

#	Ch	From Page	From Line	To Page	To Line	Comment
1	1	0	0	0	0	General Comments on Chapter 1. Point of Departure: Impressive report with excellent graphs especially graph 1-1, 1-2 , 1-3, 1-5 and 1-7. Also, the part of the Communication of the Uncertainty of the Working Group II and the part Scenarios as Inputs to Working Group II assessments. There are no other comments. (Labib, Mounir Wahba , Third National Communication (TNC) Project)
2	1	0	0	0	0	Perhaps the concept of maladaptation should be introduced more prominently given its significance in later chapters. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
3	1	0	0	0	0	WGII introduces the conceptual framework of an era of responsibility and an era of climate options. However, this concept seems to be very promising and policy relevant, but is not clear enough. Please include a box explaining the elements and actions of the two eras and the time dependency. In this box, the link between the concept of an “opportunity space” and the two eras should be clarified. Figure 1-7 is a good starting point to explain this concept and should be added to the box. (GERMANY)
4	1	0	0	0	0	Being the opening of the WG II report, this chapter should provide a brief description of the progress made by WG II in related research since the IPCC AR4 and the relationship between the IPCC AR5 WG II and WG I and III reports. References to other reports should focus on their relevance to the assessment by WG II. The chapter, as it stands now, is too lengthy, hence suggested to be shortened. For example, the information on SRREN in Section1.3.2 should be reduced by a big margin. (CHINA)
5	1	0	0	0	0	‘extremely likely (95-100% probability?)’, a term that is somewhat different from ‘likelihood’ as formulated in the Guidance Note for Lead Authors of the IPCC Fifth Assessment Report on Consistent Treatment of Uncertainties (6-7 July 2010), is heavily used in this chapter (see P7.L46-53), hence suggested to be reformulated. (CHINA)
6	1	0	0	0	0	There is a lot of repetition and mixture of findings throughout the SPM, TS and Chapter - particularly the Chapter (25). This is due in large part to the interconnected nature of the subject matter. But it can be confusing, lead to inconsistencies and wasteful of space.\n\n (NETHERLANDS)
7	1	0	0	0	0	In general - the authors dismiss one of the added values which was present in AR4, but not in TAR, that a cross sectorail analysis was present much more accurately e.g. For health, which lead to both a sectorial table as well as inclusion of health into all regional tables (SYR); for some of the issues - the stronger dominance of vulnerability factors, and other determinants of health - the attribution of impacts to CC - is weakened, and not necessarily adds to the debate. Unless that the aim of adaptation to climate change becomes to strnegthn general developments - as a mean of adaptation. Thus as a fight on climate change action would be focusing on reducing the health determinants (social, environment and economic). This might in the world development be highly welcome, however would be interesting to see how the adaptation financing community could be targetting this - through its current or future funds,. (Menne, Bettina, WHO)
8	1	0	0	0	0	a good setting of the context. (fleming, richard arthur, canadian forest service)

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9	1	0	0	0	0	There is welcome reference to the notion of environmental stressors in the report, with climate change discussed as one of multiple stressors. The phrasing is sometimes a bit confusing as in chapt, p6, l 15-20, p10, l 1, with both stresses and stressors seeming used synonymously. What does not seem to be acknowledged in the report is that the ongoing environmental stressor status of climate change includes the threat of climate change, particularly as disseminated and communicated by multi-media coverage, with this continuous background threat having appreciable psychological and social impacts (e.g., Evans, 1984; Evans & Stecker, 2004; Reser & Swim, 2011). The threat of climate change is of course, and understandably absent in Figure 1-3, but it is arguable that one of the greatest current human impacts of climate change is that of the psychological and social impacts, and therefore also health impacts of the threat of climate change. Yet these threat-related impacts are not being systematically measured or monitored or factored into the climate change research discourse, or research initiatives or programs. These matters also have important relevance with respect to perceived or subjective exposure and vulnerability, and climate change concern and motivational responses to the ongoing threat, as well as when considering and addressing the psychological impacts of the threat. It is also not clear that the IPCC report includes psychological impacts under the rubric of social impacts (e.g., p 9, l 50), and perhaps the glossary should clarify this matter. Alternatively the term psychosocial impacts could be used and this has considerable precedence (e.g., Reser & Bentrupperbaumer, 2001, 2008; Doherty & Clayton, 2011). It is noteworthy that the definition of 'impacts' found in the AR5 glossary would seem to exclude the psychosocial impacts of the threat of climate change. These matters also have direct implications for the meaning and use of vulnerability, e.g., p10, lines 4-10, 25, 35, 48 etc. [Also relevant to discussion of AR4 coverage on p 13, lines 5-8. (Reser, Joseph, Griffith University)]
10	1	0	0	0	0	The incorporation of "actual or expected climate and its effects" in the definition of adaptation in the AR5 glossary is commendable, but this still does not capture or address the 'risk domain' of climate change, or the myriad ways in which the environmental threat of climate change is 'constructed' through social construction and social representation processes, and disseminated through multi-media channels, in effect constituting many different kinds and forms of risk communications about climate change which the public must make sense of and possibly respond to. There are cogent psychological arguments to the effect that an important aspect of adaptation to climate change is psychological adaptation to the threat of climate change in terms of psychological processes such as protection motivation, and multiple other motivational and psychological coping responses. It is extraordinary that these fundamental processes of psychological adaptation are given such minimal acknowledgment or consideration (e.g., Folkman, 2011; Reser, Bradley & Ellul, 2012; Reser & Swim, 2011) (Reser, Joseph, Griffith University)
11	1	0	0	0	0	There are some missing/ incorrect citations in the chapter. These discrepancies have been highlighted in the ref check document for chapter 1 and is available in the supporting material web page. Chapter team may wish to rectify these errors before starting to work on SOD revisions and FGD preparation. (Chatterjee, Monalisa, IPCC WGII TSU)
12	1	0	0	0	0	1) Overall -- The chapter team has developed a strong second-order draft that effectively launches the report. In the final draft, the chapter team is encouraged to continue prioritizing concise, accessible assessment accompanied by compelling tables and figures. (Mach, Katharine, IPCC WGII TSU)
13	1	0	0	0	0	2) Coordination across Working Group II -- Given the role of chapter 1 in the report, careful coordination with other chapters will continue to be of paramount importance, especially for section 1.1 and the executive summary. Such introduction to the report should ensure coordination at the level of chapter text and key findings within the other chapters, with cross-references to other chapter sections and assessment findings wherever appropriate. (Mach, Katharine, IPCC WGII TSU)

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14	1	0	0	0	0	3) Harmonization with the Working Group I contribution to the AR5 -- Also of paramount importance will be ensuring fully updated cross-references to Working Group I in discussion of climate, climate change, and climate extremes, and in the introduction of the major conclusions of that report. (Mach, Katharine, IPCC WGII TSU)
15	1	0	0	0	0	4) Report release -- The chapter team should be aware that the final drafts of the chapters will be posted publicly at the time of the SPM release, before final copyediting has occurred. Thus, the chapter team is encouraged to continue its careful attention to refined syntax and perfected referencing. (Mach, Katharine, IPCC WGII TSU)
16	1	0	0	0	0	5) Informing the summary products -- To support robust and insightful summary products for the report, the chapter team is encouraged to maximize nuance and traceability in its key findings, continuing to use calibrated uncertainty language effectively. The assessment findings of chapter 1 serve as a point of departure in the summary products as well, and the chapter team is encouraged to maximize attention to effective communication of changes in the literature available, in the major themes of this literature, in treatment of uncertainties, and in scenarios used as the basis of assessment. As part of this, the introduction within the chapter of the eras of climate responsibility and climate options is effective, and the chapter team may wish to consider how framing of risks and options for risk reduction continue to emerge across chapters and in the summary products. (Mach, Katharine, IPCC WGII TSU)
17	1	0	0	0	0	GENERAL COMMENTS: I congratulate the author team for all their work on an interesting and informative SOD. Please see my detailed comments for suggestions related to specifying ES findings and traceable accounts, refining figures and tables, making additional cross-chapter linkages, and specific clarifications. (Mastrandrea, Michael, IPCC WGII TSU)
18	1	0	0	0	0	SUMMARY PRODUCTS: In preparing the final draft of your chapter and particularly your executive summary, please consider the ways in which your chapter material has been incorporated into the draft SPM and TS. Are there opportunities for presenting chapter findings and material in a way that further supports broad themes highlighted in the summary products and that facilitates additional cross-chapter synthesis in specific findings or figures/tables? Do the existing summary product drafts suggest additional coordination that should occur between Chapter 1 and other chapters at LAM4? (Mastrandrea, Michael, IPCC WGII TSU)
19	1	1	0	0	0	One of IPCC's important contribution is that it has strengthened the connection between nature sciences and social sciences, therefore, in order to let the nature scientists understand the knowledge of social sciences, AR5 should make the knowledge of social sciences clear and easy to comprehend. (PAN, Jiahua, Chinese Academy of Social Sciences)
20	1	1	1	1	1	The title of this chapter is not appealing since the knowledge we are talking about is that of climate change meaning that there is no significant departure as the title indicates. A better title for the chapter is therefore required. (KENYA)
21	1	1	32	0	0	Comparision RCP and SRES Scenarios. At this stage it is appropriate to keep full form of RCP (Representative Concentration Pathways) and SRES (Special Report on Emissions Scenario). (Gurung, Tek, Freelance consultant)
22	1	2	6	2	7	After the section 1.3 of FAQ , there should be a section 1.4 to summarize the whole WGII report, what is the structure of the whole report, what are the relations with WGI and WGIII reports, and what are the highlights of AR5 WGII report this time. (Xu, Yinlong, Institute of Environment and Sustainable Development in Agriculture (IEDA), Chinese Academy of Agricultural Sciences (CAAS))
23	1	2	6	2	7	After the section 1.3, there should be a section 1.4 to have a summarizing introduction for the whole WGII report, what is the structure of the whole report, what are the relations with WGI and WGIII reports, what are the highlights of AR5 WGII report this time. (PAN, Jiahua, Chinese Academy of Social Sciences)

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24	1	2	13	2	14	It states 'literature has more than doubled'. Strictly seen the figure 1.1-a in Chapter 1 shows a near doubling for the climate change literature when comparing 2005 and 2010. Extrapolating this trend towards the current year 2013, we indeed expect that the claim that 'literature has more than doubled' is supported. Please spend some attention to this in the body text of chapter 1, to substantiate the claim.\n\n (NETHERLANDS)
25	1	2	14	2	14	The use of terms like "very high confidence" to qualify 'facts' (vs genuine findings from the literature) such as the one in this paragraph seems unnecessary. (UNITED STATES OF AMERICA)
26	1	2	17	2	17	Access to literature is not really covered in the chapter text. Please ensure support for this element of the statement in the chapter text, if retained. (Mastrandrea, Michael, IPCC WGII TSU)
27	1	2	18	2	20	The authors are cautioned here not to make the implicit assumption the develop-ed-country authors cannot effectively discuss developing-country CCIIV. (UNITED STATES OF AMERICA)
28	1	2	21	2	0	recent sold be take out (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)
29	1	2	22	2	24	Increasing emphasis on... As opposed to what? (UNITED STATES OF AMERICA)
30	1	2	22	2	29	These impacts are regional and time-dependent, and are also dependent on the aging population (sassi, fabrizio, Naval Research Laboratory)
31	1	2	27	2	28	It is easy to have the misunderstanding on the statement of 'Synergies between multiple variables and factors that affect sustainable development', as multiple variables and factors could not contain the adaptation, so I suggest to change the sentence of '(ii) Synergies between multiple variables and factors that affect sustainable development , including risk management' as '(ii) Synergies of climate change adaptation with other variables and factors that affect sustainable development , including risk management.'. (Xu, Yinlong, Institute of Environment and Sustainable Development in Agriculture (IEDA), Chinese Academy of Agricultural Sciences (CAAS))
32	1	2	27	2	28	In the statement "(ii) Synergies between multiple variables and factors that affect sustainable development , including risk management," it is inappropriate to say that "synergies between multiple variables and factors.....", it should be "synergies between climate change adaptation and other variables and factors.....". SUGGESTION: "(ii) Synergies between multiple variables and factors that affect sustainable development , including risk management," be altered as "(ii) Synergies of climate change adaptation with other variables and factors that affect sustainable development , including risk management" (PAN, Jiahua, Chinese Academy of Social Sciences)
33	1	2	27	2	29	The mention of risk management in the context here could be better clarified, as risk management is generally introduced in the report as encompassing responses to climate change and the risks it poses, including adaptation and mitigation. (Mastrandrea, Michael, IPCC WGII TSU)
34	1	2	28	2	28	Risk management is important to highlight, but I wonder whether the framing here, in which it is implied that risk management is a variable or factor, is the most effective. Is it possible to make a separate entry in this list on managing risks? (Mach, Katharine, IPCC WGII TSU)
35	1	2	30	2	30	Please include in the executive summary as finding three the general ideas given in chapt.1 p.12, l.14-30 as they link the conceptual framework of Rockström and Raworth with the IPCC AR5 concept of "era of responsibility and era of climate options", explain better the "opportunity space" given in Figure 1-7 and give reasons for including Figure 1-7 into TS. Text proposal for a finding: "Rapidly advancing climate science provides an "opportunity space" for policy relevant information to support policy decisions leading to high resilience, low risk and low vulnerability and climate change is just one of many stressors that influence resilience. The conceptual framework of the AR5 WGII report of existing stressors and the boundaries they create, of actions to reduce climate change impacts can entail both an era of responsibility and an era of climate options. The last is an opportunity space and the decisions and pathways that societies choose within this space, informed by science, observation and experience, will affect the degree of resilience in human and natural systems. Please add confidence level [1.1.4, Figure 1-7]" . (GERMANY)

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36	1	2	31	2	32	It seems strange to attach confidence rating to a statement about the research process (UNITED STATES OF AMERICA)
37	1	2	31	2	36	The author team should coordinate this paragraph with chapters 14-17 and 20 so that it communicates the core findings of their assessment as clearly and rigorously as possible. (Mach, Katharine, IPCC WGII TSU)
38	1	2	38	2	0	evolved over time - better to say 'improved since the last IPCC report' if that is meant. (Flint, David, Cass Business School)
39	1	2	41	0	0	Full form of SAR would help the readers. I assume that this means Second Assessment Report. But 'S' might mean 'Seventh' or subsequent number as well. Therefore, it would be better to avoid such possible confusion. Moreover, I'm making such comments because different readers may enter to read/review such reports at different point of time and may assume different meaning. (Gurung, Tek, Freelance consultant)
40	1	2	48	2	48	Define CMIP3 (KENYA)
41	1	2	51	2	51	«...but they have a narrow range...». What «range» is that? Please, explain. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
42	1	2	52	2	52	It is unclear how this statement can have only "high confidence" when it appears to be a statement of fact. Suggest the authors reconsider this confidence assignment. (UNITED STATES OF AMERICA)
43	1	2	53	0	0	Full forms of FAR and TAR. Here as well FAR may mean First or Fourth Annual Report and in the near future may mean Fifth Annual Report as all words start with 'F'. Similarly, 'T' may represent 'Third' or 'Tenth' or so forth. Therefore, consistency in using acronyms might be an area of improvement in general. (Gurung, Tek, Freelance consultant)
44	1	3	1	3	1	Is “assume” the clearest word that could be used here, given that the RCPs ultimately can reflect a variety of permutations in terms of emissions, sinks, mitigation strategies, etc.? In the SPM, the word “reflect” is currently used, which could be an option for the chapter team to consider. (Mach, Katharine, IPCC WGII TSU)
45	1	3	1	3	5	It is not necessary to explain what are the 4 RCPs here, it is necessary to explain how these 4 RCPs scenarios would be employed in the impacts and vulnerability assessments and what is the difference of RCPs scenarios with SRES scenarios. (Xu, Yinlong, Institute of Environment and Sustainable Development in Agriculture (IEDA), Chinese Academy of Agricultural Sciences (CAAS))
46	1	3	1	3	5	Here the author should not explain the meaning of RCPs, rather the author should tell what and how will these four RCPs will affect the impacts of climate change, and illustrate the differences with SRES. SUGGESTION: It is suggested to delete the explanation for the 4 RCPs from line 1 to line 5. (PAN, Jiahua, Chinese Academy of Social Sciences)
47	1	3	3	3	3	The sentence beginning on this line is unclear. Was "rapid decline" intended to apply to both pollutants AND land-use change? (UNITED STATES OF AMERICA)
48	1	3	4	3	4	Add "previously" after "other". (Cassardo, Claudio, University of Torino)
49	1	3	26	3	32	No mention of an aging population which is exposed to greater risks. (sassi, fabrizio, Naval Research Laboratory)
50	1	3	28	3	28	Editorial: «...has more focused more heavily...»; delete the «more» before «focused». (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
51	1	3	28	3	28	focused more heavily on.. As opposed to what? (UNITED STATES OF AMERICA)
52	1	3	28	3	28	Remove "more" (Cassardo, Claudio, University of Torino)
53	1	3	29	3	29	Editorial: insert «an» before «analysis» (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
54	1	3	29	3	30	Is the word "aggregate" necessary here to make the intended point? The statement would make more sense in my view if it were made about impacts in general. (Mastrandrea, Michael, IPCC WGII TSU)

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55	1	3	30	3	30	Editorial: «...and the rapid emergence...vulnerability» This piece of text looks solitary, because it seems not connected to either «analysis» (at the beginning of the sentence, in line 29) or any other preceding term. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
56	1	3	34	3	34	Editorial: insert «a» before «point» (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
57	1	3	34	3	35	When the phrase "planetary boundaries" was introduced by Rockstrom and colleagues in their 2009 paper (Rockstrom et al., 2009) it was presented primarily as a 'proof-of-concept' idea, with only very tentative, notional quantitative boundaries proposed. While the planetary boundaries language has been adopted and used by various communities in recent years, the concept has not yet gained wide acceptance in the physical science community, nor has there been much progress in defining the boundaries. The ICSU Future Earth Project, under its just-forming Science Committee, will be trying to advance the concept and its definition. Therefore, it is suggested that at this stage, given that the planetary boundaries concept is an emerging concept, the IPCC avoid endorsing the concept but point to where work is in place to further develop it. Here then, it is suggested to avoid reference to the planetary boundaries concept here and use more general language to indicate how this WGII assessment extends the work of earlier WGII assessment. Related comments were also submitted on Figure 1-7 and page 12 lines 14-30 (Section 1.1.4). (CANADA)
58	1	3	34	3	38	Social boundaries should provide a reference to political, institutional and governance considerations as per chapter 14. (AUSTRALIA)
59	1	3	35	3	35	What does "status of the biophysical planetary boundaries" mean? (UNITED STATES OF AMERICA)
60	1	3	36	3	37	In this statement, "by a large part" does not seem to fully get at the degree to which these factors are variable across space and time, with high context dependency in terms of how they play out. Could the statement be revised to reflect variability, intersectionality, and context dependency, for example as discussed in Chapter 13 as well as the adaptation chapters? (Mach, Katharine. IPCC WGII TSU)
61	1	3	37	3	37	«...population interacting creating and reaction to...» Obscure piece of text. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
62	1	3	37	3	37	The phrase beginning with "interacting creating and reaction..." does not make sense. (UNITED STATES OF AMERICA)
63	1	3	38	3	38	sentence structure incorrect (Reuter, Thomas, University of Melbourne)
64	1	3	42	3	42	Referring here to "two volumes" is potentially confusing, since each of the WG reports is often referred to as a volume. (UNITED STATES OF AMERICA)
65	1	3	44	3	44	Where "such as adaptation" is called out, it seems to me that the expanded coverage of human dimensions has also very much applied to assessment of impacts and vulnerability, for example as seen in chapters 8-13. (Mach, Katharine, IPCC WGII TSU)
66	1	3	50	0	0	Development of the science base for assessment: surprisingly little mention here of approaches to impact assessments - both empirical and simulated. Have you assessed the evolution in and strength of the empirical data on impacts? Have you assessed the evolution in down-stream impact models (crops, hydrology, ...) and of the use of complex systems models and approaches? I would have expected some discussion of these important components of the scientific method of enquiry on impacts in this section. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)

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67	1	3	50	0	0	Development of the science base for assessment: I am surprised you didn't mention the evolving balance between primary and secondary sources of information, between quantitative and qualitative approaches, and between empirical research and think pieces, and how you have used these in setting out the scientific arguments in this and other chapters under WGII. It is very hard, in going through the chapters I looked at, to take a judgement on the strength of the evidence considered without reference to the type of evidence that was used. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
68	1	3	54	3	54	The Figure caption and content do not show input from ISI Web of Knowledge. (UNITED STATES OF AMERICA)
69	1	4	2	4	3	It would be useful to give the 1990-2000 and 2000-2010 breakdowns here to illustrate the point. (Mastrandrea, Michael, IPCC WGII TSU)
70	1	4	9	4	0	I propose to delete these lines because will come confusing and doubts, taking into account the importance for each geographical region to know how much is treated in the literature their capacity for adaptation or the assessment of impacts and vulnerabilities (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
71	1	4	13	4	13	Figure 1-1 referred to here is far towards the end of the last pages of the document. This location is really inconvenient for a reader to keep on turning pages of a document to refer the thefigure. It is noted that virtually all tables, figures and boxes are not within the same subject which they refer to and the reader has to keep seraching where they are located which is very inconvenient indeed. (KENYA)
72	1	4	13	4	23	The continental/regional color are confusing and make it harder to see the colors of the columns. Also, why not showing these results as pubs per capita? That way the disparity would be even greater between the developed and the underdeveloped regions. (sassi, fabrizio, Naval Research Laboratory)
73	1	4	16	4	16	For part B of this figure, it would be helpful to clarify the variable being plotted. For example, if one author has published 5 papers, does this author count once or 5 times? Are all authors on publications counted? Are the relevant publications considered for this part of the figure those under "climate change" in part a? (Mach, Katharine, IPCC WGII TSU)
74	1	4	16	4	16	Human health no longer appears to be included in the analysis. (Mastrandrea, Michael, IPCC WGII TSU)
75	1	4	18	4	18	It would be helpful to be more explicit by what is meant by "results of literature searches"--number of publications? (Mach, Katharine, IPCC WGII TSU)
76	1	4	25	26	0	points of departure (rather than "points") refer to... (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)
77	1	4	29	4	29	Does the phrase "unequal distribution" here mean unequal geographical distribution? (UNITED STATES OF AMERICA)
78	1	4	29	9	0	should be "This unequal distribution" (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)
79	1	4	37	37	0	Scopus database should have a reference to where this is from and whom the author is (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)
80	1	4	41	4	41	Why only in "engineering" journals and not other journals (like Earth sciences, environmental physics, etc.)? (Cassardo, Claudio, University of Torino)
81	1	4	41	4	42	It would be interesting to explain why the engineering journals are not increasing the publication of papers on climate change in the last four decades. Is this an indicator of a lack of actual implementation of adaptation projects? (UNITED STATES OF AMERICA)
82	1	4	43	44	0	some reference to the current literature here. (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)

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83	1	5	13	5	14	Where interactions between the natural climate system and human society are mentioned, it may be most accurate to also include ecosystems or ecological/biological systems in the list of interacting systems. (Mach, Katharine, IPCC WGII TSU)
84	1	5	13	13	0	WGII (what year?) (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
85	1	5	15	5	16	The use of "likelihood" here makes it sound as if probabilities are being assigned to different development paths, which is not the case. This text could also make clear the fact that society has some control over the development path, depending on policy decisions, etc. (Mastrandrea, Michael, IPCC WGII TSU)
86	1	5	19	5	24	Fonts are wholly unreadable without a magnifying glass. (sassi, fabrizio, Naval Research Laboratory)
87	1	5	27	5	27	Why "anticipated" climate changes? Anticipated with respect to what? (Cassardo, Claudio, University of Torino)
88	1	5	28	0	0	Since, this is 1st time use of SPM in this report, I think, it is appropriate to provide fullform of SPM - Summary for Policy Makers (SPM). (Gurung, Tek, Freelance consultant)
89	1	5	28	28	0	ambiguous term " doubling of CO2" This should be clarified in more concrete terms (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
90	1	5	30	5	32	The use of qualitative as inaccurate guesses as opposed to quantitative as supported with calculations seems not completely fair. Qualitative would mean descriptive and quantitative based on calculations taking into account uncertainty. Preferably, quantitative is used for expectations given in numbers and formulas, whereas qualitative uses words to give expectations.\n\n(NETHERLANDS)
91	1	5	38	5	38	Presumably adaptation should be included here along with "impacts and vulnerability"? (Mach, Katharine, IPCC WGII TSU)
92	1	5	47	0	0	What does IS92 stand for in "... IPCC IS92 Scenarios"? There is no use of IS92 before this in this report/chapter. In other other places (e.g. http://www.ipcc.ch/ipccreports/sres/emission/index.php?idp=27), this has been referred as, "IPCC 1992 (IS92) scenarios". Therefore, for the benefit of new readers/reviewers it would be helpful to provide consistent use of such acronyms. (Gurung, Tek, Freelance consultant)
93	1	5	51	5	51	returning please change with "lefting" (Cassardo, Claudio, University of Torino)
94	1	6	0	0	0	Figure 1-3 Scale bars are not clear. (Miloshis, Michael, Charles Darwin University)
95	1	6	3	6	4	The sentence refers to the "burning embers" diagram which is in chapter 19, not 18 as stated. (Rosales, Jon, St. Lawrence University)
96	1	6	4	6	4	In addition to mention of chapter 18 here, chapter 19 should be mentioned--both consider reasons for concern, but only chapter 19 updates the "historic" form of the burning embers diagram. (Mach, Katharine, IPCC WGII TSU)
97	1	6	4	6	4	This figure is discussed in both chapters 18 and 19 in AR5. (Mastrandrea, Michael, IPCC WGII TSU)
98	1	6	8	6	8	add "the number of" between "in" and "regional" (Cassardo, Claudio, University of Torino)
99	1	6	8	6	8	For clarity, "likely" on this line could be italicized. (Mach, Katharine, IPCC WGII TSU)
100	1	6	15	6	15	continues: to do what? (Cassardo, Claudio, University of Torino)
101	1	6	15	15	0	Will continue... (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
102	1	6	16	6	16	The word "affect" might be more accurate here in place of "threaten," given that the assessment is neutral in its departure point. (Mach, Katharine, IPCC WGII TSU)
103	1	6	17	0	0	This para on 4AR and on 5AR might include: 4AR added a new dimension by assesseing imapcts and adaptation under observed climate change....and 5 AR has expanded on this (Parry, Martin, Imperial College)

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104	1	6	17	6	19	Replace this sentence with a referenced list of stressors (you could copy it from the legend of figure 1-3). This list is likely to be more informative than the current figure 1-3, which slanted components are individually very poor as regards to detail. A table of stressors would be more informative than figure 1-3. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
105	1	6	22	6	36	Delete text (see my preceding comment to lines 17-19. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
106	1	6	23	6	36	For all practical purposes, the stacked figures are wholly unreadable (sassi, fabrizio, Naval Research Laboratory)
107	1	6	31	0	0	CMIP is first used here in this chapter (CMIP=Coupled Model Intercomparison Project). However, there is suggested footnote concerning CMIP from line 24-28 on page 8. It would be appropriate to have fullform of acronym in sequential order. (Gurung, Tek, Freelance consultant)
108	1	6	39	0	0	Treatment of uncertainty: these definitions remain very difficult to read and interpret. They also allow for an undefined level of 'expert opinion'. I would much prefer a more rigorous set of definitions of the strength of the evidence in terms of nr of peer reviewed sources of primary research, nr of systematic reviews / meta-analyses, degree of agreement / disagreement in findings. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
109	1	7	21	7	22	The following statement is very confusing, please clarify: "Consistent evidence does not necessarily imply a high degree of agreement, if, for example, evidence is consistent but judged to be low in quality." (UNITED STATES OF AMERICA)
110	1	7	38	7	39	In relation to the other comment on qualitative and quantitative, here it is described more accurately by stating that 'quantitative analysis can be expressed probabilistically'. It would be good if a similar description is added for qualitative, f.e.: qualitative results are described to best expert knowledge and insight, however not probabilistically expressed.\n\n (NETHERLANDS)
111	1	7	38	8	4	The general public most likely will be confused by the definitions of confidence and likelihood. The authors should strongly consider including the confidence figure (including low, medium, high, etc. on the shaded confidence scale) and likelihood table from the 2010 IPCC Uncertainty Guidance document. (UNITED STATES OF AMERICA)
112	1	7	53	7	53	Granted that the term «exceptionally unlikely» has already been adopted by the scientific CC community. However it is misleading, because it might mean that the occurrence of an unlikely event is an odd experience; i.e. the unlikely event is frequent. «Virtually unlikely» would have been a better expression. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
113	1	8	0	0	0	We see a focus... I recommend the use of "A focus is seen on..." (Tancredi, Elda, National University of Lujan. IHDP-Argentina)
114	1	8	1	8	1	limited circumstances' is unspecific. Replace with the number of times, or more specified conditions.\n\n (NETHERLANDS)
115	1	8	2	8	2	Replace «are» with «can» (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
116	1	8	3	8	3	remove "be" (Cassardo, Claudio, University of Torino)
117	1	8	8	0	0	Scenarios used: rationale and differences between old and new sets of scenarios remain very difficult for the uninitiated to understand. Need to explain meaning of scenarios in RCP2.6 --> RCP 8.5 better. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)

#	Ch	From Page	From Line	To Page	To Line	Comment
118	1	8	10	8	39	This introductory section to section 1.1.3 about scenarios may be a little too general for the needs of readers of the WGII report, as it mostly just describes the change in scenario development process from the SRES to RCP scenarios. It would be helpful for readers to have information about what to expect in the WGII report; for example, to what extent impacts assessed in the WGII report are based on the RCPs. The 5th paragraph in the Executive Summary states both SRES and RCPs informed the impacts assessment so readers may expect these equally informed the assessment. Some effort to manage expectations in this regard would be useful. (CANADA)
119	1	8	11	8	13	Delete the sentence "Historical uses...", as it does not provide any relevant information, and the report is already long enough. (GERMANY)
120	1	8	16	8	16	It would be helpful to clarify more explicitly whether the joint effort was of working groups 1 and 3 or of working groups 1, 2, and 3. (Mach, Katharine, IPCC WGII TSU)
121	1	8	19	8	19	This is a strange framing. The SRES scenarios explicitly did not include climate policy, but subsequent research certainly explored mitigation from these baselines. Currently, this sounds like such research was discouraged. (Mastrandrea, Michael, IPCC WGII TSU)
122	1	8	21	8	21	add "projected for the" between "and" and "21st" (Cassardo, Claudio, University of Torino)
123	1	8	24	8	28	I think this footnote refers more appropriately to page 20, when also CMIP5 is mentioned, than here. (Cassardo, Claudio, University of Torino)
124	1	8	28	8	28	remove "]" at the end of the sentence (Cassardo, Claudio, University of Torino)
125	1	8	30	8	39	Suggest the following revisions for this paragraph about the RCPs. 1. This explanation of what the RCPs are does not seem correct and is not consistent with the descriptions of the RCPs elsewhere in the AR5. The RCPs are defined as concentration pathways and while originally generated by a specific IAM emission scenario, are not tied to that. 2. Not all of the RCPs are considered stabilization scenarios for the 21st century; therefore, referring to them as such is misleading. 3. The statement about government approval is misleading. The more appropriate point to make here is that in contrast to the IPCC-led SRES development process, the RCP process is led by the scientific community. The sentences on lines 36-39 are very unclear and potentially misleading. (CANADA)
126	1	8	30	8	39	It could be useful to mention here that socioeconomic scenarios and radiative forcing pathways are not linked one-to-one in this effort. (Mastrandrea, Michael, IPCC WGII TSU)
127	1	8	34	8	34	add "expressed" between "century" and "in" (Cassardo, Claudio, University of Torino)
128	1	8	35	8	35	Was the lack of government approval process a prime motivation worth mentioning here, or were there other motivations? (Mastrandrea, Michael, IPCC WGII TSU)
129	1	8	36	8	36	The connection between the anthropogenic emissions and climate forcing is weaker with the RCPs. This statement is difficult to understand. Isn't the relationship between emissions and forcing determined by physical laws? How can it be different between RCPs and SRES (if that is indeed what is implied)? (UNITED STATES OF AMERICA)
130	1	8	38	0	0	should be changed to " the best estimation" (VIETNAM)
131	1	8	38	8	38	Please provide a specific reference to WGI. (Plattner, Gian-Kasper, IPCC WGI TSU)
132	1	8	44	9	11	A summary of these paragraphs could be done for the SPM. (de Campos, Christiano, Petroleo Brasileiro SA)
133	1	8	45	0	0	We identify... I recommend to use "it is identified here..." (Tancredi, Elda, National University of Lujan. IHDP-Argentina)
134	1	8	47	8	47	SRES B1 matches RCP4.5 Only approximately - and the distinction ought to be made clearly. (UNITED STATES OF AMERICA)

#	Ch	From Page	From Line	To Page	To Line	Comment
135	1	8	48	8	49	The text indicates that the RCP2.6 scenario falls "2 W m ⁻² below SRES B2." Should SRES B2 be replaced with either SRES B1 or RCP 4.5 since those scenarios are approximately 4 W m ⁻² in 2100, approximately 2 W m ⁻² more than SRES B2, which is 2 W m ⁻² below? SRES B2 is approximately 6 W m ⁻² below. (UNITED STATES OF AMERICA)
136	1	8	49	8	49	Is B1 meant here rather than B2? (Mach, Katharine, IPCC WGII TSU)
137	1	8	51	8	54	The AR5 WGI Tables for RF are AII.6.1-5, not AII.2.16-22. Please revise and ensure consistency. (Plattner, Gian-Kasper, IPCC WGI TSU)
138	1	8	52	8	53	These lines make an excellent point. The RCPs - for example - have much lower aerosols (land use effects, etc.) than the SRES and for this reason, comparing total radiative forcings as done in Figure 1-5 may be misleading. The caption and relevant text should explicitly explain these differences. (UNITED STATES OF AMERICA)
139	1	9	0	0	0	grammar "...sustainability is..." should be changed to "...sustainability are...." (VIETNAM)
140	1	9	0	14	0	The chapter is very well organized and balanced with quick recall followed by the objective of the report and the background (Some, Leopold, Centre National de la Recherche Scientifique Technologique)
141	1	9	4	9	11	The sentences on lines 5-6 are unclear. In the text in this paragraph, suggest mentioning that only multi-model mean changes in global mean temperature are being compared in Fig 1-5 and so does not convey a complete picture of the overlap between the SRES and RCP scenarios. (CANADA)
142	1	9	7	9	7	Is the pattern asserted here of RCP 8.5 above A2 and A1FI robust even with the indication on line 21 of the differences between CMIP5 and 3 (illustrated for only one scenario)? (Mach, Katharine, IPCC WGII TSU)
143	1	9	10	9	11	Please specify whether the temperatures here are ensemble means or something else. (Mastrandrea, Michael, IPCC WGII TSU)
144	1	9	11	9	11	It would be important to also indicate the additional uncertainty associated with variation between climate models, using the numbers given in the WG1 report. (Räsänen, Jouni, University of Helsinki)
145	1	9	13	9	21	Figure 1.5: There still appears to be insufficient details on the limited comparability between the different scenario generations, the text does not cover preSRES scenarios at all. Please add this crucial information in order to prevent any wrong interpretations or confusion. Much more information is needed describing this figure and explaining how exactly scenarios from different sources, different base years etc. are combined and made comparable. Most importantly, the figure needs to be consistent with what WGI AR5 Chapter 1 (and possibly Chapter 12) do when comparing scenarios and climate projections from FAR to AR5. (Plattner, Gian-Kasper, IPCC WGI TSU)
146	1	9	14	9	21	It requires a very careful reading of the caption of Fig. 1-5 to understand that the differences between the AR4 and "AR5" A1B do not reflect differences between CMIP3 and CMIP5 models. I would reformulate the second half of the caption as follows: "The colored lines represent decadal ensemble mean temperature change for the RCP scenarios from CMIP5 models, and the yellow circles the same for the SRES A1B scenario from CMIP3 models (AR5 WG1 Chapters 11-12 and Annex II Table AII.7.5a). The colored squares show the temperature change for all six SRES scenarios based on a simple climate model tuned to the CMIP3 models (AR4 WG1 Figure 10.26). The difference between the yellow circles and yellow squares reflects differences between the simple model and the original CMIP3 data". (Räsänen, Jouni, University of Helsinki)
147	1	9	17	9	17	For the uninformed, it would be helpful to explain why the SRES values needed to be shifted to match 2000. (UNITED STATES OF AMERICA)
148	1	9	24	9	36	It would be important to have more concrete information on the SSPs, the reference in line 28 is not enough. (GERMANY)
149	1	9	26	9	28	Are not the SSPs themselves the human development pathways (rather than the linkage between the RCPs and development pathways)? Suggest clarifying. (CANADA)

#	Ch	From Page	From Line	To Page	To Line	Comment
150	1	9	28	9	29	write "socioeconomic challenges to mitigation and adaptation" instead of "socioeconomic challenges to mitigation and socioeconomic challenges to adaptation" (GERMANY)
151	1	9	39	0	0	Evolution of understanding of interaction between CC impacts, adaptation, vulnerability with human and sustainable development: this section is dominated by literature about the interaction between CC and poverty reduction and social justice, which is only one aspect of human and sustainable development. Development is about much more than poverty reduction in poor countries. I am surprised that there is no mention in this chapter about the role of economics - economic drivers of development as well as the role of economic analysis in coming to grips with assessing impacts, vulnerability and adaptation - I thought that there was ample literature about this over the last 5 years+ (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
152	1	9	39	0	0	Section 1.1.4. It may be beneficial to add subsections to this section for clarity. Additionally, the chapter team should ensure very careful coordination with the final key findings of the relevant chapters, tightening and shortening this introduction as much as possible. (Mach, Katharine, IPCC WGII TSU)
153	1	9	42	9	43	In this introduction of "unavoidable climate change impacts," it might be helpful to specify that these impacts and risks are associated with locked in climate change, whereas human agency and choices remain especially regarding risks relevant to the 2nd half of the 21st-century. (Mach, Katharine, IPCC WGII TSU)
154	1	9	44	9	45	Hawkins and Sutton seems not to be an appropriate work to cite here. It is about the relative contributions of imperfect knowledge of initial conditions, future emissions, and climate response, to overall uncertainty in future temperature. Please check that the statement made here here actually supported by this article. (UNITED STATES OF AMERICA)
155	1	9	45	9	45	This statement is slightly misleading. The Hawkins/Sutton paper only considered temperature changes. Model uncertainty might be dominant for regional precipitation changes. This point is discussed in Ch.3, Section 3.3.1, l.15-24. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
156	1	9	51	9	51	change "physical" with "latter", as 'physical' is less general than 'biophysical' (Cassardo, Claudio, University of Torino)
157	1	10	0	11	0	The definition (as above) should enable a better interpretation of applications of maldaptation in these pages. (Pinninti, Krishna Rao, Rutgers University)
158	1	10	4	10	7	Suggest that the evolution of the term "vulnerability" may warrant some additional discussion. The TAR definition, which was also adopted in the AR4, did capture structural conditions of poverty and inequality as a element of adaptive capacity. The fundamental change in the SREX and adopted in the AR5 was to separate exposure. This recognized socio-economic conditions as the determinant of vulnerability and that this is independent of any climate factors. (CANADA)
159	1	10	4	10	8	Please provide the definition used in AR5 explicitly (with reference to the SREX, assuming that the same definition is used). (Marbaix, Philippe, Université catholique de Louvain)

#	Ch	From Page	From Line	To Page	To Line	Comment
160	1	10	9	0	0	add "environmental insecurity" - papers are available to support this; in addition, this is in line with chapter 3.5.1. where "water securiy is addressed". (some of the papers include: 1. Mihajlov, Andjelka and Stevanovic-Carapina, Hristina Environmental (In)Security from Citizens Perspective, Chapter 11 In: Advances in Environmental Research Vol 7,pp 1-14, Editor: Justin A.Daniels, 2010 Nova Science Publ.Inc., USA ; 2. Mihajlov, Andjelka and Aleksic, Danko Western Balkan Environmental Security, Regional and Local, in the Proceedings "Energy Security and Environment in the Western Balkans", Jouni Jarvinen, Emma Hakala (Editors), 2012 University of Helsinki, Aleksanteri Institute; 3. \nMihajlov A. Ed., List of authors, Local Environmental Security, 2009, OSCE, Copperatione Italiana, and Environmental Ambassadors for Sustainable Development, Project Report)\n\n (Mihajlov, Andjelka, Faculty of Technical Sciences University of Novi Sad / Environmental Ambassadors for Sustainable Development)
161	1	10	9	0	0	add "environmental insecurity" - papers are available to support this; in addition, this is in line with chapter 3.5.1. where "water securiy is addressed". (some of the papers include: 1. Mihajlov, Andjelka and Stevanovic-Carapina, Hristina Environmental (In)Security from Citizens Perspective, Chapter 11 In: Advances in Environmental Research Vol 7,pp 1-14, Editor: Justin A.Daniels, 2010 Nova Science Publ.Inc., USA ; 2. Mihajlov, Andjelka and Aleksic, Danko Western Balkan Environmental Security, Regional and Local, in the Proceedings "Energy Security and Environment in the Western Balkans", Jouni Jarvinen, Emma Hakala (Editors), 2012 University of Helsinki, Aleksanteri Institute; 3. \nMihajlov A. Ed., List of authors, Local Environmental Security, 2009, OSCE, Copperatione Italiana, and Environmental Ambassadors for Sustainable Development, Project Report) (Mihajlov, Andjelka, Faculty of Technical Sciences University of Novi Sad / Environmental Ambassadors for Sustainable Development)
162	1	10	9	10	9	Here, instead of "reverse," would it be more accurate to say "slow down and even reverse"? (Mach, Katharine, IPCC WGII TSU)
163	1	10	14	10	15	The statement in this sentence is too simplifying. You may want to check, e.g., Gupta et al. "The Adaptive Capacity Wheel:..." in Environmental Science & Policy 13 (2010), 459-471 or Jones et al. "Towards a characterization of adaptive capacity:...", ODI Background Note December 2010. Here you will find further aspects influencing adaptive capacity. (GERMANY)
164	1	10	15	10	17	This statement is not only valid for Africa, but - in this general terms - for all developing countries. (GERMANY)
165	1	10	15	10	18	The statement starting with, "For example, ... , health care and education." also the same in Asian countries. So would it be possible to also mention "African and Asian continents" instead of just saying African? (Gurung, Tek, Freelance consultant)
166	1	10	17	19	17	inappropriate housing is a strange phrase. Please consider revising the text. (UNITED STATES OF AMERICA)
167	1	10	18	10	20	The authors may want to consider citing Cutter et al.'s work on baseline resilience indicators for communities. Though the work is not focused specifically on climate risk, their use of socioeconomic data to identify community vulnerabilitiies and resilience are pertinent to this work. A citation for this work follows: Susan L. Cutter, Christoper G. Burton, and Christoper T. Emrich, published in the Journal of Homeland Security and Emergency Management, Volume 7, Issue 1, Article 51, 2010 (UNITED STATES OF AMERICA)
168	1	10	22	10	24	Sustainability should be perceived as the overarching dynamic framework within which climate resilience should be factored in, rather than the other way around. Although reference is made to chapters 20.2 and 20.3.3, the "equitable distribution in human systems" should be further explained in this section as well. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
169	1	10	23	10	23	The term "endurance" is not appropriate and could be changed to "enduring viability." (Rosales, Jon, St. Lawrence University)

#	Ch	From Page	From Line	To Page	To Line	Comment
170	1	10	24	10	27	As highlighted in Canada's general comments on the WGII report, the terms introduced here for two eras are confusing and are not widely used in the scientific literature. The same points can be made effectively using purely objective language - such as "near term (2030-2040)" and "longer term (2080-2100)". (CANADA)
171	1	10	24	10	27	The approach of climate responsibility period versus climate options approach is an important insight, could be further explored in other chapters whenever possible. (de Campos, Christiano, Petroleo Brasileiro SA)
172	1	10	25	10	25	eras or areas? (sassi, fabrizio, Naval Research Laboratory)
173	1	10	25	10	27	Where do these concepts of climate responsibility and climate options come from, I was missing a reference for them - or a more detailed explanation, how the concepts were generated. If it is described somewhere else in the report of WGII, refer to it. (GERMANY)
174	1	10	25	10	27	The introduction of these artificial "eras" is confusing. Their descriptions are difficult to follow and their application is not intuitive. The authors should strongly consider dropping this new terminology or revising it for clarity - perhaps just using the indicative time horizons as opposed to newly coined terms. (UNITED STATES OF AMERICA)
175	1	10	25	10	27	I do not think that the so-called "era of climate options" (if it is in the second part of the century and beyond) can be viewed as "the opportunity space" : opportunities to mitigate climate change and impacts exist already, this is very ambiguous. (Marbaix, Philippe, Université catholique de Louvain)
176	1	10	29	30	0	missing reference (behind "methodological scholarship") (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
177	1	10	37	10	37	add "of these sources", or simply "sources", after "All" (Cassardo, Claudio, University of Torino)
178	1	10	40	10	46	On lines 40 and 46, should the role of values in addition to ethics be referenced? (Mach, Katharine, IPCC WGII TSU)
179	1	10	42	10	42	Change "needs" to "resources" (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
180	1	10	45	10	45	...that MAY have negative consequences for local and marginalized communities; insert the "may", as the consequences for communities are not that straightforward as it is often suggested in the literature on land grabbing. (GERMANY)
181	1	10	48	10	51	Confusing piece of text, particularly the segment beginning «...attention to...systems...» because this fragment does not have an evident connection to the text preceding it. It seems that a verb is somewhere missing. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
182	1	10	48	10	51	While issues of ethics and equity are an important new focus of research relevant to WGII, the main points are captured well in lines 40 - 47, while this final sentence seems to take the discussion over the top. Framing adaptation so dramatically tends to position it as the key to solving all of the World's ills. This is inappropriate. It also has policy implications with respect to the scope of what should be supported by climate change adaptation funds. When that scope becomes everything, the issue becomes meaningless. (Lemmen, Don, Canada National Study)
183	1	10	48	10	51	Has this change in linkage also reflected changes in understanding of determinants of vulnerability? (Mach, Katharine, IPCC WGII TSU)
184	1	10	53	11	5	This paragraph on disagreements is too broad to meaningfully cover the complexities of the disagreement. Suggest the paragraph is re-written. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
185	1	10	53	53	0	relates with development complex and contested (ambiguous and lacking substance) (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
186	1	11	2	11	2	What does «development as usual» mean? (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)

#	Ch	From Page	From Line	To Page	To Line	Comment
187	1	11	3	11	4	Both the understanding of what is meant by "corrected" and what is meant by "development as usual" needs to be explained/defined. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
188	1	11	7	11	15	Further citations should be provided for this paragraph. (Mach, Katharine, IPCC WGII TSU)
189	1	11	13	11	13	I suggest add: "opportunities and limits of this concept AND THEIR SCOPE." referring to green growth. (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
190	1	11	17	11	18	This statement is also very much relevant to chapters 14-17, beyond the regional chapters, it seems, which could be mentioned. (Mach, Katharine, IPCC WGII TSU)
191	1	11	17	11	18	Is the logic correct here? It almost seems that the reverse would be true, but if not, please clarify. (Mastrandrea, Michael, IPCC WGII TSU)
192	1	11	17	11	31	The evidence included in this paragraph does not support the claim made. The claim being made is that climate change policy so far has focused more on mitigation and impacts, not adaptation. To support this claim, evidence is drawn from national communications to the UNFCCC. The problem is that while adaptation needs are intended to be included in these communications, in practice these communications focus on mitigation. It has not been until recently that member states are providing NAPAs. Therefore, the metric being used in this paragraph to show that less attention has been given to adaptation by member states does not reflect their actual concern for adaptation. If this evidence is to be included in AR5, along with figure 1-6, the narrative should be more nuanced to say that much less documentation to the UNFCCC has been devoted to adaptation than mitigation... Implying that documentation on adaptation needs to catch up with mitigation within this body. (Rosales, Jon, St. Lawrence University)
193	1	11	18	11	18	I suggest add: " The need for improve POLICIES AND decision analysis has also " (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
194	1	11	22	11	31	Suggest these two sentences be shortened, and the discussion be more nuanced. Figure 1-6 could also be removed to save space. The analysis of Gagnon-Lebrun and Agrawala is based on the assumption that the amount of space devoted to specific issues in National Communications is proportionate to the attention an issue is given in a particular country. But this assumption is incorrect - National Communications follow a prescribed template that is biased towards mitigation issues. While it is correct that recent National Communications do reflect progress in adaptation, it is reflected in the substantive content of those documents - not the number of pages devoted to the topic. (CANADA)
195	1	11	23	11	24	There is another excellent paper which speaks to the importance of organisations and institutions: Dovers, S.R., Hezri, A.A. (2010). Institutions and policy processes: the means to the ends of adaptation. WIREs Climate Change 1: 212-231. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
196	1	11	25	11	25	The work cited here is relatively old (2006). Is there a more recent citation? (UNITED STATES OF AMERICA)
197	1	11	26	11	31	Is it possible to give a more global view of relevant trends? (Mach, Katharine, IPCC WGII TSU)
198	1	11	34	11	38	Only for aclaration: Not is the same in the Second Communication recently finish(2013) by Cuba, where adaptation analysis and measures is one of the main task in the country, mainly against sea level rise taking into account the Cuban island character. (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
199	1	11	34	11	38	Update information of the Chile's second national communication of climate change (CHILE)
200	1	11	38	38	0	no need for URL in text citation .This should be in general bibliography (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)

#	Ch	From Page	From Line	To Page	To Line	Comment
201	1	11	42	0	0	There is a 2013 OECD document (ENV/EPOC/WPBWE(2013)2/REV1) that focuses on issues around development, water, and climate adaptation/mitigation that is very relevant and worth citing here (Matthews, John, Conservation International)
202	1	11	50	11	50	change "this literature" with "these arguments" (Cassardo, Claudio, University of Torino)
203	1	11	52	12	12	Suggest expanding this discussion of transformation given its fundamental importance to many elements of the WGII report (and as part of the approved outline for the Synthesis Report). "Change in the fundamental attributes of a system" is ambiguous. Transitioning to a low carbon economy is an obvious transformational change. Providing examples related to adaptation (and linkages with development and DRR) would be helpful to better understand what is meant by the term. (CANADA)
204	1	12	0	17	0	I suggest to shorten point 1.2 Major Conclusions of the WG II Fourth Assessment Report, and put the main attention in AR5, that is our task, establishing our analysis from 2007 year, that have happened from this year. Only mentioned main points in AR4 that is used as base for AR5 analysis. (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
205	1	12	1	12	2	The IPCC SREX should have a much more prominent role in this section 1.1.4, as it is a key document of the IPCC with regard to the topic of the section. (GERMANY)
206	1	12	6	6	0	emerging literature (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
207	1	12	6	12	7	This sentence is a bit circular given the 2 mentions of "transformation." Could the 1st instance be replaced by "fundamental alterations of values..."? (Mach, Katharine, IPCC WGII TSU)
208	1	12	14	12	30	Canada has suggested in general comment to avoid the use of the terms era of climate responsibility and era of climate options, and use more objective terms instead. This is the paragraph in the underlying report where these terms are first introduced and defined/described. The explanation for the creation of these terms seems weak. From this text it is not clear whether or not these eras are intended to be overlapping or parallel time periods (the emphasis is on relative efforts on adaptation vs. mitigation). This raises serious questions then about how these terms morphed into terms attached to 'near-term (up to 2040s)' and 'longer term' (towards end of the century) time periods in the SPM. Suggest revising this paragraph to avoid the use of these terms in an IPCC report. In so doing, careful attention should also be paid when using the "planetary boundary" language of Rockstrom et al., 2009, since this is another term that is still novel and has not yet been widely endorsed by the scientific community. We understand that the ICSU Future Earth Project, under its just-forming Science Committee, will be trying to advance the concept and its definition. Therefore, it is recommended that at this stage, the IPCC avoid endorsing the concept but point to it as an emerging conceptual model undergoing further development under ICSU. (CANADA)
209	1	12	14	12	30	I think that this paragraph needs an in-depth revision to make it clearer and closer to the reality of resilience, adaptation, and mitigation - in particular their timing. \nAs far as I could find, the main reference - Rockström et al. 2009 - does not discuss "societal stressors" mentioned here, and the other reference - Raworth 2012 - is to a "discussion paper" by an NGO in which it is written that it is a "work in progress". More references are needed. The concept of "planetary boundaries created by interactions of biophysical and societal stressors" is not made clear in this discussion. This is an important discussion because societal factors have an important influence on vulnerability, resilience, etc., but the concepts are presented in a very unclear manner. The term "planetary boundaries", if used, should be used in close agreement with its definition in the literature (threshold levels ?), summarised in a clear way. (Marbaix, Philippe, Université catholique de Louvain)

#	Ch	From Page	From Line	To Page	To Line	Comment
210	1	12	14	12	37	Delete lines 14 to 30 together with their accompanying figure 1-7. The text in those lines does not add anything meaningful to understand the problem of the limits to growth and development vis-à-vis the condition of the environment. Reading this text is difficult without a clear statement of the meaning of some terms, like «opportunity space», «planetary boundaries» and other metaphors. For instance, (lines 23-24) «...climate change impacts can be envisioned as a double edged sword: entailing both an era of responsibility and an era of climate options.» This segment simply means that action on climate change faces us up to trade-offs between growth and development and the condition of our biophysical environment. Too much attention is given to a model that is undoubtedly ingenious but epistemically is neither better nor worse than many other relevant models around. The model's authors recognize, e.g., that «...[O]ur proposed boundaries are rough, first estimates only, surrounded by large uncertainties and knowledge gaps...» (abstract of the article «Planetary boundaries: exploring the safe operating space for humanity.» Ecology and Society 14(2): 32. [online] URL: http://www.ecologyandsociety.org/vol14/iss2/art32/ . Figure 1.7 is extremely difficult to understand, even with the aid of the text in lines 14-30 and its own legend. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
211	1	12	14	14	0	climate science is advancing "very" rapidly (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
212	1	12	15	12	16	I suggest add: " This provide s an "oppportunity space " for policy relevant information AND INTEGRATION to support policy decisions " (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
213	1	12	15	12	17	This sentence is not clear. Rewrite. (Rosales, Jon, St. Lawrence University)
214	1	12	18	0	20	I suggest to best support the sustainability concept based in biophysical limits to incorporate the reference Fischer, J. M. Manning, A.D. Steffen, W. Rose, D.B. Daniell, K. Felton, A. Garnett, S. Gilna, B. Heinsohn, R. Lindenmayer, D.B. MacDonald, B. Mills, F. Newell, B. Reid, J. Robin, L. Sherren, K. Wade, A. 2007 Mind the sustainability gap. Trends in Ecology and Evolution 22 (12): 621-624. In my opinion also is interesting the point of view presented in the UNEP Report 2012: Inclusive Wealth Report. Measuring progress toward sustainability[UNU-IHDP and UNEP (2012). Inclusive Wealth Report 2012. Both works can contribute to a better understanding of the idea of ??sustainability in a finite world (Anadon, Ricardo, University of Oviedo)
215	1	12	18	12	20	Here again the term "planetary boundaries" is puzzling. The meaning of this sentence is obscure; please clarify. (UNITED STATES OF AMERICA)
216	1	12	23	12	23	Usage of the phrase "double edged sword" does not seem to be the clearest word choice possible. (Mach, Katharine, IPCC WGII TSU)
217	1	12	24	12	25	again, era or areas? (sassi, fabrizio, Naval Research Laboratory)
218	1	12	24	12	42	I would expect to see a reference to Stafford-Smith et al (2010) in this paragraph on the subject of incremental versus transformative. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
219	1	12	25	12	25	Could it be indicated that these unavoidable impacts are those associated with locked in climate change? (Mach, Katharine, IPCC WGII TSU)
220	1	12	25	12	30	It is not clear whether or not the era of responsibility and the era of climate options occur at the same time. As explained here, it seems like we're experiencing both of these eras right now. Is that right? (UNITED STATES OF AMERICA)
221	1	12	27	12	27	For the mitigation described on this line, the relevant time frame could be mentioned--with mitigation choices now and in the coming decades determining the level of climate change realized in the 2nd half of the 21st century and beyond. (Mach, Katharine, IPCC WGII TSU)

#	Ch	From Page	From Line	To Page	To Line	Comment
222	1	12	27	12	28	I think that it is dangerous to use of the wording "era of climate options" - it seems to be understood as an era "when this or that option is taking place" (in other parts of the report, with reference to periods in the second part of this century), but many readers will understand that it is an era when an option has to be chosen. The definition of this "era" is especially blurred here, because it is described as "an opportunity space" including mitigation. Obviously, the "options" in terms of climate are also the consequence of mitigation efforts in the first half of the century. The discussion must absolutely take into account the very specific dynamic of climate change - action on mitigation has most of its effect in the medium to long-term, there is a lot of inertia everywhere - from society to infrastructure to climate system. (Marbaix, Philippe, Université catholique de Louvain)
223	1	12	40	0	0	Section 1.2. As much as possible, all subsections of 1.2 should be tightened and focused. (Mach, Katharine, IPCC WGII TSU)
224	1	12	42	13	20	Paragraph 1.2.1 is not well linked to AR5 in the description of the issues. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
225	1	13	28	0	0	CCCIIV = ? as it is being used for the first time in this chapter. (Gurung, Tek, Freelance consultant)
226	1	13	28	13	28	can you explain the meaning of CCCIAV here? I do not remember its meaning, and as me many readers... (Cassardo, Claudio, University of Torino)
227	1	13	35	14	37	the possibility of a "run-away" greenhouse effect through positive feedbacks is alluded to here. This possibility is a crucial aspect of the problem & needs to be addressed more directly & openly. Earlier assessments raised the possibility but how much uncertainty surrounds the issue (tipping-points, rates before & after the threshold is passed, what happens beyond that - further thresholds & tipping-points or does the net +ve feedback lose its steam? How have earlier reports dealt specifically with this issue & how has our thinking changed over time regarding it. I look for the last chapter to discuss where we are now on it - even if only to say specifcally that too much uncertainty still surrounds the concept to say anything definitive - but presumably we are narrowing the uncertainty? (fleming, richard arthur, canadian forest service)
228	1	13	38	13	38	Add "listed below" after "RfC's" (Cassardo, Claudio, University of Torino)
229	1	13	48	0	0	While its very important to state that the SPMs have been approved line-by-line by the IPCC plenary, the distinction between the SPM and the remaining elements of the report is lost in this reference (and the one on p. 14 line 45). Suggest adding a sentence or two to section 1.1 that highlights the significance of the SPM. (CANADA)
230	1	14	0	0	0	One reason that the burning embers diag was not included in 4AR is that we believed the text, quoted in the paras above here, are more specific and informative than the colouring scheme. Smith et al produced a 2nd generation burning embers diag in 2009, after pubn of the 4AR. The burning embers figure, in general, remains problematic in that a) the colour scheme is not scaled (only that dark colour is high risk and light is low) and b) the method of deriving the conclusions (ie the analysts opinions) is not specified, and so is not scientifically replicable in precise terms (except by those who devised it originally). For 5AR I would recommend more text that describes the method by which analysts derived their opinion. This description of method might make the daigrams more replicable by other analysts. I have commented on this in chapter 19 and the SPM. (Parry, Martin, Imperial College)
231	1	14	5	5	0	megadeltas (give specific examples); Bangladesh; etc. (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)
232	1	14	9	14	9	Assuming "high confidence" was assigned calibrated uncertainty language in the respective assessment, it should be italicized here. (Mach, Katharine, IPCC WGII TSU)
233	1	14	29	14	29	add "changes" after "temperature" (Cassardo, Claudio, University of Torino)
234	1	14	32	33	0	which "agriculture ecosystems" ? (e.g upland tropical vs. temperate land wheat fields) ? (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)

#	Ch	From Page	From Line	To Page	To Line	Comment
235	1	14	33	14	33	It is unclear what the authors are trying to say in the sentence beginning on this line. (UNITED STATES OF AMERICA)
236	1	14	33	14	33	The word "spreader" should be clarified. (Mach, Katharine, IPCC WGII TSU)
237	1	14	35	14	35	«vulnerable» instead of «vulnerability»? (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
238	1	14	35	14	35	replace vulnerability with vulnerable (sassi, fabrizio, Naval Research Laboratory)
239	1	14	35	14	35	change "vulnerability" to "vulnerable" (Cassardo, Claudio, University of Torino)
240	1	14	42	14	42	The term "point of departure" seems to be used here to mean a distinction or difference (between AR4 and AR5). Elsewhere the term seems to mean a starting point, or more specifically the body of knowledge on which the AR5 is based. It would be best to use terminology consistently throughout. (UNITED STATES OF AMERICA)
241	1	14	42	14	42	This sentence feels a bit overstated. Could "a point of departure to be drawn from the AR4 for the AR5" be used instead? (Mach, Katharine, IPCC WGII TSU)
242	1	14	45	14	45	can you explain the meaning of SPM here? (Cassardo, Claudio, University of Torino)
243	1	14	45	14	45	The emphasis here on plenary approval seems a bit of an overemphasis given that all SPM statements are plenary approved. (Mach, Katharine, IPCC WGII TSU)
244	1	14	46	14	46	It could be clarified that the relevant report for this topic 5 statement is the synthesis report. (Mach, Katharine, IPCC WGII TSU)
245	1	15	12	15	15	This statement feels a bit overstated and not completely accurate. The emphasis on risk reflects the findings of previous assessment, evolution of the literature, and effective framings for the nature of evidence available. (Mach, Katharine, IPCC WGII TSU)
246	1	15	14	15	14	This is the first of several examples of the apparently inappropriate use of future tense. By the time this is read, "authors had to add conclusions". See also line 45 on this same page for example. (UNITED STATES OF AMERICA)
247	1	15	14	15	14	A more balanced phrasing could be appropriate here: author teams assess the full range of possible outcomes, including high-probability outcomes and low-probability outcomes, especially where the latter are associated with high consequence. (Mach, Katharine, IPCC WGII TSU)
248	1	15	19	16	15	Section 1.2.5. This section is a good start but I don't think it represents how complex the process of adaptation can be. Adaptive Capacity (AC) may have its own complex dynamics in space & time: thresholds, nonlinearities, feedbacks, connectivity, redundancies, [eng & ecol] resilience, flexibility, elasticity, & idiosyncracies [e.g., effectiveness depending on the nature of the perturbation]. E.g., if AC exceeded is there a complete collapse of all systems or are there 'fall-back' positions where, although some collapse has occurred, it is now possible to adapt by reconfiguring the remaining systems/elements? (fleming, richard arthur, canadian forest service)
249	1	15	21	15	24	It would be preferable in this statement to communicate the findings of the 4th assessment report, per the scope of this section, rather than provide not-fully-substantiated assertions on shifts in understanding. (Mach, Katharine, IPCC WGII TSU)
250	1	15	24	15	26	The relevance of this statement to the section is not completely clear, given the focus of 1.2.5 on the working group 2 contribution to the 4th assessment report. (Mach, Katharine, IPCC WGII TSU)
251	1	15	25	16	26	Much of this section seems to be off the topic promised in the section heading: interaction of adaptation and mitigation. The quote from AR4 that adaptation and mitigation can complement each other is not explained/ elaborated. I suggest referring to an excellent recent treatment of the issues: Moser, S. (2012). Adaptation, mitigation, and their disharmonious discontents. Climatic Change. 111 (2): 165-175. \n (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
252	1	15	31	15	49	Lines 31 and 48-49 are redundant. (Mastrandrea, Michael, IPCC WGII TSU)

#	Ch	From Page	From Line	To Page	To Line	Comment
253	1	15	37	15	37	It would be preferable to communicate the finding with less editorializing. (Mach, Katharine, IPCC WGII TSU)
254	1	15	43	15	49	The focus of these statements should be on the 4th assessment report given the scope of this section. (Mach, Katharine, IPCC WGII TSU)
255	1	15	45	0	0	Incorrect tense used twice on this line - future tense should be changed to past tense ("have worked" and "have produced". (Lemmen, Don, Canada National Study)
256	1	15	46	0	0	... IPCC Working Groups II, II & III The II (second) coming twice appears a typo error. (Gurung, Tek, Freelance consultant)
257	1	15	46	15	46	Groups I, II, and III, not "Groups II,II, and III" (sassi, fabrizio, Naval Research Laboratory)
258	1	15	46	15	46	Clarify that this line refers to the SYR from AR4. (UNITED STATES OF AMERICA)
259	1	15	46	15	46	II, II and III... I suppose you meant "I, II and III" (Cassardo, Claudio, University of Torino)
260	1	15	52	15	54	Avoid repetitions. The importance of human development/poverty and access to resources was already mentioned on page 3, l. 36 and p.10, l.16. It might be a good idea to recheck the whole chapter for repetitions and consistency. (GERMANY)
261	1	15	53	15	54	That trends in «economic globalization» is a stress exacerbating the vulnerability to climate change cannot be accepted as a stressor unless the meaning of economic globalization is clearly stated. O'Brien et al (Global Environmental Change 14 (2004) 303-313) define economic globalization as synonymous with free international trade and reductions in agricultural subsidies. These two conditions would favour the substitution of local food production with foreign one in developing countries, thereby producing misery for local farmers. If the meaning of economic globalization were different from O'Brien et al's, it should be clearly stated so. Otherwise, economic globalization could be understood as a condition inimical to trade protectionism and political isolationism. These last two features obviously do not contribute to effectively deal with a global issue like present and future impacts of climate change. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
262	1	16	2	16	3	Will there be examples within the report for such low-cost options? If yes, refer to the respective chapter, if not, recheck the statement. (GERMANY)
263	1	16	3	3	0	cost/benefit (C/B) ratios (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
264	1	16	9	9	9	Meridional Overturning Circulation (MOC) (Orcherton, Dan F., PACE-Pacific Centre for Environment and Sustainable Development)
265	1	16	22	16	22	remove "of the" (Cassardo, Claudio, University of Torino)
266	1	16	26	16	26	As written, the sentence is ambiguous. Consider including a list of gaps and limitations identified in AR4 for which significant progress is evident subsequently in the literature (if this is what the authors intended) (UNITED STATES OF AMERICA)
267	1	16	26	16	26	Given the examples in this list, the assertion of “significant progress” does not seem accurate for all of them. It may be more accurate to say “progress, and in some cases significant progress, is evident...” (Mach, Katharine, IPCC WGII TSU)
268	1	16	28	16	28	insert "in" between "difficulty" and "discerning" (Cassardo, Claudio, University of Torino)
269	1	16	36	0	0	... A2 and B2 families. Not clear for new readers. (Gurung, Tek, Freelance consultant)
270	1	16	38	16	40	Much of what is said here is repeated in lines 44-45. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
271	1	16	38	16	43	The point about precipitation changes and consequences for water resources is made twice. (UNITED STATES OF AMERICA)
272	1	16	39	16	39	remove "that is" (Cassardo, Claudio, University of Torino)

#	Ch	From Page	From Line	To Page	To Line	Comment
273	1	16	41	16	41	Casual usage of “likely” should be avoided here. (Mach, Katharine, IPCC WGII TSU)
274	1	16	41	16	44	Dai 2012 Increasing drought under global warming in observations & models. Nature Climate Change is relevant to this theme (fleming, richard arthur, canadian forest service)
275	1	16	44	16	44	change "due in part" with "also in part due" (Cassardo, Claudio, University of Torino)
276	1	17	7	17	7	As written, the sentence is ambiguous. Consider including a list of gaps and limitations identified in AR4 for which more modest or little progress is evident subsequently in the literature (if this is what the authors intended) (UNITED STATES OF AMERICA)
277	1	17	8	17	8	Does "present day trends" mean trends in climate or in measures of climate impacts? (UNITED STATES OF AMERICA)
278	1	17	8	17	8	add "the" between "as" and "collapse" (Cassardo, Claudio, University of Torino)
279	1	17	19	0	0	Is lack of info on costs and benefits still a major gap ? Is the increase in info here since 4AR not really small in relation to the need. There is a risk in this list (of new info now available) of implying that those topics that do not feature are now adequately informed. I suggest a short para which says something like:"in spite of incd info in (costs of impacts, costs and benefits of adaptation, [and you might list others]) there are still serious nowledge gaps in these areas'. (Parry, Martin, Imperial College)
280	1	17	20	17	20	This statement needs clarification. (Mach, Katharine, IPCC WGII TSU)
281	1	17	20	20	0	abrupts should be dangerous climate change (Orcherton, Dan F., PACE-Pacific Centre for Envionment and Sustainable Development)
282	1	17	25	17	28	The conclusion described in this sentence needs a citation. (UNITED STATES OF AMERICA)
283	1	17	26	17	28	This statement should include references to other chapters and provides an opening for a potentially very useful discussion of the value of higher resolution climate information for informing climate adaptation. This needs to be placed in the context that some will seek the absence of such information as an excuse for not taking adaptive action. (Lemmen, Don, Canada National Study)
284	1	17	43	17	49	discussion of attribution: this doesn't fit here. (UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND)
285	1	17	45	17	45	attribution to observed warming should be "attribution to observed climate change" since some impacts result from precipitation and other non-warming aspects of climate change. (UNITED STATES OF AMERICA)
286	1	17	45	17	46	Also, "attribution of local impacts to observed warming in that region" ignores the real possibility that impacts in one region can be caused by climate change in another region. (UNITED STATES OF AMERICA)
287	1	17	51	0	0	Table 1-1. Editorial. The rightmost column should refer to figure 1-8 instead of figure 1-7 (as currently does) (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
288	1	18	4	0	0	This section never seems to discuss whether 2oC is still thought to be the important threshold as in TAR. Has this threshold temp been shifted, or is such a threshold now considered misleading? Might make a clear statement of this here before sending the reader to later chapt. (fleming, richard arthur, canadian forest service)
289	1	18	15	18	15	change "to focus" with "focused" (Cassardo, Claudio, University of Torino)
290	1	18	15	18	16	I suggest add: " The report integrates perspectives from historically distinct research communities studying climate science, climate impacts, RISKS OF EXTREME EVENTS AND IMPACTS, climate adaptation and disaster risk management ". (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
291	1	18	17	18	18	Hansen et al. (2012 Perception of climate change. PNAS) has done some interesting work in this area (fleming, richard arthur, canadian forest service)
292	1	18	19	18	19	It would be more accurate here to say “weather-and climate-related events and disasters and in disaster risk management.” (Mach, Katharine, IPCC WGII TSU)

#	Ch	From Page	From Line	To Page	To Line	Comment
293	1	18	20	18	20	As specific projections of disaster losses were not made, it may be more accurate to say "trends in disaster losses." (Mach, Katharine, IPCC WGII TSU)
294	1	18	23	18	24	I suggest add: ".....such as,POLICIES IMPROVEMENT, early-warning systems," (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
295	1	18	23	18	38	at line 23 and 38 it is written "climate events"; what is a climate event? I think you mean "climate-related events" as correctly written in line 30. So I suggest using always this last expression: a climate event by definition do not exist! (Cassardo, Claudio, University of Torino)
296	1	18	27	0	0	comment on part 1.3.1.1: SREX should include the part for integration of CCA, DRR into policie, plans and strategies (VIETNAM)
297	1	18	27	19	31	Do you agree with these findings or not ? You would to take sides (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
298	1	18	27	19	31	easier to follow if there was some structure to this long list. None of your examples seem to address the first theme? (fleming, richard arthur, canadian forest service)
299	1	18	40	18	40	I suggest add: "domestic product(GDP), JUST AS ENVIRONMENTAL AFFECTATIONS, are higher in developing countries " (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
300	1	18	48	18	50	As written this sentence is not comprehensible. Please clarify. (UNITED STATES OF AMERICA)
301	1	19	1	19	32	Repetitive bullet points (sassi, fabrizio, Naval Research Laboratory)
302	1	19	4	19	4	to reduce and transfer risks: where? Could you explain? (Cassardo, Claudio, University of Torino)
303	1	19	5	19	5	Should "high confidence" be italicized? If the authors mean here to use official IPCC uncertainty language, then yes. (UNITED STATES OF AMERICA)
304	1	19	5	19	5	As calibrated uncertainty language, "high confidence" should be italicized. (Mach, Katharine, IPCC WGII TSU)
305	1	19	6	19	6	«...hardware measures...». «Hardware» is a noun; it is here used as an adjective. What does it mean as an adjective? (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
306	1	19	6	19	6	«...soft solutions such as from improving...» Delete «from» (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
307	1	19	6	19	6	I believe "hard" is meant instead of "hardware" here. (Mastrandrea, Michael, IPCC WGII TSU)
308	1	19	7	19	7	As written, this phrase is unclear; please revise the text. (UNITED STATES OF AMERICA)
309	1	19	7	19	7	change "risk" in "risks" (Cassardo, Claudio, University of Torino)
310	1	19	9	19	13	This bullet is the same of last bullet from line 27 to line 31 (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
311	1	19	9	19	13	This bulleted conclusion is repeated verbatim in lines 27-31 of this page (UNITED STATES OF AMERICA)
312	1	19	9	19	31	The paragraph in line 27~31 is the same with line 9~13, it is suggested to delete. (Xu, Yinlong, Institute of Environment and Sustainable Development in Agriculture (IEDA), Chinese Academy of Agricultural Sciences (CAAS))
313	1	19	9	19	31	The content between line 9-13 is exactly the same as line 27-31. SUGGESTION: delete line 27-31 (PAN, Jiahua, Chinese Academy of Social Sciences)
314	1	19	15	19	15	between people and countries should be "among people and among countries" (UNITED STATES OF AMERICA)
315	1	19	27	19	31	Editorial. Delete. The text is the same as that in lines 9 - 13. (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
316	1	19	27	19	31	The bullet point is the exact same (ie has been repeated) as the point at line 9 on the same page. (AUSTRALIA)
317	1	19	27	19	31	This bullet is repeated. (UNITED STATES OF AMERICA)

#	Ch	From Page	From Line	To Page	To Line	Comment
318	1	19	29	19	31	Text is a repeat of lines 11-13. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
319	1	19	46	19	46	As calibrated uncertainty language, “robust evidence” and “high agreement” should be italicized. It would also be clearer to place these summary terms for evidence and agreement within parentheses at the end of the statement. Additionally, it would be preferable to cite the wording of the summary for policymakers rather than the fact sheet. (Mach, Katharine, IPCC WGII TSU)
320	1	19	46	19	49	Suggest deleting this sentence as it repeats of the bullet at the top of the same page (Page 19, lines 1-3). (CANADA)
321	1	20	24	20	29	the numbers reported in this sentence (and in the Table) do not give a clear idea as they are not compared with the absolute total values, or at least the percentages... (Cassardo, Claudio, University of Torino)
322	1	20	27	20	27	What is meant by a “baseline scenario” in this context? (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
323	1	20	27	20	27	There is something wrong with the phrase beginning at the end of this line. (UNITED STATES OF AMERICA)
324	1	20	38	0	0	Section 1.3.3. In the final draft, the chapter team should ensure that all calibrated uncertainty language used in this section is italicized for clarity, including summary terms for evidence and agreement, levels of confidence, and likelihood terms. (Mach, Katharine, IPCC WGII TSU)
325	1	20	38	23	14	I missed the use of the two metrics of communication in this item: evidence and agreement. I suggest to reconcile if possible. (de Campos, Christiano, Petroleo Brasileiro SA)
326	1	20	42	20	42	add "reported" after "statements" (Cassardo, Claudio, University of Torino)
327	1	20	45	20	45	Why are there "" around "climate"? (UNITED STATES OF AMERICA)
328	1	20	45	21	2	see also Dai 2012 Increasing drought under global warming in observations & models. Nature Climate Change (fleming, richard arthur, canadian forest service)
329	1	20	45	21	13	These paragraphs on climate models and comparison with the AR4 are WGI issues with marginal relevance for the content of the WGII report. The results of climate modeling, as captured in next paragraphs, are what should be highlighted. Suggest these two paragraphs be deleted. (CANADA)
330	1	21	5	21	5	But differ in the long term: in which way? This sentence masks the very large overlap between the CMIP5 and CMIP3 projections, even in the long term. (Räisänen, Jouni, University of Helsinki)
331	1	21	16	21	18	Over every continent except Antarctica, GHG has made a substantial contribution to surface temperature increases. It is probably true in Antarctica as well that GHG have TENDED to increase temperatures. The difference between Antarctica and other regions seems to be that in Antarctica other factors have counteracted this warming tendency from GHG. So the statement as written seems to be incorrect (strictly speaking). Consider appropriate reference to relevant sections of WG1 describing regional observed temperature trends (i.e., WG1 Ch 3?) (UNITED STATES OF AMERICA)
332	1	21	19	21	19	Could express warming for 2016-2035 relative to preindustrial temperatures. (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
333	1	21	21	21	22	WG1 Ch. 12 formulation: For RCP4.5, 6.0 and 8.5, global temperatures are projected to *likely* exceed 2C warming with respect to preindustrial by 2100. Considering the range of the model results, there is a non-negligible possibility that the warming would remain under this limit for RCP4.5. (Räisänen, Jouni, University of Helsinki)
334	1	21	22	21	22	Please specify 'other research' by a reference or mentioning type of research, f.e. literature studies, discourse analysis, etc. \n\n (NETHERLANDS)
335	1	21	35	21	35	What is K-1 ? (Pechoux, Martin, Institut des Foraminifères Symbiotiques)

#	Ch	From Page	From Line	To Page	To Line	Comment
336	1	21	36	21	36	Change "Average precipitation in a much warmer world" to "Average precipitation change in a much warmer world" (Parker, David, Met Office Hadley Centre)
337	1	21	36	21	36	average precipitation in a much warmed world should be "changes in average precipitation." (UNITED STATES OF AMERICA)
338	1	21	38	21	38	changes: in positive or negative? Could you specify please? (Cassardo, Claudio, University of Torino)
339	1	21	41	21	48	In this paragraph, some facts about China, Taiwan and Mekong river may improve the weitage. We hear a lot of news about heavy rainfall, floods and landslides in these areas but there seems a lack of specific analysis for them. Although I'm not expert on these areas but time a again I hear/read news and become curious to know whether these have link to climate change. Chinese, Taiwanese and expert from these area should contribute here. (Gurung, Tek, Freelance consultant)
340	1	21	45	21	45	Similar for the near term but differ in the long term. But the scenarios are different, so how is this comparison made? (UNITED STATES OF AMERICA)
341	1	22	4	22	14	Shouldn't there be some description regarding impact on El Niño and La Niña? There is no mention of these anywhere. Wondering if these fall outside of the climate change discourse? (Gurung, Tek, Freelance consultant)
342	1	22	8	22	8	I know this is a real fussiness, but a "decline" of -0.0015 yr-1 (i.e. negative) for me is an increment... so or remove the minus sign (also from 0.0024), or change "increment" in "variation" (Cassardo, Claudio, University of Torino)
343	1	22	24	22	26	It would be better to include the inter-model variation in these projections. WG1 Ch12 SOD, P. 12-51 gives: 7 +-4% for RCP2.6 and 25 +-7% for RCP8.5 (+- indicating intermodel standard deviation). (Räisänen, Jouni, University of Helsinki)
344	1	22	32	22	32	What is PM ? (Pechoux, Martin, Institut des Foraminifères Symbiotiques)
345	1	22	43	23	2	Might be interested in recent work on this by Hansen et al. (2012 Perception of climate change. PNAS) (fleming, richard arthur, canadian forest service)
346	1	22	46	22	48	It says that there are inconsistency with AR4 because new results do not support global increasing trend in droughts since 1970, but it si not clear if we are speaking about drought frequency or drought severity and duration. Besides this, as it is sayed in chpater 3, page 10, lines 34-46, a main problem lacks in the own definition of drought and the associated indicators. On the other hand, it says that it continues to be the lack of evidence regarding the sign of the trend of frequency/magnitude of floods at global scale (consistency with AR4), assertion that should be considered in the SPM and TS. (Llasat, Maria-Carmen, University of Barcelona)
347	1	23	4	23	14	As it is hopeless to give a meaningful summary of regional climate changes in just 11 lines, I would suggest deleting this paragraph. Alternatively, more generic issues (nearly all land areas very likely to warm, with most of them likely to warm faster than the global average, large geographical and in some regions seasonal variations of precipitation change, etc.) could be discussed here, with a reference to WG1 Chapter 14 for more detailed information. (Räisänen, Jouni, University of Helsinki)
348	1	23	4	23	14	Given the impossibility of summarizing regional climate change in a single paragraph, it would seem logical to delete this paragraph and add a sentence to the first paragraph of section 1.3.3 (p. 20) that key findings with respect to regional climate changes are discussed in each of the regional chapters of the WGII report. (Lemmen, Don, Canada National Study)
349	1	23	21	23	21	Casual usage of "likely" should be avoided, as it is a reserved likelihood term. (Mach, Katharine, IPCC WGII TSU)
350	1	23	28	23	28	It should be clarified what is meant by "2004 data." (Mach, Katharine, IPCC WGII TSU)

#	Ch	From Page	From Line	To Page	To Line	Comment
351	1	23	28	23	42	Many readers will focus on the first part of the second paragraph where GHG emissions growth is highlighted and leave the report believing that climate change is being caused by Asia. I suggest if the IPCC highlights emissions growth in Asia, they should also state in the first of these two paragraphs where the emissions "base" continues to come from and has come from since industrialization (Annex B countries). If not, then delete the first two sentences in the second paragraphs (lines 36-39). This is a sensitive matter to non-Annex B countries, that is, "developing" countries. (Rosales, Jon, St. Lawrence University)
352	1	23	29	23	29	all time high assumes that future emissions will be lower than this. Should say "high to date." (UNITED STATES OF AMERICA)
353	1	23	36	23	42	This point is extremely relevant to WGIII, but its relevance to WGII is less clear. Suggest either deleting or making an explicit link to equity. (CANADA)
354	1	23	51	23	54	"... the large-scale application of ... CDR..." in the second half of the 21-st century would be possible if theoretical investigations and field experiments will be provided during the first half of the 21-st century (as soon as possible). Because the CDR-geoengineering methods are not effective on the time-scale of tens of years, it is very probably that application of SRM-geoengineering (Solar Radiation Management) will be needed in the second half of the 21-st century. (Ryaboshapko, Alexey, Institute of Global Climate and Ecology)
355	1	23	51	23	54	Wording implies that CDR technologies are already at hand. Also: Please consider the large uncertainties attached to CDR and, thus, reformulate, e.g.: "...require net negative emission in the second half of the 21st century. The potential contribution of CDR on this has yet to be proven: CDR technologies are far from being operational and attended by a large set of risks. Pathways ..." (GERMANY)
356	1	24	4	24	6	Could you explain better ? This affirmation isn't support or isn't explained (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
357	1	24	25	24	26	This is only true for some seasons. Other seasons have realised drastic decreases in precipitation (KENYA)
358	1	24	41	0	0	FAQ 1-1 Use of the phrase 'information basis' may be confusing for some readers. Authors may wish to add explanation on the different aspects of the literature – types of discipline, research communities, epistemologies, methodological approaches. (Chatterjee, Monalisa, IPCC WGII TSU)
359	1	24	45	24	45	The wording here on non-journal literature could be clarified to indicate that, in some cases, consideration is needed in order to understand the state of knowledge on topics that may not be fully treated within the confines of journal literature. (Mach, Katharine, IPCC WGII TSU)
360	1	24	53	24	53	Fundamental advances such as? (UNITED STATES OF AMERICA)
361	1	25	2	25	3	FAQ 1-2 An example will be very useful here. (Chatterjee, Monalisa, IPCC WGII TSU)
362	1	25	4	25	14	There is need to discuss climate change in the African continent so as to depict regional balance in reporting. (KENYA)
363	1	25	9	0	0	FAQ 1-3 Besides the last 2-3 lines the answer is focused on why there is uncertainty in scientific understanding of how things are going to be in the future. The question and answer do not fit. (Chatterjee, Monalisa, IPCC WGII TSU)
364	1	25	9	25	22	The answer to this question seems convoluted. Perhaps move the last sentence to the beginning, so it begins with an answer that directly addresses the question itself. The rest of the information on uncertainties can follow that statement, elaborating on the "degree of certainty" comment (Coughlan, Erin, Red Cross / Red Crescent Climate Centre)
368	1	30	0	0	0	Table 1-1: Signature of "River Runoff" can not be distinguished from "CO2". Both are green with black outline. (GERMANY)

#	Ch	From Page	From Line	To Page	To Line	Comment
365	1	30	0	0	0	Suggest merging Table 1.1 with Figure 1.8 into a single Figure since the two are not independent. The coloured squares in Table 1.1 are only significant in terms of their use in Figure 1.8. If either of these diagrams were used separately, they would not make sense. Also, the reference in the last column should be to Fig 1.8 not 1.7. Once merged, these diagrams will be very useful. (CANADA)
367.6	1	30	0	0	0	Table 1-1: How does this table handle cases where there are different trends in different regions? This should be clearly explained. (UNITED STATES OF AMERICA)
368.7	1	30	0	0	0	Table 1-1: There seems to be no logic to which impacts are attributed to GHG vs which are attributed to warming. It is not clear, either, why it is useful to make this distinction, or even if the distinction is meaningful for the impacts listed here. (Ocean acidification is one impact that is attributable to GHG but not warming; for the others the distinction seems meaningless.) (UNITED STATES OF AMERICA)
369.8	1	30	0	0	0	Table 1-1. The chapter team is encouraged to further develop this table. As input, I provide perspectives on some features of the table. 1st, it is not completely clear what is meant by “trend”--expected, observed, and projected trends made differ across examples. 2nd, it would be strongly preferable to add a line-of-sight column, providing references to the chapter sections in which supporting assessment can be found. 3rd, the shading used for high to low confidence should be considered. To my eye, the darkly shaded cells jump out the most, which may be an attribute best suited to cells with higher confidence. 4th, the distinction between the very low or no confidence cells and the no assessment made cells could be enhanced. Overall, the combined use of shading and symbols to communicate confidence and likelihood is really effective. (Mach, Katharine, IPCC WGII TSU)
370.9	1	30	0	30	0	I suggest in Table 1.1 try to differentiate more the colour of each small square because may come confusing, taking into account that some are in the same colour with different tonalities and are the basis for Figure 1.8 in page 38 that is very important (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)
372	1	30	1	30	0	in the table: upper right : fig 1-7 should be fig 1-8 (Kentarchos, Anastasios, European Union DG Research, Directorate Environment Climate Change & Environmental Risks Unit)
373.1	1	30	1	30	2	In Table caption, please add a reference to Fig. 1.8. In last column of the Table, "1.7" should be changed in "1.8" (Cassardo, Claudio, University of Torino)
374.1	1	32	0	0	0	The example of China given in Line 2 from the bottom, Row 2, Table 1-2 is not factual, hence suggested to be deleted. From a reference to Chapter 27, it is concluded here that wide-spread environmental degradation in Latin America is due to China's economic growth. But this conclusion cannot be reached from the literature cited in Chapter 27. So the example in parentheses in Line 2 from the bottom, Row 2, Table 1-2 must be deleted, namely “e.g. economic growth of giant consumers as China”. Similarly, Line 14-15, Page 30, Chapter 27 and Figure 27-6, Page 106 should also be deleted. (CHINA)
375.2	1	32	0	0	0	Table 1-2: There are several instances of statements that do not make sense in this table. See for example, "or however possible". (UNITED STATES OF AMERICA)
376.3	1	32	0	0	0	Table 1.2.: Please consider to replace "biofuels" in the sentence with "renewable bioenergy" (NORWAY)
377.4	1	32	0	0	0	Table 1-2. When all findings are updated to reflect the final assessment of chapters, it would be preferable to also provide line-of-sight references to specific chapter sections, rather than simply referencing chapter numbers overall. Similarly, references to the special report on renewables would be preferably made at the level of chapter sections. As a few specific edits, casual usage of “likely” should be avoided in the 2nd cell for the working group 2 contribution to the 5th assessment report; if being used as a likelihood term, it should be italicized. In the next cell down, it would be preferable to provide further detail in place of the somewhat prescriptive “should be” formulation. (Mach, Katharine, IPCC WGII TSU)

#	Ch	From Page	From Line	To Page	To Line	Comment
378.5	1	32	0	0	0	Table 1-2: Please update all WGII findings based on final chapter drafts, and please provide line of sight to chapter sections for each finding in the table. In addition, WGII chapters 4, 9, 13, and 21 all have findings relevant to the first row. WGII chapter 10 has findings relevant to the second row. (Mastrandrea, Michael, IPCC WGII TSU)
379.6	1	33	0	0	0	Figure 1-1. The worldmap shown on top of the figure is not explained in its legend. What do its many bars represent? (Ginzo, Hector, Academia Argentina de Ciencias Ambientales)
380.6	1	33	0	0	0	Figure 1-1 does not depict 1-1 b, although text refers to this. Please add 1-1 b to the map in Figure 1-1\n\n (NETHERLANDS)
381.7	1	33	0	0	0	Figure 1-1: I am not sure the rationale for grouping of the countries. Why is Iceland part of North America? Similarly, Mexico should be grouped with North America. It may be also useful to provide (a brief) methodology (in supplementary material?) for those who are interested in using the data. Information such as: 1) how “country affiliation of authors” were determined (i.e., what happens when multiple authors are involved?); 2) what “search words” were used in native languages; and, 3) names of search engines used for each literature search... etc. would be quite useful. (Estrada, Yuka, IPCC WGII TSU)
382.8	1	33	0	0	0	Figure 1-1: Robinson projection is the recommended projection for global maps. Please ensure this projection is used wherever possible to have a consistent presentation across the volume. This figure could look more concise and synthesized if we can find a way to combine and organize the data differently. TSU can help further refine the presentation of this figure. (Estrada, Yuka, IPCC WGII TSU)
383.9	1	33	0	0	0	Figure 1-1. For panel A, it would be helpful to further clarify the variable being plotted on the y-axis--number of publications. For panel B, it would be helpful to provide a title for the panel along with a label B. For panel C, it would again be helpful to clarify that the metric presented is number of publications. Within the parenthetical, it might clearest to say “region mentioned in title, keywords, or abstract.” For panel D, it would be helpful to provide a title indicating that the data indicate the number of publications in different languages. (Mach, Katharine, IPCC WGII TSU)
385	1	33	0	33	0	Figure 1-1: See broad comments in File: IPCC-AR5-NBCCRC-Maclellan-2013.pdf. Essentially the analysis here should be greatly expanded. (MacLellan, James, University of New Brunswick)
386.1	1	33	0	34	0	Figure 1-1. The results are not solely for an English literature search as suggested by the beginning of the caption, because four other languages are mentioned explicitly in (c) and (d). The map, having over 102,000 citations for 2001-10 for Europe, suggests that even more languages, such as German, may have been included, because 102,000 exceeds the European total in (c) and is not far short of the global total in (d). But overall this is a good illustration. (Parker, David, Met Office Hadley Centre)
387.1	1	34	0	0	0	Figure 1-2: See broad comments in File: IPCC-AR5-NBCCRC-Maclellan-2013.pdf. Essentially the attempt to portray broader trends across assessment reports needs greater interpretation. (MacLellan, James, University of New Brunswick)
388.2	1	34	0	0	0	Figure 1-2. A few small points. 1st, is the title provided for the 2nd assessment report correct? It differs from the title provided in the reference list for the chapter. 2nd, it would be preferable to match casing for all chapter titles; currently presentation switches between sentence case and title case. 3rd, within the legend, it may be most accurate to say “observed impacts, scenarios, and projected impacts.” (Mach, Katharine, IPCC WGII TSU)
389.3	1	35	0	0	0	Figure 1-3 (g) contains a world map with national borders. It is suggested to use a map without borders to avoid unnecessary disputes. (CHINA)
390.4	1	35	0	0	0	Figure 1-3: It will be useful to make vulnerability map less skewed and/or bigger in order to convey effectively this example of synthesis of multiple stressors. (Estrada, Yuka, IPCC WGII TSU)

#	Ch	From Page	From Line	To Page	To Line	Comment
391.5	1	35	0	0	0	Figure 1-3: The figure panels are very difficult to read, and I would strongly recommend a different layout that allows them to be displayed more clearly. In addition, please explain in the caption and/or associated chapter text how panel (g) is calculated, as well as its relation to the other panels. (Mastrandrea, Michael, IPCC WGII TSU)
392.6	1	36	0	0	0	Figure 1-4: The treatment of "agreement", "evidence", and "confidence" is very difficult to explain to the general public. Referencing the 1010 IPCC Uncertainty Guidance - along with the inclusion of the confidence figure and likelihood table from that document would be very beneficial. (UNITED STATES OF AMERICA)
393.6	1	36	0	0	0	Figure 1-5: It would be helpful to explain why the 2100 RF projections for the RCP's do not intersect the far y-axis at their designated forcing targets. (UNITED STATES OF AMERICA)
394.7	1	36	0	0	0	Figure 1-5: The figure caption needs more explanation and detail for non-experts to understand. All elements of the figure need to be explained, so that it can stand alone. You should formally define RF, RCP and SRES unless it is done somewhere (and made very clear) in the text prior to citing this figure. Colors should be consistent between the two plots. (Estrada, Yuka, IPCC WGII TSU)
395.8	1	36	0	0	0	Figure 1-5. Within the caption, it might be helpful to clarify why the SRES RF are shifted upwards to match at year 2000. It might be helpful to also clarify how the yellow square/Circle comparison plays out for other scenarios--would the same downward shift be observed? Are there resulting implications for comparison with RCP temperature projections? (Mach, Katharine, IPCC WGII TSU)
396.9	1	37	0	0	0	Figure 1-6. In final production of this graphic, it would be clearest to provide spacing between the columns for differing countries. (Mach, Katharine, IPCC WGII TSU)
398	1	37	0	0	0	Figure 1-6: It could be useful to organize this figure chronologically rather than by country to show patterns in the categorization over time (if any). (Mastrandrea, Michael, IPCC WGII TSU)
399.1	1	38	0	0	0	Figure 1-7: \nThis figure is very policy relevant, and with improvements it could also convey the AR5-WG2-concept of the eras of climate responsibility and option, and be included in the SPM. The figure should be accompanied by the text Ch1 P 12 L 14-30. The legend should explain the "opportunity space" in this context by inserting after the first sentence: "Rapidly advancing climate science provides an "opportunity space" for policy relevant information to support policy decisions. The pathways identified in this report point to an era of climate responsibility, addressing the interconnectedness of multiple vulnerabilities for unavoidable impacts, and the era of climate options, the opportunity space to transform our actions toward a low risk and high resilient future." (from Ch 1, P 12 and P 10).\n\nSpecific suggestions: \n- details are too small, please enlarge figure and reduce detail\n- Inequality as societal stressors is mentioned twice.\n- the horizontal axis should indicate the two eras. \n- explain what the sections in the circle show.\n- legend of green/red policy decisions should be outside the graph, not on the time axis\n- explain the red arrows (are these two biophysical stressors?) \n- what a the link between the sectors indicated in the middle of the left circle and the wedges (planetary systems according Rockström)\n- is the green arrow (climate change) a process transgressing a planetary boundary? (is climate change not be a biophysical stressor?) (GERMANY)
400.1	1	38	0	0	0	Figure 1-7 Comment: there is no graphical differences between "today" biophysycal and societal stressos interactions and "tomorrow" scenario (see the one on the top of low vulnerability, low risk and high resilience.) It has to be modified because present time is equal to best future at the graph. (Tancredi, Elda, National University of Lujan. IHDP-Argentina)
401.2	1	38	0	0	0	Figure 1-7 Comment: at "today" graph, where Societal Stressors are listed, concept INEQUALITY is twice (Tancredi, Elda, National University of Lujan. IHDP-Argentina)

#	Ch	From Page	From Line	To Page	To Line	Comment
402.3	1	38	0	0	0	Fig 1-7: More general language such as "biophysical boundaries" would be preferable to "planetary boundaries" which is intimately linked to a specific concept of Rockstrom and colleagues. The planetary boundary concept tries to define boundaries for earth system variables/systems which will maintain a Holocene like state, for the benefit of humankind, not the planet itself. Therefore the term 'planetary boundaries' is potentially misleading and could be misunderstood by readers not familiar with the Rockstrom et al. concept. (CANADA)
403.4	1	38	0	0	0	Figure 1-7: This figure is not helpful; the authors should strongly consider deleting it. (UNITED STATES OF AMERICA)
404.5	1	38	0	0	0	Figure 1.7: Many ingredients of this figure do not appear to have a clear meaning:\n- what is the meaning of the white inner area in the first circle on the left? What about the arrows ? (what is, for example, the effect of education on resilience ? shouldn't it help increasing resilience, among other benefits?)\n- what is the effect of "biophysical stressors" on the "planetary boundaries" (are those PBs reached due to the stressors or changed due to them ? how is this defined / explained ?)\n- what is the meaning of the green area "resilience space" ? \n- right circles : what is the cause of "low risk" here ? more mitigation ? less vulnerability ? are these two always associated ? (there should be "socio-economic pathways" that facilitates both types of objectives, but not necessarily all of these pathways?)\n- what is the precise meaning of the blue and red colours on the maps on the right (3 red and 6 blue means less risk ? what are the "wedges" ?) (Marbaix, Philippe, Université catholique de Louvain)
405.6	1	38	0	0	0	Figure 1-7: This figure may be too complex and too detailed to convey the main message effectively. The author team should further develop the caption for this figure to provide a guide for readers in interpreting the concepts depicted. The left side of the figure particularly needs to be explained further and/or illustrated a little more clearly to help the audience visualize the main concept of this figure. For instance, what is the social boundary and planetary boundary? How are these interacting with climate change? The arrow indicating climate change on the right make it looks like climate change is originating from social boundaries which are comprised of social stressors. (Estrada, Yuka, IPCC WGII TSU)
406.6	1	38	0	0	0	Figure 1-8: The information provided in this figure is redundant. I think Table 1-1 provides the same information more effectively, and also offers more information by having trend data. (Estrada, Yuka, IPCC WGII TSU)
407.7	1	38	0	0	0	Figure 1-8. The chapter team is encouraged to prioritize development of the table presenting this information, as compared to this graphical version. The overall point driven home by this graphic is perhaps the visual pattern of all of the colored boxes; however, the visual pattern achieved seems merely a function of what changes one decides to include in the plots. The most important information--what has changed or what will change--is buried, as it is difficult for a reader to remember what each colored cell stands for. Additionally, it is similarly difficult for the reader to compare how understanding varies between observations and projections given the need to remember what each colored box stands for. (Mach, Katharine, IPCC WGII TSU)
408.8	1	38	0	38	0	The same above (DIAZ MOREJON, CRISTOBAL FELIX, Ministry of Science, Technology and the Environment)