

# 10. REFERENCES

## 10.1. CHAPTER 1

- ECLAC (UN Economic Commission for Latin America and the Caribbean). 2020. “Assessment of the Effects and Impacts of Hurricane Dorian in The Bahamas”. Washington D.C.: Inter - American Development Bank, World Health Organization, Pan American Health Organization.
- Google Earth 7.3.3. 2020. Map of the Caribbean Showing CDB BMCs. Google Earth. Available From <https://www.google.com/earth/>.
- Jambou, M. 2015. “ACP-EU Natural Disaster Risk Management in the CARIFORUM.” *European Union*. October 2, 2015. <https://europa.eu/capacity4dev/drr-acp/wiki/acp-eu-natural-disaster-risk-management-cariforum>
- Seria, J. 2018. “The cost of catastrophes.” *The Actuary, March 5, 2018*. [https://www.theactuary.com/features/2018/03/2018/03/05/cost-catastrophes?utm\\_medium=email&utm\\_source=Adestra&utm\\_term=](https://www.theactuary.com/features/2018/03/2018/03/05/cost-catastrophes?utm_medium=email&utm_source=Adestra&utm_term=).

## 10.2. CHAPTER 2

- Campbell, J. D., Taylor, M. A., Stephenson, T. S., Watson, R. A. and Whyte, F. S. 2011. “Future climate of the Caribbean from a regional climate model”. *International Journal of Climatology* 31, 1866–1878. doi:10.1002/joc.2200.
- Climate Studies Group, Mona (CSGM). 2017. “State of the Jamaican Climate 2015: Information for Resilience Building”. Planning Institute of Jamaica (PIOJ), Kingston, Jamaica.
- Giorgi, F., E. Coppola, F. Raffaele, G.T. Diro, R. Fuentes-Franco, G. Giuliani, A. Mamgain, M.P. Llopart, L. Mariotti, and C. Torma. 2014. “Changes in extremes and hydroclimatic regimes in the CREMA ensemble projections”. *Climatic Change* 125(1), 39-51. doi: 10.1007/s10584-014-1117-0.
- Harris, I., P.D. Jones, T.J. Osborne and D.H. Lister. 2014. “Updated high-resolution grids of monthly climatic observations – the CRU TS3.10 Dataset”. *International Journal of Climatology* 34: 623–642. doi:10.1002/joc.3711.
- Intergovernmental Panel on Climate Change (IPCC). 2000. “Special Report on Emissions Scenarios “[Nakicenovic, M., and R. Swart (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 570 pp.
- IPCC. 2007. “Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change” [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 996 pp.
- IPCC. 2013. “Climate Change 2013: The Physical Science Basis”. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.
- Jones, R. G., M. Noguera, D. C. Hassell, D. Hudson, S. S. Wilson, G. J. Jenkins, and J. F. B. Mitchell. 2004. “Generating high resolution climate change scenarios using PRECIS”. Meteorological Office, Hadley Centre, Exeter, United Kingdom.
- Martínez-Castro, D., A. Vichot-Llano, A. Bezanilla-Morlot, A. Centella-Artola, J. Campbell and C. Vilorio-Holguin, 2016. “Performance of RegCM-4.3 over the Caribbean region using different configurations of the Tiedtke convective parameterization scheme”. *Revista de Climatología* 16, 77-98.
- Meinshausen, M., L. Jeffrey, J. Guetschow, Y. Robiou du Pont, J. Rogelj, M. Schaeffer, N. Hohne, M. den Elzen, S. Oberthur, and

- N. Meinshausen. 2015. "National post-2020 greenhouse gas targets and diversity-aware leadership". *Nature Climate Change* 5, 1098-1106. doi: 10.1038/nclimate2826.
- Nakicenovic N., J. Alcamo, A. Grubler, K. Riahi, R. Roehrl, H. Rogner, N. Victor et. A. 2000. "Special Report on Emissions Scenarios (SRES), A Special Report of Working Group III of the Intergovernmental Panel on Climate Change". Cambridge: Cambridge University Press. ISBN 0-521-80493-0
- Taylor, M., A. Centella, J. Charlery, A. Bezanilla, J. Campbell, I. Borrajero, T. Stephenson, and R. Nurmohamed. 2013. "The Precipitation Caribbean Story: Lessons and Legacies". *Bulletin of the American Meteorological Society* 94, 1065–1073. doi: 10.1175/BAMS-D-11-00235.1.
- Taylor, M. A., D. B. Enfield, and A. A. Chen. 2002. "Influence of the tropical Atlantic versus the tropical Pacific on Caribbean rainfall". *Journal of Geophysical Research* 107(C9), 3127. doi:10.1029/2001JC001097.
- Van Vuuren, D.P., J. Edmonds, M. Kainuma, K. Riahi, A. Thomson, K. Hibbard, G.C. Hurtt, Kram, T. Kram, V. Krey, J.F. Lamarque and T. Masui. 2011. "The representative concentration pathways: an overview". *Climatic Change* 109, 5-31.
- Willmott, C. J., K. Matsuura, and D. Legates. 2001. "Terrestrial Air Temperature and Precipitation: Monthly and Annual Time Series (1950–1999)." *Center for Climate Research* version 1.

### 10.3. CHAPTER 3

- Giannini, A., Y. Kushnir, and M. A. Cane. 2000. "Interannual Variability of Caribbean Rainfall, ENSO, and the Atlantic Ocean." *Journal of Climate* 13: 297-311.
- Greene, A. M., L. Goddard, and R. Cousin. 2011. "Web Tool Deconstructs Variability in Twentieth-century Climate." *Eos, Transactions American Geophysical Union* 92: 397-398.
- Harris, I., P. Jones, T. Osborn, and D. Lister. 2014. "Updated High-resolution Grids of Monthly Climatic Observations - the CRU TS3.10 Dataset." *International Journal of Climatology* 34: 623-642.
- IPCC. 2018. "Summary for Policymakers," In *Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* edited by Masson-Delmotte, V., P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, et al. World Meteorological Organization, Geneva, Switzerland, 32 pp.
- Jones, P. D., C. Harpham, I. Harris, C. M. Goodess, A. Burton, A. Centella-Artola, M. A. Taylor, A. Bezanilla-Morlot, D. Martinez-Castro, J. D. Campbell, T. S. Stephenson, O. Joslyn, K. Nicholls and T. Baur. 2015. "Long-term Trends in Precipitation and Temperature across the Caribbean." *International Journal of Climatology* 10.1002/joc.4557
- Jury, M., B. A. Malmgren, and A. Winter. 2007. "Subregional Precipitation Climate of the Caribbean and Relationships with ENSO and NAO." *Journal of Geophysical Research: Atmospheres* 112, D16107.
- Maldonado T, Alfaro E, Hidalgo H. 2018. "Revision of the Main Drivers and Variability of Central America Climate and Seasonal Forecast Systems." *Revista de Biología Tropical* 66: 153–175.
- Martinez, C., Goddard, L., Y. Kushnir, C. Martinez, and M. Ting. 2019. "Seasonal Climatology and Dynamical Mechanisms of Rainfall in the Caribbean." *Climate Dynamics*. <https://doi.org/10.1007/s00382-019-04616-4>.
- McLean, N. M., T. S. Stephenson, M. A. Taylor, and J. D. Campbell. 2015. "Characterization of Future Caribbean Rainfall and Temperature Extremes Across Rainfall Zones." *Advances in Meteorology*, 2015.
- Reynolds, R. W., N. A. Rayner, T. M. Smith, D. C. Stokes, and W. Wang. 2002. "An Improved in situ and Satellite SST Analysis for Climate." *Journal of Climate* 15: 1609-1625.
- Stennett-Brown, R. K., J. J. Jones, T. S. Stephenson, and M. A. Taylor. 2017. "Future Caribbean Temperature and Rainfall Extremes from Statistical Downscaling." *International Journal of Climatology* 37: 4828-4845.
- Stephenson, T. S., L. A. Vincent, T. Allen, C. J. Van Meerbeeck, N. McLean, T. C. Peterson, M. A. Taylor, A. P. Aaron-Morrison, et al. 2014. "Changes in Extreme Temperature and Precipitation in the Caribbean Region, 1961–2010." *International Journal of Climatology*. DOI: 10.1002/joc.3889. IF 3.76 Google Citations 74.

- Taylor, M. A., D. B. Enfield, and A. A. Chen. 2002. "Influence of the Tropical Atlantic versus the Tropical Pacific on Caribbean Rainfall." *Journal of Geophysical Research: Oceans* 107: 3127.
- Taylor M.A. and E.J. Alfaro. 2005. "Central America and the Caribbean, Climate of." In *Encyclopedia of World Climatology, Encyclopedia of Earth Science Series* edited by J.E. Oliver. Springer, Dordrecht.
- Wang C., and S-K. Lee. 2007. "Atlantic Warm Pool, Caribbean Low-level Jet, and Their Potential Impact on Atlantic Hurricanes." *Geophysical Research Letters* 34:L02703
- Willmott, C. J., K. Matsuura, and D. Legates. 2001. "Terrestrial Air Temperature and Precipitation: Monthly and Annual Time Series (1950–1999)." *Center for Climate Research* version 1.

## 10.4. CHAPTER 4

- Bell, G. D., E. S. Blake, C. W. Landsea, T. B. Kimberlain, S. B. Goldenberg, J. Schemm, and R. J. Pasch. 2012. [Tropical cyclones] Atlantic basin [in "State of the Climate in 2011"]. *Bulletin of the American Meteorological Society* 93: S99-S105. doi:10.1175/2012BAM State of the Climate.
- Bender, M. A., T. R. Knutson, R. E. Tuleya, J. J. Sirutis, G. A. Vecchi, S. T. Garner, and I. M. Held. 2010. "Modeled Impact of Anthropogenic Warming on the Frequency of Intense Atlantic Hurricanes." *Science* 327: 454-458. doi:10.1126/science.1180568.
- Blunden, J., and D.S. Arndt. 2016. "State of the Climate in 2015." *Bulletin of the American Meteorological Society* 97 (8): Si-S275. <http://doi.org/10.1175/2016BAMSStateoftheClimate.1>
- Burgess, C., M. Taylor, N. Spencer, J. Jones and T. Stephenson. 2018. "Estimating damages from climate-related natural disasters for the Caribbean at 1.5 °C and 2 °C global warming above preindustrial levels." *Reg Environ Change* 18, 2297–2312; <https://doi.org/10.1007/s10113-018-1423-6>
- Church, J. A., and N.J. White. 2006. "A 20th Century Acceleration in Global Sea-level Rise." *Geophysical Research Letters* 33 (1): 94–97. <http://doi.org/10.1029/2005GL024826>
- Emanuel, K. 2007. "Environmental Factors Affecting Tropical Cyclone Power Dissipation." *Journal of Climate* 20: 5497-5509. doi:10.1175/2007JCLI1571.1.
- Guha-Sapir D., R. Below, P. Hoyois. 2015. EM-DAT: International disaster database. Catholic University of Louvain, Brussels
- Herrera, D.A, and T. Ault. 2017. "Insights from a New High-resolution Drought Atlas for the Caribbean Spanning 1950 to 2016." *Journal of Climate* 30 (19): 26,
- Herrera, D. A., T.R. Ault, J.T. Fasullo, S.J. Coats, C.M. Carrillo, B.I. Cook, and A.P. Williams. 2018. "Exacerbation of the 2013–2016 Pan-Caribbean Drought by Anthropogenic Warming." *Geophysical Research Letters* 45: 10,619–10,626. <https://doi.org/10.1029/2018GL079408>
- Kopp, R.E. A.C. Kemp, K. Bittermann, B.P. Horton, J.P. Donnelly, W. R. .Gehrels, C. C. Hay, J. X. Mitrovica, E. D. Morrow, and S. Rahmstorf. 2016. "Temperature-driven Global Sea-level Variability in the Common Era." *Proceedings of the National Academy of Sciences of the United States of America* 113 (38).
- Landsea, C. W., and J. L. Franklin. 2013. "Atlantic Hurricane Database Uncertainty and Presentation of a New Database Format." *Monthly Weather Review* 141: 3576-3592, doi:10.1175/MWR-D-12-00254.1
- Palanisamy, H., M. Becker, B. Meyssignac, O. Henry, and A. Cazenave. 2012. "Regional Sea Level Change and Variability in the Caribbean Sea Since 1950." *Journal of Geodetic Science* 2(2): 125–133. <http://doi.org/10.2478/v10156-011-0029-4>
- Torres, R. R., and M.N. Tsimplis. 2013. "Sea-level Trends and Interannual Variability in the Caribbean Sea." *Journal of Geophysical Research: Oceans* 118 (6): 2934-2947. <https://doi.org/10.1002/jgrc.20229>
- Torres, R. R., and M. N. Tsimplis. 2014. "Sea Level Extremes in the Caribbean Sea." *Journal of Geophysical Research: Oceans* 119: 4714– 4731, doi:10.1002/2014JC009929
- Walters, R. "Examining Drought in Jamaica and the Caribbean." Master's thesis, UWI, Mona, 2018.
- Webster, P.J., G.J. Holland, J.A. Curry, and H.-R. Chang. 2005. "Changes in Tropical Cyclone Number, Duration, and Intensity in

a Warming Environment.” *Science* 309 (5742):1844–6.

Yi, S., W. Sun, K. Heki, and A. Qian. 2015. “An Increase in the Rate of Global Mean Sea Level Rise since 2010.” *Geophysical Research Letters* 42: 1–9. <http://doi.org/10.1002/2015GL063902>

## 10.5. CHAPTER 5

Antuña-Marrero, J.C., O.H. Otterå, A. Robock, and M.D. Mesquita. 2015. “Modelled and Observed Sea Surface Temperature Trends for the Caribbean and Antilles.” *International Journal of Climatology* 36(4): 1873–1886. doi: 10.1002/joc.4466.

Bender, M.A., T.R. Knutson, and R.E. Tuleya. 2010. “Modeled Impact of Anthropogenic Warming on the Frequency of Intense Atlantic Hurricanes.” *Science* 327(5964): 454–458. <http://www.ncbi.nlm.nih.gov/pubmed/20093471>.

Brown, A.B., M.A. Taylor, T.S. Stephenson, J.D. Campbell, C. Douglas, and J. Jones. 2017. “Barbados: Historical and Future Climatic Changes.” Prepared by the Climate Studies Group, UWI, Mona (CSGM).

Campbell, J. D., Taylor, M. A., Stephenson, T. S., Watson, R. A. and Whyte, F. S. 2011. “Future climate of the Caribbean from a regional climate model”. *International Journal of Climatology* 31, 1866–1878. doi:10.1002/joc.2200.

Coles, S. G., and J. A. Tawn. 1990. “Statistics of coastal flood prevention”. *Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences* 332(1627), 457–476

Emanuel, K. 2007. “Environmental Factors Affecting Tropical Cyclone Power Dissipation.” *Journal of Climate* 20 (22): pp.5497–5509. <http://journals.ametsoc.org/doi/abs/10.1175/2007JCLI1571.1>.

Hall, Trevor C., A. M. Sealy, T. S. Stephenson, S. Kusunoki, M. A. Taylor, A. A. Chen, and A. Kitoh. 2013. “Future climate of the Caribbean from a super-high-resolution atmospheric general circulation model.” *Theoretical and applied climatology* 113, no. 1-2: 271–287. doi: 10.1007/s00704-012-0779-7.

Horton, R., C. Herweijer, C. Rosenzweig, J. Liu, V. Gornitz and A.C. Ruane. 2008. “Sea Level Rise Projections for Current Generation CGCMs Based on the Semi-empirical Method.” *Geophysical Research Letters* 35, L02715.

Hunter, J. 2012. “A simple technique for estimating an allowance for uncertain sea-level rise”. *Climatic Change* 113(2), 239–252.

IPCC. 2012. “Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change” [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, UK, and New York, NY, USA, 582 pp

IPCC. 2013. “Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change” [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp, doi:10.1017/CBO9781107415324.

Karmalkar, A. V., M. A. Taylor, J. Campbell, T. Stephenson, M. New, A. Centella, A. Benzanilla, J. Charlery, 2013. “A Review of Observed and Projected Changes in Climate for the Islands in the Caribbean. Invited Paper.” *Atmosfera* 26 (2), 283–309.

Knutson, T. R., J.J. Sirutis, T.S. Garner, G.A. Vecchi, and I.A. Held. 2008. “Simulated Reduction in Atlantic Hurricane Frequency under Twenty-first-Century Warming Conditions.” *Nature Geoscience*. doi:10.1038/ngeo202

Knutson, T.R., J.L. McBride, J. Chan, K. Emanuel, G. Holland, C. Landsea, I. Held, J.P. Kossin, A.K. Srivastava, and M. Sugi. 2010. “Tropical Cyclones and Climate Change.” *Nature Geoscience* 3: 157–163. doi:10.1038/ngeo779.

Knutson, Thomas R., J.J. Sirutis, G.A. Vecchi, S. Garner, M. Zhao, H.-S. Kim, M. Bender, et al. 2013. “Dynamical Downscaling Projections of Twenty-First-Century Atlantic Hurricane Activity: CMIP3 and CMIP5 Model-Based Scenarios.” *Journal of Climate* 26: 6591–6617. doi: <http://dx.doi.org/10.1175/JCLI-D-12-00539.1>

McLean, N. M., T. S. Stephenson, M. A. Taylor, and J. D. Campbell. 2015. “Characterization of Future Caribbean Rainfall and Temperature Extremes Across Rainfall Zones.” *Advances in Meteorology*, 2015.

Mcsweeney, C., New, M., Lizcano, G. and Lu, X., 2010. The UNDP Climate Change Country Profiles: Improving the accessibility

of observed and projected climate information for studies of climate change in developing countries. *Bulletin of the American Meteorological Society*, 91(2), pp.157-166.

- Merrifield, M.A., E. Leuliette, P. Thompson, D. Chambers, B.D. Hamlington, S. Jevrejeva, J.J. Marra, M. Menendez, G.T. Mitchum, R.S. Nerem, and W. Sweet, Eds. 2016. "Sea Level Variability and Change [In "State of the Climate in 2015"]. *Bulletin of the American Meteorological Society* 97 (8): S80-S82.
- Nurse, L., and J. L. Charlery. 2014. "Projected SST Trends Across the Caribbean Sea Based on PRECIS Downscaling of ECHAM4, Under the SRES A2 and B2 Scenarios." *Theoretical and Applied Climatology* 123 (1). DOI 10.1007/s00704-014-1346-1
- Perrette, M., F. Launderer, R. Riva, K. Frieler, and M. Meinshausen. 2013. "A Scaling Approach to Project Regional Sea Level Rise and its Uncertainties." *Earth System Dynamics* 4 (1): 11–29.
- Rahmstorf, S. 2007. "A Semi-empirical Approach to Projecting Future Sea Level Rise." *Science* 315 (5810): 368-370.
- Rignot, E. and P. Kanagaratnam. 2006. "Changes in the Velocity Structure of the Greenland Ice Sheet." *Science* 311 (5763): 986-990.
- Stennett-Brown, R. K., J. J. Jones, T. S. Stephenson, and M. A. Taylor. 2017. "Future Caribbean Temperature and Rainfall Extremes from Statistical Downscaling." *International Journal of Climatology* 37: 4828-4845.
- Taylor, M. and K.A. Stephenson. 2017. "Impacts of Climate Change on Sea Temperature in the Coastal and Marine Environments of Caribbean Small Island Developing States (SIDS)". Caribbean Marine Climate Change Report Card: Science Review 2017, pp 23-30.
- Taylor, M.A., L.A. Clarke, A. Centella, A. Bezanilla, T.S. Stephenson, J.J. Jones, J.D. Campbell, A. Vichot, and J. Charlery, 2018. Future Caribbean Climates in a World of Rising Temperatures: The 1.5 vs 2.0 Dilemma. *J. Climate*, 31, 2907–2926, <https://doi.org/10.1175/JCLI-D-17-0074.1>

## 10.6. CHAPTER 6

- Cangialosi, J.P., A.S. Latta, and R. Berg, 2018. (May 30th) Hurricane Irma. National Hurricane Center, Tropical Cyclone Report. [https://www.nhc.noaa.gov/data/tcr/AL112017\\_Irma.pdf](https://www.nhc.noaa.gov/data/tcr/AL112017_Irma.pdf) (Accessed June 30, 2018).
- Carrington, C. 2013. "Dengue Past, Present and Future." *UWI Today*. Accessed April 25th, 2016. [https://sta.uwi.edu/uwitoday/archive/april\\_2013/article6.asp](https://sta.uwi.edu/uwitoday/archive/april_2013/article6.asp).
- Charlery, J., L. Nurse, and K. Whitehall, K. 2006. Exploring the Relationship Between the North Atlantic Oscillation and Rainfall Patterns in Barbados." *International Journal of Climatology* 26, doi: 10.1002/joc.1334 , pp. 819-827.
- CIMH and FAO. 2016. "Drought Characteristics and Management in the Caribbean." *Food and Agriculture Organization of the United Nations*, Rome, 78 pp.
- CIMH . 2018. CariCOF Heat Outlook for July to December 2018 Excessive heat at times. June 2018, <http://rcc.cimh.edu.bb/heat-outlook-for-july-to-december-2018/> (Accessed June 30, 2018).
- Cook, K.H. & E.K. Vizzy. 2010. "Hydrodynamics of the Caribbean Low-level Jet and its Relationship to Precipitation. *Journal of Climate* 23, doi: : 10.1175/2009JCLI3210.1 , pp. 1477-1494.
- Cooper, B. and V. Bowen. 2001. "Integrating Management of Watersheds and Coastal Areas in Small Island Developing States of the Caribbean." National report for Antigua and Barbuda. Environment Division, Ministry of Tourism and Environment. Antigua and Barbuda.
- Enfield, D.B. and E. J. Alfaro. 1999. "The Dependence of Caribbean Rainfall on the Interaction of the Tropical Atlantic and Pacific Oceans." *Journal of Climate* 12 (7), doi: 10.1175/1520-0442(1999)012<2093:TDOCRO>2.0.CO;2, pp. 2093-2103.
- Farrell, D., A. Trotman, and C. Cox. "Drought early warning and risk reduction: A case study of the drought of 2009 - 2010." [http://www.preventionweb.net/english/hyogo/gar/2011/en/bgdocs/Farrell\\_et\\_al\\_2010.pdf](http://www.preventionweb.net/english/hyogo/gar/2011/en/bgdocs/Farrell_et_al_2010.pdf) (Accessed June 30, 2018).
- Gamble, D.W., D.B. Parnell, D.B. and S. Curtis. 2007. "Spatial Variability of the Caribbean Midsummer Drought and the Relation to North Atlantic High Circulation." *International Journal of Climatology* 28 (3), doi: 10.1002/joc.1600 , pp. 343-350.
- Giannini, A., Y. Kushnir, and M.A. Cane. 2000. "Interannual Variability of Caribbean Rainfall, ENSO and the Atlantic Ocean."

- Journal of Climate* 13, doi: 10.1175/1520-0442(2000)013<0297:IVOCRE>2.0.CO;2 , pp. 297-310.
- Giannini, A., J.C.H. Chang, M.A. Cane, Y. Kushnir, and R. Seager. 2001. "The ENSO Teleconnection to the Tropical Atlantic Ocean: Contributions of the Remote and Local SSTs to Rainfall Variability in the Tropical Americas." *Journal of Climate* 14, doi: 10.1175/1520-0442(2001)014<4530:TETTTT>2.0.CO;2, pp. 4530–4544.
- Gibbs and Maher. 1967. "Rainfall deciles as drought indicators." *Bureau of Meteorology Bulletin* No. 48, Melbourne, Australia.
- Hayes, M., M. Svoboda, N. Wall and M. Widhalm. 2011. "The Lincoln Declaration on Drought Indices: Universal Meteorological Drought Index Recommended." *Bulletin of the American Meteorological Society* 92 (4), doi: 10.1175/2010BAMS3103.1 , pp. 485–488.
- IPCC. 2001. "Climate Change 2001: The Scientific Basis." Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change. [Houghton, J.T., Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, K. Maskell, and C.A. Johnson (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 881 pp.
- International Research Institute for Climate and Society (IRI). 2017. "Seasonal Heatwave Predictability." Building Regional Climate Capacity in the Caribbean: Characterising Extreme Heat in the Caribbean - Project Summary Report, June 2017, Barbados, 32pp.
- Lallo, C.O., J. Cohen, D. Rankine, M. Taylor, J. Campbell, and T. Stephenson. 2018. Characterising Heat Stress on Livestock using the Temperature Humidity Index (THI)-Prospects for warmer Caribbean. Regional Environmental Change.
- Lowe, R., Gasparrini, A., Van Meerbeeck, C.J., Lippi, C.A., Mahon, R., Trotman, A.R., Rollock, L., Hinds, A.Q., Ryan, S.J. and Stewart-Ibarra, A.M., 2018. Nonlinear and delayed impacts of climate on dengue risk in Barbados: A modelling study. *PLoS medicine*, 15(7). Mahon, R., D. Farrell, S.-A. Cox, A. Trotman, A., C.J. Van Meerbeeck, and G. Barnwell. 2018. "Climate Services and Caribbean Resilience: A Historical Perspective." *Social and Economic Studies* 67 (2&3), pp. 239-260.
- Mahon, R., C. Greene, S.-A. Cox, Z. Guido, A. Gerlak, J. Petrie, A. Trotman, et al. 2019. "Fit for Purpose? Envisioning National Climate Service Centers in the Caribbean." *Climate Services*. doi: 10.1016/j.cliser.2019.01.002, in press.
- McKee, T.B., N.J. Doesken, and J. Kleist. 1993. "The Relationship of Drought Frequency and Duration to Time Scales." *Preprints, 8th Conference on Applied Climatology* pp. 179-184. January 17-22, Anaheim, California.
- Nissan, H., K. Burkart, K. E. Coughlan de Perez, M. Van Aalst, and S. Mason. 2017. "Defining and Predicting Heat Waves in Bangladesh." *Journal of Applied Meteorology and Climatology* 56 (10), doi: 10.1175/JAMC-D-17-0035.1 , pp. 2653-2670.
- NOAA. 2018. "El Niño/Southern Oscillation (ENSO) – Cold & Warm Episodes by Season." [http://origin.cpc.ncep.noaa.gov/products/analysis\\_monitoring/ensostuff/ONI\\_v5.php](http://origin.cpc.ncep.noaa.gov/products/analysis_monitoring/ensostuff/ONI_v5.php) (Accessed June 30, 2018).
- PAHO and WHO. 2015 (September 8th). "Health Response Dominica Tropical Storm Erika." Situation Report N6
- Pasch, R.J. and A.B. Penny. 2016 (February 8th). "Tropical Storm Erika. National Hurricane Center," *Tropical Cyclone Report*. [https://www.nhc.noaa.gov/data/tcr/AL052015\\_Erika.pdf](https://www.nhc.noaa.gov/data/tcr/AL052015_Erika.pdf) (Accessed June 30, 2018).
- Pasch, R.J., A.B. Penny, and R. Berg. 2018 (April 10th). "Hurricane Maria." *National Hurricane Center, Tropical Cyclone Report*. [https://www.nhc.noaa.gov/data/tcr/AL152017\\_Maria.pdf](https://www.nhc.noaa.gov/data/tcr/AL152017_Maria.pdf) (Accessed June 30, 2018).
- Shepard, D.S., L. Coudeville, Y.A. Halasa, B. Zambrano, and G.H. Dayan. 2011. "Economic Impact of Dengue Illness in the Americas." *The American Journal of Tropical Medicine and Hygiene* 84 (2): 200-207.
- Stephenson, T.S., A.A. Chen, and M.A. Taylor. 2008. "Toward the Development of Prediction Models for the Primary Caribbean Dry Season." *Theoretical and Applied Climatology* 92: 10.1007/s00704-007-0308-2 , pp. 87-101.
- Stephenson, T.S., L.A. Vincent, T. Allen, C.J. Van Meerbeeck, N. McLean, T.C. Peterson, M.A. Taylor, et al. 2014. "Changes in Extreme Temperature and Precipitation in the Caribbean Region, 1961-2010." *International Journal of Climatology* 34 (9): 2957–2971, DOI: 10.1002/joc.3889.
- Stephenson T.S., M.A. Taylor, A.R. Trotman, S. Etienne-LeBlanc, A.O. Porter, M. Hernández, D. Boudet, et al. 2016. "Caribbean." In: State of the Climate in 2015. *Bulletin of the American Meteorological Society* 97 (8), S 181-182.
- Tavernier, R. 2016. "Dominica Strong Research Study: Key Finding from Phase I. Stress, Coping, Health and Resilience among Youth in Dominica Following Tropical Storm Erika." *Dominica Strong Research Report*.

- Taylor, M.A., D.B. Enfield, and A. Chen. 2002. "Influence of Tropical Atlantic Versus the Tropical Pacific on Caribbean Rainfall." *Journal of Geophysical Research* 107 (C9), doi: 10.1029/2001/JC001097.
- Taylor, M.A., T.S. Stephenson, A. Owino, A.A. Chen, and J.D. Campbell. 2011. "Tropical Gradient Influences on Caribbean Rainfall." *Journal of Geophysical Research* 116: D00Q08, doi:10.1029/2010JD015580.
- Taylor, M.A., F.S. Whyte, T.S. Stephenson, and J.D. Campbell. 2012. "Why dry? Investigating the Future Evolution of the Caribbean Low Level Jet to Explain Projected Caribbean Drying." *International Journal of Climatology* 33, doi: 10.1002/joc.346 , pp. 784–792.
- Taylor, M.A., L.A. Clarke, A. Centella, A. Bezanilla, T.S. Stephenson, J.J. Jones, J.D. Campbell, A. Vichot, and J. Charlery, 2018. Future Caribbean Climates in a World of Rising Temperatures: The 1.5 vs 2.0 Dilemma. *J. Climate*, 31, 2907–2926, <https://doi.org/10.1175/JCLI-D-17-0074.1>
- Trotman, A. 1994. "Agroclimatic Study of Barbados, 1970 to 1990: Rainfall. Technical Note No. 28." *Caribbean Meteorological Institute*.
- Trotman, A.R., Gordon, R.M., Hutchinson, S.D., Singh, R. & McRae-Smith, D. 2009. "Policy Responses to GEC Impacts on Food Availability and Affordability in the Caribbean Community." *Environmental Science & Policy* 12 (4); doi: 10.1016/j.envsci.2009.02.001 , pp. 529-541.
- Trotman, A., A. Joyette, C. Van Meerbeeck, R. Mahon, S.-A. Cox, N. Cave, and D. Farrell. 2017. "Drought Risk Management in the Caribbean Community – Early Warning Information and other Risk Reduction Considerations." In: *Drought and Water Crises: Integrating Science, Management, and Policy Second Edition*. Donald A. Wilhite and Roger S. Pulwarty (Eds.), CRC Press, 592pp.
- Vaidyanathan, A., S.R. Kegler, S.S. Saha, and J.A. Mulholland. 2016. "A Statistical Framework to Evaluate Extreme Weather Definitions from a Health Perspective: A Demonstration Based on Extreme Heat Events." *Bulletin of the American Meteorological Society* 97(10), doi: 10.1175/BAMS-D-15-00181.1 , pp. 1817-1830.
- WRI. 2013. World's 36 most water-stressed countries. World Resources Institute, December 12. <https://www.wri.org/blog/2013/12/world-s-36-most-water-stressed-countries> (accessed November 9, 2020).

## 10.7. CHAPTER 7

- CANARI 2008. "The impacts of climate change on biodiversity in Caribbean islands: what we know, what we need to know, and building capacity for effective adaptation." Retrieved from <https://www.canari.org/wp-content/uploads/2016/01/386-The-impacts-of-climate-change-on-biodiversity-in-caribbean-what-we-know-what-we-need-to-know-and-building-capacity-for-effective-adaptation.pdf>
- The Caribbean Catastrophe Risk Insurance Facility (CCRIF) 2015. "Understanding CCRIF's Hurricane, Earthquake and Excess Rainfall Policies." The Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company (CCRIF SPC). Technical Paper Series #1
- Caribbean Disaster Emergency Management Agency (CDEMA). 2014. "Think Tank on Gender, Vulnerable Groups and Disaster Risk Reduction in the Caribbean." Retrieved from <http://www.cdema.org/>
- Caribbean Hotel and Tourism Association (CHTA). 2017 (November 27). "Caribbean Hotel and Insurance Rates to Increase by 10-40%. Retrieved from <http://www.caribbeanhotelandtourism.com/caribbean-hotel-insurance-rates-to-increase-by-10-to-40-percent>
- Caribbean National Weekly. 2017 (October). "Dominica Police Detain Looters." <https://www.caribbeannationalweekly.com/news/caribbean-news/dominica-police-detain-looters/>
- Caribbean News Now 2017 (CNN) (September 28). "Agriculture Sector in Dominica Destroyed by Hurricane Maria." Retrieved from <http://wp.caribbeannewsnow.com/2017/09/28/agriculture-sector-dominica-destroyed-hurricane-maria/>
- CARIBSAVE. 2009. "CARIBSAVE Final Report: Negril-Jamaica."
- CEPF. 2011. Caribbean Islands Biodiversity Hotspot Ecosystem Profile Summary. Retrieved from: [https://www.cepf.net/sites/default/files/caribbean\\_ep\\_summary.pdf](https://www.cepf.net/sites/default/files/caribbean_ep_summary.pdf)

- Chapman, S.C., S. Chakraborty, M.F. Dreccer, and S.M. Howden. 2012. "Plant Adaptation to Climate Change: Opportunities and Priorities in breeding." *Crop Pasture Sci.*, 63, pp. 251-268.
- Chen, A. 2011. "Impacts of Climate Change on Renewable Energy Systems." Presented to the Renewable Energy Forum, St Thomas, US Virgin Islands on September 20-21, 2011.
- Chen, A. A., D.D. Chadee, and S.C. Rawlins (Eds.). 2006. "Climate Change Impact on Dengue: The Caribbean Experience". University of the West Indies, Kingston, Jamaica.
- Climate & Development Knowledge Network (CDKN). 2014. "The IPCC's Fifth Assessment Report. What's in it for Small Island Developing States?" <https://cdkn.org/wp-content/uploads/2014/.../CDKN> (Accessed Dec. 11, 2017)
- Climate & Development Knowledge Network (CDKN). 2014. "Analyzing Vulnerability of the Coastal Tourism Sector." Retrieved from [https://cdkn.org/wp-content/uploads/2014/04/Vulnerability-assessment-report\\_final.pdf](https://cdkn.org/wp-content/uploads/2014/04/Vulnerability-assessment-report_final.pdf)
- Climate Studies Group, Mona (CSGM). 2012. "State of the Jamaican Climate 2012: Information for Resilience Building (Full Report)." Produced for the Planning Institute of Jamaica (PIOJ), Kingston Jamaica.
- Climate Studies Group, Mona (CSGM). 2017. "State of the Jamaican Climate 2015: Information for Resilience Building (Full Report)." Produced for the Planning Institute of Jamaica (PIOJ), Kingston Jamaica.
- Commonwealth Marine Economies Programme (CMEP). 2017. "Caribbean Marine Climate Change Report Card 2017." Retrieved from [https://www.coastalzonebelize.org/wp-content/uploads/2017/04/Caribbean\\_Report\\_Card1.pdf](https://www.coastalzonebelize.org/wp-content/uploads/2017/04/Caribbean_Report_Card1.pdf) (Dec. 29, 2017)
- Cunningham, Anastacia. 2014. "Dry Pipes - Water Crisis Forces Schools To Close." *The Jamaica Gleaner*. Accessed 18.1.18. <http://jamaica-gleaner.com/gleaner/20140411/lead/lead1.html>
- Das, T., M. Hajong, D. Majumdar, R. K. Tombisana Devi and T. Rajesh. 2016. "Climate Change Impacts on Plan Diseases." *SAARC J. Agri.*, 14 (2): 200-209
- DeShazer J.A., G.L. Hahn, and H. Xin. 2009. Chapter 1: "Basic Principles of the Thermal Environment and Livestock Energetics." In: DeShazer J.A. (ed) *Livestock Energetics and Thermal Environmental Management*. ASABE, MI, USA, pp 1-22
- Doyle, E. and J. Franks. 2015. Sargassum Fact Sheet. Gulf and Caribbean Fisheries Institute
- Dunn, L. 2013. "From Kyoto to the Caribbean: Promoting Gender and Age Responsive Climate Change Policies in Small Island Developing States". *Small States Digest*, Issue 2 London: Commonwealth Secretariat pp. 6-23.
- Dunn, L. 2015. "Gender Vulnerabilities and gender mainstreaming at the Institute of Gender and Development Studies". Lecture (January 2015), University of the West Indies, Mona, Jamaica.
- ECLAC. 2018. "Irma and Maria by the numbers". *Focus Magazine of the Caribbean Development and Cooperation Committee* (CDCC) Issue 1(2018), January-March. Accessed on October 4, 2019 from <https://www.cepal.org/en/publications/43446-irma-and-maria-numbers>
- ECLAC. 2011. Caribbean Development Volume 3: The Economics of Climate Change in the Caribbean. Retrieved from <https://www.cepal.org/publicaciones/xml/2/45412/LCARTL.346.pdf>
- ECLAC. 2004a. "Assessment of the Socioeconomic Impact and Environmental Impact of Hurricane Ivan in Jamaica." <https://www.cepal.org/en/publications/25725-assessment-socioeconomic-and-environmental-impact-hurricane-ivan-jamaica>
- ECLAC. 2004b. "The impact of hurricane Ivan in the Cayman Islands." [http://repositorio.cepal.org/bitstream/11362/25728/1/LCmexL645rev1\\_en.pdf](http://repositorio.cepal.org/bitstream/11362/25728/1/LCmexL645rev1_en.pdf)
- Edwards, A. 2012. "Impacts of Climate Change on Dominica: Issues, Challenges and Initiatives." Presented at the Caribbean workshop for the Global Climate Change Alliance (GCCA) in Montego Bay, Jamaica, April 23-26, 2012. Retrieved from [http://www.gcca.eu/sites/default/files/GCCA/workshop\\_caribbean\\_presentation3\\_dominica\\_annie\\_edwards\\_0.pdf](http://www.gcca.eu/sites/default/files/GCCA/workshop_caribbean_presentation3_dominica_annie_edwards_0.pdf)
- EPA (Environmental Protection Agency). 2017. Climate Impacts on Energy). US Environmental Protection Agency. Retrieved from <https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-energy.html>
- Farrell, D., A. Trotman, C. Cox. 2010. "Global Assessment Report on Disaster Risk Reduction. Drought early warning and risk reduction- A case study of the Caribbean Drought of 2009-2010." International Strategy for Drought Reduction (ISDR).
- Food and Agriculture Organization of the United Nations (FAO). 2005. FAO Field Guide – "20 Things to Know about The Impact

of Salt Water on Agricultural Land in Aceh Province”.

- Gamble, D. W., D. Campbell, T. L. Allen, D. Barker, S. Curtis, D. McGregor, and J. Popke. 2010. “Climate Change, Drought and Jamaican Agriculture: Local Knowledge and the Climate Record.” *Annals of the Association of American Geographers* 100 (2010): 1-14.
- Gantner, V., P. Mijić, S. Jovanovac, N. Raguž, T. Bobić, and K. Kuterovac. 2012. “InfluenceMediterranean Region in Croatia. In: Casasús, I., J. Zogošić, A. Rosati, I. Štoković, D. Gabiña (ed) Animal Farming and Environmental Interactions in the Mediterranean Region. *European Federation of Animal Sciences* 131:71-78.
- GFDRR (Global Facility for Disaster Risk Reduction). 2014. *Flood Event of December 24-25, 2013-A report by the Government of Saint Lucia and the World Bank, March 2014: Joint Rapid Damage and Needs Assessment*, 66p Accessed October 4, 2019 <https://www.gfdrr.org/sites/default/files/publication/pda-2014-saint-lucia.pdf>
- Government of Jamaica. 2011. GOJ The Second National Communication of Jamaica to the United Nations Framework Convention Climate Change. National Meteorological Service Jamaica 65 ¼ Half Way Tree Road, Kingston 10, Jamaica, 409 p
- Gyan, K., W. Henry, S. Lacaille, A. Laloo, C. Lamsee-Ebanks, S. McKay, R.M. Antoine, and M.A. Monteil. 2005. “African Dust Clouds are Associated with Increased Paediatric Asthma Accident and Emergency Admissions on the Caribbean Island of Trinidad.” *International Journal of Biometeorology* 49 (6). doi: <https://doi.org/10.1007/s00484-005-0257-3>.
- Harvell, C.D., C.E. Mitchell, J.R. Ward, S. Altizer, A.P. Dobson, R.S. Ostfeld, and M.D. Samuel. 2002. “Climate Warming and Disease Risks for Terrestrial and Marine Biota.” *Science* 296, 2158–2162.
- Henry, B., E. Charmley, R. Eckard, J.B. Gaughan, and R. Hegarty. 2012. “Livestock Production in a Changing Climate: Adaptation and Mitigation Research in Australia.” *Crop Pasture Science* 63: 191–202.
- Hernández A., B. Domínguez, P. Cervantes, S. Muñoz-Melgarejo, S. Salazar-Lizán and A. Tejeda-Martínez. 2011. “Temperature-humidity Index (THI) 1917-2008 and Future Scenarios of Livestock Comfort in Veracruz, México.” *Atmósfera* 24: 89-102
- IGDS (Institute for Gender and Development Studies). 2013. JA REEACH Project Gender and Youth Assessment Final Report, 60p.
- Insurance Journal. 2017 (September 26). Insured Losses in Caribbean from Hurricane Maria Estimated at \$40-85 billion: AIR. Retrieved from <https://www.insurancejournal.com/news/international/2017/09/26/465440.htm>
- IPCC (Intergovernmental Panel on Climate Change). 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, edited by S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller, 996. New York: Cambridge University Press.
- IPCC. 2014: *Synthesis Report (SYR). Contribution of Working Groups 1,II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R. K. Pachauri, and L.A. Meyer (eds.)]* IPCC, Geneva, Switzerland, 151pp.
- Jessop, David. 2010. “Water Shortage At Unprecedented Levels.” *The Jamaica Gleaner*. Accessed 18/1/18. <http://www2.jamaica-gleaner.com/gleaner/20100414/business/business7.html>
- Jamaica Observer. 2017 (September 26). JDF disaster assistance team deployed to Dominica. Retrieved from [http://www.jamaicaobserver.com/latestnews/JDF\\_disaster\\_assistance\\_team\\_deployed\\_to\\_Dominica?profile=1228](http://www.jamaicaobserver.com/latestnews/JDF_disaster_assistance_team_deployed_to_Dominica?profile=1228)
- Kambon, A., G. Pargass, D. Noel- De Bique, J. Massiah, and V. Barnes. 2005. “Gender Impact Assessment of Hurricane Ivan in Grenada for the Economic Commission for Latin America and the Caribbean.” Economic Commission for Latin America and the Caribbean.
- Karl, T.R., J.M. Melillo, and T.C. Peterson. 2009. “Global Climate Change Impacts in the United States.” *U.S. Global Change Research Programme*. Cambridge University Press.
- Kimaro, E.G. & O.C. Chibinga. 2013. “Potential Impact of Climate Change on Livestock Production and Health in East Africa: A Review.” *Livestock Research for Rural Development* 25 (7) Article #116. Retrieved December 11, 2017, from <http://www.lrrd.org/lrrd25/7/kima25116.htm>
- Lallo, C.O., J. Cohen, D. Rankine, M. Taylor, J. Campbell, and T. Stephenson. 2018. Characterising Heat Stress on Livestock using the Temperature Humidity Index (THI)-Prospects for warmer Caribbean. *Regional Environmental Change*.

- Lau, W. and K.M Kim. 2007. "Cooling of the Atlantic by Saharan dust." *Geophysical Research Letters* 34 (23).Miami, University of. 2013. "Dust storms in Africa affect US and the Caribbean's air quality." University of Miami. <https://phys.org/news/2013-09-storms-africa-affect-caribbean-air.html>.
- Mashaly, M.M., G.L. Hendricks III, M.A. Kalama, A.E. Gehad, A.O. Abbas, and P.H. Patterson. 2004. "Effect of Heat Stress on Production Parameters and Immune Responses of Commercial Laying Hens." *Poultry Science* 83: 889–894.
- McLaren, K.P. and McDonald, M.A. 2003a. "The effects of moisture and shade on seed germination and seedling survival in a tropical dry forest in Jamaica" *Forest Ecology and Management* 183(2003) 61-75
- McLaren, K.. P and M. A. McDonald.2003b. "Coppice regrowth in a disturbed tropical dry limestone forest in Jamaica" *Forest Ecology and Management* 180 (2003) 99-111
- Miloslavich, P., Díaz, J.M., Klein, E., Alvarado, J.J., Díaz, C., Gobin, J., Escobar-Briones, E., Cruz-Motta, J.J., Weil, E., Cortes, J. and Bastidas, A.C., 2010. Marine biodiversity in the Caribbean: regional estimates and distribution patterns. *PLoS one*, 5(8), p.e11916.
- Mohammed, A.R., and L. Tarpley. 2009. "High Nighttime Temperatures Affect Rice Productivity through Altered Pollen Germination and Spikelet Fertility." *Agricultural and Forest Meteorology*, Vol. 149, pp. 999-1008, ISSN 0168-1923.
- Moreno, A.R. 2006. "Climate Change and Human Health in Latin America: Drivers, Effects and Policies." *Reg. Environmental Change* (2006) 6:157-164 DOI 10.1007/s1013-006-0015-Z
- Müller, C., A. Bondeau, A. Popp, K. Waha, and M. Fader. 2010. *Climate Change Impacts on Agricultural Yields-Background Note to the World Development Report 2010*. Germany: Potsdam Institute for Climate Impact Research (PIK).
- OECS (Organisation of Eastern Caribbean States). 2004. "Grenada: Macro-Socio-Economic Assessment of the Damages Caused by Hurricane Ivan." *OECS Report*, September 24, 2004.
- Oxenford, H.A., D. Johnson, and J. Franks. 2015. "Facing the Threat of Sargassum Seaweed, Presented to the Symposium: Challenges, Dialogue and Cooperation Towards Sustainability of the Caribbean Sea, Port of Spain, Trinidad and Tobago." November 23-24, 2015. [http://www.acs-aec.org/sites/default/files/oxenford\\_\\_sargassum\\_acs\\_symposium\\_2015\\_23\\_nov.pdf](http://www.acs-aec.org/sites/default/files/oxenford__sargassum_acs_symposium_2015_23_nov.pdf).
- Parry, M.L., C. Rosenweig, A. Iglesias, M. Livermore, and G. Fischer. 2004. "Effects of Climate Change on Global Food Production Under SRES Emissions and Socio-Economic Scenarios." *Global Environmental Change* 14: 53-67.
- Radio Jamaica News. 2017. *Brace for Increase in Property Insurance Rates*. Retrieved from <http://rjrnews.com/local/brace-for-increase-in-property-insurance-rates-iaj>
- Ramrattan, L. 2015. Caribbean Public Health Agency (CARPHA) forum on *Measuring the Impact of Chikungunya in the Caribbean*, Port of Spain, Trinidad. Retrieved from <http://carpha.org/Portals/0/docs/MEETINGS/CHIKV/S6P4-Ramrattan.pdf>
- Rojas-Downing, M.M., A.P. Nejadhashemi, T. Harrigan, and S.A. Woznicki. 2017. "Climate Change and Livestock: Impacts, Adaptation and Mitigation." *Climate Risk Management* 16: 145-163
- Seddigh, M., and G.D. Jolliff. 1984. "Night Temperature Effects on Morphology, Phenology, Yield and Yield Components of Indeterminate Field-grown Soybean." *Agronomy Journal* 76: 824-828, ISSN 0002-1962.
- Silva, H. 2016. (Lecturer, Environmental Health, University of Technology, Jamaica), in discussion with Pietra Brown (co-author). May.
- Silva, H. 2015. Climate Change and Public Health. Presentation at the University of Technology, Kingston, Jamaica.
- Simpson, M. C. 2010. The CARIBSAVE Partnership and Climate Change: A sectoral approach to vulnerability and resilience. Presentation at Crest; Innovators in the Coastal Tourism Conference. Stanford University, San Francisco. January 2010.
- Spencer, N., S. Polachek, and E. Strobl. 2016. "How do Hurricanes Impact Scholastic Achievement? A Caribbean perspective." *Journal of the International Society for the Prevention and Mitigation of Natural Hazards* 63 (21).
- Statistics, Bureau of. 2007. "2002 Population and Housing Census: National Census Report. Georgetown, Guyana." <http://www.statisticsguyana.gov.gy/census.html>.
- Stephenson, T.S., L.A. Vincent, T. Allen, C.J. Van Meerbeeck, N. McLean, T.C. Peterson, M.A. Taylor, et al. 2014. "Changes in Extreme Temperature and Precipitation in the Caribbean Region, 1961–2010." *International Journal of Climatology* 34: 2957–2971

- Struck, D. 2014. "National Geographic: Tropical Fish Cause Trouble as Climate Change Drives Them Towards the Poles", July 24 ,2014. Retrieved from <http://news.nationalgeographic.com/news/2014/07/140725-climatechange-tropical-fish-animals-ocean-science/>.
- Taylor, M.A. 2015. Presentation entitled *Why Climate Demands Change?* Published by the Grace Kennedy Foundation, 73 Harbour Street, Kingston, Jamaica Technical Centre for Agricultural and Rural Cooperation (CTA) (22 September 2017) Rebuilding Caribbean agriculture after Hurricane Maria and Irma. Retrieved from <http://www.cta.int/en/article/2017-09-22/rebuilding-caribbean-agriculture-after-hurricane-irma-and-hurricane-maria.html>
- The Gleaner (30, November 2017). "\$100m support for climate resilience in the Caribbean." Retrieved from <http://jamaica-gleaner.com/article/news/20171130/earth-today-100m-support-climate-resilience-caribbean>
- Thornton, P.K., J. Van de Steeg, A. Notenbaert, and M. Herrero. 2009. "The Impacts of Climate Change on Livestock and Livestock Systems in Developing Countries: A Review of What we Know and What we Need to Know." *Agricultural Systems* 101: 113–127.
- Time.2017. " 'All We Are Really Living on Is Hope.' Hurricane Irma's Devastation Lingers in the Caribbean." Retrieved from: <https://time.com/4938103/hurricane-irma-caribbean-island-st-martin-anguilla/>
- United Nations Country Team in Haiti. Haiti Cholera Response January-March 2015. Retrieved from [http://www.un.org/News/dh/infocus/haiti/Cholera\\_UN\\_Factsheet\\_Jan\\_Mar\\_2015.pdf](http://www.un.org/News/dh/infocus/haiti/Cholera_UN_Factsheet_Jan_Mar_2015.pdf)
- United Nations Development Programme (UNDP). 2009. UNDP Report on Enhancing Gender Visibility in Disaster Risk Management and Climate Change in the Caribbean Country Assessment Report for Jamaica. Retrieved from Institute of Gender and Development Studies, University of the West Indies, Mona, Jamaica.
- United Nations Development Programme (UNDP). 2010. Quantification and Magnitude of Losses and Damages Resulting from the Impacts of Climate Change: Modelling the Transformational Impacts and Costs of Sea Level Rise in the Caribbean.
- United Nations Framework Convention on Climate Change (UNFCCC). Presentation entitled Impact of climate change on Grenada's coastal zones. Justification for Conducting Vulnerability Assessment in the Coastal Zone .Retrieved from [https://unfccc.int/files/national\\_reports/non-annex\\_i\\_natcom/cge/.../grenada.pp](https://unfccc.int/files/national_reports/non-annex_i_natcom/cge/.../grenada.pp)
- United States Senate Committee on Energy and Natural Resources website. Retrieved from <https://www.energy.senate.gov/public/>
- VOA. 2017. "UN: Floods Leave Haitian Farmers Struggling in Irma's Wake." Retrieved from: <https://www.voanews.com/americas/un-floods-leave-haitian-farmers-struggling-irmas-wake>
- Webber, D. n.d. Climate Change Impacts on Jamaica's Biodiversity. Retrieved from [https://www.nepa.gov.jm/neec/climate\\_change\\_portal/CCF/presentations/Dr.%20Dale%20Webber%20-%20Climate%20Change%20Impacts%20on%20Jamaica's%20Biodiversity.pdf](https://www.nepa.gov.jm/neec/climate_change_portal/CCF/presentations/Dr.%20Dale%20Webber%20-%20Climate%20Change%20Impacts%20on%20Jamaica's%20Biodiversity.pdf)
- Webber, D. 2012. The Science of Climate Change and Climate Change Vulnerability and Adaptation - Adaptation for Coastal Ecosystems in the Caribbean. Retrieved from: <https://www.mona.uwi.edu/physics/sites/default/files/physics/uploads/ADAPTATION%20FOR%20COASTAL%20ECO-SYSTEMS%20IN%20THE%20CARIBBEAN-AUG%202012.pdf>
- WEC (World Energy Council). 2014. Climate Change: Implications for the Energy Sector. Key Findings from the Intergovernmental Panel on Climate Change Fifth Assessment Report. University of Cambridge. UK
- WFP (World Food Programme). 2016. "WFP Haiti Country Brief, July 2016." <https://reliefweb.int/report/haiti/wfp-haiti-country-brief-july-2016>.
- WFP. n.d. "Haiti 2010-2013: Working Toward Sustainable Solutions." [https://www.wfp.org/sites/default/files/Haiti%202010-2013%20Report\\_English.pdf](https://www.wfp.org/sites/default/files/Haiti%202010-2013%20Report_English.pdf)
- WTTC (World, Travel and Tourism Council 2017). Travel and Tourism Economic Impact Caribbean. Retrieved from: <https://www.scribd.com/document/445277958/WTTC-Caribbean2017>

## 10.8. CHAPTER 8

Farrell, D., A. Trotman A., and C. Cox. 2010. "Drought Early Warning and Risk Reduction: A Case Study of the Caribbean Drought

- of 2009–2010”. Global Assessment Report on Disaster Risk Reduction 2011 Contributing Paper (pp. 22). Accessed July 19th, 2018. [http://www.preventionweb.net/english/hyogo/gar/2011/en/bgdocs/Farrell\\_et\\_al\\_2010.Pdf](http://www.preventionweb.net/english/hyogo/gar/2011/en/bgdocs/Farrell_et_al_2010.Pdf)
- Gerlak, A.K., Z. Guido, C. Vaughan, V. Rountree, C. Greene, D. Liverman, A.R. Trotman, R. Mahon, S. Cox, S.J. Mason, K.L. Jacobs, J.L. Buizer, C.J. Van Meerbeeck, and W.E. Baethgen. 2018. “Building a Framework for Process-Oriented Evaluation of Regional Climate Outlook Forums.” *Wea. Climate Soc.*, 10, 225–239, <https://doi.org/10.1175/WCAS-D-17-0029.1>
- Lowe R., A. Gasparrini, C.J. Van Meerbeeck, C.A. Lippi, R. Mahon, A.R. Trotman, L. Rollock, A.Q.J. Hinds, S.J. Ryan, and A.M. Stewart-Ibarra. 2018. “Nonlinear and delayed impacts of climate on dengue risk in Barbados: A modelling study.” *PLoS Medicine* 15 (7): 1002613. <https://doi.org/10.1371/journal.pmed.1002613>
- Mahon, R., Greene, C., Cox, S.-A., Guido, Z., Gerlak, A. K., Petrie, J.-A., et al. (2019). Fit for purpose? Transforming National Meteorological and Hydrological Services into National Climate Service Centers. *Climate Services*, 13, 14-23. <https://doi.org/10.1016/j.cliser.2019.01.002>
- Mahon, R., et al. 2018. “Climate Services and Caribbean Resilience: A Historical Perspective.” *Social and Economic Studies* 67: 2 & 3: 239–260. ISSN: 0037-7651
- Mahon, R., and A.R. Trotman. 2018. Summary Report: Status of Provider and End-User Climate Capacity in Caribbean Small Island Developing States. Environment and Climate Change Canada (ECCC) and the World Meteorological Organization’s (WMO) Programme for Implementing the Global Framework for Climate Services (GFCS) at Regional and National Scales. Bridgetown: Caribbean Institute for Meteorology and Hydrology. Accessed February 25<sup>th</sup> 2019. [http://rcc.cimh.edu.bb/files/2018/06/Summary-Report\\_Provider-and-Enduser-capacity-sessment\\_Carib-climate-services.pdf](http://rcc.cimh.edu.bb/files/2018/06/Summary-Report_Provider-and-Enduser-capacity-sessment_Carib-climate-services.pdf)
- Mahon, R., D. Rankine, and A. Trotman. 2015a. “Development of Seasonal Forecasting Capabilities to apply to Climate-Sensitive Sectors in the Caribbean: Conceptual Framework and Methodology.” Bridgetown: Caribbean Institute for Meteorology and Hydrology. Accessed February 25<sup>th</sup> 2019. <http://rcc.cimh.edu.bb/files/2016/02/Development-of-Sectoral-EWISACTs-in-the-Caribbean-Conceptual-Framework-and-Methodology.pdf>
- Mahon, R., D. Rankine, and A. Trotman. 2015b. “Development of Seasonal Forecasting Capabilities to apply to Climate-Sensitive Sectors in the Caribbean: Work and Implementation Plan 2015-2016.” Bridgetown: Caribbean Institute for Meteorology and Hydrology. Accessed February 25<sup>th</sup> 2019. <https://rcc.cimh.edu.bb/files/2016/02/Development-of-Sectoral-EWISACTs-in-the-Caribbean-Work-and-Implementation-Plan.pdf>
- Martínez, R., D. Hemming, L. Malone, N. Bermudez, G. Cockfield, A. Diongue, J. Hansen, et al. 2012. “Improving Climate Risk Management at Local Level – Techniques, Case Studies, Good Practices and Guidelines for World Meteorological Organization Members.” In *Risk Management - Current Issues and Challenges* edited by Banaitiene, Nerija, 477-532 Rijeka, Croatia: InTech
- Pulwarty, R.S., and Sivakumar, M.V.K. 2014. “Information Systems in a Changing Climate: Early Warnings and Drought Risk Management.” *Weather and Climate Extremes* 3: 4–21.
- Shepard, D., S., L. Coudeville, Y.A. Halasa, B. Zambrano, and G.H. Dayan. 2011. “Economic Impact of Dengue Illness in the Americas.” *The American journal of Tropical Medicine and Hygiene* 84 (2): 200-207.
- Trotman, A., A. Joyette, C. Van Meerbeeck, R. Mahon, S.A. Cox, SA. N. Cave, and D. Farrell. 2017. “Drought Risk Management in the Caribbean Community: Early Warning Information and Other Risk Reduction Considerations.” Chapter 20. In: *Drought and Water Crises: Integrating Science, Management, and Policy, Second Edition*. Eds. D. Wilhite and R. Pulwarty. 431-450. 10.1201/9781315265551-25. CRC Press, USA.
- Trotman, A., R. Mahon, J. Shumake-Guillemot, R. Lowe, and A.M. Stewart-Ibarra. “Strengthening Climate Services for the Health Sector in the Caribbean.” *WMO Bulletin*, December 2018. Accessed February 25<sup>th</sup> 2019. <https://public.wmo.int/en/resources/bulletin/strengthening-climate-services-health-sector-caribbean>
- Vaughan, C. and S. Dessai. 2014. “Climate Services for Society: Origins, Institutional Arrangements, and Design Elements for an Evaluation Framework.” *Wiley Interdisciplinary Reviews: Climate Change* 5 (5): 587–603. doi:10.1002/wcc.290.
- WMO 2018. Step-by-step Guidelines for Establishing a National Framework for Climate Services. Retrieved from: [https://library.wmo.int/doc\\_num.php?explnum\\_id=4335](https://library.wmo.int/doc_num.php?explnum_id=4335)
- WMO. 2017. “Priority Needs for the Operationalization of the Global Framework for Climate Services (2016–2018).” Geneva.
- WMO. 2011. “Climate Knowledge for Action: A Global Framework for Climate Services – Empowering the Most Vulnerable.” *The Report of the High Level Task Force for the Global Framework for Climate Services* (pp. 240). Accessed July 19, 2018, [ftp://ftp.wmo.int/Documents/SESSIONS/CgXVI/English/DOCs/d11-1%281%29\\_1065\\_HLT\\_report\\_en.pdf](ftp://ftp.wmo.int/Documents/SESSIONS/CgXVI/English/DOCs/d11-1%281%29_1065_HLT_report_en.pdf)