

Comment ID	From Page	From Line	To Page	To Line	Comment	Response
71561	0				Some links of the Table don't work. Some datasets available through specific links are not included (e.g. AGCD: <a href="https://data.gov.au/dataset/ds-bom-ANZCW0503900567/details?q=">https://data.gov.au/dataset/ds-bom-ANZCW0503900567/details?q=</a> or <a href="http://www.bom.gov.au/metadata/catalogue/19115/ANZCW0503900567">http://www.bom.gov.au/metadata/catalogue/19115/ANZCW0503900567</a> ), which do the criterium is to include or not an specific link? A detailed review of the links should be don in order to include the available links and remove or update the non-available. [Sixto Herrera, Spain]	Taken into account. A check of listed data sets and links has been undertaken prior to FGD submission.
29227	3	1	3	1	It is recommended to increase coverage of observational data for SLCFs (Chapter 6); currently only MISR, MODIS, and TOAR are included. This is in a sharp contrast with those from Chapter 5, where more than 30 observations (including those at points) are registered. Maybe better to mention gas satellite observations (GOME, SCIAMACHY, GOME-2, OMI, IASI), network observations including EANET, SPARTAN, IMPROVE, EMEP, EPA, and some other key ground stations. [Yugo Kanaya, Japan]	Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s).
30035	3		19		This list documents observational data sets used in working Group I in IPCC 6. This is very necessary to track where the conclusions obtained in the assessment originally come from. Therefore, one may further judge the uncertainty or confidence levels of the conclusions written in the scientific assessments. Furthermore, this Annex I also provide an opportunity of inter-comparisons among the different datasets of observations. One suggestion is to add the contribution from China, especially for nearly 100-yr surface datasets, by using of which the paper on 100-yr temperature cures in China have been published by the National climate Data Center, China Meteorological Administration, Beijing, China (contact point: Yan Zhongwei, the institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China). [Yihui Ding, China]	Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s). Intercomparison of data sets, where appropriate, falls within the remit of the individual chapters where those data sets are used.
2959	4	1	19	20	The paper had the observed temperature in the Arctic region ( Jianbin Huang, Xiangdong Zhang, Qiyi Zhang, Yanluan Lin, Mingju Hao, Yong Luo,Zongci Zhao, Yao Yao, Xin Chen, Lei Wang, Suping Nie, Yizhou Yin, Ying Xu and Jiansong Zhang, 2017, Recently amplified arctic warming has contributed to a continual global warming trend. Nature Climate Change, 10.1038/s41558-017-0009-5) [Zong Ci Zhao, China]	Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s).
79879	4	10	4	10	Citation and link (where available): "Imaoka et al., 2010 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> " should be cited instead of "Kummerow, 2015 <a href="https://lance.nsstc.nasa.gov/amr2-science/data/level2/rainocean/">https://lance.nsstc.nasa.gov/amr2-science/data/level2/rainocean/</a> ". Imaoka, K., Kachi, M., Fujii, H., Murakami, H., Hori, M., Ono, A., Igarashi, T., Nakagawa, K., Oki, T., Honda, Y., and Shimoda, H. (2010) Global Change Observation Mission (GCOM) for Monitoring Carbon, Water Cycles, and Climate Change, Proc. of the IEEE, 98, 717-732. [Shoichi Shige, Japan]	Taken into account. Citations have been updated where required prior to FGD.
80535	4	10	4	10	Imaoka et al. (2010) is suitable for the AMSR2, instead of Kummerow et al. (2015), because the AMSR2 is the JAXA's sensor. AMSR2 data is available from " <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> ". K. Imaoka, M. Kachi, H. Fujii, H. Murakami, M. Hori, A. Ono, T. Igarashi, K. Nakagawa, T. Oki, Y. Honda, and H. Shimoda; "Global Change Observation Mission (GCOM) for Monitoring Carbon, Water Cycles, and Climate Change," Proc. of the IEEE, IEEE, Vol. 98, pp. 717-732, May 2010. <a href="https://ieeexplore.ieee.org/document/5446360">https://ieeexplore.ieee.org/document/5446360</a> [Takuji Kubota, Japan]	Taken into account. Citations have been updated where required prior to FGD.
80537	4	11	4	11	AMSR-E data is available from " <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> ". [Takuji Kubota, Japan]	Taken into account. A check of listed data sets and links has been undertaken prior to FGD submission.
67573	4		4		Add the reference for AIRS V6 climate data products: Tian, B., Manning, E., Fetzer, E. J., Olsen, E. T., Wong, S., Susskind, J., & Iredell, L. (2013), AIRS/AMSU/HSB Version 6 Level 3 product user guide, available at <a href="http://disc.sci.gsfc.nasa.gov/AIRS/documentation/v6_docs/">http://disc.sci.gsfc.nasa.gov/AIRS/documentation/v6_docs/</a> . Tian, B., Fetzer, E. J., & Manning, E. M. (2019), The Atmospheric Infrared Sounder Obs4MIPs Version 2 Data Set, Earth Space Sci., 6(2), 324-333, <a href="https://doi.org/10.1029/2018ea000508">https://doi.org/10.1029/2018ea000508</a> [Baijun Tian, United States of America]	Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s).
104807	6	27	6	30	The information on COSMO-reanalysis products is not consistent: 1) It should be COSMO, instead of COSMOS. 2) Two versions exist: COSMO-REA6 and COSMO-REA2, which are of different length. The given reference Wahl et al. is a description of COSMO-REA2, which covers the period 2007 to 2013 (at 2 km for Central Europe). // COSMO-REA6 covers 1995-2019 and is described in <a href="https://doi.org/10.1002/qj.2486">https://doi.org/10.1002/qj.2486</a> (Bollmeyer et al.). The link for data access for COSMO-REA6 is: <a href="https://opendata.dwd.de/climate_environment/REA/">https://opendata.dwd.de/climate_environment/REA/</a> [Frank Kaspar, Germany]	Taken into account. Citations have been updated where required prior to FGD.
39057	8	0	8	0	I would say ERA-Interim, like ERA-40, is available 3-hourly. [Federico Serva, Italy]	Accepted. Listing corrected.
39059	8	0	8	0	ERA-Interim/Land does not have 60 vertical levels (while this is the case for ERA-Interim) [Federico Serva, Italy]	Accepted. Listing corrected.

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363	8	0	8	70	<p>ESA CCI greenhouse gasses (GHG) data sets have been used (e.g., citations Houweling et al., 2015; Reuter et al., 2017; Palmer et al., 2019) but this information is missing in the table. Please add a line with this content:</p> <p>Name: ESA CCI GHG Version: L2 Type: Remote sensing Resolution: Satellite footprint sampling (spatial: SCIAMACHY: 50 km; GOSAT: 10 km) Chapter: 5 Time period: 2003-2015 Citation &amp; link: Buchwitz et al., 2015; <a href="http://cci.esa.int/ghg">http://cci.esa.int/ghg</a> Reference: Buchwitz et al., 2015: Buchwitz, M., M. Reuter, O. Schneising, H. Boesch, S. Guerlet, B. Dils, I. Aben, R. Armante, P. Bergamaschi, T. Blumenstock, H. Bovensmann, D. Brunner, B. Buchmann, J. P. Burrows, A. Butz, A. Chedin, F. Chevallier, C. D. Crevoisier, N. M. Deutscher, C. Frankenberg, F. Hase, O. P. Hasekamp, J. Heymann, T. Kaminski, A. Laeng, G. Lichtenberg, M. De Maziere, S. Noel, J. Notholt, J. Orphal, C. Popp, R. Parker, M. Scholze, R. Sussmann, G. P. Stiller, T. Warneke, C. Zehner, A. Bril, D. Crisp, D. W. T. Griffith, A. Kuze, C. O'Dell, S. Oshchepkov, V. Sherlock, H. Suto, P. Wennberg, D. Wunch, T. Yokota, Y. Yoshida, The Greenhouse Gas Climate Change Initiative (GHG-CCI): comparison and quality assessment of near-surface-sensitive satellite-derived CO<sub>2</sub> and CH<sub>4</sub> global data sets, Remote Sensing of Environment, 162, 344-362, doi:10.1016/j.rse.2013.04.024, 2015. [Michael Buchwitz, Germany]</p>	<p>Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s).</p>
82841	8	1	8	1	<p>The ESA CCI Sea State dataset V1 that I suggest to mention in Chapter 9 can be included in this Annex. The required information are: Name : ESA CCI Sea State Version : V1.1 Type : Remote sensing Resolution (time and space) : Monthly, 1x1° Time period : 1992-2018 Citation and link (where available) : Dodet et al. 2020 <a href="ftp://anon-ftp.ceda.ac.uk/neodc/esacci/sea_state/data/v1.1_release/14/v1.1/">ftp://anon-ftp.ceda.ac.uk/neodc/esacci/sea_state/data/v1.1_release/14/v1.1/</a> Dodet, G., Piolle, J.-F., Quilfen, Y., Abdalla, S., Accensi, M., Arduin, F., Ash, E., Bidlot, J.-R., Gommenginger, C., Marechal, G., Passaro, M., Quartly, G., Stopa, J., Timmermans, B., Young, I., Cipollini, P., Donlon, C., 2020. The Sea State CCI dataset v1: towards a Sea State Climate Data Record based on satellite observations. Earth System Science Data Discussions 1–28. <a href="https://doi.org/10.5194/essd-2019-253">https://doi.org/10.5194/essd-2019-253</a> [Guillaume Dodet, France]</p>	<p>Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s).</p>
17915	8	15	8	15	<p>Time period: 1995-2019. There is a more updated article you can include for pH data in ESTOC: Santana-Casiano, J. M. and González-Dávila, M. 2015. Ocean acidification in the Canary Current Large Marine Ecosystem. In: Oceanographic and biological features in the Canary Current Large Marine Ecosystem. Valdés, L. and Déniz-González, I. (eds). IOC-UNESCO, Paris. IOC Technical Series, No. 115, pp. 343-349. URI: <a href="http://hdl.handle.net/1834/9200">http://hdl.handle.net/1834/9200</a>. Also the web page for the data is not available anymore, new web page is <a href="http://siboy.plocan.eu/buoy/ESTOC">http://siboy.plocan.eu/buoy/ESTOC</a>. Data from 1995-2010 are available in PANGAEA (see e.g. <a href="https://doi.pangaea.de/10.1594/PANGAEA.856616">https://doi.pangaea.de/10.1594/PANGAEA.856616</a>) [Patricia Lopez Garcia, United Kingdom (of Great Britain and Northern Ireland)]</p>	<p>Taken into account. Citations have been updated where required prior to FGD.</p>
108969	9	18	9	18	<p>Link to GPCC dataset is outdated. Preferred way of referencing the dataset is the Digital Object Identifier (DOI): <a href="https://dx.doi.org/10.5676/DWD_GPCC/FD_M_V2018_025">https://dx.doi.org/10.5676/DWD_GPCC/FD_M_V2018_025</a> [Frank Kaspar, Germany]</p>	<p>Taken into account. DOIs/persistent links have been included if available.</p>
108967	9	26	9	27	<p>Two entries for GISTEMP should be merged. [Frank Kaspar, Germany]</p>	<p>Rejected. These entries are for different versions of GISTEMP used in SOD by different chapters. FGD entries reflect the data set versions used in FGD.</p>
54865	9		9		<p>The reference for GOSAT XCH<sub>4</sub> observations (Yoshida et al. 2011) is somewhat outdated and does not correspond to the current version of the dataset as presented at the companion link provided as a reference. The actual data more closely correspond to Yoshida et al. (2013), which is available at this open access address: <a href="https://www.atmos-meas-tech.net/6/1533/2013/">https://www.atmos-meas-tech.net/6/1533/2013/</a> [Nancy Hamzawi, Canada]</p>	<p>Taken into account. Citations have been updated where required prior to FGD.</p>

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79195	10	2	10	3	Following dataset should be included in the list. Name: Global Precipitation Measurements (GPM) Dual-frequency Precipitation Radar (DPR), Version: 6.0, Type: Remote sensing, Resolution: Orbital, 5km horizontal, 250m vertical, Chapter: 10, 11, Time Period: 2014-2019, Citation: Iguchi T. , 2020: Dual-Frequency Precipitation Radar (DPR) on the Global Precipitation Measurement (GPM) Mission's Core Observatory. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 67. Springer, Cham, <a href="https://doi.org/10.1007/978-3-030-24568-9_11">https://doi.org/10.1007/978-3-030-24568-9_11</a> <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a> [Yukari Takayabu, Japan]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
79201	10	2	10	3	Following dataset should be included in the list. Name: GPM Spectral Latent Heating (GPM SLH), Version: 6.0, Type: Remote sensing, Resolution: Orbital, 5km horizontal, 250m vertical, Chapter: 2, 10, Time Period: 2014-2019, Citation: Takayabu Y.N., Tao WK. (2020) Latent Heating Retrievals from Satellite Observations. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 69. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-35798-6_22">https://doi.org/10.1007/978-3-030-35798-6_22</a> <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a> [Yukari Takayabu, Japan]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
79197	10	7	10	8	Following dataset should be included in the list. Name: Global Satellite Mapping of Precipitation (GSMaP), Version 6, Type: Remote sensing, Resolution: 1-hourly, 0.1deg x 0.1deg, Chapter: 2,10, Time Period: 2000-2020, Citation: T. Kubota, K. Aonashi, T. Ushio, S. Shige, Y. N. Takayabu, M. Kachi, Y. Arai, T. Tashima, T. Masaki, N. Kawamoto, T. Mega, M. K. Yamamoto, A. Hamada, M. Yamaji, G. Liu and R. Oki (2020) Global Satellite Mapping of Precipitation (GSMaP) Products in the GPM Era. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 67. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-24568-9_20">https://doi.org/10.1007/978-3-030-24568-9_20</a> <a href="https://sharaku.eorc.jaxa.jp/GSMaP/index.htm">https://sharaku.eorc.jaxa.jp/GSMaP/index.htm</a> [Yukari Takayabu, Japan]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
79881	10		10		The following dataset should be included.  Name: Global Precipitation Measurements (GPM) Dual-frequency Precipitation Radar (DPR) Version: 6.0 Type: Remote sensing Resolution: Instantaneous, 5km Chapter: 10, 11 Time Period: 2014-2019 Citation and link (where available): Iguchi, 2000 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a>  Iguchi T. (2020). Dual-Frequency Precipitation Radar (DPR) on the Global Precipitation Measurement (GPM) Mission's Core Observatory. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 67. Springer, Cham, 183-192, <a href="https://doi.org/10.1007/978-3-030-24568-9_11">https://doi.org/10.1007/978-3-030-24568-9_11</a> . [Shoichi Shige, Japan]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).

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79883	10		10		<p>The folloing dataset should be included.</p> <p>Name: Global Satellite Mapping of Precipitation (GSMaP)                      Version: 6                      Type: Remote sensing                      Resolution: 1-hourly, 0.1° x 0.1°                      Chapter: 2,10                      Time Period: 1997-2019                      Citation and link (where available): Kubota et al. (2020) <a href="https://sharaku.eorc.jaxa.jp/GSMaP/index.htm">https://sharaku.eorc.jaxa.jp/GSMaP/index.htm</a></p> <p>Kubota, K. Aonashi, T. Ushio, S. Shige, Y. N. Takayabu, M. Kachi, Y. Arai, T. Tashima, T. Masaki, N. Kawamoto, T. Mega, M. K. Yamamoto, A. Hamada, M. Yamaji, G. Liu and R. Oki (2020). Global Satellite Mapping of Precipitation (GSMaP) Products in the GPM Era. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 67. Springer, Cham, 355-373, <a href="https://doi.org/10.1007/978-3-030-24568-9_20">https://doi.org/10.1007/978-3-030-24568-9_20</a> [Shoichi Shige, Japan]</p>	<p>Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).</p>
79885	10		10		<p>The folloing dataset should be included.</p> <p>Name: GPM Spectral Latent Heating (GPM SLH)                      Version: 6.0                      Type: Remote sensing                      Resolution: Instatneous, 5km                      Chapter: 2, 10                      Time Period: 2014-2019                      Citation and link (where available): Takayabu and Tao, 2020 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a>  <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a></p> <p>Takayabu Y.N., Tao W.-K. (2020). Latent Heating Retrievals from Satellite Observations. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 69. Springer, Cham, 897-915, <a href="https://doi.org/10.1007/978-3-030-35798-6_22">https://doi.org/10.1007/978-3-030-35798-6_22</a>. [Shoichi Shige, Japan]</p>	<p>Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).</p>
80539	10		10		<p>The following dataset should be included.</p> <p>Name: Global Precipitation Measurements (GPM) Dual-frequency Precipitation Radar (DPR)                      Version: 6.0                      Type: Remote sensing                      Resolution: Instantaneous, 5km                      Chapter: 10, 11                      Time Period: 2014-2019                      Citation and link (where available): Iguchi, 2000 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a>  <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a></p> <p>Iguchi T. (2020). Dual-Frequency Precipitation Radar (DPR) on the Global Precipitation Measurement (GPM) Mission's Core Observatory. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 67. Springer, Cham, 183-192, <a href="https://doi.org/10.1007/978-3-030-24568-9_11">https://doi.org/10.1007/978-3-030-24568-9_11</a>. [Takuji Kubota, Japan]</p>	<p>Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).</p>

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80541	10		10		<p>The following dataset should be included.</p> <p>Name: Global Satellite Mapping of Precipitation (GSMaP) Version: 6 Type: Remote sensing Resolution: 1-hourly, 0.1° x 0.1° Chapter: 2,10 Time Period: 1997-2019 Citation and link (where available): Kubota et al. (2020) <a href="https://sharaku.eorc.jaxa.jp/GSMaP/index.htm">https://sharaku.eorc.jaxa.jp/GSMaP/index.htm</a></p> <p>Kubota, K. Aonashi, T. Ushio, S. Shige, Y. N. Takayabu, M. Kachi, Y. Arai, T. Tashima, T. Masaki, N. Kawamoto, T. Mega, M. K. Yamamoto, A. Hamada, M. Yamaji, G. Liu and R. Oki (2020). Global Satellite Mapping of Precipitation (GSMaP) Products in the GPM Era. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 67. Springer, Cham, 355-373, <a href="https://doi.org/10.1007/978-3-030-24568-9_20">https://doi.org/10.1007/978-3-030-24568-9_20</a> [Takuiji Kubota, Japan]</p>	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
80543	10		10		<p>The following dataset should be included.</p> <p>Name: GPM Spectral Latent Heating (GPM SLH) Version: 6.0 Type: Remote sensing Resolution: Instantaneous, 5km Chapter: 2, 10 Time Period: 2014-2019 Citation and link (where available): Takayabu and Tao, 2020 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a></p> <p>Takayabu Y.N., Tao W.-K. (2020). Latent Heating Retrievals from Satellite Observations. In: Levizzani V., Kidd C., Kirschbaum D., Kummerow C., Nakamura K., Turk F. (eds) Satellite Precipitation Measurement. Advances in Global Change Research, vol 69. Springer, Cham, 897-915, <a href="https://doi.org/10.1007/978-3-030-35798-6_22">https://doi.org/10.1007/978-3-030-35798-6_22</a>. [Takuiji Kubota, Japan]</p>	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
8687	10		10		HadEX3 - the spatial resolution is 1.875 x 1.25 (four times that of HadEX2) [Robert Dunn, United Kingdom (of Great Britain and Northern Ireland)]	Accepted. Listing corrected.
39061	13	0	13	0	To my knowledge, MERRA-2 is (also) available hourly and 3 hourly [Federico Serva, Italy]	Accepted. Listing corrected.
12191	15		15		The OSISAF/CCI Sea Ice Concentration is made of two data sources: OSI-450 (1979-2015) and OSI-430-b (2016-2019). It appears in Chapter 2 and 9. [Thomas Lavergne, Norway]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
110657	17				There is an extension of Spain02, namely Iberia01 at a higher resolution and including the whole Iberian Peninsula: Herrera, S., Cardoso, R. M., Soares, P. M., Espírito-Santo, F., Viterbo, P., and Gutiérrez, J. M.: Iberia01: a new gridded dataset of daily precipitation and temperatures over Iberia, Earth Syst. Sci. Data, 11, 1947–1956, <a href="https://doi.org/10.5194/essd-11-1947-2019">https://doi.org/10.5194/essd-11-1947-2019</a> , 2019. [Ana Casanueva, Spain]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
79887	18	5	18	5	Resolution: "5km" should be "0.5° x 0.5°". Citation and link (where available): "Iguchi et al., 2009 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a> " should be added.	Taken into account. Details have been corrected. Citations have been updated prior to FGD.
45007	18	5	18	5	The duration of the TRMM Precipitation Radar 3A25 is not "1979-". "1997-" is correct. [Moeka Yamaji, Japan]	Accepted. Listing corrected.
45009	18	5	18	5	The resolution of the TRMM precipitation Radar 3A25 is not "5km x 5km". It should be "0.5 deg x 0.5 deg". <a href="https://gpm.nasa.gov/data-access/downloads/trmm">https://gpm.nasa.gov/data-access/downloads/trmm</a> <a href="https://pps.gsfc.nasa.gov/ppsddocuments.html#version7">https://pps.gsfc.nasa.gov/ppsddocuments.html#version7</a> [Moeka Yamaji, Japan]	Accepted. Listing corrected.

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79889	18	6	18	6	Resolution: "Daily" should be "Instantaneous". Citation and link (where available): "Kummerow et al., 2015" should be cited instead of "Stocker et al., 2018".  Kummerow, C., Randel, D. L., Kulie, M., Wang, N.-Y., Ferraro, R., Munchak, S. J., and Petkovic, V., (2015). The evolution of the Goddard profiling algorithm to a fully parametric scheme. J. Atmos. Oceanic Technol., 32, 2265–2280, doi:10.1175/JTECH-D-15-0039.1. [Shoichi Shige, Japan]	Taken into account. Details have been corrected. Citations have been updated prior to FGD.
45011	18	6	18	6	GPROF should have the version number. "Version is GPROF" is not correct. <a href="https://gpm.nasa.gov/data-news/trmm-level-2-level-3-gprof-processing-announcement">https://gpm.nasa.gov/data-news/trmm-level-2-level-3-gprof-processing-announcement</a> [Moeka Yamaji, Japan]	Accepted. Listing corrected.
79891	18	7	18	7	Name: "TRMM Microwave Imager (TRMM 3B42)" should be "TRMM Multi-satellite Precipitation Analysis (TMPA)". Citation and link (where available): "Huffman et al., 2007" should be cited instead of "Liu et al., 2012b".  Huffman, G. J., et al. (2007). The TRMM Multisatellite Precipitation Analysis (TMPA): Quasi-global, multiyear, combined-sensor precipitation estimates at fine scales. J. Hydrometeor., 8, 38–55, doi:10.1175/JHM560.1. [Shoichi Shige, Japan]	Taken into account. Details have been corrected. Citations have been updated prior to FGD.
45013	18	7	18	7	TMI should have the version number. "Version is TMI" is not correct. [Moeka Yamaji, Japan]	Accepted. Listing corrected.
79893	18	8	18	8	Name: "Tropical Rainfall Measuring Mission Precipitation Radar (TRMM PR)" would be "TRMM Precipitation Radar 2A25" Resolution: "Monthly, 0.5° x 0.5°" should be "Instantaneous, 5 km" Chapter: "8" should be "8, 10, 11" Citation and link (where available): "Iguchi et al., 2009 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a> " should be cited instead of "Haddad et al., 1997".  Iguchi, T., Kozu, T., Kwiatkowski, J., Meneghini, R., Awaka, J., and Okamoto, K. (2009). Uncertainties in the rain profiling algorithm for the TRMM precipitation radar. J. Meteorol. Soc. Japan, 87A, 1–30, doi:10.2151/jmsj.87A.1. [Shoichi Shige, Japan]	Taken into account. Details have been corrected. Citations have been updated prior to FGD.
45015	18	8	18	8	3B42 is "TRMM Multi-satellite Precipitation Analysis (TMPA)", not "TRMM Microwave Imager (3B42)". Huffman et al. (2007) should be cited. <a href="https://doi.org/10.1175/JHM560.1">https://doi.org/10.1175/JHM560.1</a> [Moeka Yamaji, Japan]	Taken into account. Details have been corrected. Citations have been updated prior to FGD.
45017	18	9	18	9	Which version of Tropical Rainfall Measuring Mission Precipitation Radar (TRMM PR)? It may be 3A25, and can be merged into Row 5 "TRMM Precipitation Radar 3A25" and refer the Iguchi 2000 and 2009. Haddad et al. (1997) is old (before the launch). Iguchi et al. 2009 <a href="https://doi.org/10.2151/jmsj.87A.1">https://doi.org/10.2151/jmsj.87A.1</a> [Moeka Yamaji, Japan]	Taken into account. Details have been corrected. Citations have been updated prior to FGD.
79193	18	9	18	10	Following dataset should be included in the list. Name: Tropical Rainfall Measuring Mission (TRMM) Precipitation Radar (PR) 2A25, Version: 7.0, Type: Remote sensing, Resolution: Orbital, 5km horizontal, 250m vertical, Chapter: 10, 11, Time Period: 1997-2014, Citation and Link: Iguchi et al. 2000: Rain-profiling algorithm for the TRMM Precipitation Radar. J. Appl. Meteorol. 39, 2038–2052. <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a> [Yukari Takayabu, Japan]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
79199	18	9	18	10	Following dataset should be included in the list. Name: TRMM Spectral Latent Heating (TRMM SLH), Version: 7.0, Type: Remote sensing, Resolution: Orbital, 5km horizontal, 9 layers in troposphere, Chapter: 2, 10, Time Period: 1997-2014, Citation: Shige, S., Y. N. Takayabu, W.-K. Tao, and C.-L. Shie, 2007: Spectral retrieval of latent heating profiles from TRMM PR data. Part II: Algorithm improvement and heating estimates over tropical ocean regions. J. Appl. Meteor. Climatol., 46, 1098-1124. <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a> [Yukari Takayabu, Japan]	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).

Comment ID	From Page	From Line	To Page	To Line	Comment	Response
79895	18		18		<p>The following data should be included.</p> <p>Name: TRMM Spectral Latent Heating (TRMM SLH) Version: 7.0 Type: Remote sensing Resolution: Orbital, 5km Chapter: 2, 10 Time Period: 1997-2014 Citation and link (where available): Shige et al., 2007 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a></p> <p>Shige, S., Y. N. Takayabu, W.-K. Tao, and C.-L. Shie, 2007: Spectral retrieval of latent heating profiles from TRMM PR data. Part II: Algorithm improvement and heating estimates over tropical ocean regions. <i>J. Appl. Meteor. Climatol.</i>, 46, 1098-1124. [Shoichi Shige, Japan]</p>	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
80545	18		18		<p>The following data should be included.</p> <p>Name: TRMM Spectral Latent Heating (TRMM SLH) Version: 7.0 Type: Remote sensing Resolution: Orbital, 5km Chapter: 2, 10 Time Period: 1997-2014 Citation and link (where available): Shige et al., 2007 <a href="https://gportal.jaxa.jp/gpr/?lang=en">https://gportal.jaxa.jp/gpr/?lang=en</a> <a href="https://storm.pps.eosdis.nasa.gov/storm/">https://storm.pps.eosdis.nasa.gov/storm/</a></p> <p>Shige, S., Y. N. Takayabu, W.-K. Tao, and C.-L. Shie, 2007: Spectral retrieval of latent heating profiles from TRMM PR data. Part II: Algorithm improvement and heating estimates over tropical ocean regions. <i>J. Appl. Meteor. Climatol.</i>, 46, 1098-1124. [Takuji Kubota, Japan]</p>	Taken into account. Data sets have been included in the annex if they are included in FGD of the relevant chapter(s).
45019	23	26	23	27	"The TRMM &lsquo;Day-1&rsquo; Radar/Radiometer..." is erroneous. "The TRMM 'Day-1' Radar/Radiometer " is correct. [Moeka Yamaji, Japan]	Accepted. Listing corrected.
84087	191	10	19	19	10th row of the table in page 19 - The first collum shows only Brazil (Xavier). I suggest the flowing text "Brazil Gridded Met Data from 1980-2013" (Xavier) [Marco Tulio Cabral, Brazil]	Accepted. Listing corrected.
116795					Thank you for this first version for Annex II. Could it be possible to highlight novel datasets compared to AR5, or major changes to datasets compared to AR5, in the Introduction? Please also make sure that the Annex is cited in relevant chapters (provide guidance). It would also be good if there would be links to specific elemnts of chapters using the datasets (corresponding tables, figures). [Valerie Masson-Delmotte, France]	Taken into account. The annex is now linked to chapters at the section level. There are too many new data sets to highlight in this annex and highlighting new data which is particularly significant for an individual chapter is the role of that chapter.
111165					Table Atlas.A.1 lists observational datasets for North, West and Central Asia. Some of them are absent in the Annex I [Volodymyr Osadchy, Ukraine]	Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s).
116797					It would also be good if there would be links to specific elemnts of chapters using the datasets (corresponding tables, figures). [Valerie Masson-Delmotte, France]	Taken into account. The annex is now linked to chapters at the section level.
4569					Same with the suggestion for Chapter 2. [Qingxiang Li, China]	Unclassifiable. This appears to refer to a Chapter 2 comment which is addressed there.
4571					There is another China Global Precipitation dataset (CGP) has been released in 2016 by CMA. And the global precipitation change trend based on CGP is consistent with GPCC and GHCN (Yang et al, 2016). However, it is a pity that it has not been updated during recent years. But I suggest to include it in the Annex_I. Ref: Yang S, W Xu, Y Xu, Q Li, 2016, Development of a global historic monthly mean precipitation dataset. <i>J. Meteor. Res.</i> , 30(2), 217–231, doi: 10.1007/s13351-016-5112-4. [Qingxiang Li, China]	Taken into account. Data sets are included in the annex if they are included in FGD of the relevant chapter(s).
5089					The links to data sources given are improving the transparency of the results. As the printed version of the AR6 will be available on the long-term it would be even better to have persistent links, e.g. via PIDs or DOIs, and ideally persistent access to the data via these links/PIDs. A data reference would comply to the author guidelines, which were signed by many publishers <a href="http://www.copdess.org/enabling-fair-data-project/author-guidelines/">http://www.copdess.org/enabling-fair-data-project/author-guidelines/</a> . [Martina Stockhause, Germany]	Taken into account. DOIs/persistent links are included if available.