#	Ch	From Page	From Line	To Page	To Line	Comment	Response
1	9	0	0	0	0	In general, I found the more specific the case study, the more useful it is, particularly with respect to key messages and conclusions. Where key messages are rather general, they tend to appear rather repetitive. (Goodess, Clare, Climatic Research Unit)	Thank you - these suggestions are be reflected in the SOD.
2	9	0	0	0	0	My comments here only refer to the introductory sections that prelude the case studies as such. This we do in generic fashion. With regard to the first sections on the why and the method of case studies a few overall comments and suggestions are warranted. Firstly, when starting off with the why and benefits of case studies I believe it would be much better to detail why these chosen case studies are here and what we hope to achieve with them as regards the overall goal of the study--advancing adaptation through knowledge of how risk associated with extreme events and disasters has been managed historically and today, as opposed to providing a somewhat disperse and maybe at times very specific argument for case studies in general in other fields of enquiry--this of course does not mean that reference could not be made to the more general comments on case studies in general, where this is relevant. The explanation of why the case studies are here, the typology used and the justification of the final selection is rather limited and and far more needs to be put to justify these thematically, methodologically etc, and to explain very clearly what is expected. Secondly, when reference is made early in these first sections to what is sought through an examination of case studies, the idea of learning from the "response" to disasters and how this can help disaster risk management in the future comes up time and again. Here one is somewhat concerned given that DRM is about much more than "response" to disasters--in fact it is more about response to disaster risk. In fact later in these opening sections the argument is opened up to talk of prevention, mitigation, reconstruction experiences as well but at the very beginning in the opening statements reference is to "response" to events and this is not exactly accurate as many of the case studies cover more than response to events getting into important prevention, mitigation, organizational, governance etc issues as they should do. Moreover, really I dont think the idea should be to see how past experience can improve DRM or DM as such (unless we are suggesting that DRM is adaptation!!) but rather how it contributes to adaptation, as this is the primary aim of the study as established in its title. Thirdly, even if the typology used for selecting case studies recognizes hazard types and types of region or zone as relevant, we should be clear all along that the case studies referring to hazard types and regions must concentrate on the disaster risk management and adaptation promotion concerns explicit in the study objectives and title. As we suggest in the next overall comment it is not clear this is the case. A last point relates to how well at this stage the case studies can reflect issues and experience as depicted in the main thematic chapters, if these have only just been put together in FOD form and may change considerably in the future. This chapter has always been somewhat of a paradox given that without finalised thematic chapters that highlight the management experience gained and relevant it is difficult to gear up examples and case studies such as to use them to illustrate such issues and conclusions. Thus, at present, on reading what is in FOD as a whole one realises there are numerous points, conclusions, ideas, experiences that are raised and that would beneft from a case study but which are not there yet. One really feels that this chapter is going to need a thorough revision and filtering in addition to amplification to get it to reflect the chapters and their final preocupations fully. In our next comment on the case studies as such we delve a little further into missing aspects and management concerns as we see them. (Lavell, Allan, Programme for the Social Study of Risk and Disaster (FLACSO))	Thank you - in response to the first two comments, the suggestions are reflected in the SOD. With respect to the DRM vs. CCA issue, case studies in the SOD will deal with them in a more integrated manner (though in some respect improving DRR can indeed improve adaptation); ultimately, this issue may be best addressed in Chapter 1. Re: comment 3: the authors concur, and the case studies now reflect the fact that the key messages, if not their wording, have been in large identified.

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3	9	0	0	0	0	The comments in this generic contribution refer to the sum of the case studies using one or another to illustrate or support our arguments, but without offering a detailed analysis and discussion of these one by one. Firstly, although the division into cases according to hazard type, types of vulnerable region and management strategies is acceptable as a starting point, it is also clear that no matter what the rationale for such a division may be (and there are others that could be considered relevant-for example, if there are chapters on local, national and international management concerns and practice and the need for integration across scales why are there not case studies that look at these levels and integration challenges in a specific way?), the case studies within each section should take as the central guiding element, the need to provide evidence and examples, using concrete cases or comparative case study, of how risk has been managed when faced with extreme events and disasters in the past, how this is seen to evolve in the future and and how this promotes or could promote adaptation, as is established in the study rationale and title. And this should be done building on and specifying the more generic analysis provided in thematic chapters (see previous comment on the difficulties associated with this). As one reads the chapter however and the case studies, one realises that this end is achieved at very varying levels--some dont achieve it at all as they hardly even refer to management aspects (see duststorms for example) and others concentrate almost completely on such aspects with very good results (see urban heat, cholera, governance, less developed countries). Following on from this point a second fact is that various cases put far too much information on the causes of the events and their impacts but very little on how prevention, mitigation, response etc was consructed and practiced (see duststorms, heat,drought and fires). Thirdly, in various cases a lot of what is there is not a case study approach as such but rather a generic discussion of a theme with many case examples put to illustrate the theme and its value and the experience associated with it. This information, which at times is very valuable and well put together, could easily be in the thematic chapters, complementing what is there now-- good parts of the insurance, early warning, education, SIDS first page, and section 2 of governance cases are examples of this. That is to say, many "case studies" are not case studies in the sense that a management principle or practice based on diverse hazard and vulnerability and exposure circumstances is illustrated in its good and bad points using a concrete example or case or a limited number of comparative cases. Fourthly, there is a notorious difference in detail and level of argument between or the cases--some are really excellent and some so sketchy and wandering as to be of little use for achieving the central management and adaptation guiding principles required of the study. Fifthly, although there are three thematic chapters on scale approaches--local, national and international-this major aspect is rarely taken up on and it is only in the DZUD and governance case studies that allusion is made to this key management topic. In the end if one had to select the cases that most approximate the goal sought and could be used to guide other examples as to structure content and maybe length, then according to my criteria, they would be the urban heat, cholera, governance, coastal areas and city, and, with need for more detail, the less developed country cases. The Arctic case is so different, if interesting, because there really is no experience with managing extreme events and disasters in these regions that approximates the case of perma frost melting, such that the case is really on newly devised and thought out adaptation measures that have no real antecedents in previous DRM experience. Lastly, it is clear that the cases chosen do not deal with all the scales and themes that are important for getting to the basics of this adaptation in the light of extreme event and disaster risk management experience concern. Although one is cognizant of the fact that there is limited space to deal with things one is also cognizant of the fact that a number of the cases here are not sufficiently relevant as they are developed now, and many could be edited in order to concentrate on the relevant aspects, leaving space for others and from other regions--Latin America is almost not represented in the cases. Three themes come to mind immediately. First cases of management of risk where the zones or regions have never experienced a particular type of event and then do so and need to thus vamp up their ideas as to the future--Brasil and hurricanes for example; Montevideo and wind storms: second, areas that have experienced many smaller and medium scale events prior to a large scale event as opposed to areas that only have suffered a large scale event or have limited experience with smaller scale recurrent events, and how they deal with this comparatively. Third, cross border management contexts around a common problem-river basins, ecological zones etc. Finally, on hind sight, as regards the DRM legislation theme and cases I believe that more important than seeing how DRM has developed as such it is far more important to deal with what is dealt with in the last part of the case study--how some governments are now building DRM and ACC considerations together in the same legislation and hopefully, institutional arrangements and planning procedures--Phillipines as an example given in the text. Here as additional info, Central America through its SICA promoted Integral Disaster Risk Management Policy and its Climate Change Strategy both approved this year, take up on the integration front and could be looked at as cases. Also the Colombian National Planning Department in thinking its next national development plan is considering a joint DRM, ACC, Environmental management approach to action and an integral conceptual statement on this is now being put together to guide intervention. (Lavell, Allan, Programme for the Social Study of Risk and Disaster (FLACSO))	Re: comment 1: The SOD case studies are not going to be subdivided by theme; they are selected based on the key messages and themes identified by the other chapters and reflect their needs and requests. Each case study has been discussed in more than one chapter. Re: comment 2: The authors agree with this comment and it will be addressed in the structure of the case studies in the SOD. Re: comment 3: multiple examples were chosen to incorporate broader geographic regions and to be able to make comparisons; at the same time the most general case studies will no longer be included in the SOD. Re: comment 4: Noted. A uniform template will resolve this issue for the SOD. Re: comment 5: Helpful suggestion, but the page limitations do not allow for the pursuit of this objective. Re: comment 6: the page limits constrain all aspects being suggested; the initial division of case studies by theme is no longer based upon the themes in the FOD. The multi-scalar and other dimensions are best addressed by Chapter 7. Re: comment 7: due to space limitations and availability of literature and knowledge of effectivness, this will be dealt with in as thorough a manner possible.
3.2	9	0	0	0	0		
4	9	0	0	0	0	case study 9.18 is a best marerial to have a concrete image for what chaps. 5,6,7, 8 suggest (morisugi, Hisayoshi, Nihon University)	Thank you – this case study has been kept and added to the rest of the cyclones study to make sure the messages are as clear as possible
5	9	0	0	0	0	In the reference list: Ebi et al., 2004: Journal names should be given in its format. " Int. j (J)of biometeorology (B)" (Incecik, Salahattin/Selahattin, Istanbul Technical University)	Fixed

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6	9	0	0	0	0	the different case studies are difficult to compare as each section is structured differently and refers to different issues. This makes a comparison or detection of patterns difficult. (Ammann, Walter J., Global Risk Forum GRF Davos)	As CLAs and with our Review Editors we agree - the case studies are intended to illustrate a wide range of messages and learning, and for this reason they may not always be comparable. That said, the cases in the SOD are nonetheless be more easily compared, especially with regard to lessons learned and common themes
7	9	0	0	0	0	The case studies offer a variety of approaches. Some sections are analyses of multiple cases on a theme - they would be better described as thematic discussions than case studies.The case studies which are most useful are those that provide more detail about one particular siutation. The case study which is most closely resembles a model of a case study is the case study on Mozambique, which provides a lot of detail about implementation. The case studies on cholera and the bushfires also provide the level of detail which meets the description of case study. It is proposed that all case studies should be modelled on these case studies. It is suggested that the case studes should be limited to a certain amount of words or pages (eg. 5 pages). (Abrahamsj, Jonathan, World Health Organization)	This contents of this comment has been addressed above. The case studies are intended to illustrate a wide range of messages and learning, and for this reason they may not always be comparable. The SOD case studies will all be the same length.
8	9	0	0	0	0	As stated before, the case studies should consistently apply the terminology raised in the Chapter 1. (Abrahamsj, Jonathan, World Health Organization)	Agreed. This will be reflected in the SOD.
9	9	0	0	0	0	The use of the term "response" in the field of emergency/disaster risk management should be reserved for emergency response or else it causes confusion. (Abrahamsj, Jonathan, World Health Organization)	Agreed. This has been reflected in the SOD.
10	9	0	0	0	0	The focus of this report is adaptation. As some case studies refer to climate risk mitigation, it might be decided to remove these descriptions. (Abrahamsj, Jonathan, World Health Organization)	The authors disagree with the first sentence, because the SREX takes a broad approach to adaptation and disaster risk reduction and the case studies reflect this.
11	9	0	0	0	0	Overall, many of the case studies focus on climate change, but do not address in detail the issues of vulnerabilities, community impacts and they address adaptation of risk management measures even less. In my view case studies should emphasise the measures taken to reduce the risks rather than to describe the risks. A framework of measures or capacities required to manage or treat the risks could be included in each case study, and comments made accordingly. More empahsis on a programmatic or systemic approach should be followed. (Abrahamsj, Jonathan, World Health Organization)	Where possible, this comment will be reflected in the SOD (with respect to descriptions of measures taken to reduce risks).
12	9	0	0	0	0	All the case studies should contain reference to the human impact of risks, such as health, livelihoods, development etc, Texts such as EK Noji's Public Health Consequences of Disasters, which identifies the epidemiology associated with climate risks, could be helpful. (Abrahamsj, Jonathan, World Health Organization)	The case studies are intended to illustrate a wide range of messages and learning. The suggested references is welcome and will be reflected in the SOD.
13	9	0	0	0	0	Where chapters make statements that disaster risk management is about reducing vulnerability, I am concerned that they miss recognising the important role of effective response and recovery. While there is a need to invest in being more proactive, there is still a need for emergency response capacities. In general, the case studies do not address preparedness, response and recovery measures needed to manage the risk in the holistic sense. (Abrahamsj, Jonathan, World Health Organization)	Though the focus of the report is on DRR and adaptation, assessment of response and recovery will be more thorough in the SOD where possible.
14	9	0	0	0	0	In general terms, statements which imply that there is evidence should be accompanied by a citation, and preferably from the primary source. (Abrahamsj, Jonathan, World Health Organization)	The authors agree with this.
15	9	0	0	0	0	BLANK (Abrahamsj, Jonathan, World Health Organization)	Noted
16	9	0	0	0	0	No particular observation (Bosello, Francesco, Fondazione Eni Enrico Mattei, Milan University \)	Noted
17	9	0	0	0	0	1. Case study is an effective method to understand cilmate change, but the case sellection is very important to shape our knowledge.In chaper 9,very few cases come from China, where has been and will be suffered serious negative impact from climate change. In recent years, lots of extreme climate events occurred in China, including droughts, floods, frozens and stormsnows. sdudies showed that all theses reginal disasters were close related to climate change. and due to language difference,China cases should be paid more attention. 2. We could reviw recent disasters, frozen in South China in early 2008, cold wave in North China in late 2009, drought in Southwest in spring of 2010, flood in Northeast in summer of 2010. These events showed that temperature could decreased sharply in some region when it be increasing, floods could occurred in some region during lasting drought(--drought has been kept 10 years in Northeast). These facts also indicated that climate change impact and extree events impacts under climate change showed more serious in regional level, thus regional adaptation is majority task facing climate change. thus we have to think about carefully what is meaning in practice and real society of "2℃ increase". 3. Some cases were old, and they were difficult to be defined whether(or not) climate change lead to the event happening.For example, flood in Mozambique and sand storm in Mongolia, are they come from climate change? or climate? 4. Forestfire in Australia resulted from natural light, which was connection to warming and drought. But the fire in Russia this summer maybe has more implications to climate change.Reports showed that high temeprature caused the fire. (XIE, LIYONG, SHENYANG AGRICULTURAL UNIVERSITY)	The authors agree with this comment. The cases were chosen based on avialable literature, but if references for these events can be provided they will be taken into consideration.
18	9	0	0	0	0	Case studies should provide some typical and severe cases in this chapter. Suggestion is that case 9.1 tropical cyclones and case 9.5 floods should be reinforced. (Zhao, Zong-Ci, National Climate Center)	The comment is noted but the cases need to reflect a wide range of issues.

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19	9	0	0	0	0	GENERAL STRUCTURE AND QUALITY: Overall, the first two groups of case studies appear very disjointed, not helped by the large number, and large variation in structure and quality of the individual cases that are presented. Note that Case Studies 9.1 (Cyclones), 9.2 (Urban heat), 9.8 (Cholera) and 9.11 (Arctic) are most effective, and should serve as templates for how many of the other case studies in these sections should be improved. (Stocker, Thomas, IPCC WGI TSU)	Noted. This issue will be addressed in the SOD.
20	9	0	0	0	0	GENERAL STRUCTURE AND QUALITY: Several case studies in the 'extreme events' and 'vulnerable regions and population' sections need considerable revision to bring them up to the same level of quality that is found in the last grouping 'management approaches'. Some of the structuring of these case studies is difficult to follow, and the case study titles often do not reflect the content. Some case studies (but not all) conclude with 'relationship to key messages'. It is not made clear in the introduction section where these 'key messages' are coming from, or what purpose they serve. It is not clear why some case studies have this section relating to key messages while others do not. Does this mean that some case studies have no relationship to 'key messages'? The case studies that do include this 'key message' section are inconsistent in their approach, eg, Drought in Ethiopia compared to Dzud. (Stocker, Thomas, IPCC WGI TSU)	All of these comments are addressed in the SOD.
21	9	0	0	0	0	KEY MESSAGES: We propose Chapter 9 includes a table in the introduction that lists the 'key messages' coming from other chapters, and links these with the case studies to be provided in chapter 9 - it will thus be clear to the reader what case studies are illustrative of particular key messages. Case studies which are not illustrative of any key message should be removed. Chapter 9 with its 19 case studies is much too long and this will be an effective way to focus the chapter and clearly link the case studies with the other SREX chapters. (Stocker, Thomas, IPCC WGI TSU)	All of these comments are addressed in the SOD.
22	9	0	0	0	0	SCIENTIFIC QUALITY AND REFERENCING: Scientific quality and referencing remains poor in many of these case studies. When physical observations and projections relating to climate and extreme events are given, these must be supported with cited literature and preferably with reference to Chapter 3 of SREX. Many instances are noted where this is lacking. In addition, the strong dependence on grey literature in this Chapter is an area of major concern, and we encourage the authors to look for peer-reviewed alternatives to the extent possible, and carefully assess any remaining grey literature. (Stocker, Thomas, IPCC WGI TSU)	All of these comments are addressed in the SOD.
23	9	0	0	0	0	OVERLAP/ CONSISTENCY: Case studies must avoid reassessing the science and material already provided in Chapters 1-8. The assessment provided in Chapter 9 must be consistent with what was written about occurrence, magnitude, variability etc. of extreme events and impacts (e.g., Chapters 3 and 4). (Stocker, Thomas, IPCC WGI TSU)	All of these comments are addressed in the SOD.
24	9	0	0	0	0	FOOTNOTES: The use of footnotes is mostly unnecessary and inconsistent. In many cases these seem to be used to cite websites or other literature that should just be cited in the normal way and provided in the reference list. (Stocker, Thomas, IPCC WGI TSU)	This comment will be relected in the SOD.
25	9	0	0	0	0	ABBREVIATIONS: As a minor editorial comment - The abbreviation CAA is used here a lot, sometimes it appears interchanged with CCA. The term CAA needs to be introduced in full the first time it is used (page 55), to avoid any confusion. Many other abbreviations need clarification also, and are noted in later comments. (Stocker, Thomas, IPCC WGI TSU)	This comment will be relected in the SOD.
26	9	0	0	0	0	I like this Chapter very much. The only possible improvement should be to try and unify the presentation of case studies as much as possible. (Simonovic, Slobodan, University of Western Ontario)	Noted, with thanks. This concern will be reflected in the SOD.
27	9	0	0	0	0	“all sections “Research Gaps and Conclusions: All these sections in the chapter miss research gaps referring to impacts of extreme events on ecosystem provisioning and regulating services as well as on social-ecological resilience. Often, vulnerability can substantially be reduced by adaptive ecosystem management and prevention measures (disaster risk management). Investment in knowledge is a central conclusion. However, for most impacts of extreme events on ecosystem services and for vegetation traits as a buffer against detrimental effects of climate extremes, scientific knowledge needs to be generated. Ideally, field experiments manipulating extreme weather events are installed in various biomes addressing the most pressing local aspects. Discrete events of novel extreme magnitude and frequency can have long-term ecological significance and drive ecosystems beyond stability and resilience. (Jentsch et al. 2007). Reference: Jentsch A, Kreyling J, Beierkuhnlein C (2007): A new generation of climate change experiments: events not trends. Frontiers in Ecology and the Environment 6(6): 315-324.” (Jentsch, Anke, University of Koblenz-Landau)	This comment is more relevant to the thematic Chapters (i.e., Chapter 4). Moreover, the SOD case studies will not contain the particular subsection referenced.

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28	9	0	0	0	0	"(also corresponding to points made on page 131, line 30): In this chapter, a case study on interacting disturbances and synchrony in previously independent extreme events is missing. If no such case study is available to the authors, more general conclusions on interacting disturbances need to be drawn from section 9.31 - 9.6 (Drought, heat waves and bushfires). From White & Jentsch 2001: Disturbances and extreme events vary not only with contemporary environment and the kind of ecosystem present but also with the history of disturbance. It is frequently asserted that the probability of fire and fire intensity increases as fuels build within the ecosystem as a function of the time since the previous fire. Past fire events influence the amount of fuel build-up as a historical factor. Situations such as these represent feedback between the community's state and the event regime. Acting in the opposite direction, disturbance interactions can promote further disturbance. For example, wind damage can lead to insect and fungal attack; this may increase the vulnerability to further windstorms. Some fires can create more fuels than they consume if they kill trees that then break apart and fall, increasing fuel loads after the fire and creating the conditions for a subsequent extreme fire that is more intense than the original fire. Insect outbreaks can also cause heavy fuel loads and areas of high fire intensity. Disturbance interactions generally mean that a prior disturbance attracts a subsequent disturbance (repeat disturbances are likely), but some disturbances may decrease the probability of another disturbance. Interactions and feedback both suggest that the probability and characteristics of current extreme events can only be understood with reference to the history of the event regime. Interactions among different kinds of disturbances add to the complexity of approaching an understanding of extreme event impacts. The interaction of disturbances that have varying temporal rhythms and spatial extensions and are subject to varying positive or negative feedback is a major challenge. Generally, three kinds of system response to disturbances have been identified: threshold responses, scale-independent responses and continuous responses. However, data on many biotic and abiotic parameters and records of historical events and processes are often missing or are difficult to acquire. Reference: White PS, Jentsch A (2001): The search for generality in studies of disturbance and ecosystem dynamics. Progress in Botany 63: 399-449." (Jentsch, Anke, University of Koblenz-Landau)	This comment is more relevant to the thematic Chapters (i.e., Chapter 4). Moreover, the SOD case studies will not contain the particular subsection referenced.
29	9	0	0	0	0	A case study from the Mediterranean is absent in this chapter, although Med has been identified as a red spot for extremes in IPCC 2007. I suggest that the authors use case studies (e.g. 2003 and 2007) discussed in Chapter 3 . (Zerefos, Christos, Academy of Athens)	The heat wave case study covers this region and the chapter as a whole must reflect a wide range of geographical considerations.
30	9	0	0	0	0	I wish there could be an example from north Africa, as much as it has the Sahara that affects some regions on Earth. (Yasseen, Adel, Ain Shams University - Institute of Environmental Research and Studies)	The drought and dust storms case study covers this region and the chapter as a whole must reflect a wide range of geographical considerations.
31	9	0	0	0	0	This chapter presents various cases studies in relation with the special report thematic. The material is relevant, detailed with on average relevant references to support the description of the case studies. The authors must be thanked for this huge work. However, I think that this chapter needs significant work to present the material in a better way and to improve the links with the other chapters and the key messages or findings of the report. My main suggestions are : - The chapter lenght should be significally reduced (there are a lot of generalities and repetitions that can be removed). - The presentation of the case studies should be more homogeneous - Synthesis figures and/or Tables should be added (in the cases studies description and in the introduction/conclusion - a section « research needed » could be added in the conclusion (some case studies treat this point) (Martin, Eric, Meteo-France)	These suggestions will be reflected in the SOD. The concern about research gaps and needs will be addressed by the previous chapters.
32	9	0	0	0	0	Structure/General Comment. This chapter is very useful in anchoring some of the abstract concepts and discussing practical relevance of linking disaster risk management and adaptation. I found the selection of case studies by events, regions and interventions particularly useful. (Sperling, Frank, WWF)	Thank you
33	9	0	0	0	0	Additional recommended references: (i) Agrawala, S., Raksakulthai, V., van Aalst, M., Larsen, P., Smith, J. and Reynolds J. (2003). Development and Climate Change in Nepal: Focus on Water Resources and Hydropower. OECD. (ii) Sperling F. with Valdivia C., Quiroz R., Valdivia R., Angulo L., Seimon A. and Noble I. (2008). Transitioning to Climate Resilient Development - Perspectives from Communities in Peru. Environment Department Papers - Climate Change Series. Paper number 115. The World Bank, Washington, D.C. (iv) World Bank (2005). Natural Disaster Hotspots - A Global Risk Analysis. Disaster Risk Management Series No.5. The World Bank and Columbia University. Washington, D.C. (Sperling, Frank, WWF)	Thank you – we have reviewed the references as well as the completeness of the case studies for the SOD and the chapter has been modified, clarified and the references made more specific
34	9	0	0	0	0	Chapter needs a careful edit to determine what information should appear in other chapters and not here, and how to cross-reference when specific case studies appear in multiple chapters. An Executive Summary focusing on key messages and the degree of certainty in those findings must be prepared. Referencing must also be consolidated. (IPCC WGII TSU)	The SOD has reflected these comments. The Executive Summary works towards summarizing the key messages – but these are not complete from Chapters 1-8 so we hope the SOD will aid us in refining this.

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35	9	0	0	0	0	As the whole, the case studies are quite effective in highlighting key messages from other chapters. However, they still need considerably more work. They are far too long, repeat information from other chapters, and often don't focus on what can be learned from the case study. For nearly all the case studies, the introductions can be deleted as they repeat what is in other chapters. The definitions of extreme events are in Chp 3. Definitions of vulnerability, etc. are in Chp 1 and do not need to be repeated. Please read Chps 5-8 and if a point you think is important is not raised there, then offer the relevant text to that chapter; there is far too much discussion of scale issues that should be Chps 5-7. The governments will look to the case studies for examples of what worked and why that is relevant to other situations. Therefore, please remove most of the meteorology and lists of who is vulnerable or what has been done, in favor of highlighting what was learned from the case study. The authors should go through the FODs and identify which specific key messages from the ES the case study highlights; you might consider listing that first. The case studies should be 2-3 focused, concise, and clear pages. (IPCC WGII TSU)	Thank you – these points are noted - These concerns are addressed in the SOD.
36	9	0	0	0	0	As noted previously, Wikipedia is not an acceptable reference source. The referencing for many of the case studies needs to be improved. (IPCC WGII TSU)	Noted. This issue will be addressed in the SOD.
37	9	1	0	0	0	Chapter 9 is a very useful chapter and a huge improvement over earlier beginnings in the ZOD. It provides good balance and a wide spread over the issues pertinent to the entire ambit of SREX, as illustrated by the three types of areas covered by the case studies. I do question somewhat the extent of elaboration provided in the nine case studies of Extreme Events, especially as so much of the emphasis of the commentary in the text about DRM emphasizes the particular and often understated importance of the human and systems aspects of both exposure and vulnerability, in contrast to the elaboration of specific hazard-derived conditions. While some of the Event case studies do provide good coverage too about the interface between the phenomena and the human dimensions of risk, some others remain more focused on the technicalities of the event and the nature of their impacts. For the over-riding purposes of the SREX as a whole, I found the discussions contained in the case studies of subsections 9.2. and 9.3. more relevant. Some of those, like Case Study 9.16. on DRR Legislaton provides the opportunity for very useful discussion of elements perhaps not elaborated so much elsewhere in the SREX text, and with the very useful of both exemplary practical examples, as well as others that have proven to illustrate only a partial or so far incomplete approach to the problem. Finally, the various examples of comparative analysis provided with their trade-offs and multiple approaches provides a fine and stimulating review of the possibilitiues as well as the potential constraints for interested "users", hence bringing the discussions back to practical roles and responsibilities of implementation. (Jeggle, Terry, University of Pittsburgh)	This concern will be addressed and reflected in the SOD.
38	9	1	0	135	0	Terms "cost"use in several parts of the text often needs to be rephrased by "economic loss", since the concept of opportunity cost has been emphsized in previous chapters. (Kondo, Masahide, University of Tsukuba)	Noted. This issue will be addressed in the SOD.
39	9	1	1	135	32	Several case studies refer to "key messages" from other chapters of this report. I did not detect any section labelled "key messages" or "Key findings" in any of these other chapters (or I missed it in these 830 pages), although they are subliminally included in the "executive summaries". If you want to emphasize key messages / findings they should be explicitly stated in each single chapter, in a way readers can find and identify them easily. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	This will be addressed in the SOD.
40	9	1	22	0	0	“Missing is experimental evidence” (Jentsch, Anke, University of Koblenz-Landau)	Noted - this chapter does not lend itself to experimental evidence in the view of the CLAs - Chapters 1- 8 may be more appropriate for this
41	9	1	36	0	0	“Missing are a few paragraphs on vulnerablility of ecosystem functions and services based on insights from experimental evidence. Rest of paragraph from Jentsch et al. submitted J Ecol: There is growing concern that i.e. severe drought could negatively affect ecosystem functioning and stability. Here, the focus of attention is particularly on primary productivity, one of the major common currencies in global ecology. The findings from existing climate change studies on drought effects are highly controversial. While some field experiments showed that natural and simulated drought led to decreases of primary productivity (Olesen & Bindi 2002; Morecroft et al. 2004; Penuelas et al. 2004; Ciais et al. 2005), others did not find any significant effects of locally severe drought manipulations (Fay et al. 2000; Kreyling et al. 2008c). Generally, evidence suggests that an elongation of inter-rainfall-intervals as well as changes in seasonal timing are more likely to have effects on a reduction of above-ground net primary productivity (ANPP) than reduced total rainfall quantity per se (Fay et al. 2000; Swemmer, Knapp & Snyman 2007). However, ecosystem multifunctionality in the face of climate extremes has rarely been addressed experimentally to date (Jentsch, Kreyling & Beierkuhnlein 2007; Jentsch & Beierkuhnlein 2008; 2010). Prevailing response parameters in climate change experiments are above-ground production, soil C/N-ratio and soil respiration (ISI Web of Science). The interrelationships between primary productivity and nutrient cycling, gas exchange or water regulation seem to be a scientific black box. Reference: Jentsch A, Elmer M, Gellesch E, Glaser B, Grant K, Hein R, Kreyling J, Mirzae H, Nadler S, Nagy L, Otieno D, Pritsch K, Rascher U, Schädler M, Schloter M, Singh B, Lara M, Walter J, Wellstein C, Wöllecke J, Beierkuhnlein C (submitted 16/08/2010 – invited for special issue): Climate extremes initiate plant physiological processes which serve to regulate overall ecosystem productivity. Journal of Ecology.” (Jentsch, Anke, University of Koblenz-Landau)	Noted – thank you – vulnerability is being further addressed in Chapter 2 of the SOD and Chapter 9 case studies link to these points – we believe these concerns are addressed in the SOD.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
42	9	2	1	0	0	"Too lengthy in justifying the use of case studies. Reader does not need to be convinced of the value of case studies, rather be informed about the criteria for selecting the case studies following here and the potential insights to be expected from reading through them." (Jentsch, Anke, University of Koblenz-Landau)	Noted - these concerns are addressed in the SOD which is much more focused and targeted
43	9	2	1	0	0	On average, the introduction contains too much generalities. A presentation including a justification of the choice of the case is missing. A synthesis table showing the cases studies and their main characteristics (lenght, spatial extent, management, which type of country (developed, developing ...)... is missing). (Martin, Eric, Meteo-France)	Noted - these concerns are addressed in the SOD. We will have a table of key messages but the other chapters have not yet completed their work on this
44	9	2	1	0	0	Section 9.1 provides a confusing introduction to the chapter. The key points relevant to this report are summarized well in section 9.2.1, which also would serve as a clear concise introduction to the chapter. Suggest deletion of 9.1, perhaps integrating a few of its elements into 9.2, but significantly cutting down the general discussion of case studies. (IPCC WGII TSU)	Noted - these concerns are addressed in the SOD.
45	9	2	1	5	32	The Introduction is highly repetitive of information in other chapters, and repetitive across the Introduction. Much of section 9.2.1 and nearly all of section 9.2.3 can be deleted. (IPCC WGII TSU)	Noted - these concerns are addressed in the SOD.
46	9	2	1	9	3	The purpose of these case studies needs to be made clear. Ultimately this is a report about climate change, and in some of the case studies the connection to climate change (actual or potential) is tenuous at best. Care also needs to be taken as the inclusion of an event in a case study in this report may be taken by some readers to imply that climate change is influencing the probability of the event without evidence being presented as to whether or not this is the case. There may need to be an explicit statement somewhere in the introduction of the section commenting on this. (Trewin, Blair, Australian Bureau of Meteorology)	Noted – we consider that these concerns are addressed in the SOD.
47	9	2	3	2	11	Case studies are also applicable in applied science. For instance in engineering , architecture, and building science. (Yasseen, Adel, Ain Shams University - Institute of Environmental Research and Studies)	Noted - these concerns are addressed in the SOD.
48	9	2	3	3	18	Section 9.1 and 9.2 are really too general. Must be more focused on the subject of the report. (Martin, Eric, Meteo-France)	Noted - these concerns are addressed in the SOD and a much shorter introduction has been prepared – in part because we have published material in other peer review domains to reflect these issues and can now reference these.
49	9	2	5	82	52	paintfully I must say here the same that I expresed in 11 and 12 about the chapters 3 and 4... This chapter needs a compete review.. I think that it is another very important part of the document becouse is the one that shows especific cases.. But in my opinion neither the cases selected nor their analisys is good... (Linayo, Alejandro, Research Center on Disaster Risk Reduction CIGIR)	Noted - these concerns are addressed in the SOD and this is clearer and shorter in our view as CLAs
50	9	2	8	2	9	Hard to see the link between industrial marketing research and climate/disaster risk research - is this citation really useful? (Stocker, Thomas, IPCC WGI TSU)	Noted - this concern is addressed in the SOD and a much shorter introduction has been prepared – in part because we have published material in other peer review domains to reflect this issue and can now reference these.
51	9	3	2	0	0	"Case studies must be methodologically rigorous and include external validation. Predictions of effects of climate extremes on species, communities and ecosystem have become critical to science and society. Yet, up to date, consequences of future extreme weather events for species functional performance are largely unknown (Jentsch & Beierkuhnlein 2008, 2010). Increasingly, external validation of impacts of extremes on ecosystem functions and services is available from field experiments. They resemble highly controlled case studies of i.e. extreme drought, heavy precipitation events or cold spells on ecosystem functions and services such as productivity, nutrient cycling, gas exchange and water retention. There is a series of field experiments in operation, which can provide response patterns over time, e.g. covering several years of recurrent extreme events and their impacts on multiple ecosystem functions such as the EVENT experiments in central Europe (Jentsch et al. 2007). References: Jentsch A, Beierkuhnlein C (2008): Research frontiers in climate change: effects of extreme meteorological events on ecosystems. Comptes Rendus Geoscience 340: 621-628; Jentsch A, Beierkuhnlein C (2010): Simulating the future – responses of ecosystems, key species and European provenances to expected climatic trends and events. In special issue: Continents under Climate Change. Nova Acta Leopoldina 112: 89-98; Jentsch A, Kreyling J, Beierkuhnlein C (2007): A new generation of climate change experiments: events not trends. Frontiers in Ecology and the Environment 6(6): 315-324." (Jentsch, Anke, University of Koblenz-Landau)	Noted - these concerns are addressed in the SOD which is much more focused and targeted
52	9	3	21	3	36	I think that this paragraph present very well the chapter objectives and should be placed at the beginning of the introduction, probably mixed with section 9.1.1. (Martin, Eric, Meteo-France)	Noted - this concern is addressed in the SOD which is now much more focused and targeted
53	9	4	8	4	11	A reference should be made here to Box 5.1, chapter 5, which provides an excellent definition of grey literature, and the process of assessing this literature. (Stocker, Thomas, IPCC WGI TSU)	Noted – thank you - but we have not yet linked to Chapter 5 and Box 5.1 because we will take this forward with the next draft when we have clearer data from all the chapters – particularly the key messages from Chapters 1-8
54	9	4	18	0	0	what do UNISDR and CARE stand for? (Stocker, Thomas, IPCC WGI TSU)	UNISDR is one of the sponsors of the IPCC SREX – it is the UN International Strategy on Disaster Risk Reduction
55	9	4	23	4	27	Delete -- of course it will be. (IPCC WGII TSU)	Noted

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
56	9	4	30	0	0	It makes no sense when this report contains an entire chapter (chapter 3) which assesses the most recent literature on extreme climate-related events, to contain here an outdated, and over simplified summary of what was reported back in AR4. The statement from UNISDR is also over generalised and not useful. Lines 32 to 41 should be deleted. This section should simply begin with a sentence that refers the reader back to Chapter 3 - something like: "Chapter 3 of SREX has projected that many extreme climate events will increase in frequency and/or magnitude in many regions of the world. The risks from climate hazards present a growing threat, especially ..." (Stocker, Thomas, IPCC WGI TSU)	Agreed. This has been reflected in the SOD.
57	9	4	30	0	0	Please consider the World Bank study (2008). Transitioning to Climate Resilient Development: Perspectives from Communities in Peru. The discusses hazard exposure, resilience, coping and adaptation strategies of communities in NW part and altiplano of Peru, two regions incluenced in their climatic characteristics by El Nino/La Nina events but otherwise quite different exposure to hazards. Particularly the report explores the perceptions of risk by communities, the use of internal and external information and knowledge (early warning), qualitatively discusses the impact of hazards on households and communities, coping and adaptation strategies, role of institutions and possible implications of climatic change. (Sperling, Frank, WWF)	Noted – thank you for this
58	9	4	46	4	50	Rephrasing needed. This report cannot say what ongoing research objectives "need to be". (IPCC WGII TSU)	Agreed. This has been reflected in the SOD.
59	9	4	48	4	49	The affirmation seems to assure that the events being treated have a 10-year return period, which I do not think the original objective of the sentence was. (Kazama, So, Tohoku University)	Agreed. This has been reflected in the SOD.
60	9	4	52	4	54	I am not sure that it is very relevant to cite an IPCC workshop report. It's better to cite the primary litterature (Martin, Eric, Meteo-France)	Agreed. This has been reflected in the SOD.
61	9	5	19	5	20	These examples need unpacking--not clear enough to be effective, currently. (IPCC WGII TSU)	Agreed. This has been reflected in the SOD – more weight has been given to the case studies and the introduction cut significantly
62	9	5	21	5	22	Sentence « For example .... number of years. I think the consequences of very short events like hurricanes can be felt over long time. This sentence should be modified. (Martin, Eric, Meteo-France)	Agreed. This has been reflected in the SOD.
63	9	7	1	0	0	case studies (CSs) of extreme events (9.3.1) should appear in a more logical order, ie, temperature related, precipitation related, etc. (Stocker, Thomas, IPCC WGI TSU)	Case studies have been reordered.
64	9	7	11	7	29	This paragraph only describes the characteristics of the event that hit Taiwan. There is no text addressing the lessons learned from this study case. (Kazama, So, Tohoku University)	The main reason for mentioning this event in the introduction is to point out that seemingly minor tropical storms could have catastrophic consequences.
65	9	7	11	7	29	The introduction is not clear. The contents seem to belong to the main body. There is no reference to the link between climate change and tropical cyclones. An improvement may clarify the contents of the study case being addressed. (Kazama, So, Tohoku University)	The introduction has been revised in the SOD version.
66	9	7	23	7	23	Instead of employing the term "world records", perhaps a more technical term should be used to address the variable of interest. (Kazama, So, Tohoku University)	The wording has been revised in the SOD version.
67	9	7	42	0	0	What are these trends? (Goodess, Clare, Climatic Research Unit)	The text has been revised.
68	9	8	32	0	0	It is recorded history rather than one can say that Myanmar has never had a cyclone of such magnitude before. (Abrahamsj, Jonathan, World Health Organization)	Comment noted and text slightly adjusted.
69	9	9	18	9	21	Ciphers may need citation. (Kazama, So, Tohoku University)	Comment noted.
70	9	9	23	9	40	Citations are needed to confirm the realiability of the ciphers. (Kazama, So, Tohoku University)	Several citations are provided. It is not clear which “ciphers” need further citations.
71	9	9	34	9	35	The comment on the social conditions seems to be from a personal perspective. A citation may be necessary. (Kazama, So, Tohoku University)	Comment noted.
72	9	9	39	9	40	The comment about the "adaptation strategy" adopted is a personal perspective, rather than a fact based on documents. In any case, a proper reference should be addressed. Otherwise, I do not see a reason to keep it in the text. (Kazama, So, Tohoku University)	The comment about the “adaptation strategy” removed.
73	9	9	43	9	43	« Regrettably » I am not sure this redaction is appropriate for an IPCC report. (Martin, Eric, Meteo-France)	The term “Regrettably” is removed in the SOD version.
74	9	10	11	10	17	The One-Stop Support Service is interesting idea, but is there a little bit more information of how they do it. (Yasseen, Adel, Ain Shams University - Institute of Environmental Research and Studies)	This section is deleted in the SOD version. Comment no longer relevant.
75	9	10	19	10	19	Within three years of when? Given the reference is to a 2003 paper, has it already happened? (Trewin, Blair, Australian Bureau of Meteorology)	This section is deleted. Comment no longer relevant.
76	9	12	6	12	35	Concerning heat waves, elevated heat temperatures affect psychology of people and communication becomes more fragile. Architecture / street patterns and open spaces become opportunities' facilitators for hostility and aggressivenes among people, as much as architecture could be considered in some cases "Aggressive Act". So I consider this part of humanbeing is worthy to consider in report. (Yasseen, Adel, Ain Shams University - Institute of Environmental Research and Studies)	Noted - these concerns are addressed in the SOD which is much more focused and targeted and we consider that the heatwave study is more useful – see 1.1 – social and biological vulnerabilities to heatwaves
77	9	12	6	12	35	Section 1 : introduction : I think this introduction is not appropriate. Instead I would prefer an indrodcution focussed on cities : section 3.2 material could be transformed in introduction (Martin, Eric, Meteo-France)	Noted - these concerns are addressed in the SOD heat wave case study which is much more focused and targeted

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78	9	12	8	12	35	Throughout the first paragraph (Line 8-22), authors explained the severity of the first heat wave in 2003 in terms of the temperature rise and the impact. Also it discussed some adaptation measures introduced to mitigate the future impacts. In the second paragraph (Line 24-35), they explain the second heat wave in 2006 and compare the effectiveness of the adaptation measures in terms of the impact. However, data have not been given to compare the two events in terms of the temperature rise. (Kazama, So, Tohoku University)	Noted - these concerns are addressed in the SOD which is much more focused and targeted and we consider that the heatwave study is more useful – and this point is reflected in 2 – the description of the two events
79	9	12	10	12	11	"This corresponded to an increase in monthly mean temperature of about +7°C". It is not clear to which region, which month(s) and which reference period this statement refers. (Koppe, Christina, Deutscher Wetterdienst)	Noted – the statement has been changed
80	9	12	12	0	0	This seems rather high for initial estimates, which I thought were generally lower e.g., Italian figures were not available until some considerable time after the event. (Goodess, Clare, Climatic Research Unit)	Noted - this concern is considered in the SOD - a section on assessing heat mortality has been clarified
81	9	12	12	0	0	"put the death toll in the range of 70,000". In chapter 4 a death toll of 35 000 is given. As far as I remember the 70 000 estimate refers to the whole summer period and not the August heat wave! Therefore, I would suggest to refer to the same literature source as in chapter 4, which gives from my point of view a more relatistic estimate. (Koppe, Christina, Deutscher Wetterdienst)	Noted - this concern is considered in the SOD - a section on assessing heat mortality has been clarified
82	9	12	24	0	35	I think it should be mentioned that also in summer 2007 there was an intense heat wave in Greece and finally that last summer (2010) was characterised by the extreme heat wave in Russia. I think it should be mentioned that in the last 10 years the frequency of heat waves with relevant impacts somewhere in continental Europe has been higher than in the previous decades. (Pavan, Valentina, ARPA Emilia-Romagna)	Noted – unfortunately there are no peer review publications yet for the Russian 2010 heat wave for us to quote - the second comment is reflected in the rewording to cover a wider area than Europe in the introduction
83	9	12	25	12	26	Careful rewording is needed here to reflect the current uncertainty linking flooding and landslides with climate change. Currently this sentence suggests that more intense rainfall and related flooding have already been observed, but Chapter 3 of SREX ass (Stocker, Thomas, IPCC WGI TSU)	Noted – 9.2.4 floods has a section specifically on floods and landslides to cover this point
84	9	12	26	12	27	This result could reflect one of two things - either there has been an improvement in response to heatwaves or there is a flaw in the model. I don't have ready access to the paper cited, but do note that the 2006 heatwave (compared with 2003) was distinguished by a very long period of hot conditions (and hence very high monthly average temperatures), but never reached the extreme intensity that occurred in 2003. Also, the numbers quoted do not match the 2-8% decline in mortality quoted at page 15 lines 6-7. (Trewin, Blair, Australian Bureau of Meteorology)	Noted - these concerns are addressed in the SOD which is much more focused and targeted and we consider that the heatwave study is more useful – and this point is reflected in 2 – the description of the two events
85	9	12	46	0	0	McGregor et al needs a year (Goodess, Clare, Climatic Research Unit)	Noted - reference removed
86	9	12	46	0	0	Highly likely' is not an AR4 likelihood term. (Goodess, Clare, Climatic Research Unit)	Noted - removed
87	9	12	46	12	47	"and there is consensus that climate change is highly likely to increase.....". Rather than basing this statement on the now outdated AR4, it is much better to base this statement on SREX chapter 3. The formal likelihood language used by chapter 3 is "..... VERY likely to increase". (Stocker, Thomas, IPCC WGI TSU)	Noted – modified
88	9	12	50	0	0	By susceptibility do you mean vulnerability? If so, would be good to be consistent with language of other chapters. (Goodess, Clare, Climatic Research Unit)	Noted – susceptibility has been removed except for infectious susceptibility in case study 9.2.7 and in 9.2.9 – for specific relevant purpose we believe
89	9	13	14	13	14	Add "also" before "at risk". (Trewin, Blair, Australian Bureau of Meteorology)	Noted – the statement has been changed
90	9	13	27	13	28	Please explain the outdoor workers and the homeless as a percentage of totally impacted people. (Kazama, So, Tohoku University)	Noted – the statement has been changed see 1.1 last sentence
91	9	13	31	14	32	For the sake of urban tissue and architecture, we should recommend the "court" system in buidings, and specially in residential areas to creat a suitable "micro climate" to metigate the effect of extreme heat waves. (Yasseen, Adel, Ain Shams University - Institute of Environmental Research and Studies)	Noted – thank you
92	9	13	41	13	43	add evapotranspiration as a very important cause here also, ie, "....lack of shading and evapotranspiration by vegetation...." (Stocker, Thomas, IPCC WGI TSU)	Noted –evapotranspiration added
93	9	13	50	0	53	please reword the sentence; misleading: less dense development causes warming at a faster rate? (Stocker, Thomas, IPCC WGI TSU)	Noted – sentence reworded
94	9	13	51	13	51	"A lower proportion" - this doesn't make sense to me - I would have expected a sprawling, low-density city to have a higher proportion of vegetative land cover within its boundaries than a denser city. (Trewin, Blair, Australian Bureau of Meteorology)	Noted – sentence reworded
95	9	14	0	0	0	The paragraph on infrastructural measures might be better placed in the next section. This case study does not refer to heatwaves incountries from the developing world, hence there is an impression that this a developed world phenomenon. (Abrahamsj, Jonathan, World Health Organization)	Noted – the case study has been reworked and infrastructures has a section
96	9	14	8	14	9	Which California event is this referring to? If it's the widespread blackouts of 2001 then heat had little to do with them (not least because they were in winter). (Trewin, Blair, Australian Bureau of Meteorology)	Noted – this sentence has been removed
97	9	14	14	14	16	Are nuclear plants the only power generating plants which are affected in this way? (Trewin, Blair, Australian Bureau of Meteorology)	Noted – other power plants added
98	9	14	20	14	22	Where does Phoenix get its electricity from? If its hydroelectricity is drawn from a remote catchment (the Colorado River?) the wording should reflect this. (Trewin, Blair, Australian Bureau of Meteorology)	Noted – section on Phoenix removed

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
99	9	14	27	14	28	Australia also subsidised home insulation installation for a time (although the program became highly politically controversial, and was eventually abandoned, because of problems with its implementation) (Trewin, Blair, Australian Bureau of Meteorology)	Noted
100	9	14	41	0	0	Are HWS and HARS generic or specific country examples of heat wave plans? (Goodess, Clare, Climatic Research Unit)	Noted – HWS and HARS are now explained by region/country
101	9	15	50	16	8	It should be pointed out in this sub-chapter, WHY it is important to assess heat mortality, and also why the focus is on mortality and not morbidity. Otherwise the sub-chapter can as well be deleted. (Koppe, Christina, Deutscher Wetterdienst)	Noted – section on assessing heat mortality has been clarified
102	9	15	50	16	8	Include more explanation about the different kind of biases (e.g. hazard bias, temporal bias, threshold bias, accounting bias and systematic bias) would complete the discussion about the uncertainty level of the impact assessments (Melanie Gall et al., 2008). (Kazama, So, Tohoku University)	Noted – section on assessing heat mortality has been clarified
103	9	16	0	0	0	Kovats and Hajat, 2008 is missing in the list of reference. (Incecik, Salahattin/Selahattin, Istanbul Technical University)	Noted – now added in SOD
104	9	16	11	16	34	Section 5 : relationship to key message : the messages are very general. I would expect a more clear relation with what is discribed in the case study. (Martin, Eric, Meteo-France)	Noted – the SOD has changed the approach to link to the key messages – this is now in a developmental table and will be further reviewed when the final key messages from Chapters 1-8 are collated
105	9	16	13	16	13	"heatwaves are VERY likely to increase" - and also cite Chapter 3 at the end of this sentence. (Stocker, Thomas, IPCC WGI TSU)	Noted – this section has been removed
106	9	16	25	0	0	Was the heat wave 2006 comparable to the heat wave 2003 with respect to severness, location, extend, duration etc.? If not, the comparison of heat-related mortality should be done very carefully. (Koppe, Christina, Deutscher Wetterdienst)	Noted – this point has been reviewed and clarified
107	9	16	37	13	45	References in the field of "Quality of Urban Life" are there. They offer some appropriate knowledge about life in urban areas. I hope it help. (Yasseen, Adel, Ain Shams University - Institute of Environmental Research and Studies)	Noted – thank you
108	9	16	39	16	45	The study case is focused on Europe. A recerence that states the geographical coverage of the conclusions may be needed. A geographical reference in the title may be also helpful. (Kazama, So, Tohoku University)	Noted – the title is still focused on Europe but other heat wave examples are included where applicable
109	9	19	0	0	0	The discussion could consider what are the community impacts of drought and famine on development of the country and the region affected. (Abrahamsj, Jonathan, World Health Organization)	Noted – the SOD addresses this point we believe
110	9	19	20	19	21	I don't think it's necessary to include the percentages to one decimal place. (Trewin, Blair, Australian Bureau of Meteorology)	Noted and addressed
111	9	19	27	19	35	This definition of 'drought' is much too simplistic and refers only to 'meteorological drought' where as large parts of this section discuss 'agricultural drought'. This first paragraph should be deleted and rewritten based on the more comprehensive definition given by Chapter 3, pages 61 - 62, which in turn is drawn from the AR4 glossary. It is important that definitions of physical extremes are consistent between SREX chapters. (Stocker, Thomas, IPCC WGI TSU)	Noted – drought is now defined in the glossary as agreed at LAM3
112	9	19	27	19	44	The consistency of this section with Chapter 3 needs reviewing. What about hydrological/agricultural drought? And seasonal/multi-seasonal events. In the context of this report it doesn't seem appropriate to refer to drought as a 'normal' event. The final sentence about changes in drought needs references and some caveats - again checking for consistency with Chapter 3. (Goodess, Clare, Climatic Research Unit)	Noted – link to Chapter 3 added
113	9	19	29	23	39	Pulls stop must come after references. E.g., in p. 19 L. 29…….severity of the event (Sivakumar 2005). (Kazama, So, Tohoku University)	Noted – thank you
114	9	19	31	19	33	Are there sources for these definitions? I find the US and British definitions quoted implausible. (Trewin, Blair, Australian Bureau of Meteorology)	Noted – drought is now defined in the glossary as agreed at LAM3
115	9	19	37	19	38	A scientific reference is needed to support this link between El Nino and African droughts - for example, Giannini et al 2008 (from Chapter 3). (Stocker, Thomas, IPCC WGI TSU)	Noted – Giannini et al reference now included
116	9	19	43	19	44	This statement cannot be made without citing the appropriate IPCC source! In this case, you should draw from the most recent assessment provided here by Chapter 3 which concludes: There has been a "likely increase in area affected by meteorological drought, and a likely increase in total area affected by agricultural drought" (Table 3.1). Please replicate the wording of chapter 3 carefully, rather than making general statements regarding frequency/intensity. (Stocker, Thomas, IPCC WGI TSU)	Noted – sentence reworded
117	9	19	43	19	44	This is only an explanation about global level. Therefore, please consider to move to Line 26 before the country level discussion. (Kazama, So, Tohoku University)	Noted – sentence removed
118	9	19	44	19	44	« according to IPCC » : replace by a more appropriate citation (Martin, Eric, Meteo-France)	Noted – sentence removed
119	9	19	47	19	54	Section 3 « geological ... ». I don't see any geological information in this section. (Martin, Eric, Meteo-France)	Noted - case study has been reworded
120	9	19	51	0	0	Should this be 4.9% rather than dollars? (Goodess, Clare, Climatic Research Unit)	Noted - sentence removed and section on Ethiopia reworked
121	9	19	51	19	51	Should this be 4.9%? (Trewin, Blair, Australian Bureau of Meteorology)	Noted - sentence removed and section on Ethiopia reworked
122	9	20	5	0	26	a drought event summary should include information about the corresponding weather/climate related causes; these are missing entirely; please add based on relevant literature. (Stocker, Thomas, IPCC WGI TSU)	Noted - section reworked
123	9	20	14	20	20	Paragragh « Quoting for ... » I think that this form of citation is not appropriate. (Martin, Eric, Meteo-France)	Noted – section reworked

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
124	9	20	14	20	20	From the evidence presented it is not clear whether the increase in disease was caused by the heavy rains of 1998 or the drought of 1999 - if there is additional evidence this should be quoted. The data presented suggest that mortality was actually relatively low in the drought year of 2000. (Trewin, Blair, Australian Bureau of Meteorology)	Noted and reworded.
125	9	20	22	20	22	The word 'extreme' should be removed from this sentence, as no information has been cited that would suggest this drought was extreme in any way. (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded.
126	9	21	15	0	0	Comparable in what respect? The relevance of these events for the case study is not very clear. (Goodess, Clare, Climatic Research Unit)	Noted and reworded.
127	9	21	17	0	0	What is the need for this 'comparable other events' section when the case study should be focussed on Ethiopia - what rationale did you use to select these other comparable events? The events are described here with almost a complete absence of supporting literature. Chapter 3 is the chapter in which regional drought observations should be and are assessed. (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded.
128	9	21	17	21	18	First sentence should read "due to many climatic phenomena". The sentence referring to El Nino occurring on average every 5 years must be supported with relevant literature or deleted. The following sentences linking El Nino to drought in various regions must also be supported with scientific references. If you are to keep this section, the best option would be to reword these sentences to be consistent with Section 3.4.2 of Chapter 3 (page 50, lines 17-19) and include a reference to this section where the reader can turn to for more detail. (Stocker, Thomas, IPCC WGI TSU)	noted and reworded
129	9	21	17	21	25	This discussion of ENSO seems inappropriate here. (Goodess, Clare, Climatic Research Unit)	Text rewritten
130	9	21	19	21	19	Should be El Nino rather than ENSO here. The English in this section in general is difficult to follow. (Trewin, Blair, Australian Bureau of Meteorology)	Text rewritten
131	9	21	21	0	22	Droughts are not solely or 'generally' a (Western Pacific) ENSO phenomenon; e.g. Mediterranean droughts? Why ENSO focus? (Stocker, Thomas, IPCC WGI TSU)	Text rewritten
132	9	21	27	0	0	what caused severe droughts in 1997/1998, El Nino? Please clarify. (Stocker, Thomas, IPCC WGI TSU)	Text rewritten
133	9	21	29	21	30	Was this dry spell associated with ENSO? If not, why mention it? (Trewin, Blair, Australian Bureau of Meteorology)	Text rewritten
134	9	21	29	21	30	Please explain in terms of the return period or number of days compared to past events. (Kazama, So, Tohoku University)	Text rewritten
135	9	21	30	21	31	A citation is needed, to confirm the ciphers. (Kazama, So, Tohoku University)	Text rewritten
136	9	21	37	21	40	References are required to support these proposed causes of the drought. (Stocker, Thomas, IPCC WGI TSU)	Text rewritten
137	9	21	47	21	48	Reference needed to support this La Nina - drought link. It might also be sensible to include in () that La Nina is the opposite phase to an El Nino event. (Stocker, Thomas, IPCC WGI TSU)	Text rewritten
138	9	22	1	22	2	As mentioned by the author, it is unclear the impacts of droughts on the nutritional state of the population in Argentina. In the form presented, both cases do not seem comparable. Perhaps writing perspective of the author. the article in a clear form may clearify the actual (Kazama, So, Tohoku University)	Text rewritten
139	9	22	3	22	5	2008-09 data would be useful here if available. (Trewin, Blair, Australian Bureau of Meteorology)	Text rewritten
140	9	22	13	22	13	« Arab regions » : are these regions well defined somewhere ? (Martin, Eric, Meteo-France)	Noted and reworded
141	9	22	15	22	15	Surely these are not the only three countries which are exposed to drought? (Trewin, Blair, Australian Bureau of Meteorology)	Noted and removed
142	9	22	18	0	0	10 years is a rather short period for saying anything about trends in drought. Or do you mean that the frequency of drought was higher in this 10 year period compared with a longer time series? (Goodess, Clare, Climatic Research Unit)	Noted and reworded
143	9	22	18	22	19	Reference needed to support this increasing drought frequency statement. (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded with reference added
144	9	22	25	22	26	Insert "on average" after "every three years". (Trewin, Blair, Australian Bureau of Meteorology)	Noted and removed
145	9	22	25	22	42	The relevance of the material on Mongolia to the Ethiopian case study is not clear. (Goodess, Clare, Climatic Research Unit)	Noted and removed
146	9	22	29	22	30	This statement is not clear - do you mean that there is 95% confidence that drought frequency/area has increased during the past 10 years? Please clarify and provide a reference to the study this statement I based upon. (Stocker, Thomas, IPCC WGI TSU)	Noted and removed
147	9	22	45	0	0	This section doesn't seem to say anything specific about what happened in Ethiopia in 1999/2000. (Goodess, Clare, Climatic Research Unit)	Noted and reworked
148	9	22	45	22	45	Abbreviations should be avoided in section titles. (Martin, Eric, Meteo-France)	Noted and reworked
149	9	23	0	0	0	The section on policy management practice could describe the systemic framework used to manage risks. Humanitarian aid should defined - is it internal or extenal aid or both? (Abrahamsj, Jonathan, World Health Organization)	Noted – and reworded
150	9	23	8	0	0	Was this approach ineffective in 1999/2000? (Goodess, Clare, Climatic Research Unit)	Noted and reworded
151	9	23	9	23	19	Correct spelling is Wilhite. (Trewin, Blair, Australian Bureau of Meteorology)	Noted and corrected

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152	9	23	12	0	0	what does WANA stand for? (Stocker, Thomas, IPCC WGI TSU)	Noted and removed
153	9	23	13	0	0	When/where was this expert meeting held? (Goodess, Clare, Climatic Research Unit)	Noted and reworded
154	9	23	13	23	14	It would be useful to give a date for the expert group meeting (Trewin, Blair, Australian Bureau of Meteorology)	Noted and reworded
155	9	23	21	0	0	Strange here that you combine the research efforts at both a country and institutional scale within the one sentence. Please reword (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded
156	9	23	21	23	26	It would be good to provide references and more information on these measures - including their scale and effectiveness. (Goodess, Clare, Climatic Research Unit)	Noted and reworded
157	9	23	28	23	33	This all seems rather general. Who is making these recommendations? Doesn't the final point about consecutive droughts depend on the type/length of drought? (Goodess, Clare, Climatic Research Unit)	Noted and reworded
158	9	23	35	23	35	Is this statement correct? It is often claimed that the polar regions are THE most vulnerable regions of the world. Perhaps rewording is needed to "one of the parts of the world that is most vulnerable...". In any case a reference is needed to support this statement... AR4 perhaps? (Stocker, Thomas, IPCC WGI TSU)	Noted and this has been removed
159	9	23	42	23	2	Section : Drought monitoring... . This section is very incomplete (Martin, Eric, Meteo-France)	Noted and reworked
160	9	23	51	0	0	Is it legitimate to refer to these improvments as dramatic? (Goodess, Clare, Climatic Research Unit)	Noted and removed
161	9	24	7	24	12	The purpose and value of these key messages are not at all clear. All that appears here are four very vague statements based on information that is found in much more detail in other chapters. You should be summarising how this case study relates and further illustrates these key messages, if that is your aim. Chapter 3 DO NOT project droughts to occur more frequently - the wording they use is very specific, ie, that there will be a likely increase in the global area affected by extreme drought. (Stocker, Thomas, IPCC WGI TSU)	Noted – the SOD has changed the approach to link to the key messages – this is now in a developmental table and will be further reviewed when the final key messages from Chapters 1-8 are collated
162	9	24	7	24	12	Relationship to key messages : this messages are not very specific to the section droughts « Drought are likely to occur more widely and frequently » : it is not a finding of this case study. (Martin, Eric, Meteo-France)	Noted – the SOD has changed the approach to link to the key messages – this is now in a developmental table and will be further reviewed when the final key messages from Chapters 1-8 are collated
163	9	24	9	24	12	These points are all rather general and it's hard to see how they emerge from the case-study presentation. (Goodess, Clare, Climatic Research Unit)	Noted – the SOD has changed the approach to link to the key messages – this is now in a developmental table and will be further reviewed when the final key messages from Chapters 1-8 are collated
164	9	24	11	24	11	The reverse might also be true (for example, droughts are much less likely to lead to famine in India than in historic times) (Trewin, Blair, Australian Bureau of Meteorology)	Noted – the SOD has changed the approach to link to the research gaps and these are not included in the SOD
165	9	24	18	0	0	Lack of policy agreement is not really a research gap. (Goodess, Clare, Climatic Research Unit)	Noted – the SOD has changed the approach to link to the research gaps and these are not included in the SOD
166	9	26	15	26	15	Define SEAWIFS at its first use here (at present it's defined at page 27 line 37) (Trewin, Blair, Australian Bureau of Meteorology)	Noted – case study 9.4 in the FOD has been reduced significantly, reworded to reflect comment and added to case study 9.2.3 drought in SOD
167	9	26	15	26	26	References are needed to support the description of this dust cloud event. If this description is based on raw satellite images then provide a link to where the reader might find these images. (Stocker, Thomas, IPCC WGI TSU)	Noted – removed - case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
168	9	26	40	0	0	Need references to support the claim that human-induced change is the dominant source of the increase in dust. (Goodess, Clare, Climatic Research Unit)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
169	9	26	40	26	41	You must provide a reference to support this statement regarding human-induced change. If this is based only on the Sivakumar (2005) reference than you would need to reword this statement to make it clear that only one study has indicated that human-induced change is by far the most significant factor. Otherwise, a broader range of studies need to be cited. (Stocker, Thomas, IPCC WGI TSU)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
170	9	27	1	27	2	This seems to contradict the previous statement about human influence. (Goodess, Clare, Climatic Research Unit)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
171	9	27	1	27	2	You should cite Section 3.5.8.2 of Chapter 3 here, which provides more detail to support this statement. (Stocker, Thomas, IPCC WGI TSU)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
172	9	27	2	27	8	This sentence is too long and unclear. Several statistics are provided but no supporting references are cited from which these statistics have been taken! (Stocker, Thomas, IPCC WGI TSU)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
173	9	27	4	27	5	I don't understand what is meant by 'desert reversal scenarios in natural precipitation zones' (Goodess, Clare, Climatic Research Unit)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
174	9	27	16	27	16	Please remove "last few years" and replace with actual years - not clear if this means prior to the Chun et al. 2008 paper, or prior to now (2010), or SREX publication (2011). (Stocker, Thomas, IPCC WGI TSU)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
175	9	27	30	0	0	What sort of impacts did the 1903 event have? Was it a disaster? (Goodess, Clare, Climatic Research Unit)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
176	9	27	30	27	31	References needed to support the statements relating to this 1903 dust event (Stocker, Thomas, IPCC WGI TSU)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD

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177	9	27	38	27	38	Reference needed - where can the reader see this thick yellow dust cloud? The literature or satellite database that these observations are based on need to be cited. (Stocker, Thomas, IPCC WGI TSU)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
178	9	28	31	0	0	Is it relevant to discuss positive impacts here? What is the relevance to the Mongolian case study? (Goodess, Clare, Climatic Research Unit)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
179	9	28	31	28	54	Section « positive impacts » : it is a good idea to describe also positive impacts. This should be included in all case studies (even to say that there are no positive impacts) (Martin, Eric, Meteo-France)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
180	9	28	35	28	39	What is the significance of the underlining? (Trewin, Blair, Australian Bureau of Meteorology)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
181	9	29	5	29	16	How relevant are these measures to Mongolia and the Sahara? Generally, there does not seem to be enough material in this case study which is specific to the case study event and its aftermath. (Goodess, Clare, Climatic Research Unit)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
182	9	29	6	29	7	Some further detail is needed - it is not clear to me how remote sensing can be used to help combat wind erosion. (Stocker, Thomas, IPCC WGI TSU)	Noted – case study 9.4 in the FOD has been reduced significantly and added to case study 9.2.3 drought in SOD
183	9	31	0	0	0	Some more literature reviews on health effects of flooding (mainly on diarrhea +acute respiratory infections) has been done. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
184	9	31	0	0	0	There is potential for increased transmission of diarrhoeal diseases during flood and post-flood conditions. In high-income countries, the risk of diarrhoea due to flood is considered to be low [1,2], although a study in the UK reported an increase in risk of gastroenteritis for flood exposed individuals [3]. A cohort study in the United States found that flooding house or yard was associated with increased risk of gastrointestinal illness [4]. Self-reported diarrhoea was used as an outcome measure in these studies. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
185	9	31	0	0	0	In low-income countries, where water supply, sanitation system and causative agents of diarrhoea are likely to be different from those in high-income countries, post-flood increases in cholera [5], rotavirus diarrhoea [6,7], cryptosporidiosis [8] and non-specific diarrhoea [9,10,11,12,13,14] have been reported. There is a report that the area outside the flood-control embankment had an 18% higher mortality rate compared to the rate inside the embankment suggesting adverse effect of flooding on diarrheal mortality.[15] However, most of these studies had methodological problems such as lack of pre-flood data, lack of comparison groups and potential recall bias. A recent study in diarrhoeal epidemic during floods in Dhaka provided good evidence for increase in diarrhoeal cases due to some pathogens [16]. During four consecutive flood-related epidemics in 1988, 1998 and 2004, the mean number of cases due to V. cholerae, Shigella, Salmonella, E. hystolytica, Giardia lamblia and rotavirus was increased compared with seasonally matched non-flood periods. V. cholerae played a primary role of flood-related epidemics, because it was the only pathogen of which proportion among pathogens increased during the flood compared with non-flood period. They also reported that the cases during the flood-related epidemics were older and of lower socioeconomic status than those in non-flood period. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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186	9	31	0	0	0	Floods adversely affect water sources and supply systems as well as sewerage and waste disposal systems [17]. For example, the waste disposal system in Dhaka city was almost completely ineffective during the major flood in 1998 [18]. A number of tube wells were covered by the floodwaters and were contaminated [19]. Many of the flood affected people became displaced and took refuge in temporary shelters [20]. Some of the shelters were extremely crowded with displaced people [20], and the deteriorated environmental conditions were observed in shelters and slums [21]. These observations implied that people's hygiene and sanitation level in the city were extremely disrupted, and the transmission of enteric pathogens was likely to have been increased during the flood. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
187	9	31	0	0	0	Acute respiratory infections (ARI) are a major cause of illness and deaths among displaced populations by natural disasters, particularly in children under 5 years of age.[22] Lack of access to health care facilities and to antimicrobial agents for treatment further increases the risk of death from ARI. Risk factors among displaced populations include crowding, exposure to indoor cooking using open flame, and poor nutrition. The reported incidence of ARI increased 4-fold in Nicaragua in the 30 days after Hurricane Mitch in 1998,[23] and ARI accounted for the highest number of cases and deaths among those displaced by the tsunami in Aceh in 2004.[24] In Bangladesh, prevalence of respiratory problems (14%) was the second highest among those affected by flood in 1998 following that of diarrhea (27%).[12] ARI was also the second most common cause of illness (17%) and death (13%) among those affected during the 1988 flood.[9] However, it was not clear whether the higher number of ARI was due to the flood or due to the usual seasonal increase and rigorous studies about the effect of flooding on incidence of ARI are warranted. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
188	9	31	0	0	0	There is little evidence on the long-term health impact of flooding. A cohort study of people forced from their homes by flooding in 1968 in Bristol found a 50% increase in the number of deaths in the year after the flood among those whose homes had been flooded.[25] The number of clinic visits and hospital admissions was also higher in the year after the flood among those who had been affected by flooding than among those who had not.[25] However, an Australian study found no difference in mortality between those who had been affected by flooding and those who had not. The authors noted that those who had been affected made a greater number of visits to medical providers.[26] Heightened psychological stress was thought to have played a part in the increase in visits in both studies. A recent study in China showed higher mortality of malignant neoplasm in the residents of flood affected villages than in those of the no-flood villages in the year after the flood.[27] The standard rate of years of potential life lost for respiratory and circulatory diseases in the flood group were also significantly higher than those in the no-flood group. The authors speculated that the flood-related environmental contaminations and psychological and physical stresses after the flood disaster may be the explanation for this. Actually, the long-term effect of flood on stress-related psychological disorders has been an important public health issue.[1] The adverse effect of flood experience does not limit to the mental health problems. There is clear evidence that chronic psychosocial stress contributes to the pathogenesis and expression of coronary artery disease.[28,29] Thus, cardiovascular diseases should be included in the investigation of the long-term health impact of flood. A space-time clustering of leukaemia and lymphomas was also reported in New York after 2 years of major floods in 1972.[30] However, most of these studies had methodological limitations, in particular lack of pre-flood data, ambiguous exposure measurments, lack of clinical diagnosis and potential recall bias. Improved epidemiological research needs to be undertaken on the long-term health impacts of floods. There is also a concern for the potential long term adverse effects of exposure to contaminants, mould, and toxic substances that may be present in their homes after clean up. The high concentration of mold was measured indoors and outdoors in the New Orleans area 2 months after the flooding due to Hurricane Katrina.[31] Repeated exposure to significant quantities of fungal material can result in respiratory irritation or allergic sensitization in some individuals.[32] There is sufficient evidence of a causal link between indoor dampness and upper respiratory tract symptoms, cough, wheeze, asthma symptoms in sensitized people.[33] Also important to note is the impact of inadequate nutrition following disruption to incomes and food distribution systems.[34] (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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189	9	31	0	0	0	Although there is some epidemiological evidence for short-term adverse effects of floods on diarrhoea in both high and low-income settings, there has been little information on long-term health impact of flooding. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
190	9	31	0	0	0	1. Ahern M, Kovats RS, Wilkinson P, Few R, Matthies F (2005) Global health impacts of floods: epidemiologic evidence. Epidemiol Rev 27: 36-46. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
191	9	31	0	0	0	2. Hunter PR (2003) Climate change and waterborne and vector-borne disease. J Appl Microbiol 94 Suppl: 37S-46S. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
192	9	31	0	0	0	3. Reacher M, McKenzie K, Lane C, Nichols T, Kedge I, et al. (2004) Health impacts of flooding in Lewes: a comparison of reported gastrointestinal and other illness and mental health in flooded and non-flooded households. Commun Dis Public Health 7: 39-46. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
193	9	31	0	0	0	4. Wade TJ, Sandhu SK, Levy D, Lee S, LeChevallier MW, et al. (2004) Did a severe flood in the Midwest cause an increase in the incidence of gastrointestinal symptoms? Am J Epidemiol 159: 398-405. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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194	9	31	0	0	0	5. Sur D, Dutta P, Nair GB, Bhattacharya SK (2000) Severe cholera outbreak following floods in a northern district of West Bengal. Indian J Med Res 112: 178-182. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
195	9	31	0	0	0	6. Ahmed MU, Urasawa S, Taniguchi K, Urasawa T, Kobayashi N, et al. (1991) Analysis of human rotavirus strains prevailing in Bangladesh in relation to nationwide floods brought by the 1988 monsoon. J Clin Microbiol 29: 2273-2279. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
196	9	31	0	0	0	7. Fun BN, Unicomb L, Rahim Z, Banu NN, Podder G, et al. (1991) Rotavirus-associated diarrhea in rural Bangladesh: two-year study of incidence and serotype distribution. J Clin Microbiol 29: 1359-1363. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
197	9	31	0	0	0	8. Katsumata T, Hosea D, Wasito EB, Kohno S, Hara K, et al. (1998) Cryptosporidiosis in Indonesia: a hospital-based study and a community-based survey. Am J Trop Med Hyg 59: 628-632. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
198	9	31	0	0	0	9. Siddique AK, Baqui AH, Eusof A, Zaman K (1991) 1988 floods in Bangladesh: pattern of illness and causes of death. J Diarrhoeal Dis Res 9: 310-314. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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199	9	31	0	0	0	10. Mondal NC, Biswas R, Manna A (2001) Risk factors of diarrhoea among flood victims: a controlled epidemiological study. Indian J Public Health 45: 122-127. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
200	9	31	0	0	0	11. Kondo H, Seo N, Yasuda T, Hashizume M, Koido Y, et al. (2002) Post-flood--infectious diseases in Mozambique. Prehospital Disaster Med 17: 126-133. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
201	9	31	0	0	0	12. Kunii O, Nakamura S, Abdur R, Wakai S (2002) The impact on health and risk factors of the diarrhoea epidemics in the 1998 Bangladesh floods. Public Health 116: 68-74. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
202	9	31	0	0	0	13. Biswas R, Pal D, Mukhopadhyay SP (1999) A community based study on health impact of flood in a vulnerable district of West Bengal. Indian J Public Health 43: 89-90. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
203	9	31	0	0	0	14. Woodruff BA, Toole MJ, Rodrigue DC, Brink EW, MAahgoub ELS, et al. (1990) Disease Surveillance and control after flood: Khartoum, Sudan, 1988. Disasters 14: 151-163. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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204	9	31	0	0	0	15. Ali M, Emch M, Donnay JP, Yunus M, Sack RB (2002) The spatial epidemiology of cholera in an endemic area of Bangladesh. Soc Sci Med 55: 1015-1024. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
205	9	31	0	0	0	16. Schwartz BS, Harris JB, Khan AI, Larocque RC, Sack DA, et al. (2006) Diarrheal epidemics in Dhaka, Bangladesh, during three consecutive floods: 1988, 1998, and 2004. Am J Trop Med Hyg 74: 1067-1073. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
206	9	31	0	0	0	17. Parker D.J., Thompson P.M. (2000) Floods in Africa: vulnerability, impacts and mitigation.; D.J. P, editor. London: Routledge. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
207	9	31	0	0	0	18. Nishat A, Reazuddin M, Amin R, Khan AR (2000) The 1998 flood: impact on the environment of Dhaka city. Dhaka: Department of Environment and IUCN Bangladesh. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
208	9	31	0	0	0	19. Rashid SF (2000) The urban poor in Dhaka City: their struggles and coping strategies during the floods of 1998. Disasters 24: 240-253. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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209	9	31	0	0	0	20. Karim F, Sultan S, Chowdhury A (1999) A visit to a flood shelter in Dhaka city. Dhaka: BRAC. 40-45 p. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
210	9	31	0	0	0	21. Ahmed SM, Husain AM, Sattar M, Chowdhury A (1999) A quick assessment of flood losses and post-flood rehabilitation needs in BRAC's programme areas. Dhaka: BRAC. 1-29 p. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
211	9	31	0	0	0	22. Watson JT, Gayer M, Connolly MA (2007) Epidemics after natural disasters. Emerg Infect Dis 13: 1-5. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
212	9	31	0	0	0	23. Campanella N (1999) Infectious diseases and natural disasters: the effects of Hurricane Mitch over Villanueva municipal area, Nicaragua. Public Health Rev 27: 311-319. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
213	9	31	0	0	0	24. World Health Organization (2005) Epidemic-prone disease surveillance and response after the tsunami in Aceh Province, Indonesia. Wkly Epidemiol Rec 80: 160-164. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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214	9	31	0	0	0	25. Bennet G (1970) Bristol floods 1968. Controlled survey of effects on health of local community disaster. Br Med J 3: 454-458. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
215	9	31	0	0	0	26. Abrahams MJ, Price J, Whitlock FA, Williams G (1976) The Brisbane floods, January 1974: their impact on health. Med J Aust 2: 936-939. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
216	9	31	0	0	0	27. Li X, Tan H, Li S, Zhou J, Liu A, et al. (2007) Years of potential life lost in residents affected by floods in Hunan, China. Trans R Soc Trop Med Hyg 101: 299-304. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
217	9	31	0	0	0	28. Kubzansky LD, Davidson KW, Rozanski A (2005) The clinical impact of negative psychological states: expanding the spectrum of risk for coronary artery disease. Psychosom Med 67 Suppl 1: S10-14. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
218	9	31	0	0	0	29. Rozanski A, Blumenthal JA, Kaplan J (1999) Impact of psychological factors on the pathogenesis of cardiovascular disease and implications for therapy. Circulation 99: 2192-2217. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.

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219	9	31	0	0	0	30. Janerich DT, Stark AD, Greenwald P, Burnett WS, Jacobson HI, et al. (1981) Increased leukemia, lymphoma, and spontaneous abortion in Western New York following a flood disaster. Public Health Rep 96: 350-356. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
220	9	31	0	0	0	31. Solomon GM, Hjelmroos-Koski M, Rotkin-Ellman M, Hammond SK (2006) Airborne mold and endotoxin concentrations in New Orleans, Louisiana, after flooding, October through November 2005. Environ Health Perspect 114: 1381-1386. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
221	9	31	0	0	0	32. Bush RK, Portnoy JM, Saxon A, Terr AI, Wood RA (2006) The medical effects of mold exposure. J Allergy Clin Immunol 117: 326-333. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
222	9	31	0	0	0	33. Institute of Medicine (2004) Damp indoor spaces and health. Washington DC: National Academy Press. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
223	9	31	0	0	0	34. Intergovernmental Panel on Climate Change (2001) Climate Change 2001: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Second Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press. (Hashizume, Masahiro, Institute of Tropical Medicine, Nagasaki University)	First of all I would like to thank the reviewer for his very extensive and detailed comments on the influence of floods on human health, got in the flooded zone. The reviewer raised a wide range of issues that relate not only to floods but to all natural disasters. The impact of floods, heavy rains, tsunamis, avalanches, landslides, tornadoes and other natural disasters on the epidemiological situation in the disaster area, as well as on human health can be a single large study. We are aware of the vital importance of these issues. However, due to the limited volume of the manuscript, we have to cover only the general aspects of this problem.
224	9	31	0	0	0	There are different types of slow onset flood which could be recognised in the introduction. (Abrahamsj, Jonathan, World Health Organization)	The text has been revised in the SOD version.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
225	9	31	0	41	0	The case study on floods is interesting and thoughtful. It says nothing about climate change it is all about human institutions. I think it points to the main issue. Floods are a serious problem worldwide. We don't prepare for them very well, we don't take the actions that we should to mitigate or manage the risks. Climate change may/or may not make this problem worse. We need to focus our energies on the real issues of flood preparedness. I have a hard time understanding this in the context of this report. The title is "Managing the Risks...to Advance Climate Change Adaptation" I thin that is backwards. It should be about "Advancing the management of risks of extreme events under current climate and in the face of potential climate change." The point is "managing risks" not "Advancing Climate Change Adaptation". (Hirsch, Robert, United States Geological Survey)	This remark applies to all reports and should be considered by all LA.
226	9	31	1	0	0	consider editing the title: this CS mainly deals with 'floods in Mozambique 2000 & 2007' (Stocker, Thomas, IPCC WGI TSU)	It's correct remark. We have included the additional case studies on the floods and complex danger phenomena connected with the heavy precipitation in other countries into the SOD version.
227	9	31	7	31	13	Please reword your definition of 'flood' based on the text provided by chapter 3 (lines 46-54) page 64. It is important that basic physical terminology is consistent across SREX and based on the best available literature. (Stocker, Thomas, IPCC WGI TSU)	It's right remark. The text has been revised in the SOD version.
228	9	31	15	31	18	Please explain the time period of "recent flood events" so that readers can compare the material losses with 1998 floods in China. (Kazama, So, Tohoku University)	Comment noted. The text has been revised in the SOD version.
229	9	31	19	31	20	I have never heard of flood classified as 'snow floods' or 'sea floods'. Also mudflows are normally classified as mass movements, not floods. This sentence should be removed, or rewritten based on the text provided by chapter 3 (lines 46-54) page 64. (Stocker, Thomas, IPCC WGI TSU)	This sentence has been removed in the SOD version.
230	9	31	33	31	34	References needed to support this link between SST variations and rainfall, and also not clear how SST can alter tidal patterns? (Stocker, Thomas, IPCC WGI TSU)	The text has been revised in the SOD version.
231	9	31	47	31	47	The title of this sub chapter is "Catastrophic floods in Mozambique". However Line 47-50 just put some qualitative discription about floods in several countries, which seems awkward to the title. Therefore, Please consider either move it to the beginning of the paragraph (Line 27) as a brief introduction or give some more quantitative discription about the flood impact in other countries for comparing with impacts in Mozambique. (Kazama, So, Tohoku University)	It's right remark. This sentence has been removed in the SOD version.
232	9	31	47	31	50	This paragraph could be deleted - focus should be kept on Mozambique, and this case study is already quite long without such unnecessary extra sentences. (Stocker, Thomas, IPCC WGI TSU)	It's right remark. This sentence has been revised in the SOD version.
233	9	31	48	0	0	I suggest avoiding rather emotive words such as 'ravaged' (Goodess, Clare, Climatic Research Unit)	The text has been revised in the SOD version
234	9	33	15	33	17	Sentence « In November 1999 ... » I don't think it is necessary to go into such details. (Martin, Eric, Meteo-France)	The text has been revised in the SOD version
235	9	33	35	0	0	not only regarding CCA but also with respect to DRR (Stocker, Thomas, IPCC WGI TSU)	In my opinion, this assertion is more appropriate with respect to CCA. I'm not sure that this statement could be extended to DRR.
236	9	34	15	34	26	While this paragraph does accurately reflect the high standing that Mozambique held with respect to international assistance, the reasons cited may be presented with better clarity. In previous years Mozambique had adopted and pursued vigorously various economic reforms as encouraged and supported by the World Bank and other international donors. This was done with a high degree of transparency and resulting trust built up over some years. Following the floods the thoroughness and tranparency of documentation prepared by the Govt of Mozambique also was of a high order with the result that the amount pledged for reconstruction at the pledging conference in Rome actually exceeded the initially estimated requirements. This reflects the positive relationship between the donor community and the Government especially following the event and planning the reconstruction, which may also have been advanced by prior policy developments to expand national DRM outlooks and considerations. However, I believe a closer reading of the record during the early days of the evolving disaster and particularly emergency relief requirements will illustrate an initial slow and more limited response from the international community for emergency assistance and vital resources. This was a celebrated concern at the time, particularly in the very limited provision of helicopters beyond the 6 or 8 provided ONLY by neighboring South Africa, until after more than week or two fwhen a few more were supplied by European and/or USA sources. I believe that some of the descriptions provided here may be unduly "polished" in estimating or suggesting the efficiencies or timeliness of emergency relief response by international donors, (even as the comments of the positive latter recovery relationships are more appropriately factual). I only suggest that some additional documentation should be reviewed regarding the initial emergency assistance dynamics and efficacies and the characterizations be revised accordingly. (Jeggle, Terry, University of Pittsburgh)	The text has been revised in the SOD version

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237	9	34	19	34	20	The statement about uncertainty as to the extent that reconstruction planning occurred with due regard for HFA priorities is odd and misplaced here, considering that the reconstruction planning and later implementation dates from 2000 - but the HFA was not conceived nor internationally known until Januray 2005. It is also unclear to what extent climate change adaptation was current in either discourse, and much less practice, in 2000. Hence this misstatement or erroneous assumption should be corrected. (Jeggle, Terry, University of Pittsburgh)	The text has been revised in the SOD version
238	9	34	20	0	0	what does HFA stand for? (Stocker, Thomas, IPCC WGI TSU)	The text has been revised in the SOD version
239	9	36	36	36	36	Should this be the 2006-2007 rainy season? The events described on page 37 occurred in 2006-2007. (Trewin, Blair, Australian Bureau of Meteorology)	The text has been revised in the SOD version
240	9	36	36	36	37	Please briefly explain the impact of 2007-2008 rainy season, so that readers can understand the effectiveness of the preparedness. (Kazama, So, Tohoku University)	The text has been revised in the SOD version
241	9	37	0	0	0	A graph presenting the differential impacts of recent flood events in Mozambique would be interesting. (Abrahamsj, Jonathan, World Health Organization)	Unfortunately, because of limitation of volume of the report the number of illustrations has been reduced so we have no opportunity to place an additional illustrative material because it will lead to reduction of the text part of the section
242	9	37	0	0	0	Reference could be made to the management of flooding in Bangladesh which the flood risk crosses international borders but has its greatest impact downstream in Bangladesh. A system of early warnings is making a big difference to the impacts of floods on communities in Bangladesh. (Abrahamsj, Jonathan, World Health Organization)	On the decision of the Second meeting of LA the cases of floods in the transboundary river basins were removed in the SOD version.
243	9	39	21	0	0	what does GRM stands for? (Stocker, Thomas, IPCC WGI TSU)	GRM stands for the Government of the Republic of Mozambique.
244	9	39	30	39	33	The wording here suggests the work is still ongoing, which I presume is not the case. (Trewin, Blair, Australian Bureau of Meteorology)	The text has been revised in the SOD version
245	9	39	38	0	0	the number of 800 casualties mentioned here does not match the number of 699 victims reported on p32 Line 37 (Stocker, Thomas, IPCC WGI TSU)	The text has been revised in the SOD version
246	9	39	48	0	0	what does NDMI stand for? (Stocker, Thomas, IPCC WGI TSU)	NDMI stands for National Institute for Disaster Management. The text has been revised in the SOD version.
247	9	40	1	40	41	These paragraphs need to be combined and the summary made more concise. Currently reads as a collection of disjointed sentences. (Stocker, Thomas, IPCC WGI TSU)	The text has been revised in the SOD version.
248	9	40	11	40	12	Please remove reference to the Kolka Glacier example - this event was extremely complex, unprecedented in many regards, and the comment that it was in any way expected within '30 years',, and therefore could have been prepared for is nonsense. (Stocker, Thomas, IPCC WGI TSU)	The text has been revised in the SOD version.
249	9	42	0	0	0	There are interesting references in this case study to drought and heatwave, however, they might be better included in other case studies, leaving this case study to focus on fires. The reference to drought and heatwave could be described in the context of the bushfire risk. (Abrahamsj, Jonathan, World Health Organization)	The authors agree with this comment. The cases were chosen based on available literature, but if references for these events can be provided they will be taken into consideration. The SOD will reflect these comments.
250	9	42	0	0	0	This section suffers somewhat from a lack of local knowledge. I wonder if this also applies to some of the other case studies? (Trewin, Blair, Australian Bureau of Meteorology)	The comment is noted but the cases need to reflect a wide range of disasters such as complex issues.
251	9	42	1	0	0	This case study needs rewriting or removal. The language is unclear, and the structure is difficult to follow, jumping between fire, drought, and heatwave, without ever really clearly addressing the interplay between them. The case study should be focussed on the fires, with some background description of how the heatwave and drought contributed to the extreme fire conditions. The case study presented in Box 4-2 of chapter 4 does an excellent job of this, and provides a much clearer and more concise description of the Melbourne Fires, and the preceding drought/heatwave. Chapter 9 should use this box as a starting point, adding to this the impacts and lessons learnt from the fire. Ideally both components might be moved into Chapter 9, within a single case study (if chapter 4 authors agree). (Stocker, Thomas, IPCC WGI TSU)	The SOD will reflect these comments. SOD is modified with case study presented in Box 4-2 of chapter 4.
252	9	42	10	42	10	Formal IPCC likelihood statements (very likely, likely, etc) should only be used if based on a formal likelihood assessment, otherwise alternative, less problematic terminology should be used, eg, use 'probably' rather than 'very likely'. (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded
253	9	42	14	0	0	I would avoid talking about 'unprecedented records' unless you can be very precise about the context. (Goodess, Clare, Climatic Research Unit)	This comment is addressed in the SOD.
254	9	42	17	0	0	Fires are not becoming more frequent and widespread everywhere, e.g., there is a reduction in Tuscany due to better management and control. (Goodess, Clare, Climatic Research Unit)	This comment will be reflected in the SOD.
255	9	42	19	42	20	The final report has indeed been published (at www.royalcommission.vic.gov.au). It is probably best cited as the 2009 Victorian Bushfires Royal Commission (2010). (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
256	9	42	23	42	25	This case study would be more effective if the focus was limited to the lessons learnt from the Melbourne fires only, without any need to include additional descriptions of the European or Korean fires. (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
257	9	42	26	42	26	climate change' is not in itself an extreme event - please remove from this sentence. (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
258	9	42	32	43	27	The Meteorological and Geological background sections are lifted largely from Wikipedia and are unnecessarily detailed. For example the names of Victoria's rivers could be removed. (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	It is removed in SOD.
259	9	42	32	51	13	It is apparent that large sections of the text in this case study comes from Wikipedia and is not referenced. This case study would benefit from editing to ensure correct language throughout. It would be useful for the authors of the text box in Chapter 4, page 13-14, to work with the author of this case study to ensure consistency in messaging. While many facts are stated, this case study lacks a synthesis and assessment of the events and the lessons learnt. The findings of Victorian Bushfire Royal Commission report should be incorporated http://www.royalcommission.vic.gov.au/Commission-Reports (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	It is removed in SOD.
260	9	42	34	44	21	There is too much unnecessary information given in sections 2.1, 2.2, and 2.3. A much more concise overview of the most relevant factors contributing to the Melbourne Fires should be provided, followed by a concise description of the fires themselves. Only the most important statistics relating to the preceding drought, heatwave, and fires themselves are needed. See Box 4-2, chapter 4. (Stocker, Thomas, IPCC WGI TSU)	It is removed in SOD. It is modified with case study presented in Box 4-2 of chapter 4 in SOD.
261	9	42	38	42	38	Add "in the state's northwest" after "Wimmera". (Trewin, Blair, Australian Bureau of Meteorology)	It is removed in SOD.
262	9	42	40	42	41	Needs year (2009) (Chambers, Lynda, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
263	9	42	43	42	44	This information doesn't come from the stated reference. The correct reference is Australian Bureau of Meteorology (2009b), Australian Daily Temperature and Rainfall Extremes, Bureau of Meteorology, Melbourne. (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
264	9	42	49	42	49	As for comment 147, Bureau of Meteorology (2009b) is the correct reference here. (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
265	9	43	3	43	27	This section could be shortened. (Goodess, Clare, Climatic Research Unit)	This comment will be reflected in the SOD.
266	9	43	6	43	6	Victoria does not share a land border with Tasmania. Tasmania is an island. (Chambers, Lynda, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
267	9	43	6	43	6	Victoria does not have a land border with Tasmania (Tasmania is an island). (Trewin, Blair, Australian Bureau of Meteorology)	It is removed in SOD.
268	9	43	11	43	13	I don't think this detail is relevant or necessary. (Trewin, Blair, Australian Bureau of Meteorology)	It is removed in SOD.
269	9	43	32	43	32	During which period? (Chambers, Lynda, Australian Bureau of Meteorology)	It is modified with case study presented in Box 4-2 of chapter 4 in SOD.
270	9	43	32	43	32	What period do you mean? (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	It is changed by during the 1997-2009 period.
271	9	43	32	43	32	Replace "during this period" with "during the 1997-2009 period". (Trewin, Blair, Australian Bureau of Meteorology)	It is changed by during the 1997-2009 period.
272	9	43	32	43	34	Please explain the "period" that is considering here. Also please be more specific about "below or well below" in terms of the average rainfall. (Kazama, So, Tohoku University)	It is changed by during the 1997-2009 period.
273	9	43	38	43	38	The National Climate Centre (2009) reference is the same reference as the earlier Bureau of Meteorology (2009) one. (Trewin, Blair, Australian Bureau of Meteorology)	It is changed by during the 1997-2009 period.
274	9	43	38	43	39	This statement is incorrect. Both cities set records for the most consecutive days above 43 C. Adelaide (but not Melbourne) also equalled its record for consecutive days over 40 C. (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
275	9	43	52	43	52	Temperature in Melbourne (Chambers, Lynda, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
276	9	44	5	44	7	A heat wave cannot cause a bushfire. A fire needs an ignition source (lightning, human activities, ...) and fuel. A heatwave can make e. g. woody debris and vegetation more flammable, but to reach the temperatures needed for combustion air temperature would have to raise to 150 degrees celtigrade. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	This comment will be reflected in the SOD.
277	9	44	7	44	9	This sentence makes no sense here, seems to belong elsewhere. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	This comment will be reflected in the SOD.
278	9	44	9	0	0	was cited in support of what? (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
279	9	44	28	0	49	is it possible to replace the references to government report with more scientific sources? (Stocker, Thomas, IPCC WGI TSU)	The SOD will reflect these comments and modified.
280	9	44	28	44	30	Please add the numbers of reduction with the references. (Kazama, So, Tohoku University)	This comment will be reflected in the SOD.
281	9	44	28	44	49	This is in large parts redundant with section 2.1 - Meteorological backgrounds. Please consolidate. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	This comment will be reflected in the SOD.
282	9	44	31	44	31	What is the relevance of the sentence on Central Australia? (Chambers, Lynda, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
283	9	44	44	44	46	This sentence belongs to a "results" section, delete here. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	It is usually used.
284	9	45	3	45	21	It should be noted that bushfire-related deaths are not included in these figures. (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
285	9	45	16	0	0	what is the significance of deaths that are reported to the State Coroner's Office? Please explain this further (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
286	9	45	35	45	36	The reference to Australian Government 2009 should be replaced with Department of Innovation 2009 Black Saturday. (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	This comment will be reflected in the SOD.
287	9	45	41	45	41	"Estimated" means "not exactly known". You thus cannot estimate the number of affected people to a specific number. Suggestion: round to full tens (here 7560) or 100 (7600) or delete "estimated". (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	This comment will be reflected in the SOD.
288	9	45	47	45	48	References from wikipedia are unacceptable - please remove. In any case, without further details, it is not made clear what the significance of this smoke over the Antarctica is. Either provide more details and support with scientific references, or remove this sentence completely. (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
289	9	46	0	0	0	The extensive bushfire risk management measures, especially at community or household level, employed in Victoria could be described (Abrahamsj, Jonathan, World Health Organization)	This comment will be reflected in the SOD.
290	9	46	6	46	6	The reference to 3582 firefighters does not appear in the referenced document. This number comes from Wikipedia and numerous media articles from the time of the fires. (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	This comment will be reflected in the SOD.
291	9	46	6	46	6	As above, you cannot have "about 3582 firefighters", you have exactly 3582 personnel or else you should round to meaningful digits. Or do you mean you had e.g. 3583 firefighting personnel but "about 3582" sounds better? (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	It is revised with peer reviewed reference or removed in SOD.
292	9	46	19	46	20	An IPCC report should not be identifying individual scientists in this way, ie, "Australias most prominent fire ecologist". (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
293	9	46	26	46	27	Reference appears to be incorrect, text from Wikipedia. (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	This comment will be reflected in the SOD.
294	9	46	26	46	27	The system has been implemented, so replace "will be" with "are". (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
295	9	46	30	0	0	Not clear why do you additionally refer to fires in Europe and Korea in a case study dealing with forest fires in Victoria, Australia; this does not appear to strengthen the case study. (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
296	9	46	32	0	0	I think that in this subsection there should be a mention of the fires in Greece and in general in South Eastern Europe in Summer 2007(Tolika, Maheras and Tegoulias, 2007:Extreme temerature in Greece during 2007:could this be a "return to the future"?, Geaphysical Research Letters,36(L10813)), and of course of the recent events occurred in Russia during summer 2010. (Pavan, Valentina, ARPA Emilia-Romagna)	Noted – reference added
297	9	46	32	46	38	The IPCC AR4 summary for policymakers is cited as the basis for these likelihood statements, but such statements for southern Europe and the Mediterranean are not found there. Formal IPCC likelihood statements (very likely, likely, etc) should only be used if based on a formal likelihood assessment. Temperature projections should be reworded here based on the projections given by SREX chapter 3, (Figure 3.2 and Table 3.3). Chapter 3 assesses 'very likely' large increases in hot days and warm nights, and 'very likely' increases in the intensity and magnitude of heatwaves. Chapter 3 also assesses a 'very likely' increase in drought. (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
298	9	46	35	46	36	Note, though, that most of this area is already seasonally dry in summer. (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
299	9	46	36	46	38	Sentence about Melbourne seems out of place here. (Goodess, Clare, Climatic Research Unit)	Noted, with thanks. This concern will be reflected in the SOD.
300	9	46	36	46	38	Melbourne is not in Europe. This sentence needs moving or deleting (Chambers, Lynda, Australian Bureau of Meteorology)	Noted, with thanks. This concern will be reflected in the SOD.
301	9	46	47	46	48	Not clear what areas you are talking about here. (Goodess, Clare, Climatic Research Unit)	It is removed and revised in SOD.
302	9	46	48	46	48	Give a year for the Bulgarian fires. (Trewin, Blair, Australian Bureau of Meteorology)	This comment will be reflected in the SOD.
303	9	46	50	0	0	Which heat wave? (Goodess, Clare, Climatic Research Unit)	This comment will be reflected in the SOD.
304	9	47	1	0	0	What is the justification/motivation for looking at Europe and Korea? (Goodess, Clare, Climatic Research Unit)	This comment will be reflected in the SOD.
305	9	47	3	47	33	Please rephrase, many sentences are of poor quality and not understandable. E.g. it is not clear which fire is which (lines 5 - 9). (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	Landslide is one of important following disaster after fire. This concern will be reflected in the SOD.
306	9	47	13	0	0	Are you saying that fire caused an increase in precipitation? This needs justification/reference. (Goodess, Clare, Climatic Research Unit)	This comment will be reflected in the SOD.
307	9	47	13	47	14	I think what you mean to say here is "The effects of this fire, combined with increased annual precipitation, resulted in increased landslide related damages, most notably following Typhoon Rusa in 2002." - the current wording is unclear. (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
308	9	47	16	47	18	This last sentence listing other causes of sediment disasters in the mountains is not relevant to this case study, and should be removed. (Stocker, Thomas, IPCC WGI TSU)	This comment will be reflected in the SOD.
309	9	47	21	48	35	The section on 'Lessons from Drought, Heat Wave and Fires' does not contain an assessment of the lessons learnt from drought. This sections would also benefit from a discussion around the impacts and lessons learnt from co-incident events. (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	This concern will be reflected in the SOD.
310	9	47	29	47	33	This sentence does not make any sense. Do you mean that the preparation for heat waves has led to documentation of plans only? (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	The title is changed by complex disaster regarding on fire.
311	9	47	35	47	37	Why is something "intended to debate" that is already a standard? (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	This comment will be reflected in the SOD.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
312	9	47	37	47	40	Please check the numbers. 27 °C would be more near the average air temperature in this region - without fire. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	The SOD will reflect these comments and modified.
313	9	47	38	0	0	Is 817 degree C correct? (Goodess, Clare, Climatic Research Unit)	The SOD will reflect these comments and modified.
314	9	47	40	47	40	Reference to 27°C should be 727°C (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	The SOD will reflect these comments and modified.
315	9	47	40	47	40	27 C doesn't seem right here. (Trewin, Blair, Australian Bureau of Meteorology)	The SOD will reflect these comments and modified.
316	9	48	2	48	19	This paragraph discusses vegetation issues around the Greece fires which appears out of context in a discussion on the Victorian Bushfires. It would be more helpful for a discussion around the lessons learnt from Australian circumstances, for example, the movement of population into bushfire prone areas, change in vegetation and fuel loads as a result of prolonged drought, fire/hazard reduction burn policy, soil erosion and the impact on water supplies etc. (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	The SOD will reflect these comments and modified.
317	9	48	2	48	19	It would be interesting to include some comments on the lesson learned from the fire events in the Republic of Korea. (Kazama, So, Tohoku University)	This concern will be reflected in the SOD.
318	9	48	21	48	35	This paragraph on future heatwave events needs to be moved to below the first paragraph of the 'lessons learnt' section to tie in with the current heatwaves story. (Dumbrell, Amy, Australian Government Department of Climate Change and Energy Efficiency)	This concern will be reflected in the SOD.
319	9	48	25	48	26	This case study is about heatwave, drought, and fire - it is not a general case study on climate extremes faced by Melbourne. Intense rainfall and sea level rise are not relevant to this discussion. (Stocker, Thomas, IPCC WGI TSU)	This concern will be reflected in the SOD.
320	9	48	38	49	15	While an interesting and nicely detailed discursive discussion of wildfire occurrence in Australia, and less so in Korea and Mediterranean Europe, the conclusions are rather general and slight on wider or specific relevance to drm and cca issues beyond obvious linkages. This raises the question as to what extent this particular case study actually addresses the intended objectives and purposes outlined at the beginning of the Chapter ? (Jeggle, Terry, University of Pittsburgh)	The comment is noted but the cases need to reflect a wide range of disasters such as complex issues.
321	9	48	40	49	15	I can hardly find any conclusions here. Most of the text is redundant from paragraphs above, contains only buzzwords, or does not make sense (lines 8 - 11, p. 49). The last sentence is - IMHO - absolutely meaningless, verbiage, and should be erradicated. What has been achieved besides building standards? What would be necessary? How can landscape planning or management be conducted to achieve less risk from fires (without only using buzzwords like "participatory" or "self-organized", what can be done "on the ground")? Or is the time since the fires too short to answer these questions? That would be a conclusion, too. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	This concern will be reflected in the SOD.
322	9	49	8	0	11	which system are you referring to here? (Stocker, Thomas, IPCC WGI TSU)	This concern will be reflected in the SOD.
323	9	51	1	55	47	The entire case study text needs editing, especially with regard to grammar and articles. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	Noted – the case study has been extensively reviewed and merged with 9.11 the Arctic
324	9	52	0	0	0	The case study on the dzud should consider the wider community and country implications associated with the dzud, including health and development. (Abrahamsj, Jonathan, World Health Organization)	Country implications including impacts on development issues such as GDP, livelihood, poverty, migration, and relief efforts are described on the example of recent dzud events. Lack of information detailing impacts on health is still remaining.
325	9	52	1	0	0	The title and structuring of this case study is not clear. The title refers to 2009-2010, yet much of the text is in relation to dzud during 1999-2002. The subheadings 'Storm, cold, and snowfall' and 'Dzud' don't follow any logic. (Stocker, Thomas, IPCC WGI TSU)	Dzud is in the section 9.6 under title “Complex Cold Climate Impacts” together with Arctic case. The article shortened and logically restructured, and dzud of 2009-2010 and 2000-2002 was separated in subsections 3.1 and 3.2. Dzud is a year around complex event of drought, snowfall, cold and storm. This was explained.
326	9	52	12	0	0	Dzud 2000 is not a reference, author of the report: National Agency for Meteorology etc. (Stocker, Thomas, IPCC WGI TSU)	Corrected.
327	9	52	23	52	26	What time period are these 'climate norms' calculated from? Otherwise this information is of no use. (Stocker, Thomas, IPCC WGI TSU)	This is a citation. Refer to WMO climatic norm is an average of 1961-1990.
328	9	52	53	0	0	This is not a valid way to cite references. It is OK to cite reports that are available from online sources, but they must be cited in the normal way ,ie, Author/year. (Stocker, Thomas, IPCC WGI TSU)	Corrected.
329	9	53	4	0	16	what is a black, white, iron or hoof dzud? Please explain different dzud types before using them as explanation for a severe event. (Stocker, Thomas, IPCC WGI TSU)	Information on dzud types is deleted.
330	9	53	21	0	31	Dzud Impact is not the author of the 2004 report which is used as reference, please correct. (Stocker, Thomas, IPCC WGI TSU)	Corrected.
331	9	53	23	53	24	"per cent" must be corrected as "percent". (Kazama, So, Tohoku University)	Percent is expressed with %
332	9	53	37	0	0	"ger" was not understood. (Kazama, So, Tohoku University)	Ger is traditional housing for nomads. The sentence with ger is removed.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
333	9	53	42	53	49	Climate projections must be based on peer-reviewed literature, and ideally from IPCC AR4 and SREX chapter 3. Projections are normally given with an associated uncertaintly range. In any case, a paragraph describing Dzud risk in the context of future projected climate would be better placed at the beginning of this case study, to establish the rationale for including it. You must in this paragraph recognise that extremely cold days/nights are 'virtually certain' to decrease (see Chapter 3), and the impact this will have on future Dzud risk. If temperature is the most important factor in causing Dzud, than I don't think there is a good basis for this case study remaining. (Stocker, Thomas, IPCC WGI TSU)	Information on projection of climate warming, winter precipitation and desert is cited as it is in the most recent official climate change assessment report published by the Ministry of Nature, Environment and Tourism. Review editors of the report are national and international. The most important factors causing dzud are drought, snowfall, cold and storm.
334	9	53	44	53	47	Need a reference for these projections and some caveats since only presenting single estimates. Can't see Table 1. (Goodess, Clare, Climatic Research Unit)	CC projection is referenced and table is removed.
335	9	53	46	53	46	Not sure what/where 'Table 1' is that is referred to here. (Stocker, Thomas, IPCC WGI TSU)	Table is removed
336	9	53	47	0	0	There must be a pulls stop after the …. Catastrophic. (Kazama, So, Tohoku University)	Sentence is removed.
337	9	54	1	55	10	As useful as these expressed intentions and "lessons learned/observed may be" the true value of the case study lies much more in the extent to which the suggested actions are actually able to be pursued and results realized. It is therefore desirable, to the extent possible that the items outlined here in Section 6 on Efforts to Mitigate and Reduce Dzud Losses continue to be followed and actually updated during later drafts of the Chapter. There really is a need to be able to demonstrate that the identified or otherwise intended actions are actually implemented to danticipated effect. (Jeggle, Terry, University of Pittsburgh)	Agree with this. We had lessons from dzud of 2000-2002, there were many efforts with government policies, research communities, business, and international aids etc., but a decade later, and in 2010 dzud occurred with much more losses (8 million). This is 3 times more than losses from Dzud of 2000. So, question is about adequateness and effectiveness of policy and actions. But, there is no evaluation of these efforts, and no references to cite. So, adaptation part of the article is limited with lessons learned, goals, efforts, recommendations, rather than results and achievements. New references on efforts of volunteer Risk study team for participatory early warning are cited to the adaptation at local level.
338	9	54	9	0	0	camel firm? (Stocker, Thomas, IPCC WGI TSU)	This ere was discussion on camel milk or diary firm. Sentence is removed.
339	9	54	53	0	0	You have not provided any scientific evidence in this case study that Dzud is an 'emerging disaster', ie, that the disaster is emerging or increasing in any way; please provide references. (Stocker, Thomas, IPCC WGI TSU)	The most recent and important scientific and government official references that exist meanwhile are cited.
340	9	55	22	55	23	What is CAA? (Stocker, Thomas, IPCC WGI TSU)	This is CCA. Sentence is removed.
341	9	55	23	55	25	Social service etc. are aims and measures to achieve DRM and CCA, they do not stand aside nor are they opposed to CCA and DRM. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	Agree with this. Dzud affects livestock sector, thus concern is around this sector rather than general social services. Social service to herders is important. But cited references are more about physical and technical aspects.
342	9	55	31	55	31	Not clear what winter in Europe during 2009-2010 has to do with this case study. (Stocker, Thomas, IPCC WGI TSU)	Europe case study is removed.
343	9	55	33	55	34	What do you mean here: Scientific research is not aimed at solutions?? (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	There is a gap between climate change research and real life demands. CC research provides or directs strategy for longer term, while politicians are concerning about time of election (4 years in Mongolia), and ordinary people are busy with today's life issues and problems. So far, CC study in Mongolia have not provided practical solution yet, that is why the country affected severely by Dzud phenomenon. Local grounded and pragmatic solution is needed along with advanced scientific research.
344	9	55	36	55	47	This correctly emphasizes the need for evaluation of effectiveness, but it does seem that one of the items referred here as perhaps supplemental, namely the rigorous assessment of viable carrying capacity of the lands, pastures and water reserves is actually fundamental and demanding of serious attention. It should be equally important to translate this ecological assessment based on biological sciences into the socio-economic and cultural opportunities or limitations for assessing the resulting exposure and vulnerability under likely future climate regimes. (Jeggle, Terry, University of Pittsburgh)	I agree with this. Section on research gaps and needs including this paragraph is removed.
345	9	55	43	0	47	why do you finish with two very signigicant (unanswered) questions which actually could have formed the basis for discussion in this case study? (Stocker, Thomas, IPCC WGI TSU)	These questions are removed.
346	9	57	0	0	0	This case study could mention the effect of climate and weather in the first paragraph. The case study should include references to the interventions, including a discussion on how the epidemic was managed. (Abrahamsj, Jonathan, World Health Organization)	The first paragraph has been changed to reflect a broader focus. Management options are discussed in the case study and the references for the Zimbabwe epidemic describe how that epidemic was managed.
347	9	57	48	0	51	references needed (Stocker, Thomas, IPCC WGI TSU)	These lines were removed from the case study.
348	9	57	51	0	53	for which regions is ENSO associated with these phenomena? (Stocker, Thomas, IPCC WGI TSU)	We outline regions where ENSO associations have been documented in Africa, South Asia, and South America.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
349	9	57	51	57	53	Even though more detail is given elsewhere in the case-study, some example references should still be cited here to support the statement relating to the effects of El Nino, and the statement describing links with extreme events (Stocker, Thomas, IPCC WGI TSU)	As noted, reports from three continents are cited. The case study now emphasizes extreme impacts associated with changes in weather and climate, some driven by ENSO cycles. The case study is not focused on extreme events associated with El Nino so we did not expand on or cite the mention of extreme events.
350	9	58	2	58	3	Some rewording is needed to be more specific and avoid generalisation in this statement - something like: "As climate change is expected to alter mean climatic conditions and variability, bringing more extreme weather in some instances, and heighten vulnerability.....". (Stocker, Thomas, IPCC WGI TSU)	This statement has been removed.
351	9	60	19	60	29	Please, at the beginning of this case study, provide readers not common with this disease with a short explanation about its progression, impacts (what happens to someone infected) etc. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	Cholera is described as a diarrheal disease that often occurs in epidemics as noted.
352	9	61	22	61	24	It would be nice to tie this key message in with the assessment of SREX chapter 3 and remove use of the word 'variability' which is not very specific, so something like - "through an increase in extreme precipitation and extreme heat (Chapter 3), along with a more gradual increase in mean temperature, and by increasing population....." (Stocker, Thomas, IPCC WGI TSU)	The Key Messages section of the case study has been removed.
353	9	64	0	0	0	This case study should provide details on community.based disaster risk management measures in urban areas. (Abrahamsj, Jonathan, World Health Organization)	noted
354	9	64	1	0	0	for 9.3.2 'vulnerable regions' it would make sense to sort case studies according to topic, ie, 9.9 and 9.11 followed by 9.10 and 9.12 (Stocker, Thomas, IPCC WGI TSU)	noted
355	9	64	1	0	0	This case study would be much more effective if it focussed on either Vulnerable coastal cities OR Mega cities. The current combined approach lacks any clear purpose or structure. (Stocker, Thomas, IPCC WGI TSU)	Noted – but LAM3 showed LAs that the re are significant space constraints – so limited space has been used to best capacity in SOD
356	9	64	9	64	10	The statement that cities are one of the key drivers of climate change must be supported with cited references. (Stocker, Thomas, IPCC WGI TSU)	Added cited reference
357	9	64	12	64	13	Are the urban poor in developing countries really the most vulnerable to drought ? (Jeggle, Terry, University of Pittsburgh)	Changed the examples of disaster
358	9	64	24	0	0	Not sure which research results are being referred to here. (Goodess, Clare, Climatic Research Unit)	Removed the para
359	9	64	24	64	34	Not sure what the 'research results' are that are referred to in this paragraph. This paragraph is unclear and does not seem to fit within the introduction. (Stocker, Thomas, IPCC WGI TSU)	Removed the para
360	9	64	39	64	53	I think it would be better to refer to Chapter 3 for details of projections which are based on peer-review assessment, rather than drawing so heavily on the Copenhagen Diagnosis. (Goodess, Clare, Climatic Research Unit)	Removed the para
361	9	64	39	64	53	The peer-reviewed scientific literature from which the Copenhagen Diagnosis based its assessment should be cited here, rather than this secondary, potentially controversial source. The statements made in relation to tropical cyclones and rainfall (lines 44 - 51) should be rewritten based on the assessment and wording used in SREX by chapter 3 (see table 3.1 - 3.2 and figures 3.2 - 3.3). (Stocker, Thomas, IPCC WGI TSU)	Removed the para
362	9	65	13	65	14	Not sure this footnote to a web address is needed, or adds any significant value to the case study. (Stocker, Thomas, IPCC WGI TSU)	Footnote removed from here
363	9	65	29	66	14	Is there basic information available on the total population/demographics of the example cities? (Stocker, Thomas, IPCC WGI TSU)	Already covered
364	9	65	32	65	33	Temperature variability' - this is very vague, do you mean 'warm temperature extremes?' (Stocker, Thomas, IPCC WGI TSU)	Changed to temperature variability and extremes
365	9	65	36	65	36	You must provide more detail (with cited references) as to how this 'red tide' is caused by climate related changes. (Stocker, Thomas, IPCC WGI TSU)	Details provided
366	9	65	53	65	54	References are needed to support this claim that flash floods have increased. You can not just report observations like this without any indication of what evidence you have. (Stocker, Thomas, IPCC WGI TSU)	Example removed
367	9	66	8	66	9	considered one of the most vulnerable regions' - considered by who? Which study? References needed!! (Stocker, Thomas, IPCC WGI TSU)	Example removed
368	9	66	14	66	14	devastating consequences of climate change'. Sorry, but nowhere in this case study have you provided evidence that Ecuador has experienced more frequent or more severe impacts from climate change! (Stocker, Thomas, IPCC WGI TSU)	Example removed
369	9	66	30	0	0	realised by who? (Goodess, Clare, Climatic Research Unit)	Removed the sentence
370	9	66	36	0	0	Who are these partners? (Goodess, Clare, Climatic Research Unit)	Removed the sentence
371	9	66	39	0	0	But also many who are not acting. (Goodess, Clare, Climatic Research Unit)	Removed the sentence
372	9	66	53	66	53	Instead of providing a web address, the hard copy publication should be cited in all instance. In this case, I presume you are referring to the UNEP World Resources 1996-97, The Urban Environment chapter. This is a hard copy publication and should be cited as such. (Stocker, Thomas, IPCC WGI TSU)	The hard copy reference cited
373	9	67	22	67	23	Sorsogon 2009 is missing from the reference list. Web address is not needed and should be deleted. (Stocker, Thomas, IPCC WGI TSU)	Added in the reference list. And web address removed from text.
374	9	67	41	0	0	what is this 'well-proven four stage Environmental Planning and Management Process' - more details needed (Stocker, Thomas, IPCC WGI TSU)	Text rewritten

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
375	9	68	5	68	27	It is hard to understand what you are trying to achieve with this section - these read more like criticisms of the other chapters rather than illustrations of how your case study relates to key messages. This is not useful in any way. Also not clear what (CAA) is? (Stocker, Thomas, IPCC WGI TSU)	Removed the para
376	9	68	5	68	27	In contrast to the good discussion in Case Study 9.9 Vulnerable Coastal and Mega-cities, these Relationships to Key Messages are weak and unfocussed. In comparison to the other case studies' "Key Messages" sections, these comments refer to other chapters with unclear purpose. In reading these comments, I do not really know what, exactly, or more importantly why, I am reading what is stated here. There seems a disconnect with the key or crucial issues pertinent to the subject of this Case Study - or at least I am missing it. (Jeggle, Terry, University of Pittsburgh)	Removed the para
377	9	68	30	66	44	Maybe these points are only initial notes still to be fleshed out, but they do need elaboration. (Jeggle, Terry, University of Pittsburgh)	Removed the para
378	9	68	32	68	44	This list of bullet points could be better organised. Not all relate to climate projections. Most of the points about spatial scale of projections could be wrapped up in one point. (Goodess, Clare, Climatic Research Unit)	Removed the para
379	9	68	32	68	44	Some of these read more like future needs, rather than existing limitations - you tend to focus here on climate modelling rather than on the social factors. Limitations of climate modelling are well covered in Chapter 3, so don't need to be repeated here. (Stocker, Thomas, IPCC WGI TSU)	Removed the para
380	9	68	34	68	34	Not sure what is meant with this sentence "Projection of average value ....". (Stocker, Thomas, IPCC WGI TSU)	Removed the para
381	9	68	39	68	39	What is the significance of 4 - 8 years? (Stocker, Thomas, IPCC WGI TSU)	Removed the para
382	9	70	0	0	0	Section Comment: the case makes good points and presents the issues well, it would be improved by the addtion of more examples from the Caribbean and AIMS, most examples are from Pacific, while these are important, adding others would increase its relevance. The last section requires more analysis, to indicate common factors, and indicates what works and what does not in the context of SIDS, that section would profit from more examples and references.. (Smith, David, University of the West Indies)	Noted – but real issue of space constraints
383	9	70	1	0	0	This case study is much too generalised and needs to shortened, to focus specifically on the vulnerability of SIDs in relation to climate extremes, and management practices relating to climate extremes. (Stocker, Thomas, IPCC WGI TSU)	Noted – case study reworked for SOD
384	9	70	1	76	48	Case Study 9.10..Good case study, well reasoned and containing a very good range of examples. (Jeggle, Terry, University of Pittsburgh)	Noted – thank you
385	9	70	1	120	24	Case study 9.10 (Small Islands developing State): Vulnerability is essentially addressed through a socio-economic perspective. Environmental features that also explain the vulnerability of SIDS are too poorly described. In consequence, the interface between environmental dynamics and anthropogenic dynamics is not well emphasized, as in numerous SIDS, this is precisely these relationsships that shape vulnerability and allow "rooms of manoeuvre" for adaptation. I think physical features of SIDS could be better exposed (scacity of lands and resources, territorial scattering when considering atolls, e.g.) and linked to societies features: e.g. this is because of a lack of natural resources taht these societies are poor, and these is because they are poor that they cannot use other resources like the ones of their Economic Exclusive Zones. There is a kind of vicious cycle that might be interesting to describe in the chapter, because it explains vulnerability. (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	noted
386	9	70	8	0	0	I would add into brackets: "… growing populations, lack of resources (freshwater, land, soils e.g.), remoteness…" (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	Noted - Added
387	9	70	10	0	0	Instead of "SIDS are also", I would write "SIDS are therefore" (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	Noted - Changed
388	9	70	12	0	0	I would add "contamination of agricultural land and aquifers (or groundwaters) due to saltwater intrusion." (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	This sentence has been removed
389	9	70	23	0	0	Author should mention the Association of Caribbean States. Although it also includes mainland members it also includes Dominican Republic and Cuba http://www.acs-aec.org/about.htm but the majority of members are SIDS. (Smith, David, University of the West Indies)	This para has been removed
390	9	70	28	70	30	there are no information given to understand the "extreme impact" of shoreline inundation and saline intrusion. (Kazama, So, Tohoku University)	This para has been removed
391	9	70	33	70	34	The word 'extreme' should be removed from this sentence - there is no evidence to suggest that sea level rise in this instance was 'extreme'. (Stocker, Thomas, IPCC WGI TSU)	This para has been removed

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392	9	70	37	0	0	After "effects of such phenomena" or at thend eof the sentence, maybe add the following references: (1) Cazes-Duvat, V., 2001, Le poids des contraintes physiques dans le développement des atolls : l'exemple de l'archipel des Maldives (océan Indien), Les cahiers d'Outre-Mer, 53, pp. 3-26 ; (2) Barnett, J., W.N. Adger, 2003, Climate danger and atoll countries, Climatic Change, 61, pp. 321-337 ; (3) Mimura, N., L. Nurse, R.F. McLean, J. Agard, L. Briguglio, P. Lefale, R. Payet, G. Sem, 2007, Small islands. Climate change 2007: impacts, adaptation and vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the IPCC, Parry M.L., O.F. Canziani, J.P. Palutikof, P.J. Van der Linden, C.E. Hanson (Eds.), Cambridge University Press, Cambridge, UK,1000 p., p. 687-716 ; (4) Nunn, P.D., 2007, Climate, environment and society in the Pacific during the last millennium, Elsevier, Amsterdam, 316 p.; (5) Duvat V., Magnan A. (forthcoming). Des archipels en péril? Les Maldives et les Kiribati face au changement climatique. VertigO, vol. 10, No. 3, http://vertigo.revues.org. (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	This para has been removed
393	9	70	48	0	0	This final chapter of SREX should be able to draw upon definitions introduced earlier in the report, so terms like 'vulnerability' should not be reintroduced here. Definitions from Chapter 2 should be cited here. This chapter needs to be integrated better into the overall report, and this will help towards that. (Stocker, Thomas, IPCC WGI TSU)	Accepted, the definitions removed
394	9	70	52	71	17	Most of these comments are not particular to SIDS and appear superfluous and can be dispensed with. Especially considering how good the specific following discussion is about SIDS' particular vulnerability. (Jeggle, Terry, University of Pittsburgh)	Accepted, the definitions removed
395	9	71	12	0	0	Indicate what percentage of Turkey's GDP was this, to illustrate the point. There are better more recent examples, e.g. the impact of Ivan on Grenada or on Cayman Islands near to 200% of GDP (ECLAC figures). http://www.eclac.org/publicaciones/xml/1/20501/Presentacion.pdf etc. (Smith, David, University of the West Indies)	This para has been removed
396	9	71	24	0	0	Note that high GDP per capita is often a statistical artifact when countries have small populations. But that impact is also high on a per capita basis e.g. cayman Islands 2004 Ivan over USD 75,000 per head according to the ECLAC report on the event. (Smith, David, University of the West Indies)	Accepted, that's true
397	9	71	28	71	28	Note clear what FAO is? Many abbreviations are used in this case study that require explanation. (Stocker, Thomas, IPCC WGI TSU)	This para has been removed
398	9	71	44	0	45	the figures increase so a constant base for the currency figures should be used (Smith, David, University of the West Indies)	This para has been removed
399	9	71	44	71	45	Check figures - this seems a pretty modest relative decline (and is an absolute increase). (Trewin, Blair, Australian Bureau of Meteorology)	This para has been removed
400	9	71	45	0	0	why are the numbers increasing in the brackets if they are expected to decline? References must be cited to support these GDP figures. (Stocker, Thomas, IPCC WGI TSU)	This para has been removed
401	9	71	45	0	0	Please add the reference (Kazama, So, Tohoku University)	This para has been removed
402	9	72	1	72	4	You must cite evidence that SIDS are particularly vulnerable to climate change - what is this based on? AR4? (Stocker, Thomas, IPCC WGI TSU)	Noted – reference cited
403	9	72	5	72	7	Please delete 'due to thermal expansion of the world's ocean' and 'caused by increasing sea surface temperatures of the oceans'. Neither of these are accurate statements, and are only part of the story. (Stocker, Thomas, IPCC WGI TSU)	Changed
404	9	72	11	0	0	Maybe to add after (Nurse & Sem 2001): Pernetta J.C., 1990, Impacts of climate change and sea-level rise on small island sates. National and international responses, Global Environmental Change, pp. 19-31. (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	Noted - added
405	9	72	13	72	20	Every statement you make in this paragraph relating to the impacts of El Nino events, ocean surface warming, increasing rainfall events and cyclones/hurricanes MUST be supported with reference to peer-reviewed literature. You can not make these sorts of statements without support from the literature. You should in the first instance consult the assessment of projections given in chapter 3 of SREX. (Stocker, Thomas, IPCC WGI TSU)	This para has been removed
406	9	72	14	0	16	Note also the drought in Caribbean 2009 and 2010 for the same reasons (Smith, David, University of the West Indies)	This para has been removed
407	9	72	16	72	17	Please explain the magnitude of warming (Kazama, So, Tohoku University)	This para has been removed
408	9	72	17	72	19	Is this the case everywhere? Need some references to these various projections/observations. (Goodess, Clare, Climatic Research Unit)	This para has been removed
409	9	72	23	0	0	Percentage live coral will be reduced, the physical structure of the reef will persist. (Smith, David, University of the West Indies)	This para has been removed
410	9	72	24	0	0	The Mangrove statement needs to substantiated, maybe better to say extent of mangroves will be reduced or that %age of mangals will be damaged. If the sea rises wont the mangroves retreat? This may not be possible in some places because of human structures but will probably happen in others. (Smith, David, University of the West Indies)	This para has been removed
411	9	72	27	72	27	I am confused! Above in lines 17 - 18 you claim (without any supporting references) that there will be an INCREASE in rainfall, yet here you now claim SIDS will face a reduction in freshwater due to DECREASED rainfall .... again without supporting references. This highlights the problem of making unsupported generalised claims. (Stocker, Thomas, IPCC WGI TSU)	This para has been removed

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
412	9	72	28	0	0	The last point does not seem to be related to climate change. If it is, the linkage should be explained in the paragraph above. (Smith, David, University of the West Indies)	This para has been removed
413	9	72	28	72	29	Why might this risk change due to climate change? (Goodess, Clare, Climatic Research Unit)	This para has been removed
414	9	72	34	0	0	Section 4 comment: This section needs a Caribbean example such as Grenada after Ivan, or Haiti after 2004 floods and mudslides. Or Cayman Islands after Ivan. UNDP sub regional office in Barbados would be a useful source of information on Grenada. (Smith, David, University of the West Indies)	Noted - added Caribbean example - Grenada
415	9	72	35	0	0	What was the cost of the damage? relate to GDP if possible. (Smith, David, University of the West Indies)	Noted - Changed
416	9	72	37	72	38	Explaning the damage to drainage system alone may not give an estimation for total damage. (Kazama, So, Tohoku University)	Addressed
417	9	73	3	73	3	What is DESA? People will be reading this from outside the CCA and DRM communities so these abbreviations need to be make clear. (Stocker, Thomas, IPCC WGI TSU)	This sentence has been removed
418	9	73	12	73	31	It is nice to read that the life of women in Bulelavata has improved - but you need to describe the relevance of this to CCA or DRM. (Stocker, Thomas, IPCC WGI TSU)	Accepted, this example has been removed
419	9	73	12	73	31	This example, while valuable seems to relate to rural development not climate change. The relationship to natural hazards or climate change needs to be made more explicit or another example used instead. Does the community manage the watershed that provides the water for the micro-hydro system? (Smith, David, University of the West Indies)	Accepted, this example has been removed
420	9	73	32	0	49	Note the activities and role of the Caricom centre for climate change in Belize, the Cuban Government and the University of the west Indies in carrying out similar research in the Caribbean. (Smith, David, University of the West Indies)	The para has been moved to point no. 4
421	9	73	33	73	49	There are no references in this section as to which research project or 'study' you are referring to here. Who or what research group are doing this study? In any case, it is strange to have a whole paragraph describing the expected outcomes from a particular study. (Stocker, Thomas, IPCC WGI TSU)	The para has been moved to point no. 4
422	9	73	51	74	7	Again there is no link made between this installation of solar energy and CCA or DRM. The 8 benefits of this installation that you list are of no relevance to this report. (Stocker, Thomas, IPCC WGI TSU)	This para has been removed
423	9	73	51	74	7	please explain the time duration between installation of the solar home system and feedback collection. This is because, some conclusions made by the feedback, such as health improvement might need considerable time span to notice. (Kazama, So, Tohoku University)	This para has been removed
424	9	74	10	75	2	I don't feel this section bring useful elements because it just looks like some scattered exemples that don't mobilize the same elements for each case study (not the same framework of presentation: e.g. 1. the event, 2. the impacts, 3. the induced costs). Once again, its erasure could let some available space for better describing the physical and environmental features of SIDS that partly explin theur vulnerability to natural hazards and to climate change. (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	This para has been removed
425	9	74	12	0	19	Include the January 2010 7.1 Haitian earthquake which killed over 250,000 people, this should head the list (Smith, David, University of the West Indies)	This para has been removed
426	9	74	12	0	19	Reduce the number of seismic examples and increase meteorological ones which are more closely related to climate change. (Smith, David, University of the West Indies)	This para has been removed
427	9	74	18	0	19	Ivan also affected the Cayman Islands and Jamaica. The single hazard caused over 4 billion in damage and loss (ECLAC) (Smith, David, University of the West Indies)	This para has been removed
428	9	74	22	0	23	It is questionable whether the storms increased the vulnerability of the population to the earthquake. Please quote a reference here. (Smith, David, University of the West Indies)	This para has been removed
429	9	74	24	0	0	This is a good example but should include the economic cost of the three hurricanes for caparison in % of GDP terms. UN ECLAC collected these data after the event (Smith, David, University of the West Indies)	This para has been removed
430	9	74	33	0	47	Can references be provided in relation to this project? (Stocker, Thomas, IPCC WGI TSU)	This para has been removed
431	9	74	51	74	51	The figure of 33% quoted is inconsistent with the 63% quoted at page 71 line 44. (Trewin, Blair, Australian Bureau of Meteorology)	The para in which 63% was quoted has been removed
432	9	75	2	0	0	Please add the reference (Kazama, So, Tohoku University)	Noted - added
433	9	75	5	75	53	This all seems rather general and would benefit from some references. (Goodess, Clare, Climatic Research Unit)	Reviewed and changes done accordingly

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
434	9	75	7	75	11	An example of the economic-centred appraoch: the authors write that adaptation is solely a question of economic means. It is indeed generally accepted that there exists a systematic link between a low level of adaptive capacity and a low level of development, but definitly it's false. Adaptation to climate change is not solely determined by economic and technological capacities; many other characteristics of a community can play a major role in its ability to react to and anticipate climate changes (e.g. the territorial identity or the social relationships). See for example: (1) Handmer JW, Dovers S, Downing TE (1999) Societal vulnerability to climate change and variability. Mitigation and Adaptation Strategies for Global Change 4:267–281. doi: 10.1023/A:1009611621048 ; (2) Kates RW (2000) Cautionary tales: adaptation and the global poor. Climatic Change 45(1):5-17. doi: 10.1023/A:1005672413880 ; (3) Smit B, Wandel J (2006) Adaptation, adaptive capacity and vulnerability. Global Environmental Change 16:282-292. doi:10.1016/j.gloenvcha.2006.03.008 ; (4) Adger WN, Dessai S, Goulden M, Hulme M, Lorenzoni I, Nelson DR, Ness LO, Wolf J, Wreford A (2009) Are there social limits to adaptation to climate change? Climatic Change 93:335-354. doi: 10.1007/s10584-008-9520-z. (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	Reviewed and changes done accordingly
435	9	75	12	75	15	Here, nothing is said about e.g. communities involvement or territorial processes (land management, social inequalities…). Then the "policy and management practices" picture is not incomplete. (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	Reviewed and changes done accordingly
436	9	75	14	0	0	An example of use of trade policy by SIDS in this way would be useful. (Smith, David, University of the West Indies)	Reviewed and changes done accordingly
437	9	75	17	0	0	green technologies, such as non-renewable energies'? -> renewable energies?? (Stocker, Thomas, IPCC WGI TSU)	Reviewed and changes done accordingly
438	9	75	20	0	0	Again an example of this actually taking place would add to this section which currently sounds rather theoretical. (Smith, David, University of the West Indies)	Reviewed and changes done accordingly
439	9	75	25	0	0	The phrase "natural disaster" should be avoided here and throughout the report. (Smith, David, University of the West Indies)	Reviewed and changes done accordingly
440	9	75	26	75	26	Include a date for the East Asia Tsunami - when this report is read in 5 years time, it may not be the 'latest' tsunami. Also again on line 35. (Stocker, Thomas, IPCC WGI TSU)	Reviewed and changes done accordingly
441	9	75	26	75	26	Replace "latest tsunami" with "2004 tsunami" or similar. (Trewin, Blair, Australian Bureau of Meteorology)	Reviewed and changes done accordingly
442	9	75	32	76	48	This section needs to be strengthened by deeper analysis, drawing out the common points, provision of more examples and references (Smith, David, University of the West Indies)	The para has been revised
443	9	75	35	0	0	Noted by whom? (Goodess, Clare, Climatic Research Unit)	The para has been revised
444	9	75	38	0	0	Can you give some examples of specific needs? (Goodess, Clare, Climatic Research Unit)	The para has been revised
445	9	76	11	76	22	This section is not enough developed. Some other research needs could be: (1) to better understand past adaptations to climate stimuli and understand which features of the present conditions constrain these past adaptiove capacities (e.g. demographic pressure in capitals, pollution of groundwaters...); (2) to study the real assets of islands communities (cultural values, territorial identity, links between generations; lifestyles...) which can be strengths in order to cope with environmental perturbations. (MAGNAN, Alexandre, Institute fior Sustainable Development and International Relations (IDDRI))	The sections of research gaps and needs; and summary and conclusions have been replaced by a new section of lessons identified
446	9	76	17	0	0	Can you provide some references for these published outcomes? (Goodess, Clare, Climatic Research Unit)	The sections of research gaps and needs; and summary and conclusions have been replaced by a new section of lessons identified
447	9	76	17	76	17	You must cite the references where these 'published outcomes' can be found. (Stocker, Thomas, IPCC WGI TSU)	The sections of research gaps and needs; and summary and conclusions have been replaced by a new section of lessons identified
448	9	76	40	76	40	Who is 'Arifin Muh Hadi"? (Stocker, Thomas, IPCC WGI TSU)	The sections of research gaps and needs; and summary and conclusions have been replaced by a new section of lessons identified
449	9	77	54	0	0	For a useful review of the economic impact of disasters and how they relate to GDP check http://www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/1/38101/P38101.xml&xsl=/mexico/tpl/p9f.xsl&base=/tpl/top-bottom.xslt (Smith, David, University of the West Indies)	The sections of research gaps and needs; and summary and conclusions have been replaced by a new section of lessons identified
450	9	79	0	0	0	This section could use a definition (or map) in its introduction to indicate what the authors mean by the 'Arctic'. Some of the impacts quoted (e.g. ice jams) occur some distance south of the Arctic Circle. (Trewin, Blair, Australian Bureau of Meteorology)	The case study has been entirely re-written and the focus is now on Canadian territories.
451	9	79	0	82	0	The IPCC A4R report state that Arctic sea ice has shrunk since 1978. A continuous shrinking or absence of sea ice could lead to increased shipping activity in the North Polar basin. Extreme weather events causing shipping accidents in this area will have consequences for the arctic ecosystem and arctic indigenous people. This comment could also/or instead be added to chapter 4 (Asphiell, Torgrim, Climate and Pollution Agency (Norway))	Noted and reworded.
452	9	79	1	82	52	Case Study 9.11. Insightful and well presented. Does a good job of linking CCA and DRM issues. (Jeggle, Terry, University of Pittsburgh)	Thanks.
453	9	79	7	0	0	Is this really true? Perhaps better phrased as 'some of the most rapid rates'... (Goodess, Clare, Climatic Research Unit)	Noted and reworded.
454	9	79	7	0	0	Please explain the warming rate compared to global mean (Kazama, So, Tohoku University)	Noted and reworded.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
455	9	80	20	80	21	Are there references that can be cited here to support this claim that ice jam occurrences or characteristics have changed? (Stocker, Thomas, IPCC WGI TSU)	Case removed in new version.
456	9	81	0	0	0	It is proposed that this case study also discusses the health,social, economic and developmental implications of vulnerability to climate change and the Arctic. (Abrahamsj, Jonathan, World Health Organization)	Noted and added some information.
457	9	81	6	81	6	Vulnerability … : I think it is better to cite an IPCC glossary (Martin, Eric, Meteo-France)	Noted and reworded.
458	9	81	22	0	24	what is the third option? (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded.
459	9	81	41	81	41	projections' is problematic as it depends very much on what projections are used. Perhaps this can be rephrased to something like - "…shift beyond their design limits" (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded.
460	9	81	46	81	46	The climate change modellers would probably disagree that the climate is changing at 'unpredictable' rates. It would be better to be more specific and comment that changes in mean and extreme climate show regional and local variations, and confidence in climate projections therefore vary between regions, between seasons, and between different climate elements. This also happens to be one of the key messages coming from Chapter 3, so would be a nice link to make here. (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded.
461	9	81	51	81	51	Please spell out in this first instance the NRTEE abbreviation. (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded.
462	9	82	9	82	11	This explanation of why ice jams could increase with climate change is very important, and should appear earlier in the case study - either as part of the introduction or around line 21, page 80. This will then make it very clear to the reader why ice jams are of such concern, and better sets the context for the Lensk, Russia example. (Stocker, Thomas, IPCC WGI TSU)	Case removed from new version.
463	9	82	11	82	14	Is there any thought on what these ashes, coal or sand may cause in the river and in the polar seawater ecosystems? (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	Case removed from new version.
464	9	82	23	82	30	This is all very general. Here and for other case studies, it's not clear what key messages are being referred to. (Goodess, Clare, Climatic Research Unit)	Key messages section removed.
465	9	82	50	0	0	Should include reference(s) to support statement about accelerated permafrost thaw. (Goodess, Clare, Climatic Research Unit)	Added.
466	9	82	50	82	50	Am not convinced you have really cited any evidence that permafrost is thawing at an accelerated rate. This statement, along with any supporting citations should probably appear in the introduction. (Stocker, Thomas, IPCC WGI TSU)	Noted and reworded.
467	9	85	0	0	0	While this is an important theme, it appears to be too ambitious (especially as a case study) to do justice to it in one short discussion. As such this section requires to be more focused and more details are needed. (Abrahamsj, Jonathan, World Health Organization)	Noted – reviewed by Chapter 9 and remains included as a case study but reworded 9.2.9 in SOD
468	9	85	0	87	0	regardless the fact that session 2 has no subtitles, it should be restructurd in order to transfer a clear message. (Ammann, Walter J., Global Risk Forum GRF Davos)	Noted – case study extensively reworded from FOD to SOD 9.2.9
469	9	85	1	0	0	Fragile states are not defined so I find it hard to know if these are covered by these case studies. (Goodess, Clare, Climatic Research Unit)	Suggestion noted, but the case study in question is not intended to be comprehensive of the issue, merely illustrative of some key aspects of it. This case has been merged with another case, thus all facets of the vunerabilities of LDCs and fragile states will not be addressed.
470	9	85	1	0	0	This case study needs attention - structure is lacking; titles are missing; statements concerning LDCs are very general with an apparent arbitrary choice of example states (Senegal and Nepal) used; references are missing. (Stocker, Thomas, IPCC WGI TSU)	The author concurs with this comment, and it was taken on board for the Second-Order Draft when this case study was merged with the SIDS case study.
471	9	85	1	90	49	Headings of this case study are strange (Martin, Eric, Meteo-France)	Comment noted and taken on board. The new case focuses less on fragile states per se than on limits to adaptive capacity, chiefly in the context of SIDS and LDCs.
472	9	85	5	85	42	This section looks like a sub case study rather than an introduction to the section. (Trewin, Blair, Australian Bureau of Meteorology)	Comment and suggestion taken on board and incorporated into the Second-Order Draft.
473	9	85	8	0	0	before 2001 Senegal was no LDC then? Please provide a general introduction where you 1) outline the key characteristics of a LDC, and 2) justify why you focus on Senegal and Nepal. (Stocker, Thomas, IPCC WGI TSU)	Comment noted and addressed in the Second-Order Draft.
474	9	85	14	85	18	Need references to support these statements. (Goodess, Clare, Climatic Research Unit)	Comment noted and considered in the revison of the case study for the Second-Order Draft.
475	9	85	14	85	18	References are needed in this paragraph to support the statements made concerning declining rainfall, beach erosion, and loss of ecosystems. (Stocker, Thomas, IPCC WGI TSU)	Comment noted and addressed in the Second-Order Draft.
476	9	85	22	85	22	Not sure what this (UN 2009) reference is - can you give more specific details. (Stocker, Thomas, IPCC WGI TSU)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
477	9	85	22	85	26	Are these statements specific to Senegal? Is there any new information since AR4? (Goodess, Clare, Climatic Research Unit)	See response to comment 474 above.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
478	9	85	23	85	26	This prediction should be updated and reworded now based on the assessment given in Chapter 3 of SREX. (Stocker, Thomas, IPCC WGI TSU)	This is a reference to the UN Global Assessment Report on Disaster Risk Reduction.
479	9	85	45	87	42	These seem like a rather random selection of examples. Is it possible to provide some more specific justiciation/motivation for including each of them? (Goodess, Clare, Climatic Research Unit)	Statements referred to Senegal; but this section was cut in the preparation of the Second-Order Draft.
480	9	85	47	86	23	This section looks incomplete. (Trewin, Blair, Australian Bureau of Meteorology)	Comment noted and will be taken on board as relevant (in princple) but here it is no longer relevant since this text was cut from the case study.
481	9	86	26	86	50	While Glacial Lake Outburst Floods (GLOFs) were indeed discussed in Sperling and Szekely 2005 and a case study was given, please note that this is based and references the original study by Agrawala 2003, OECD. Suggust adding or replacing with original source in the context of the case study. (Sperling, Frank, WWF)	The samples were based on availability of peer-reviewed literature, but there was some editorial choice given as well to different geographical regions.
482	9	86	28	0	50	How do you plan to connect the phenomenon of GLOFs with the more social and economic aspects of LCD you have been focusing on in the rest of this case study? GLOFs don't seem to be an appropriate fit here, and are already covered in much more detail in chapters 3 and 4. Stongly consider removing this section here. (Stocker, Thomas, IPCC WGI TSU)	Comment noted and taken on board during the revision of the case study for the Second-Order Draft.
483	9	86	28	86	29	Delete 'As a result of rising temperatures' and replace with 'in response to glacial retreat and mass loss.' You should also cite section 3.5.6 of Chapter 3, and section 4.3.4.5 of Chapter 4 here. (Stocker, Thomas, IPCC WGI TSU)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
484	9	86	31	0	0	Expression as '6000%' is not appropriate. Cite the original article in which the change in lake area of Tsho Rolpa was analyzed (Yamada, 1998) (Fujita, Koji, Nagoya University)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
485	9	86	33	0	0	Who measured the volume? Cite the original article in which the volume of Tsho Rolpa was observed (Yamada, 1998) (Fujita, Koji, Nagoya University)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
486	9	86	33	86	36	Please cite a reference(s) in relation to the Tsho Rolpa information. (Stocker, Thomas, IPCC WGI TSU)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
487	9	86	42	86	43	This early warning system is NOT working now. News reporters in Japan found that all solar panels were missed from the system in 2007. (Fujita, Koji, Nagoya University)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
488	9	86	50	0	0	What does this 20% mean? Total lake volume or expected GLOF volume? Unclear. (Fujita, Koji, Nagoya University)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
489	9	87	20	87	27	Perhaps this information could be incorporated in the 9.19 case study. (Goodess, Clare, Climatic Research Unit)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
490	9	87	21	87	23	Please give a reference in relation to this El Nino event. (Stocker, Thomas, IPCC WGI TSU)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
491	9	87	25	0	0	Please explain the reduction as compared to the previous events (Kazama, So, Tohoku University)	During preparation of the Second-Order Draft, the authors felt like this section could be cut, and did so.
492	9	87	30	87	42	Purpose of this section is unclear. (Trewin, Blair, Australian Bureau of Meteorology)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
493	9	88	31	88	37	Is it possible to be specific about the relevance of these questions for these particular case studies? (Goodess, Clare, Climatic Research Unit)	Comment noted, but this part of the case study was cut when condensed for the Second-Order Draft.
494	9	88	31	88	37	Are these questions specific to LDC's or are the of a more general nature? (Stocker, Thomas, IPCC WGI TSU)	Author concurs: section deleted from Second-Order Draft version.
495	9	91	0	0	0	It is proposed that this case study should contain further discussion of the challenges and barriers to establishing insurance schemes in disaster risk management. (Abrahamsj, Jonathan, World Health Organization)	Comment noted and text was revised.
496	9	91	1	0	0	for 9.3.3 'management approaches' case studies could be better sorted according to topic/theme. (Stocker, Thomas, IPCC WGI TSU)	Order of case studies was changed.
497	9	91	24	91	26	The validity of this point would rely on a consistent definition of "disaster" - does such a definition exist? (Trewin, Blair, Australian Bureau of Meteorology)	Definition added.
498	9	91	29	91	29	Over what period of time is this ranking calculated? If it is a short period then the results could be skewed badly by a single major disaster in a small country. (Trewin, Blair, Australian Bureau of Meteorology)	Noted and reworded.
499	9	92	19	0	0	Please explain with an example for better understanding (Kazama, So, Tohoku University)	Noted and reworded.
500	9	92	26	0	0	it would be helpful to explain moral hazard in this context (Surminski, Swenja , Association of British Insurers)	Noted and reworded.
501	9	92	52	0	0	clarify/quantify 'many countries'. I would argue that this is mainly the case in emerging markets. (Surminski, Swenja , Association of British Insurers)	Noted and reworded.
502	9	93	47	93	47	and livestock (Ammann, Walter J., Global Risk Forum GRF Davos)	Noted and reworded.
503	9	93	53	94	2	claify this statement - why are claims events rare by definition? (Surminski, Swenja , Association of British Insurers)	Noted and reworded.
504	9	94	4	94	14	in addition to the administrative cost, moral hazard is a big problem. (Ammann, Walter J., Global Risk Forum GRF Davos)	Noted and reworded.
505	9	94	38	0	0	Why was take up poor? Earlier sections seemed more positive about this scheme. (Goodess, Clare, Climatic Research Unit)	Noted and reworded. Reasons for low take up not clear.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
506	9	94	49	0	0	Can you be more specific about what UNEP has proposed? (Goodess, Clare, Climatic Research Unit)	Noted and reworded.
507	9	95	3	95	8	a reference to the fundamental condition of risk-based-pricing is necessary in this context (Surminski, Swenja , Association of British Insurers)	Noted and reworded.
508	9	95	6	0	0	These barriers haven't really been discussed. (Goodess, Clare, Climatic Research Unit)	Noted and reworded.
509	9	97	0	0	0	2.1. Risk education needs to be seen as part of environmental education/ESD. EE and ESD follow the principles of experiential learning by incorporating cognitive, affective and psychomotoric dimensions and take up the constructivist approach of so-called 'situated learning'. (Hama, Angela Michiko, United Nations International Strategy for Disaster Reduction)	Noted. Case study reduced and comment no longer relevant.
510	9	97	0	0	0	Case Study 9.14. Disaster Risk Reduction Education, Training, and Public Awareness to Promote Adaptation - the case study and section 5.3.5.2 should be aligned with respect to the theoretical background; see also chapter 2, 2.7.5.2. Education (Hama, Angela Michiko, United Nations International Strategy for Disaster Reduction)	Noted. Case study reduced and comment no longer relevant.
511	9	97	0	0	0	Rather than just focussing on schools, other forms of learning and eduction at tertiary level and in profession in service training could be mentioned. (Abrahamsj, Jonathan, World Health Organization)	Comment addressed in definition.
512	9	97	16	97	24	Please mention the 'United Nations Decade of Education for Sustainable Development 2005-14', as it calls explicitly for improving the knowledge base on disaster prevention and mitigation as one of the keys to sustainable development (Hama, Angela Michiko, United Nations International Strategy for Disaster Reduction)	Included as suggested.
513	9	97	33	97	43	See also findings on risk perception by, e.g. Tina Plapp and Christine Jurt (Hama, Angela Michiko, United Nations International Strategy for Disaster Reduction)	Noted. Case study reduced and comment no longer relevant.
514	9	99	0	0	0	This section could benefit from references to health promotion and disease prevention as effective ways to improve health outcomes, for which there are analogies with disaster risk management. (Abrahamsj, Jonathan, World Health Organization)	Noted but space constraints make it impossible.
515	9	102	1	102	11	According to the given case studies, risk management and adaptation to climate change in developed countries such as Japan seems more advance and effective than in developing countries. However, economical and cultural differences between the developed and developing countries may have a barrier to implement the good practices learned from developed countries as it is in developing countries. Please make a comment and explain how you can overcome such drawbacks. (Kazama, So, Tohoku University)	The good practices presented are also from developing countries, from which developed countries can also learn.
516	9	104	0	0	0	This case study could also emphsise the importance of multisectoral coordination at all levels of governance. (Abrahamsj, Jonathan, World Health Organization)	Noted
517	9	104	10	104	10	You should also cite Chapter 3 (Section 3.5.1.3) here, which contains projections of increasing drought in this region. (Stocker, Thomas, IPCC WGI TSU)	Noted
518	9	104	12	104	23	Are there some references that can be cited in relation to this drought event? (Stocker, Thomas, IPCC WGI TSU)	Comment taken on board and incorporated into the Second-Order Draft.
519	9	104	22	104	22	Note that desalination is a very high-cost option for desalination: presumably it is only done for high-value products? (Trewin, Blair, Australian Bureau of Meteorology)	Noted - only mentioned in Marshall Island example for SIDS
520	9	105	0	0	0	The reference to southern Africa would appear to be contradicted by the Mozambique case study. (Abrahamsj, Jonathan, World Health Organization)	The author is working with the Spanish government to solidify the source data.
521	9	106	36	106	47	These sections are very brief and not worth including unless they can be expanded. (Trewin, Blair, Australian Bureau of Meteorology)	Comment noted, and author concurs.
522	9	106	38	106	39	The analysis of the initiative seems to be too short, giving the impression that its importance is less relevant than the formerly cited. To add more information about the structure of such initiative may be a useful guide to the reader. (Kazama, So, Tohoku University)	Comment noted--this section was deleted from the version of the case study that appears in the Second-Order Draft.
523	9	107	6	107	6	"numerous papers" are referred to with respect to decentralization of flood risk management, but none are citied. One is: Hall, J.W., Meadowcroft, I.C., Sayers, P.B. and Bramley, M.E. Integrated flood risk management in England and Wales. Natural Hazards Review, ASCE, 4(3) (2003) 126-135. (Hall, Jim, Newcastle University)	Authors concur. Sections were cut.
524	9	110	45	110	45	The phrase "a green and white paper" does not sufficiently convey what transpired. There were actually two efforts that resulted, first in the production of a "green" paper that encouraged and solicited wide-ranging public participation, input and debate, followed by a second "white" paper that translated primary publicly derived responses as to people's interests, priorities and expressed needs into various policy options for further technical, administrative and authoratative debate. To be meaninging ful the "green" and white" designations need explanation for the two stage process, which was innovative and recognized as being a valuable effort to gain wide interest, knowledge and support at the time. (Jeggle, Terry, University of Pittsburgh)	This section is deleted in the SOD version. Comment no longer relevant.

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
525	9	111	20	115	40	As we noted from the given examples in Philippine and South Africa, a legal framework and political commitment are key elements for risk reduction. When concern on developing countries, especially the countries in South Asia, unstable parliaments with some high priority issues such as ethnic wars hampered the successful political involvements to the objective. Moreover, the nature of changing the policy, especially in the environmental sector, from government to government eventually weakens the successful management programs. Please make some comment and explain how the responsible authorities can overcome such difficulties. (Kazama, So, Tohoku University)	Comment noted but the issue is beyond the scope of this case study.
526	9	117	8	117	10	Minor rewording of this sentence is advised to avoid generalisation - suggest: "....like tropical cyclones (typhoon or hurricane), are expected to increase IN SOME REGIONS because of ....." A reference to chapter 3 should also be added, so the reader can turn to here for more details. (Stocker, Thomas, IPCC WGI TSU)	Noted – but 117 is a page of references in the FOD
527	9	117	46	0	48	give reference (Stocker, Thomas, IPCC WGI TSU)	Noted – but 117 is a page of references in the FOD
528	9	118	3	0	0	Please correct "1979 96 and 1996 2004" as "1979-96 and 1996-2004" (Kazama, So, Tohoku University)	Noted and removed
529	9	118	5	0	0	Please correct "an d" as "and" (Kazama, So, Tohoku University)	Noted – section reworked
530	9	118	8	0	0	value per ha or in total? (Stocker, Thomas, IPCC WGI TSU)	noted - removed
531	9	118	19	118	20	Is all this information relating to coral degradation based on Parry et al.? Either way, these more specific statements, such as linking El Nino and bleaching should be supported with citations. (Stocker, Thomas, IPCC WGI TSU)	Noted – section reworked
532	9	118	46	0	0	increased environmental extremes' is a very general statement, please refer to e.g. ch03 and specify (Stocker, Thomas, IPCC WGI TSU)	Noted – section reworked
533	9	121	0	0	0	The management of diarrhoea with Oral Rehydration Therapy has also had a signficant impact on reduced mortality in Bangladesh. These and other community based health care intervention should be discussed. The role of different sectors in reduing the impacts could also be discussed. (Abrahamsj, Jonathan, World Health Organization)	This aspect was left out because the authors are not familiar with peer-reviewed references documenting it and length restrictions for the case studies.
534	9	121	1	0	0	Bangladesh's 'success' and experience in adaptation to cyclone and stone surges have been reported. The country is facing these extreme events in higher intensity and frequency. Some successes have been achieve in delivering early warning, participation of local communities in Cyclone Shelter Management, but the present status of the whole programme is not as effective as has been reported. Confusions regarding the Warning numbers still prevails. The south-western part of Bangladesh is yet to recover from the adverse impact of Aila and Sidr, two of the recent Cyclones. As, of today, thousands of people are living under open sky as post disaster rehabilitations efforts have failed totally. A Cyclone of moderate intensity will cause havoc, if it happens today. The Comprehensive Disaster Management Program (CDMP) has been identified as a successfu project. However, the CDMP has been a donor driven an donor executed project with little impact on capacity enhancement of the government. Lessons and key messengers need to edited in light of ground reality. (Nishat, Ainun, BRAC University)	The case study tries to highlight the relative improvements in Bangladesh since the 70's. The section about the CDMP in Bangladesh has been deleted.
535	9	121	8	121	8	Check definition of a severe tropical cyclone - the quoted wind speed range seems too low, especially at the upper end. (Trewin, Blair, Australian Bureau of Meteorology)	"Severe" is a qualitative term, which certainly is relevant for the events discussed in the case study.
536	9	123	38	123	40	This sentence is a generalisation, and 'accelerating' is not the right word. Suggest rewording to something less problematic like: "The magnitude, intensity, frequency, and spatial distribution of climate-related extreme events is evolving and expected to change in many instances over short or longer time scales". (Stocker, Thomas, IPCC WGI TSU)	The sentence is reworded.
537	9	123	44	0	0	"A critical research gap in Bangladesh and other countries prone to higher frequency and magnitude of severe flooding is in vegetation traits promoting erosion control and in the influence of land use practices on such functional traits." (Jentsch, Anke, University of Koblenz-Landau)	Point noted.
538	9	125	3	125	3	Correct spelling is Nicholls. (Trewin, Blair, Australian Bureau of Meteorology)	Noted and reworded.
539	9	125	7	125	8	A reference should be cited here in relation to this opening sentence. (Stocker, Thomas, IPCC WGI TSU)	Paragraph rewritten.
540	9	126	6	126	16	Suggestion to add: The early warning systems development and their extensive application, beyond the damage minimization and the safety improvement, represents a soft adaptation option to the potential climate change exacerbation of natural severe extremes. Moreover it allows to increase the people knowledge and awareness of natural risks and to foster the policy and decision making level assuming their responsibilities. (BOVO, STEFANO, ARPA Piemonte)	Noted and reworded.
541	9	127	0	0	0	It is proposed to include discussion of the relevance of early warning to communicable diseases and food secruity in this case study. (Abrahamsj, Jonathan, World Health Organization)	Noted and included.
542	9	128	24	128	38	It is not clear what these numbered messages refer to - should there be a table included where these numbered messages appear? (Stocker, Thomas, IPCC WGI TSU)	Noted and deleted.
543	9	131	0	0	0	Overall, we can conclude that there is a lot of evidence or discussion on hazards and vulnerabilities, and much less on the implementation of strategies which reduces the risk or responds to it. A lesson is the criticality of multisectoral approach. The term Disaster Risk Management is preferable to DRR. (Abrahamsj, Jonathan, World Health Organization)	Noted and reworked
544	9	131	0	132	0	whereas for most issues treated in this section further research is demanded, no statement is given on how well the actual state of knowledge has been applied and effectively implemented. (Ammann, Walter J., Global Risk Forum GRF Davos)	Noted and section reworked and simplified

#	Ch	From Page	From Line	To Page	To Line	Comment	Response
545	9	131	1	0	0	Section 9.4. is a useful summary of a good and important chapter to the SREX, particularly in highlighting the importance of legislative structures (page 132, lines 14-21), an important issue not so evident in discussions elsewhere in the other chapters of SREX (at least amongst those that I read). (Jeggle, Terry, University of Pittsburgh)	Noted and section reworked and simplified – legislation and governance retain their own case study
546	9	131	1	132	30	Section 9.4 : this concluding section is too general. The conclusions must be supported by conclusions of the cases studies and links to the other chapters must be provided. In addition, synthesis tables are needed (Martin, Eric, Meteo-France)	noted and section reworked and simplified due to space constraints
547	9	131	5	131	6	Warming trends can NEVER be predicted - only projected with an associated uncertainty level. Am not sure this sentence "Warming trends....." is useful or needed. There are many places in this chapter and overall report where the authors refer quite appropriately to insufficient scientific knowledge regarding extreme events and future projections. In many instances, the link between warming and extreme events can not yet be made due to insufficient evidence, eg, monsoon, tropical cyclones, and small scale events such as hail and thunder. This sentence should be deleted. (Stocker, Thomas, IPCC WGI TSU)	Noted - deleted
548	9	131	15	0	0	I would avoid the term 'scenarios' since many readers will think of climate scenarios - whereas a rather broader meaning is intended here. (Goodess, Clare, Climatic Research Unit)	Noted – scenarios are only mentioned in 9.2.8 cities climate change response case study
549	9	131	23	0	0	“Too little emphasis is put on options of risk prevention by reducing vulnerability through ecosystem management before climate extremes occur.” (Jentsch, Anke, University of Koblenz-Landau)	Noted and section reworked and simplified
550	9	131	41	131	42	Don't really have a case-study example of a 'low probability high consequence' event. (Goodess, Clare, Climatic Research Unit)	Noted - however we think this is addressed now by several of the case studies in the chapter
551	9	132	0	0	0	It is proposed that avoid statements that imply criticism of response, because response is needed. What we need is greater investment in proactive hazard and vulnerability reduction measures, as well as development of systemic and programmatic capacities to respond and recover from the events - hence a risk management approach. (Abrahamsj, Jonathan, World Health Organization)	Noted – section reworked and simplified
552	9	133	0	0	0	Table 9 - 3: Please give meaning of CPP somewhere. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	Noted - CPP cyclone preparedness programme is in 9.2.1 cyclones
553	9	133	0	0	0	Table 9-1 should specify that these mechanisms as being financial measures (Abrahamsj, Jonathan, World Health Organization)	Noted – table removed
554	9	134	0	0	0	Figure 9 - 1: Please indicate location of Melbourne in the map. (Rock, Joachim, Johann Heinrich von Thuenen-Institute)	Noted – map removed