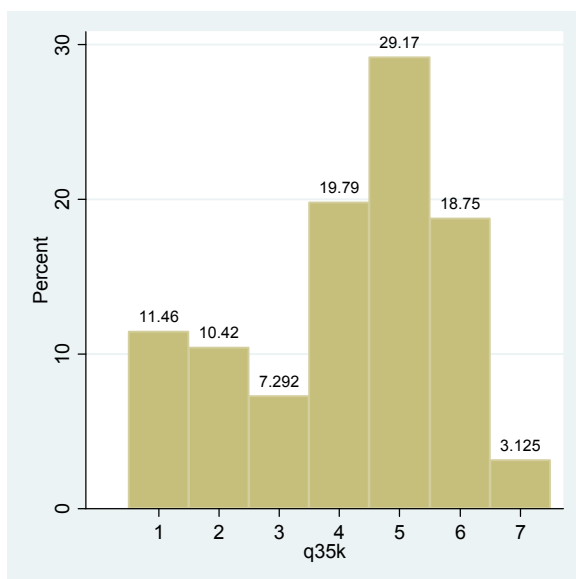
Mean estimation                      Number of obs = 95

	Mean	Std. Err.	[95% Conf. Interval]
q35j	2.926316	.1634196	2.601842 3.250789



**Figure 75.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? stärkere Winde

*Are there signs that the following have already happened in the area where you live: stronger winds*

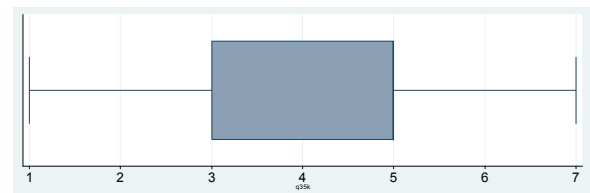


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

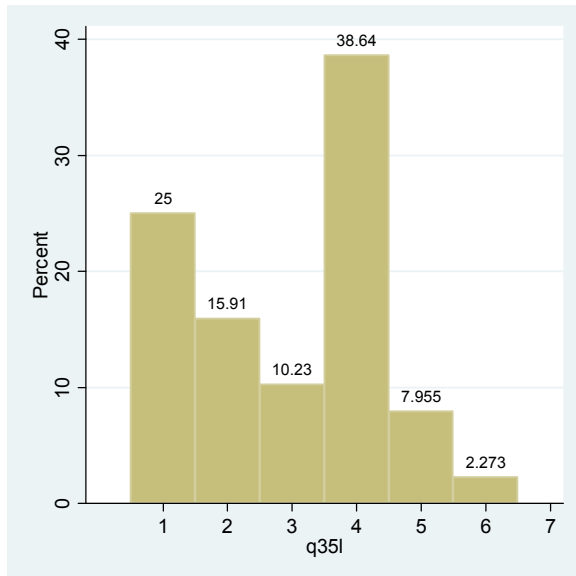
Mean estimation                      Number of obs = 96

	Mean	Std. Err.	[95% Conf. Interval]
q35k	4.135417	.1724563	3.793048 4.477786



**Figure 76.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? mehr Eis im Meer

*Are there signs that the following have already happened in the area where you live: more sea ice*

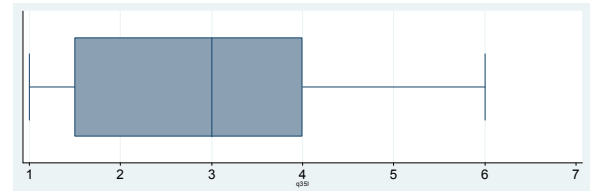


keine 1 2 3 4 5 6 7 sehr deutliche

*not at all 1 2 3 4 5 6 7 very much*

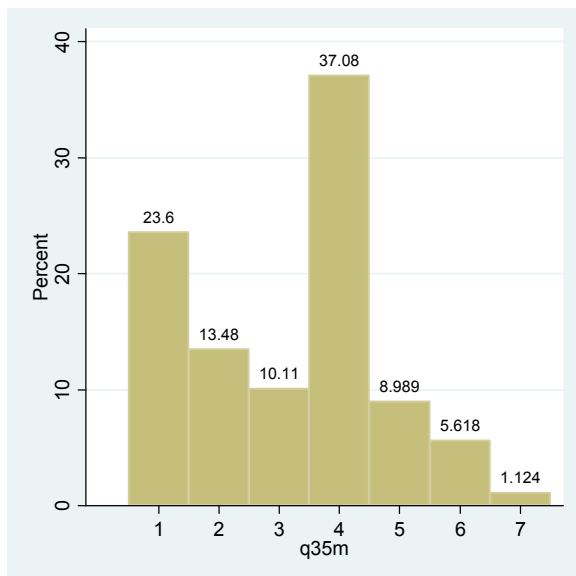
Mean estimation                      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]
q35l	2.954545	.1541053	2.648244 3.260847



**Figure 77.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? weniger Eis im Meer

*Are there signs that the following have already happened in the area where you live: less sea ice*

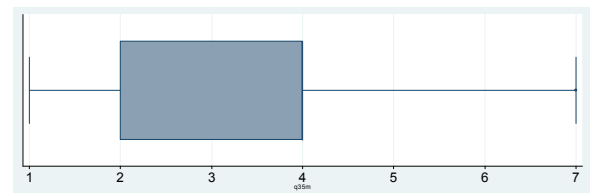


keine 1 2 3 4 5 6 7 sehr deutliche

*not at all 1 2 3 4 5 6 7 very much*

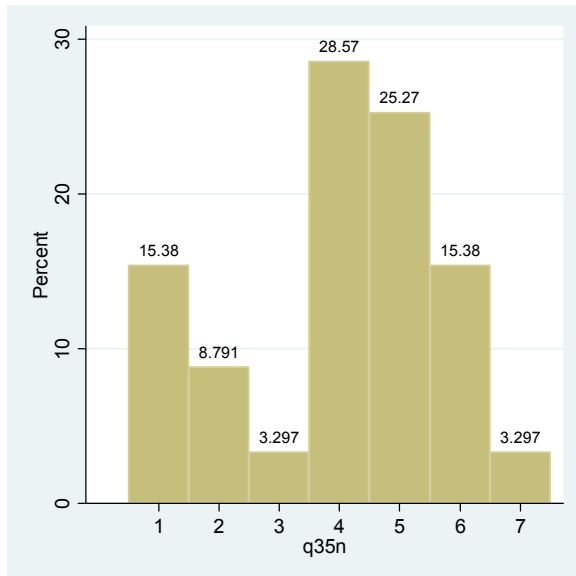
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]
q35m	3.157303	.1675233	2.824386 3.490221



**Figure 78.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? stärkere Stranderosion

*Are there signs that the following have already happened in the area where you live: increase beach erosion*

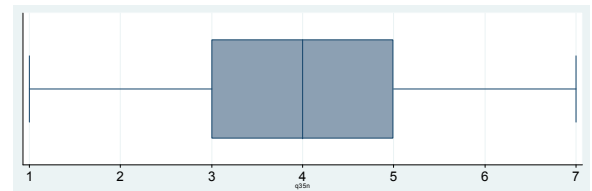


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

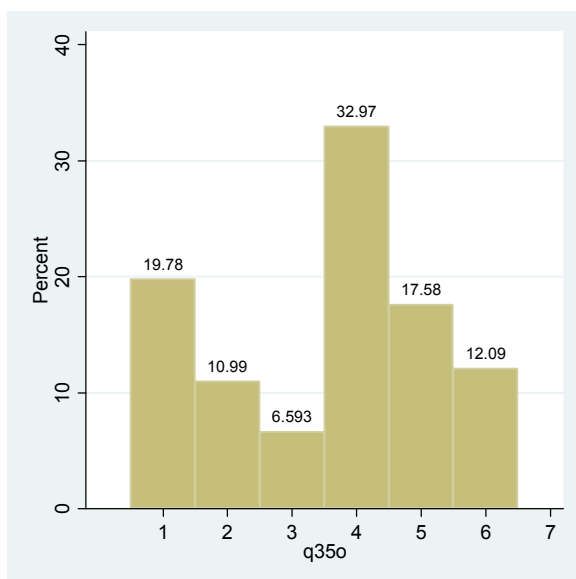
Mean estimation                      Number of obs = 91

	Mean	Std. Err.	[95% Conf. Interval]
q35n	3.989011	.180553	3.630311 4.347711



**Figure 79.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? mehr Sturmfluten

*Are there signs that the following have already happened in the area where you live: more storm surges*

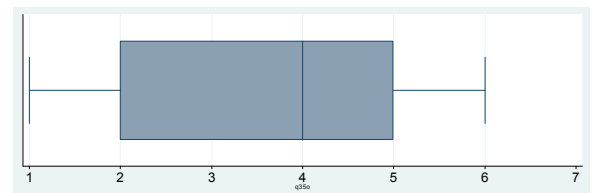


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

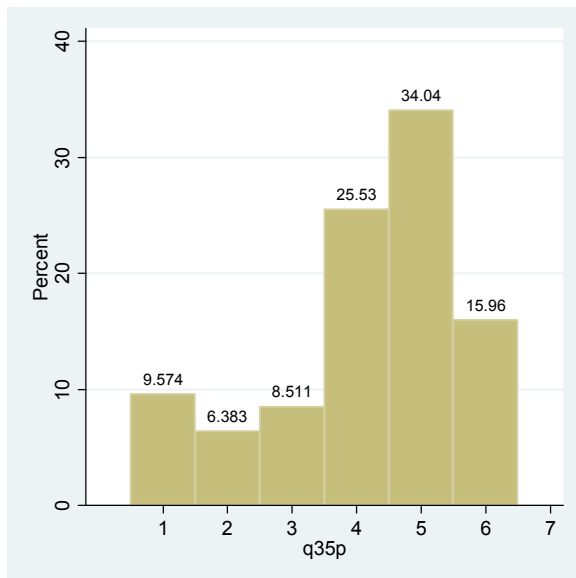
Mean estimation                      Number of obs = 91

	Mean	Std. Err.	[95% Conf. Interval]
q35o	3.538462	.1742296	3.192324 3.884599



**Figure 80.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? mehr Überschwemmungen durch Schnee oder Regen

*Are there signs that the following have already happened in the area where you live: more floods from snow or rain*

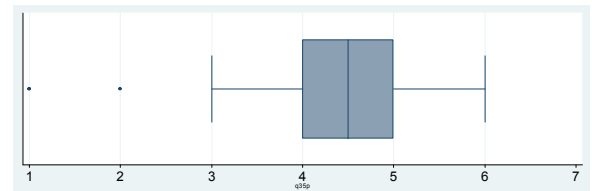


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

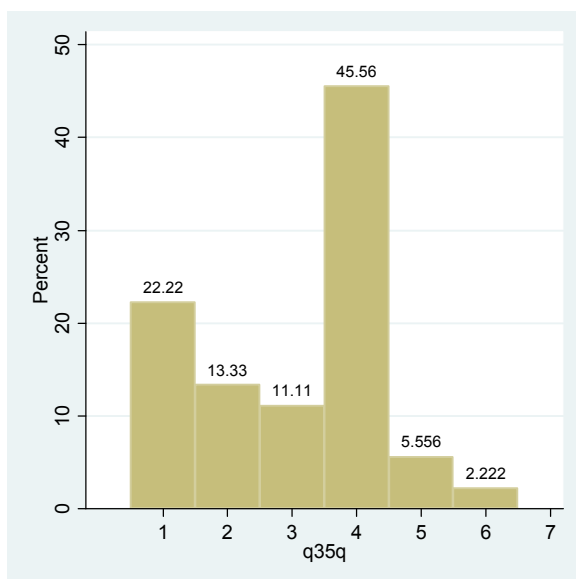
Mean estimation                      Number of obs = 94

	Mean	Std. Err.	[95% Conf. Interval]
q35p	4.159574	.1522373	3.857261 4.461888



**Figure 81.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? weniger Sonnenstunden

*Are there signs that the following have already happened in the area where you live: less hours of sunshine*

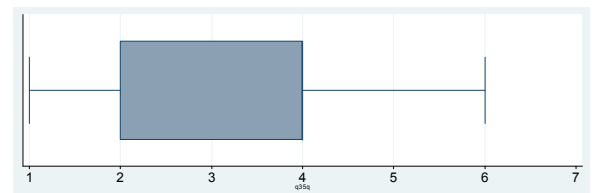


keine 1 2 3 4 5 6 7 sehr deutliche

not at all 1 2 3 4 5 6 7 very much

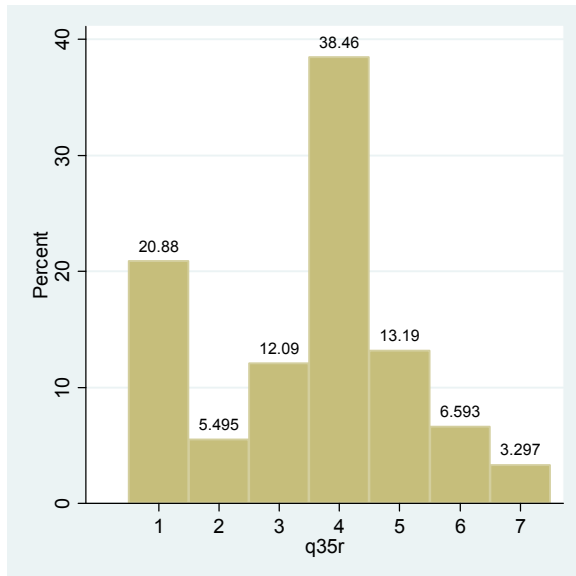
Mean estimation                      Number of obs = 90

	Mean	Std. Err.	[95% Conf. Interval]
q35q	3.055556	.1459919	2.765473 3.345638



**Figure 82.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? mehr Sonnenstunden

*Are there signs that the following have already happened in the area where you live: more sunshine hours*

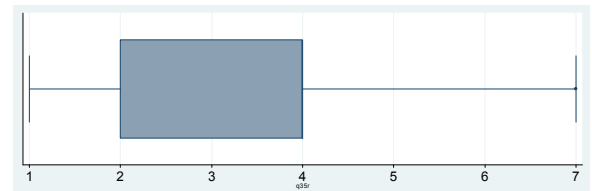


keine 1 2 3 4 5 6 7 sehr deutliche

*not at all 1 2 3 4 5 6 7 very much*

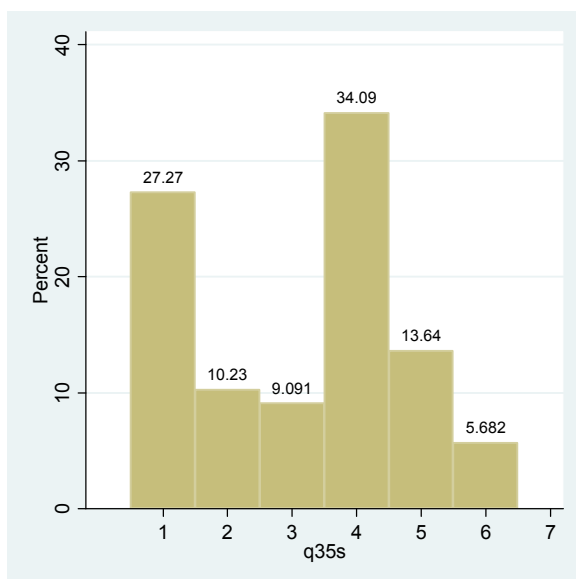
Mean estimation                      Number of obs = 91

	Mean	Std. Err.	[95% Conf. Interval]
q35r	3.505495	.1721612	3.163466 3.847523



**Figure 83.** Sehen Sie Anzeichen dafür, dass die folgenden Umweltveränderungen in Ihrer Region bereits eingetreten sind? Meeresspiegelanstieg

*Are there signs that the following have already happened in the area where you live: sea level rise*

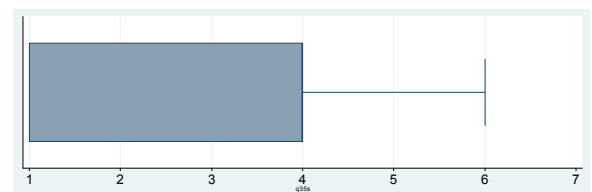


keine 1 2 3 4 5 6 7 sehr deutliche

*not at all 1 2 3 4 5 6 7 very much*

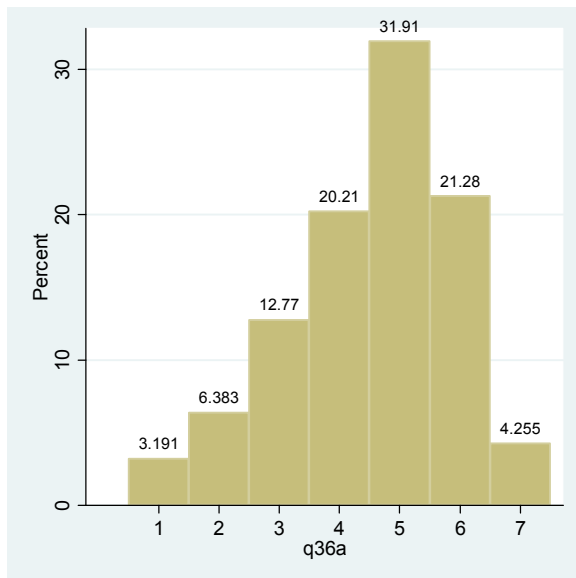
Mean estimation                      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]
q35s	3.136364	.1719501	2.794594 3.478133



**Figure 84.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? wärmere Temperaturen im Sommer

*How much do you think the following are likely to happen in the area where you live? warmer summer temperatures*

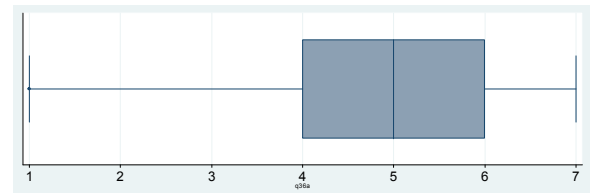


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

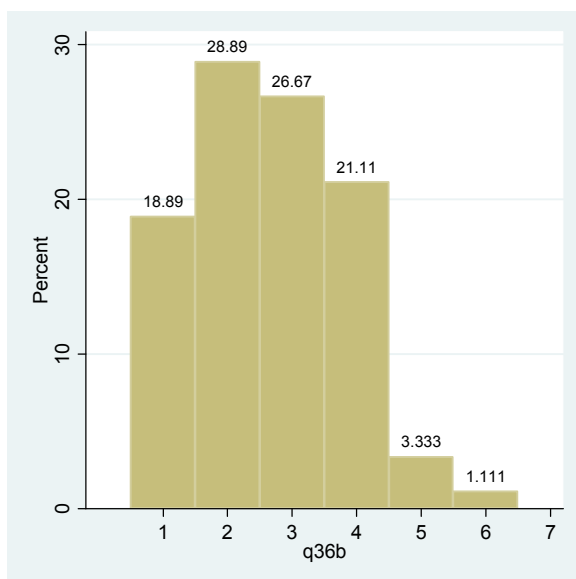
Mean estimation                      Number of obs = 94

	Mean	Std. Err.	[95% Conf. Interval]
q36a	4.521277	.1448646	4.233604 4.808949



**Figure 85.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? kühlere Temperaturen im Sommer

*How much do you think the following are likely to happen in the area where you live? cooler summer temperatures*

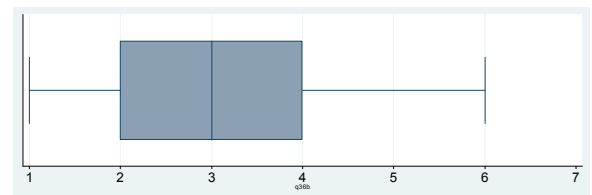


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

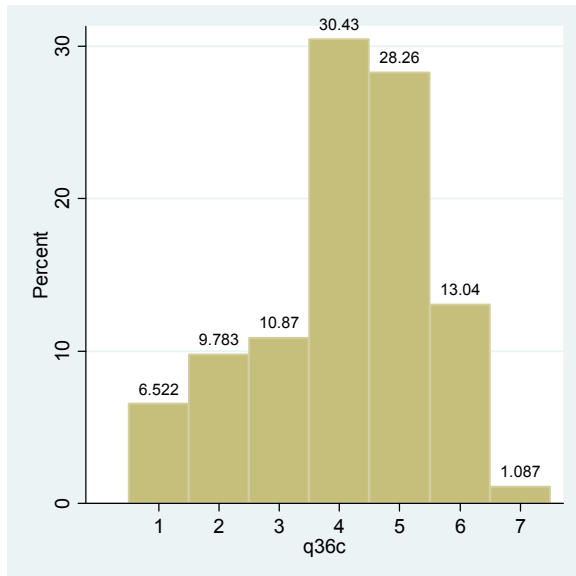
Mean estimation                      Number of obs = 90

	Mean	Std. Err.	[95% Conf. Interval]
q36b	2.644444	.1237281	2.398599 2.89029



**Figure 86.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? wärmere Temperaturen im Winter

*How much do you think the following are likely to happen in the area where you live? warmer winter temperatures*

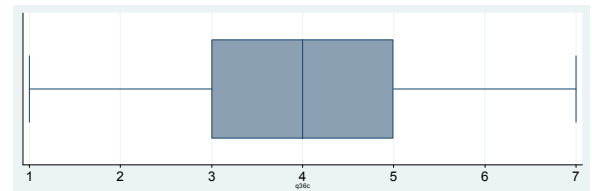


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

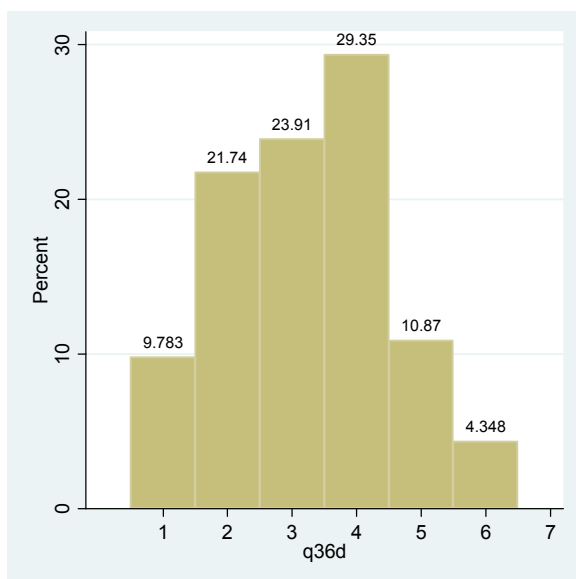
Mean estimation                      Number of obs = 92

	Mean	Std. Err.	[95% Conf. Interval]
q36c	4.076087	.1476312	3.782836 4.369338



**Figure 87.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? kühlere Temperaturen im Winter

*How much do you think the following are likely to happen in the area where you live? cooler winter temperatures*

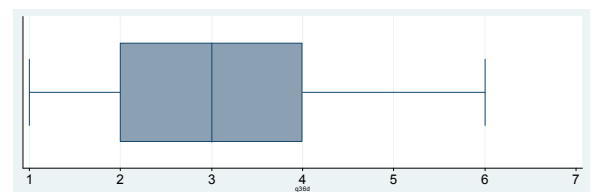


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

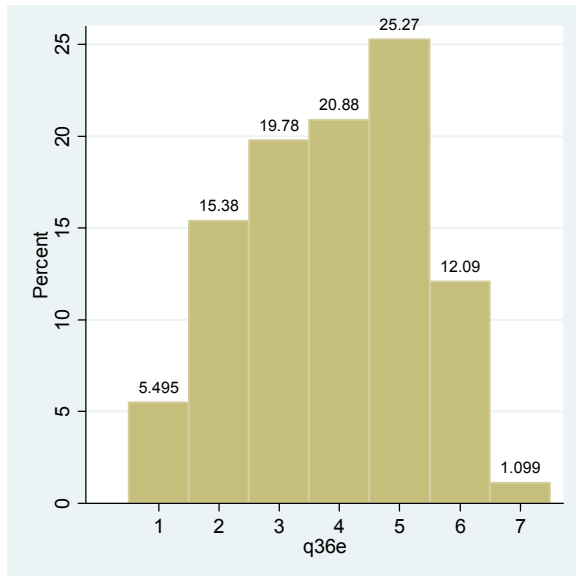
Mean estimation                      Number of obs = 92

	Mean	Std. Err.	[95% Conf. Interval]
q36d	3.228261	.1357178	2.958674 3.497848



**Figure 88.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? mehr Regen im Sommer

*How much do you think the following are likely to happen in the area where you live? more rain in summer*

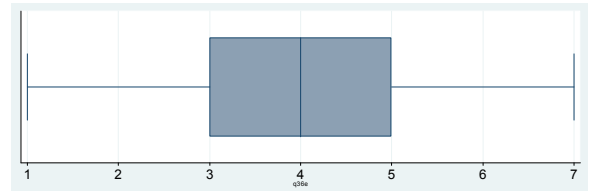


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

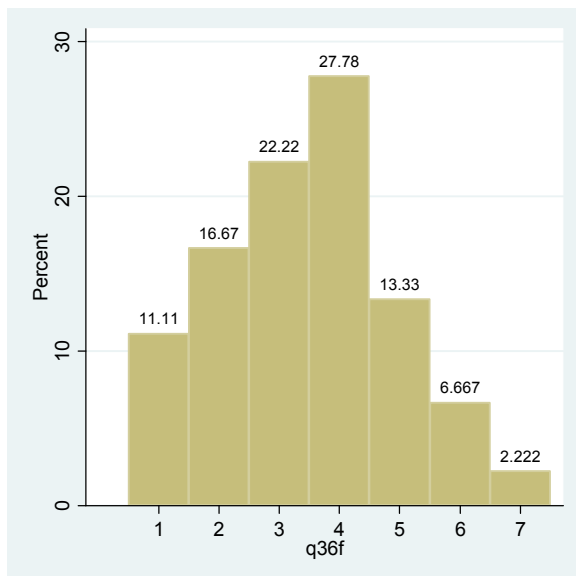
Mean estimation                      Number of obs = 91

	Mean	Std. Err.	[95% Conf. Interval]
q36e	3.857143	.1535668	3.552056 4.16223



**Figure 89.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? weniger Regen im Sommer

*How much do you think the following are likely to happen in the area where you live? less rain in summer*

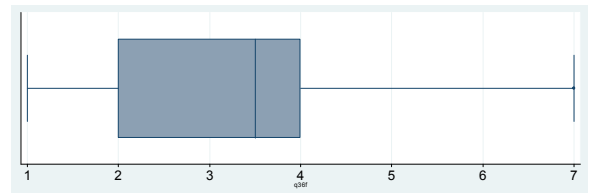


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

Mean estimation                      Number of obs = 90

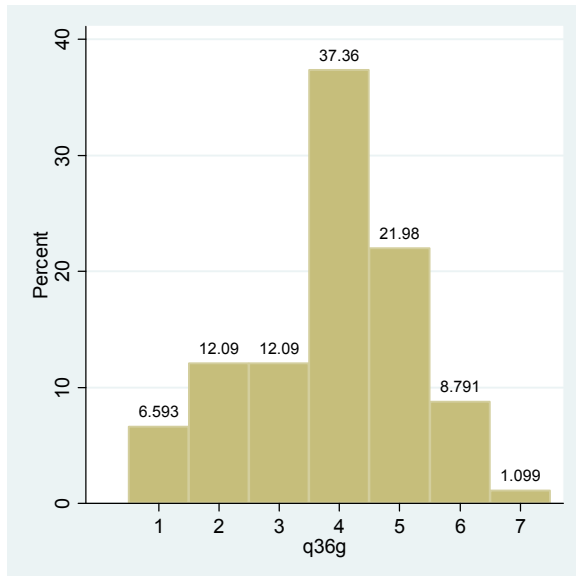
	Mean	Std. Err.	[95% Conf. Interval]
q36f	3.444444	.1565157	3.133451 3.755438





**Figure 90.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? mehr Regen im Winter

*How much do you think the following are likely to happen in the area where you live? more rain in winter*

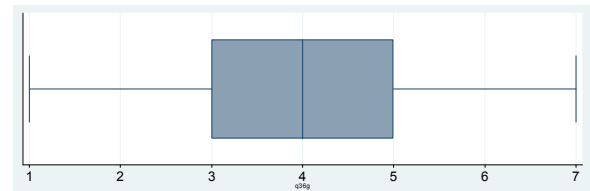


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

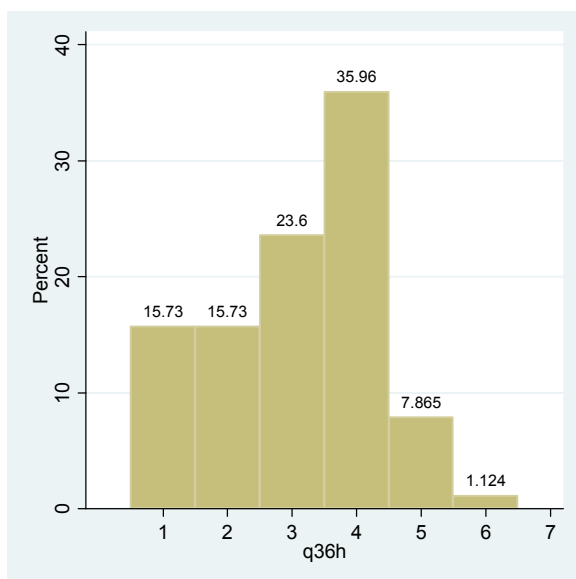
Mean estimation                      Number of obs = 91

	Mean	Std. Err.	[95% Conf. Interval]	
q36g	3.868132	.1434009	3.583241	4.153023



**Figure 91.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? weniger Regen im Winter

*How much do you think the following are likely to happen in the area where you live? less rain in winter*

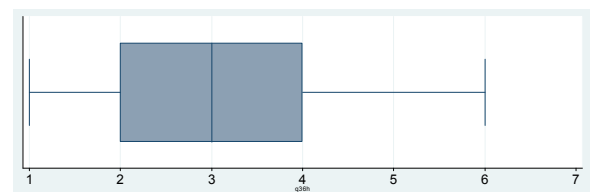


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

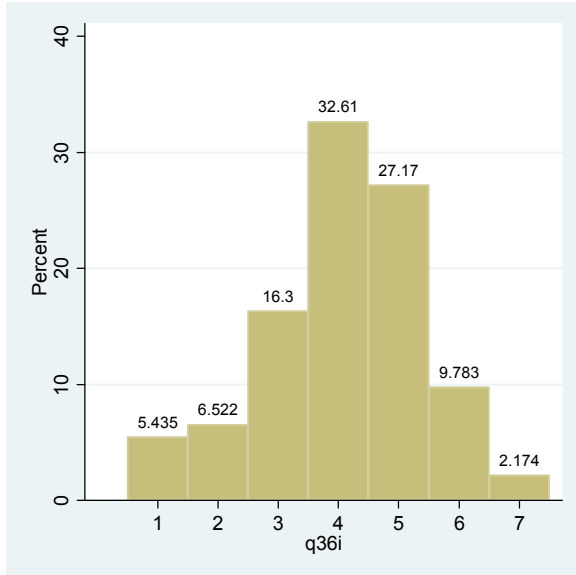
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]	
q36h	3.078652	.1329564	2.814429	3.342875



**Figure 92.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? mehr Schnee

*How much do you think the following are likely to happen in the area where you live? more snow*

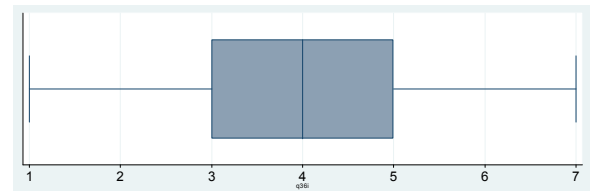


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

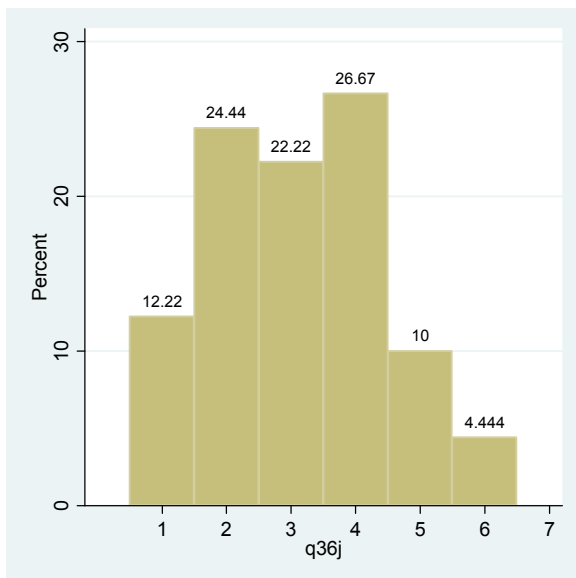
Mean estimation                      Number of obs = 92

	Mean	Std. Err.	[95% Conf. Interval]	
q36i	4.076087	.1393056	3.799374	4.3528



**Figure 93.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? weniger Schnee

*How much do you think the following are likely to happen in the area where you live? less snow*

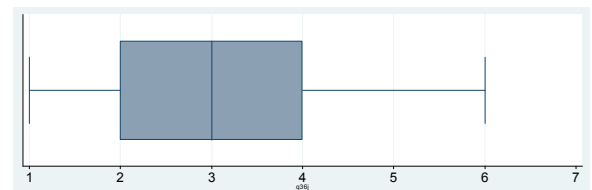


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

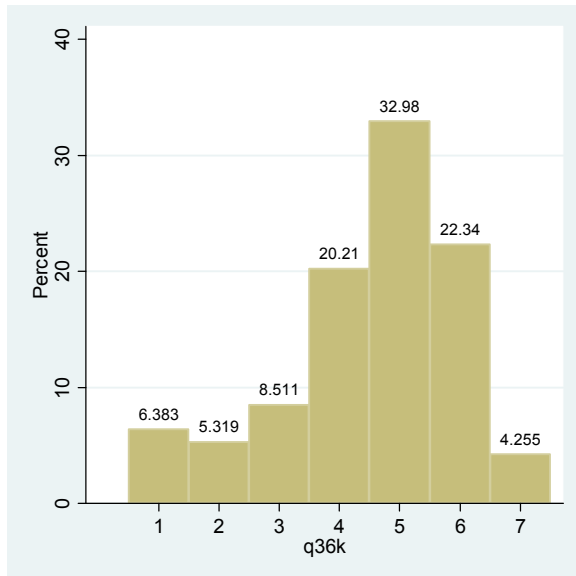
Mean estimation                      Number of obs = 90

	Mean	Std. Err.	[95% Conf. Interval]	
q36j	3.111111	.1417251	2.829506	3.392716



**Figure 94.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? stärkere Winde

*How much do you think the following are likely to happen in the area where you live? stronger winds*

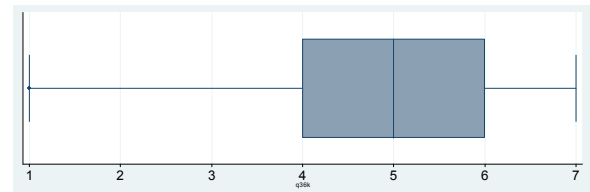


gar nicht 1 2 3 4 5 6 7 sehr gut

*not at all 1 2 3 4 5 6 7 very much*

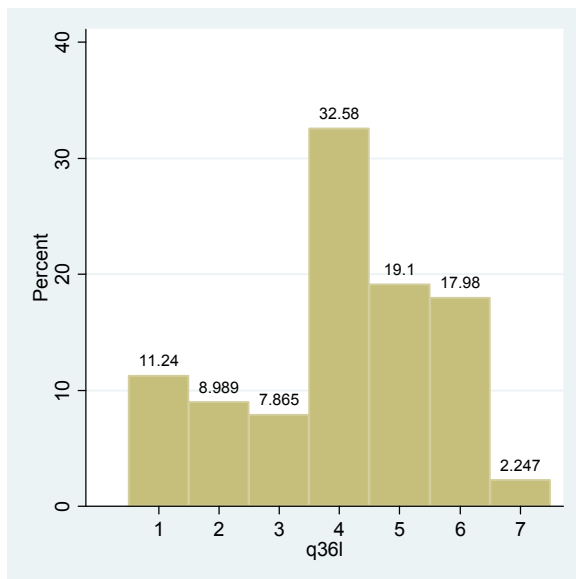
Mean estimation                      Number of obs = 94

	Mean	Std. Err.	[95% Conf. Interval]	
q36k	4.521277	.1540491	4.215366	4.827188



**Figure 95.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? mehr Sturmfluten

*How much do you think the following are likely to happen in the area where you live? more storm floods*

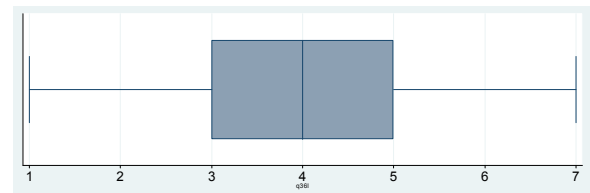


gar nicht 1 2 3 4 5 6 7 sehr gut

*not at all 1 2 3 4 5 6 7 very much*

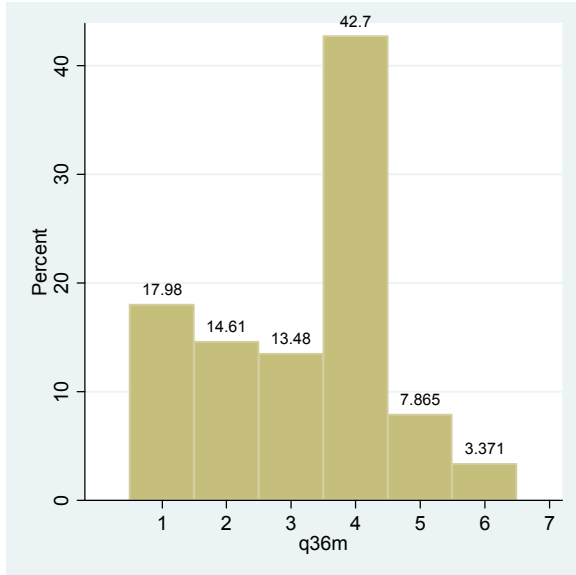
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]	
q36l	4.022472	.1706036	3.683433	4.361511



**Figure 96.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? mehr Eis im Meer

*How much do you think the following are likely to happen in the area where you live? more sea ice*

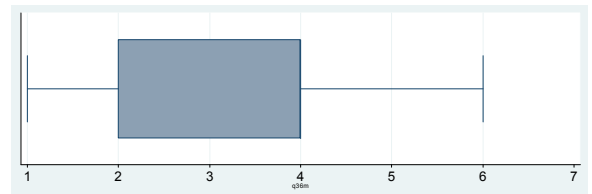


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

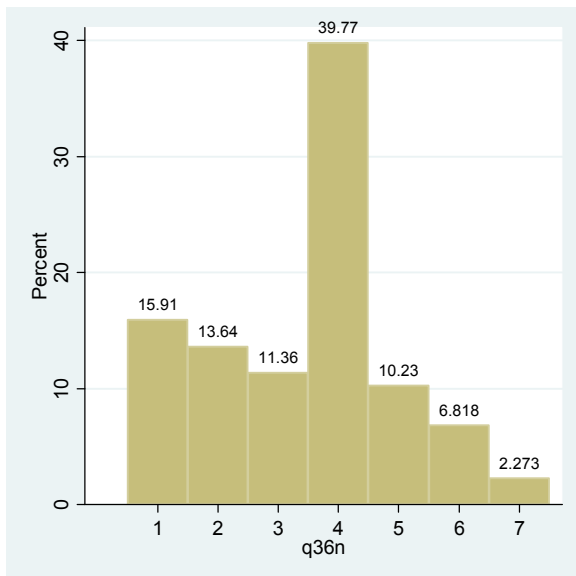
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]
q36m	3.179775	.1460772	2.889477 3.470073



**Figure 97.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? weniger Eis im Meer

*How much do you think the following are likely to happen in the area where you live? n. less sea ice*

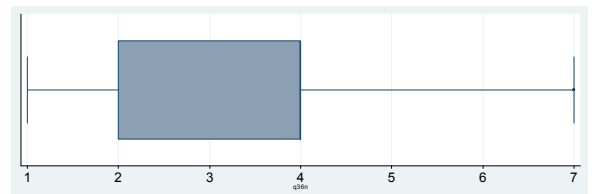


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

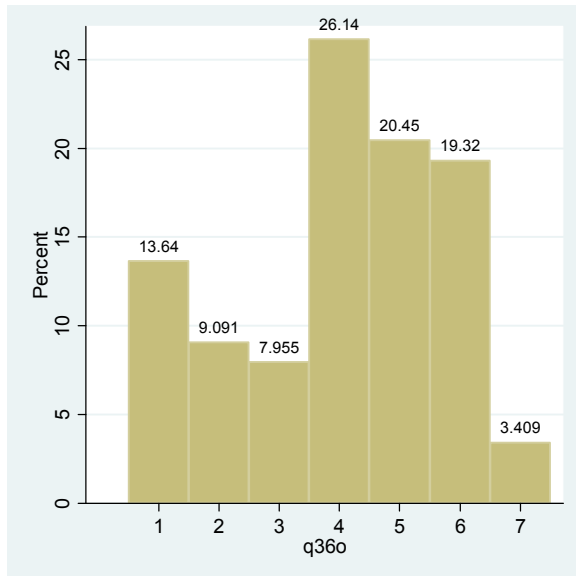
\Mean estimation                      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]
q36n	3.443182	.1647153	3.115792 3.770571



**Figure 98.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? stärkere Stranderosion

*How much do you think the following are likely to happen in the area where you live? increased beach erosion*

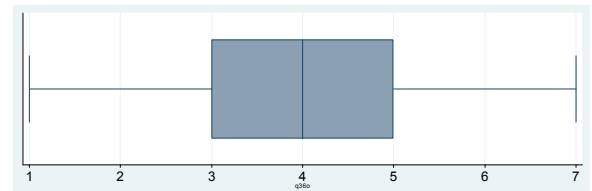


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

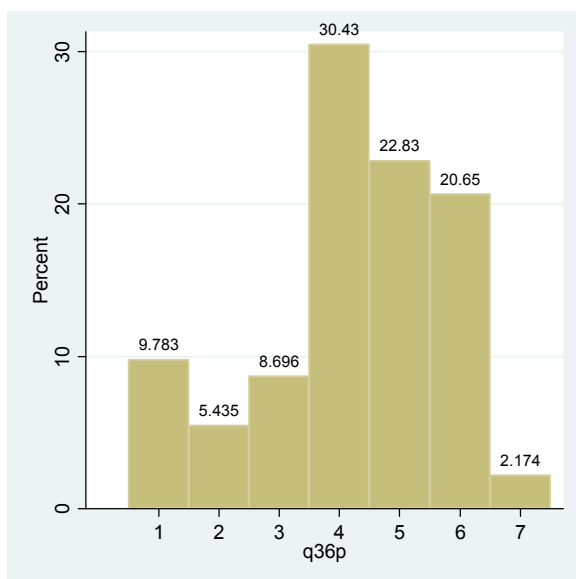
Mean estimation                      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]
q36o	4.022727	.1842671	3.656477 4.388978



**Figure 99.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? Überschwemmungen durch Schnee oder Regen

*How much do you think the following are likely to happen in the area where you live? more floods from snow or rain*

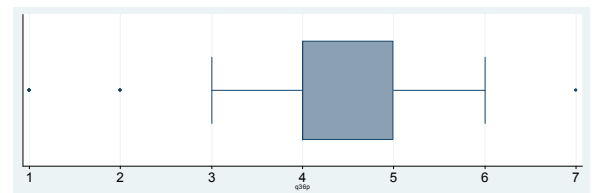


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

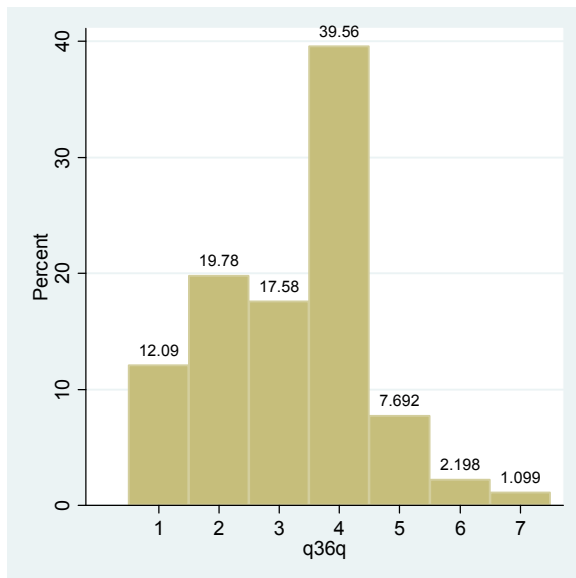
Mean estimation                      Number of obs = 92

	Mean	Std. Err.	[95% Conf. Interval]
q36p	4.217391	.1619769	3.895644 4.539139



**Figure 100.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? weniger Sonnenstunden

*How much do you think the following are likely to happen in the area where you live?. less sunshine hours*

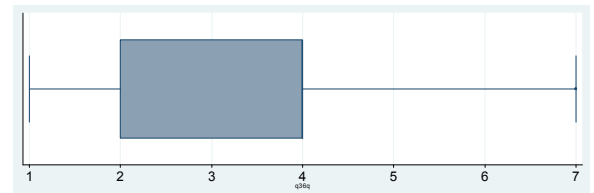


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

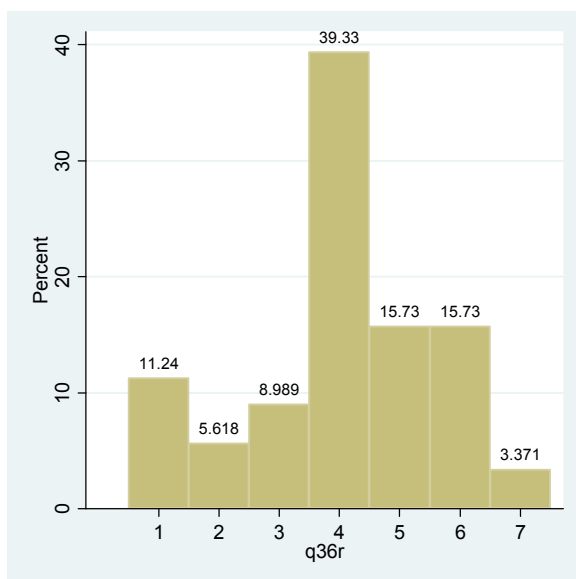
Mean estimation                      Number of obs = 91

	Mean	Std. Err.	[95% Conf. Interval]
q36q	3.21978	.137838	2.945941 3.493619



**Figure 101.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? mehr Sonnenstunden

*How much do you think the following are likely to happen in the area where you live? more sunshine hours*

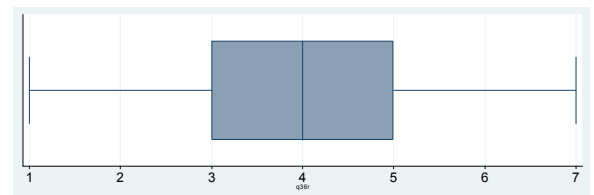


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

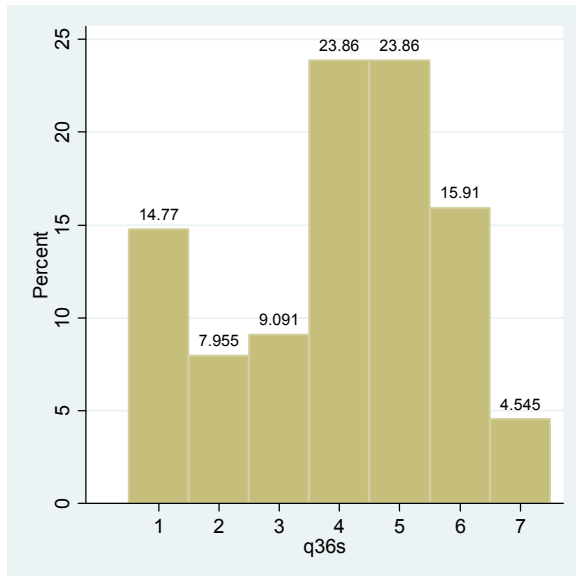
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]
q36r	4.033708	.1656459	3.704521 4.362894



**Figure 102.** Für wie wahrscheinlich halten Sie es, dass die folgenden Umweltveränderungen in Ihrer Region auftreten werden? Meeresspiegelanstieg

*How much do you think the following are likely to happen in the area where you live? sea level rise*

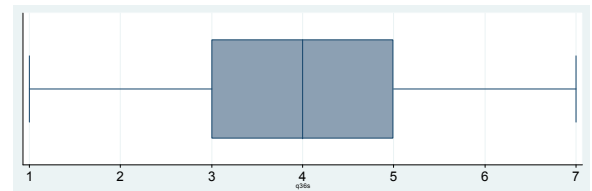


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

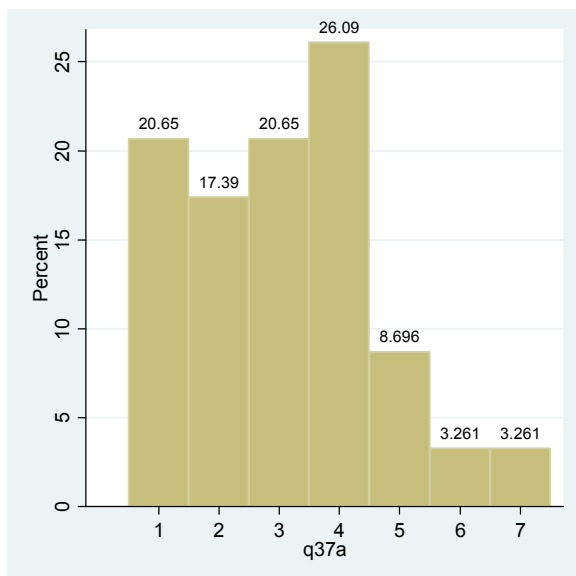
Mean estimation                      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]
q36s	4	.1863974	3.629515 4.370485



**Figure 103.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? wärmere Temperaturen im Sommer

*How aware are you of things that could be done in your region to adapt to the following should they occur? warmer summer temperatures*

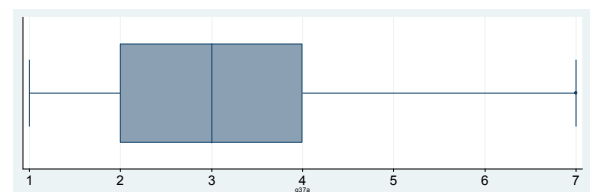


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

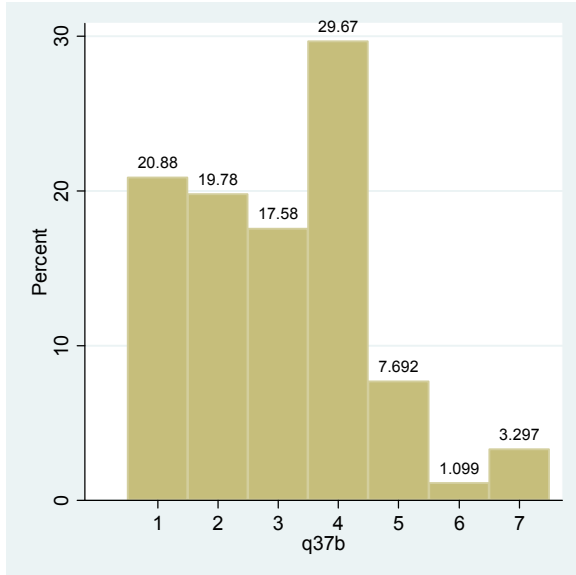
Mean estimation                      Number of obs = 92

	Mean	Std. Err.	[95% Conf. Interval]
q37a	3.076087	.1630116	2.752284 3.39989



**Figure 104.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? kühlere Temperaturen im Sommer

*How aware are you of things that could be done in your region to adapt to the following should they occur? cooler summer temperatures*

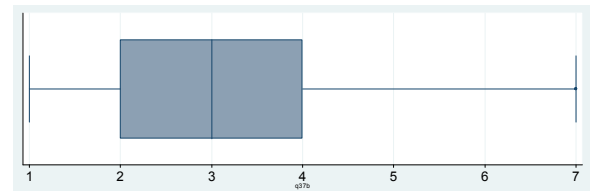


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

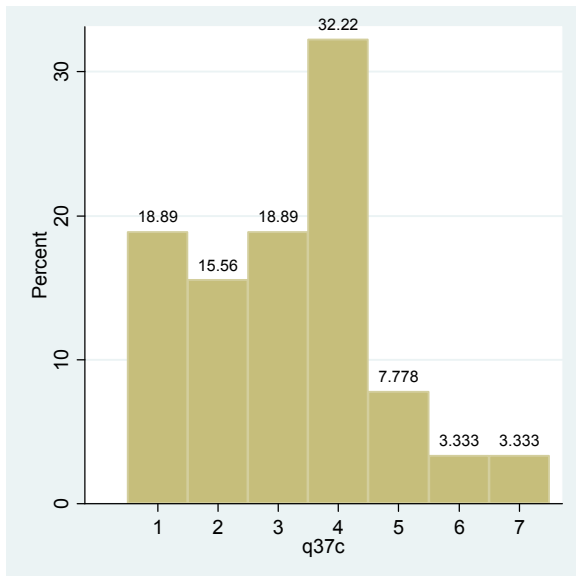
Mean estimation                      Number of obs = 91

	Mean	Std. Err.	[95% Conf. Interval]
q37b	3	.1585958	2.684922 3.315078



**Figure 105.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? wärmere Temperaturen im Winter

*How aware are you of things that could be done in your region to adapt to the following should they occur? warmer winter temperatures*

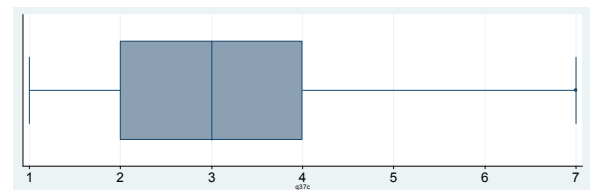


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

Mean estimation                      Number of obs = 90

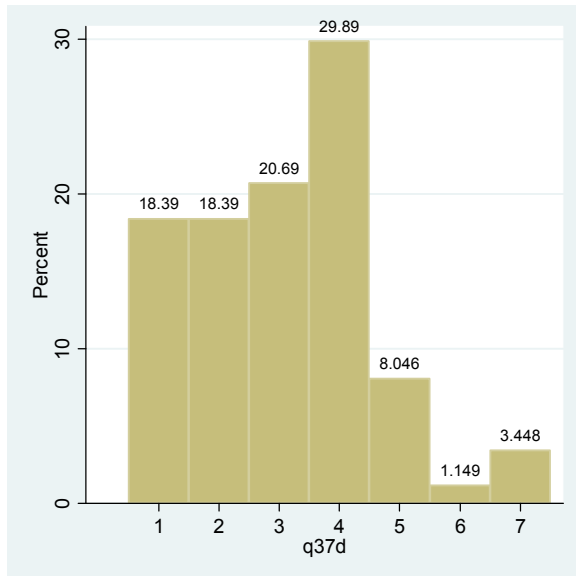
	Mean	Std. Err.	[95% Conf. Interval]
q37c	3.177778	.1623622	2.855167 3.500388





**Figure 106.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? kühlere Temperaturen im Winter

*How aware are you of things that could be done in your region to adapt to the following should they occur? cooler winter temperatures*

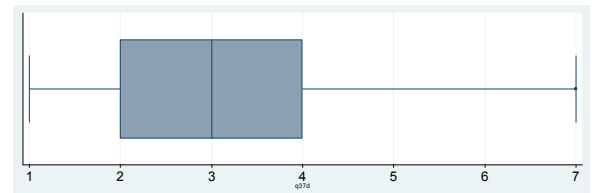


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

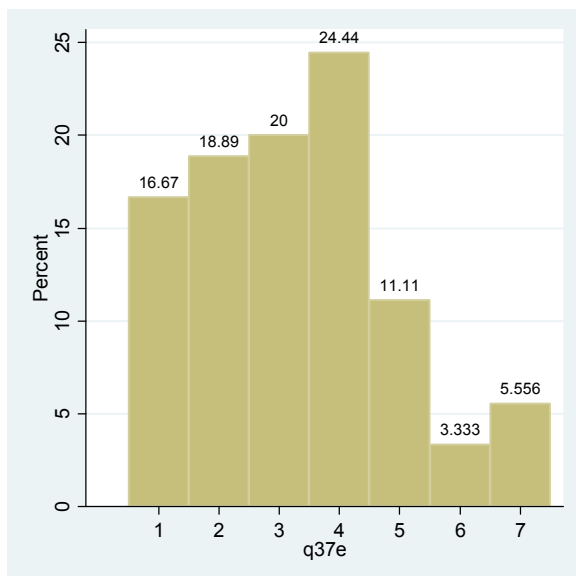
Mean estimation                      Number of obs = 87

	Mean	Std. Err.	[95% Conf. Interval]	
q37d	3.08046	.1595389	2.763307	3.397613



**Figure 107.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? mehr Regen im Sommer

*How aware are you of things that could be done in your region to adapt to the following should they occur? more rain in summer*

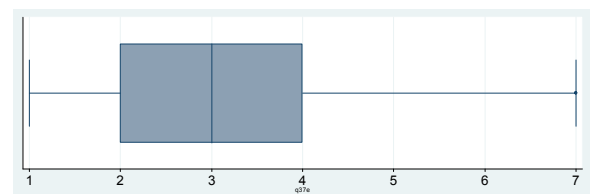


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

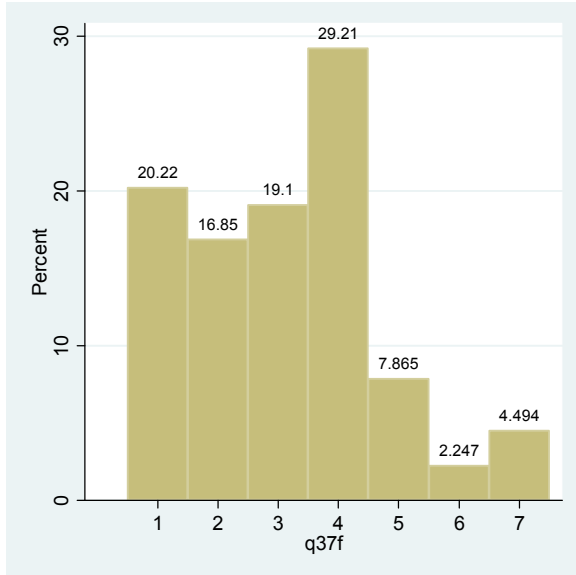
Mean estimation                      Number of obs = 90

	Mean	Std. Err.	[95% Conf. Interval]	
q37e	3.266667	.1729526	2.923013	3.61032



**Figure 108.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? weniger Regen im Sommer

*How aware are you of things that could be done in your region to adapt to the following should they occur? less rain in summer*

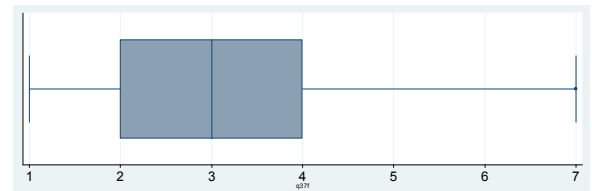


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

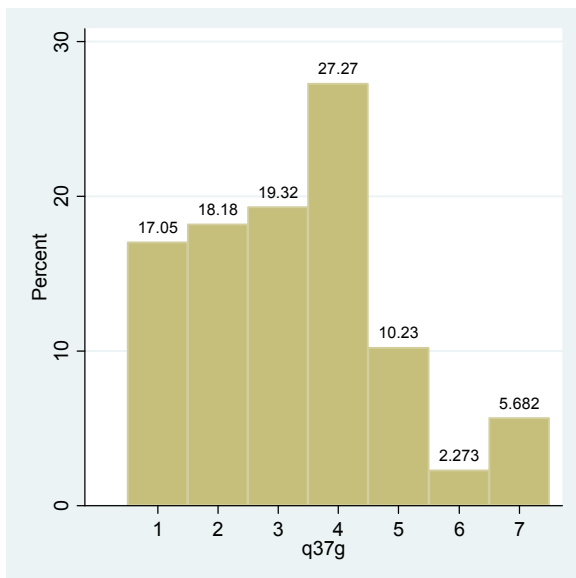
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]	
q37f	3.123596	.1682241	2.789285	3.457906



**Figure 109.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? mehr Regen im Winter

*How aware are you of things that could be done in your region to adapt to the following should they occur? g. more rain in winter*

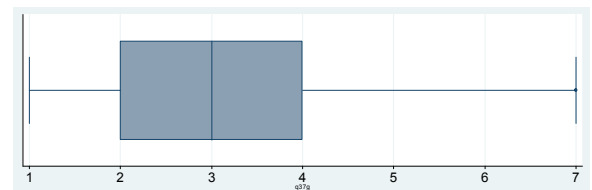


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

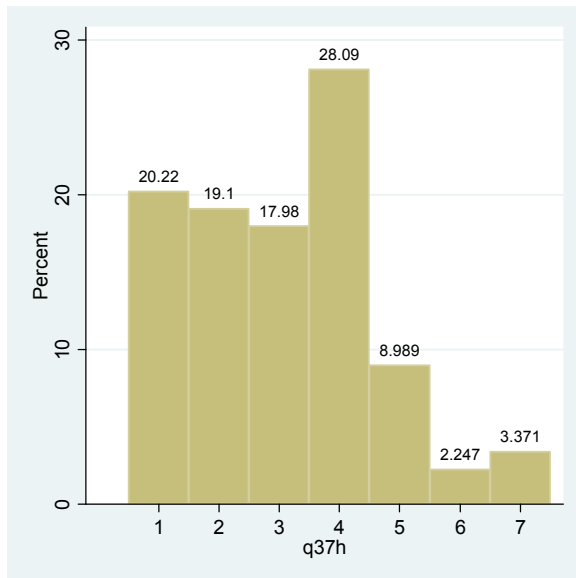
Mean estimation                      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]	
q37g	3.25	.1727596	2.906622	3.593378



**Figure 110.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? weniger Regen im Winter

*How aware are you of things that could be done in your region to adapt to the following should they occur? less rain in winter*

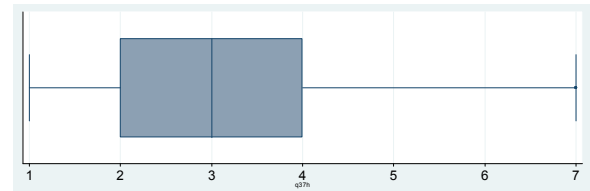


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

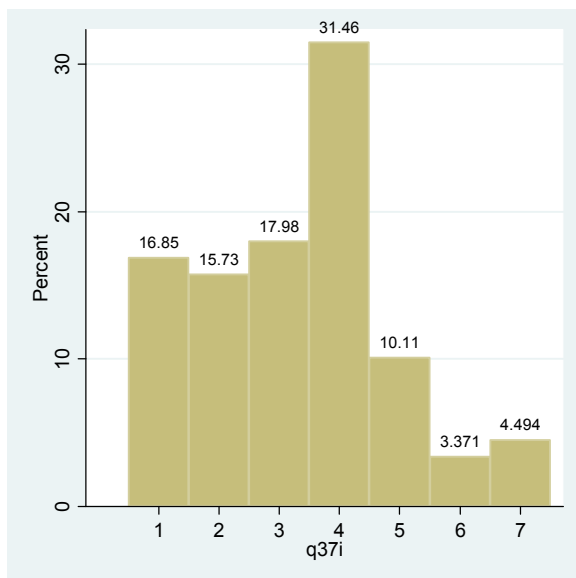
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]
q37h	3.067416	.1643679	2.740769 3.394062



**Figure 111.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? mehr Schnee

*How aware are you of things that could be done in your region to adapt to the following should they occur?. more snow*

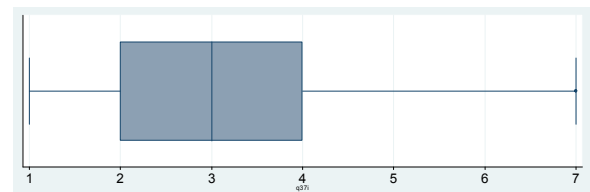


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

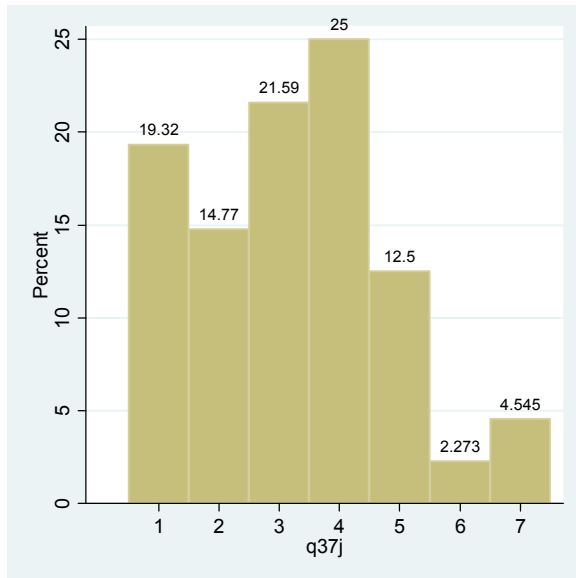
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]
q37i	3.303371	.1679082	2.969688 3.637053



**Figure 112.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? weniger Schnee

*How aware are you of things that could be done in your region to adapt to the following should they occur? less snow*

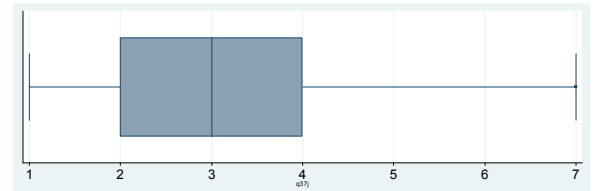


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

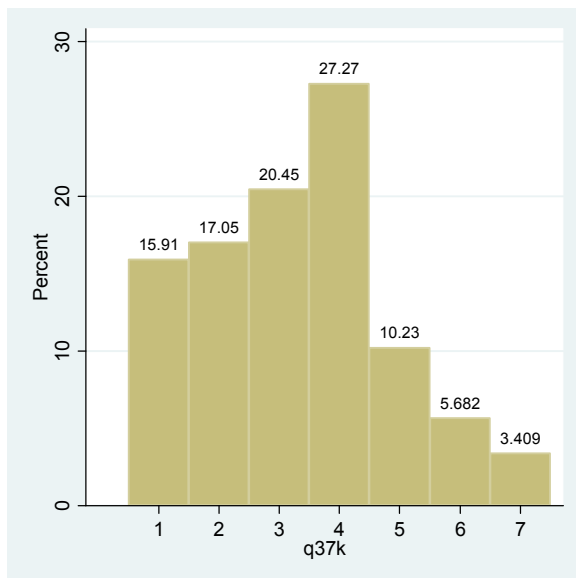
Mean estimation      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]
q37j	3.215909	.1713924	2.875248 3.55657



**Figure 113.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? stärkere Winde

*How aware are you of things that could be done in your region to adapt to the following should they occur? stronger winds*

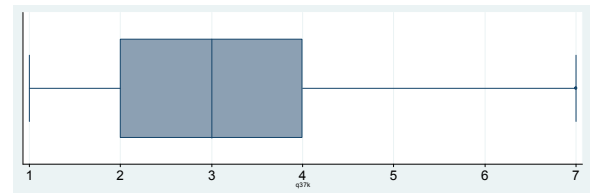


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

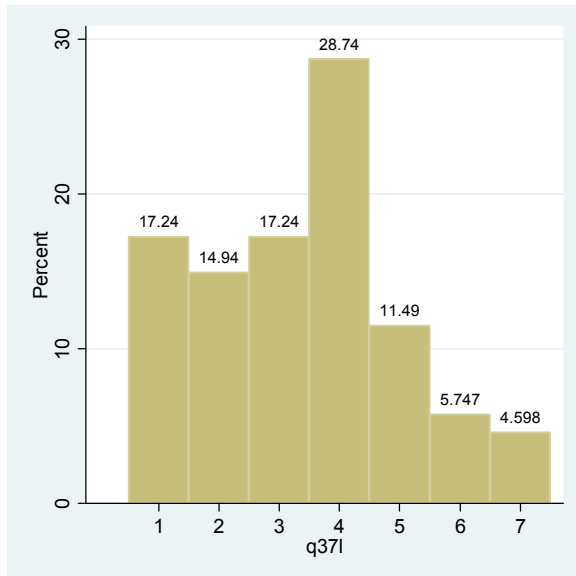
Mean estimation      Number of obs = 88

	Mean	Std. Err.	[95% Conf. Interval]
q37k	3.295455	.1680914	2.961355 3.629554



**Figure 114.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? mehr Sturmfluten

*How aware are you of things that could be done in your region to adapt to the following should they occur? l. more storm floods*

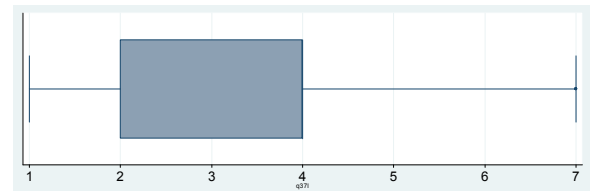


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

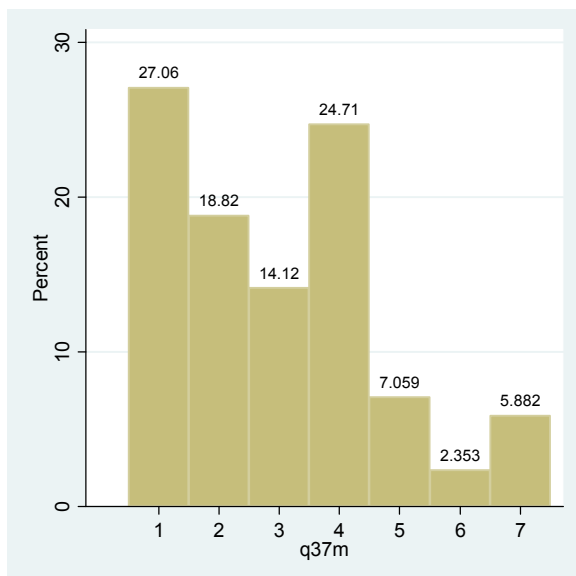
Mean estimation                      Number of obs = 87

	Mean	Std. Err.	[95% Conf. Interval]
q37l	3.37931	.1770299	3.027387 3.731234



**Figure 115.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? mehr Eis im Meer

*How aware are you of things that could be done in your region to adapt to the following should they occur?. more sea ice*

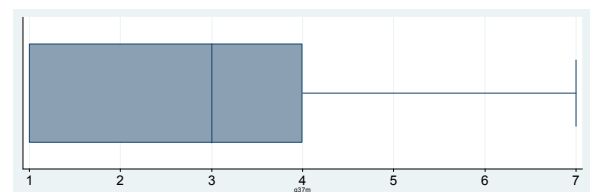


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

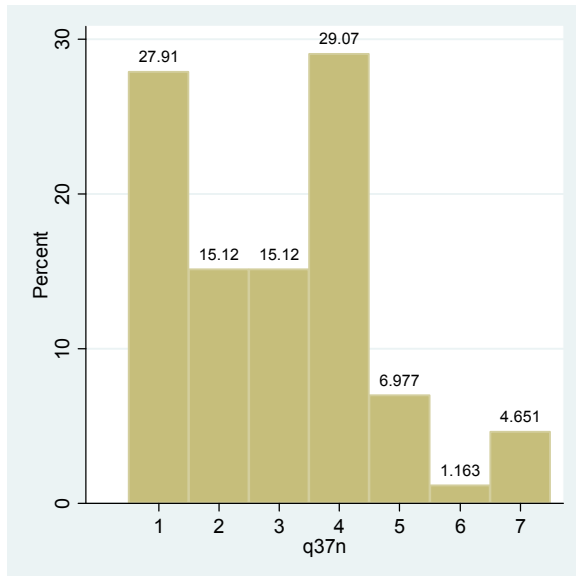
Mean estimation                      Number of obs = 85

	Mean	Std. Err.	[95% Conf. Interval]
q37m	2.964706	.1874546	2.591932 3.33748



**Figure 116.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? weniger Eis im Meer

*How aware are you of things that could be done in your region to adapt to the following should they occur? less sea ice*

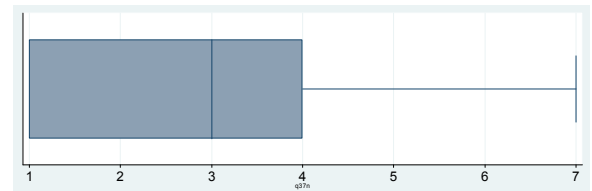


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

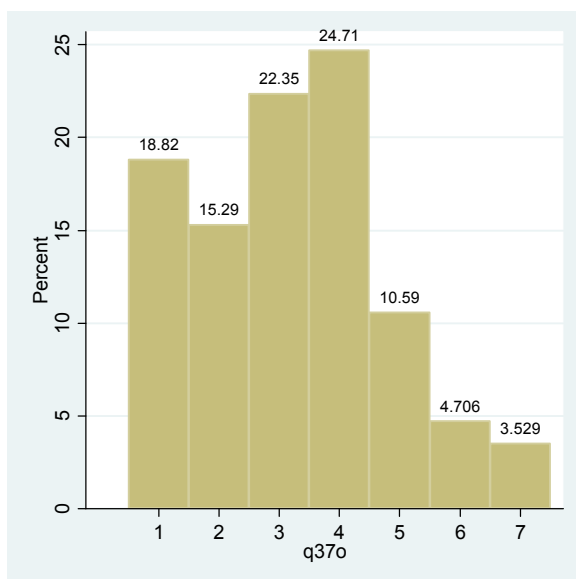
Mean estimation                      Number of obs = 86

	Mean	Std. Err.	[95% Conf. Interval]	
q37n	2.94186	.1776535	2.588638	3.295083



**Figure 117.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? stärkere Stranderosion

*How aware are you of things that could be done in your region to adapt to the following should they occur? increased beach erosion*

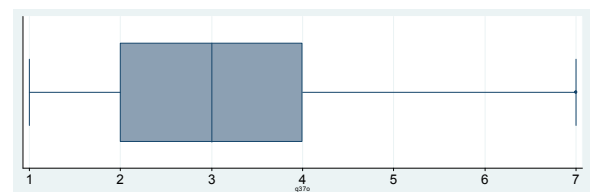


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

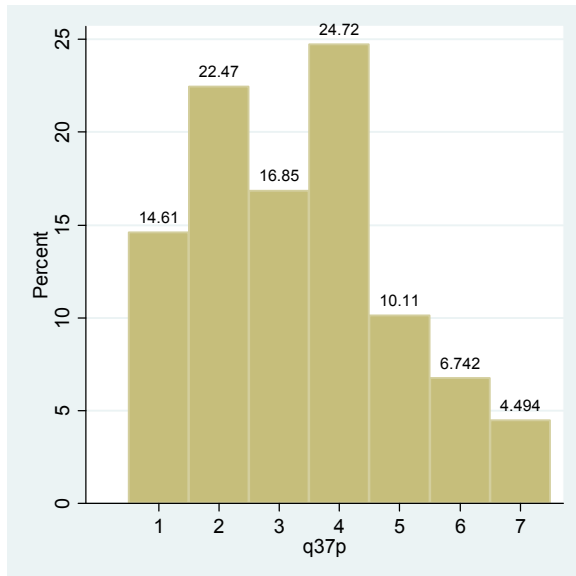
Mean estimation                      Number of obs = 85

	Mean	Std. Err.	[95% Conf. Interval]	
q37o	3.211765	.1732003	2.867337	3.556193



**Figure 118.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? mehr Überschwemmungen durch Schnee oder Regen

*How aware are you of things that could be done in your region to adapt to the following should they occur? more floods from snow or rain*

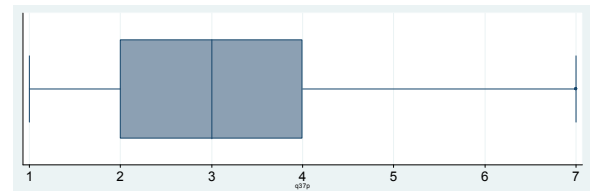


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

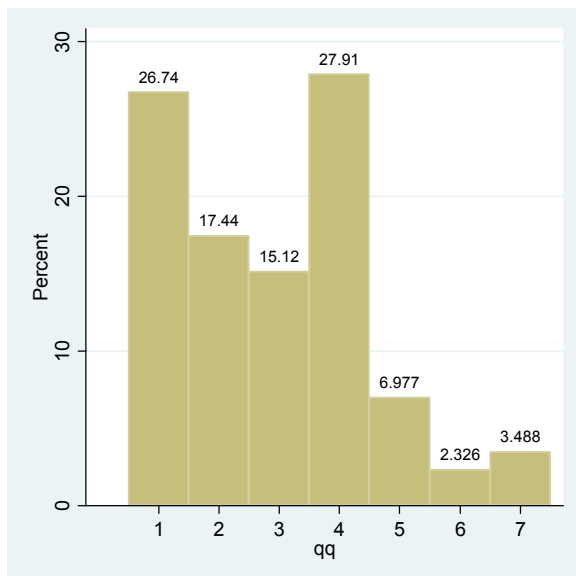
Mean estimation                      Number of obs = 89

	Mean	Std. Err.	[95% Conf. Interval]	
q37p	3.314607	.1747576	2.967313	3.661901



**Figure 119.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? weniger Sonnenstunden

*How aware are you of things that could be done in your region to adapt to the following should they occur? less sunshine hours*

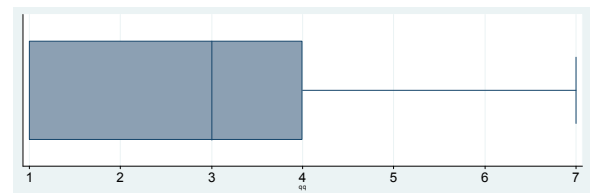


gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

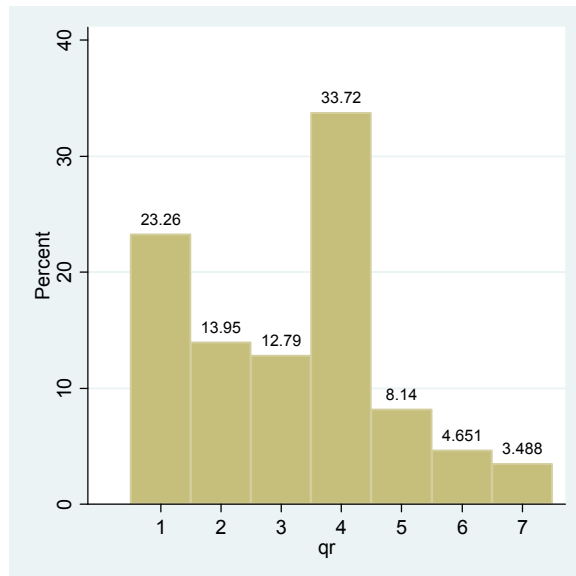
Mean estimation                      Number of obs = 86

	Mean	Std. Err.	[95% Conf. Interval]	
qq	2.918605	.1736508	2.57334	3.263869



**Figure 120.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? mehr Sonnenstunden

*How aware are you of things that could be done in your region to adapt to the following should they occur? more sunshine hours*



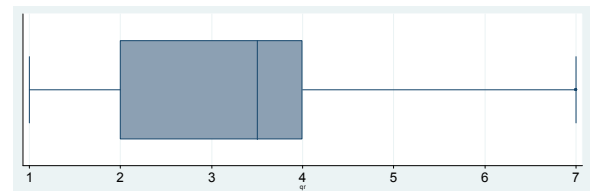
gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

Mean estimation                      Number of obs = 86

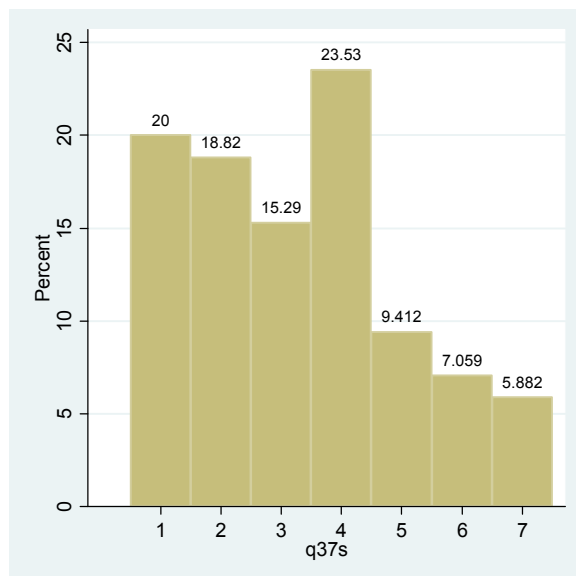
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	Mean	Std. Err.	[95% Conf. Interval]
qr	3.174419	.1775281	2.821445 3.527392



**Figure 121.** Angenommen, die folgenden Umweltveränderungen treten ein: Wie gut sind Sie informiert über das, was in Ihrer Region zur Anpassung getan werden kann? Meeresspiegelanstieg

*How aware are you of things that could be done in your region to adapt to the following should they occur? sea level rise*



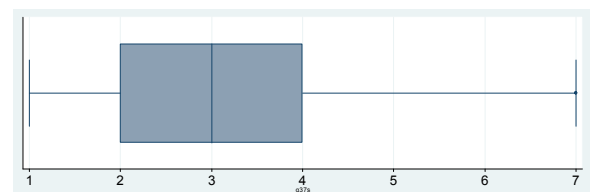
gar nicht 1 2 3 4 5 6 7 sehr gut

not at all 1 2 3 4 5 6 7 very much

Mean estimation                      Number of obs = 85

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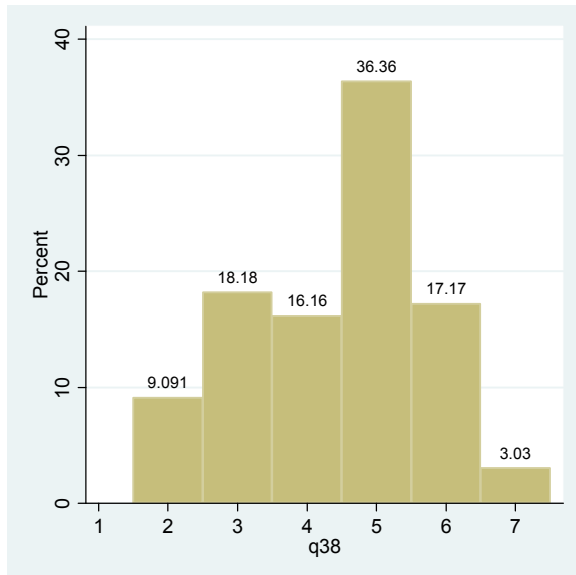
	Mean	Std. Err.	[95% Conf. Interval]
q37s	3.282353	.1920053	2.900529 3.664177





**Figure 122.** Welche wirtschaftlichen Auswirkungen hätten Anpassungsstrategien Ihrer Meinung nach in Ihrer Region? (der Wert 4 steht für "keine Auswirkung auf die Wirtschaft")

*In your opinion, in your region adaptation strategies would result in what economic impact? (a value of 4 indicates no economic impacts).*



sehr negative Auswirkungen 1 2 3 4 5 6 7  
sehr positive Auswirkungen

very negative impact 1 2 3 4 5 6 7 very positive impact

Mean estimation                      Number of obs = 99

	Mean	Std. Err.	[95% Conf. Interval]
q38	4.434343	.130932	4.174513 4.694174

