Chapter 3: Human influence on the climate system - Supplementary Material

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Notes:
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3.SM.1 Data Table

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Table 3.SM.1: Input Data Table. Input datasets and code used to create chapter figures

Figure number / Table number / Chapter section (for calculations)	Dataset / Code name	Type	Filename / Specificities	License type	Dataset / Code citation	Dataset / Code URL	Related publications
Figure 3.1	-	-	-	-	-	-	-
Figure 3.2	Cleator2020 (land-based reconstructions of surface temperature anomalies)	Input dataset	LGM_reconstruction.csv	Creative Commons Attribution 4.0 International	http://dx.doi.org/10.17864/1947.244	https://researchdata.reading.ac.uk/244/1/LGM_reconstruction.csv	(Cleator et al., 2020)
	Tierney2019 (land-based reconstructions of surface temperature anomalies)	Input dataset	Tierney2020_ProxyData_5x5_deltaSST.nc	Creative Commons Attribution 4.0 International		https://doi.pangaea.de/10.1594/PANGAEA.920596	(Tierney et al., 2020)
	PAGES2k temperature reconstruction	Input dataset	BHM.txt, CPS.txt, DA.txt, M08.txt, OIE.txt, PAI.txt, PCR.txt		doi.org/10.6084/m9.figshare.c.4507043.v2	https://figshare.com/collections/Global_mean_temperature_reconstructions_over_the_Common_Era/4507043	(PAGES 2k Consortium, 2019)
	Mid-Piacenzian Warm Period	Input dataset	Data_for_1a_1c_3a in supplementary information		doi: 10.5194/cp-16-2095-2020	https://doi.org/10.5194/cp-16-2095-2020	(Haywood et al., 2020)
	Figure 3.2c Code	Code				https://github.com/aschurer/IPCC_Fig3.2c	
Figure 3.3	ERA5 Reanalysis Monthly Means	Input dataset	era5_2m_temperature_*_monthly.nc		doi:10.24381/cds.68d2bb30	https://cds.climate.copernicus.eu/cdsapp#!/dataset/rean	(Hersbach et al., 2020)

						alysis-era5-land-monthly-means	
	Figure 3.3 Code	Code				Link to ESMValTool	(Bock et al., 2020)
Figure 3.4	HadCRUT5	Input dataset	HadCRUT.5.0.1.0.analysis.anomalies.ensemble_mean.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2021)
	NOAAGlobalTemp v5	Input dataset	temp.ano.merg5.asc			https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/2020.grl.dat/interim.2020/	(Vose et al., 2021)
	BerkeleyEarth	Input dataset	Land_and_Ocean_LatLong1_H4.nc				(Rohde and Hausfather, 2020)
	Kadow	Input dataset	HadCRUT.5.0.1.0.anomalies.Kadow				(Kadow et al., 2020)
	Figure 3.4 Code	Code				Link to ESMValTool	(Bock et al., 2020)
Figure 3.5	HadCRUT5	Input dataset	HadCRUT.5.0.1.0.analysis.anomalies.ensemble_mean.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2021)
	NOAAGlobalTemp v5	Input dataset	temp.ano.merg5.asc			https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/2020.grl.dat/interim.2020/	(Vose et al., 2021)
	BerkeleyEarth	Input dataset	Land_and_Ocean_LatLong1_H4.nc				(Rohde and Hausfather, 2020)
	Kadow	Input dataset	HadCRUT.5.0.1.0.anomalies.Kadow				(Kadow et al., 2020)
	Figure 3.5 Code	Code				Link to ESMValTool	
Figure 3.6	HadCRUT5	Input dataset	HadCRUT.5.0.1.0.analysis.anomalies.ensemble_mean.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2021)

	BerkeleyEarth	Input dataset	Land_and_Ocean_LatLong1_H4.nc				(Rohde and Hausfather, 2020)
	NOAAGlobalTemp v5	Input dataset	temp.ano.merg5.asc			https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/2020.grl.dat/interim.2020/	(Vose et al., 2021)
	Kadow	Input dataset	HadCRUT.5.0.1.0.anomalies.Kadow				(Kadow et al., 2020)
	Figure 3.6 Code	Code				Link to ESMValTool	
Figure 3.7	HadCRUT4	Input dataset	HadCRUT.4.6.0.0.median.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2012)
	Figure 3.7 Code	Code				Link to ESMValTool	(Gillett et al., 2021)(Gillett et al., 2021)
Figure 3.8	HadCRUT4	Input dataset	HadCRUT.4.6.0.0.median.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2012)
	Figure 3.8 Code	Code				Link to ESMValTool	
Figure 3.9	HadCRUT5	Input dataset	HadCRUT.5.0.1.0.analysis.anomalies.ensemble_mean.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2021)
	Figure 3.9 Code	Code				Link to ESMValTool	
Figure 3.10	RICH-obs 1.7	Input dataset	rich17obs_mean_gridded_2019.0.1979-2014_fixed2_invertlat.nc		doi:10.1175/JCLI4050.1 doi:10.1175/JCLI-D-11-00668.1	https://img.univie.ac.at/forschung/meteorologie/produkte/raobcorerich/	(Haimberger, 2007; Haimberger et al., 2012)
	RICH-obs 1.5.1	Input dataset	OBS_rich_atmos_rio*_Amon_ta_190001-201912.nc		doi:10.1175/JCLI4050.1 doi:0.1175/JCLI-D-11-00668.1	https://img.univie.ac.at/forschung/meteorologie/produkte/raobcorerich/	(Haimberger, 2007; Haimberger et al., 2012)

	RAOBCORE 1.7	Input dataset	raobcore17_gridded_2019.0.1979-2014_fixed2.nc		doi:10.1175/JCLI4050.1 doi:10.1175/JCLI-D-11-00668.1	https://img.univie.ac.at/forschung/meteorologie/produkte/raobcorerich/	(Haimberger, 2007; Haimberger et al., 2012)
	ERA5/5.1 Reanalysis Monthly Means	Input dataset	ta_monthly_era5.1_regridded_masked_1979-2014_updated_fixed.nc		doi:10.24381/cds.68d2bb30	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-land-monthly-means	(Hersbach et al., 2020)
	Figure 3.10 Code	Code				Link to ESMValTool	Mitchell et al. (2020)
Figure 3.11	Reconstructions	Input dataset	map_delta_06ka_ALL_grid_2x2.nc		https://doi.org/10.1007/s00382-010-0904-1	https://static-content.springer.com/esm/art%3A10.1007%2Fs00382-010-0904-1/MediaObjects/382_2010_904_MOESM2_ESM.zip	(Bartlein et al., 2011)
	PMIP4	Input dataser			https://doi.org/10.5194/cp-2019-168	https://doi.org/10.5194/cp-2019-168	Brierley et al. (2020)
	Figure 3.11 Code	Code				https://github.com/chrisbrierley/PMIP4-midHolocene	Brierley et al. (2020)
Figure 3.12	RSS	Input dataset	tpw_v07r01_198801_202010.nc4.nc			http://www.remss.com/measurements/atmospheric-water-vapor/	(Wentz, 2013)
	ERA5.1 Reanalysis	Input dataset	era5_total_column_water_vapour_*_monthly.nc		doi:10.24381/cds.f17050d7	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-single-levels-monthly-means	(Hersbach et al., 2020; Simmons et al., 2020)
	Figure 3.12 Code	Code				Link to ESMValTool	Santer et al. (2007)
Figure 3.13	Global Precipitation Climatology Project	Input dataset	pr_GPCP-SG_L3_v2.3_197901-201710.nc			https://esgf-node.llnl.gov/sear	(Huffman et al., 1997, 2009, Adler

	(GPCP) v2.3					ch/obs4mips/	et al., 2003, 2016)
	Figure 3.13 Code	Code				Link to ESMValTool	
Figure 3.14	Global Precipitation Climatology Project (GPCP) v2.3	Input dataset	pr_GPCP-SG_L3_v2.3_197901-201710.nc			https://esgf-node.llnl.gov/search/obs4mips/	(Huffman et al., 1997, 2009, Adler et al., 2003, 2016)
	ERA5 Reanalysis	Input dataset	era5_total_precipitation_*_monthly.nc			https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-land-monthly-means	(Hersbach et al., 2020)
	Figure 3.14 Code	Code				Link to ESMValTool	
Figure 3.15	Global Historical Climatology Network (GHCN) station data	Input dataset	precip.mon.total.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.ghcngridded.html	(Zhang et al., 2007)
	Global Precipitation Climatology Project (GPCP) v2.3	Input dataset	pr_GPCP-SG_L3_v2.3_197901-201710.nc			https://esgf-node.llnl.gov/search/obs4mips/	(Huffman et al., 1997, 2009, Adler et al., 2003, 2016)
	Climate Research Unit (CRU)	Input dataset	cru_ts4.02.1901.2017.pr.dat.nc.gz			https://crudata.uea.ac.uk/cru/data/hrg/cru_ts_4.02/cruts.1811131722.v4.02/	(Harris et al., 2014)
	Figure 3.15 code	Code				Link to ESMValTool	
Figure 3.16	ERA-Interim	Input dataset	ERA-Interim_u10_monthly_*.nc, ERA-Interim_msl_monthly_*.nc			http://apps.ecmwf.int/datasets/data/interim-full-moda/	(Dee et al., 2011)
	ERA5	Input dataset	era5_10m_u_component_of_wind_*_monthly.nc, era5_mean_sea_level_pressure_*_monthly.nc		doi: 10.24381/cds.f17050d7	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-single-levels-monthly-means	(Hersbach et al., 2020)
	JRA-55	Input dataset	uas_Amon_reanalysis_JRA-55_*.nc,			https://earthsyst	(Kobayashi et al.,

			psl_Amon_reanalysis_JRA-55_*.nc			emcog.org/doc/list/ana4mips/	2015)
	MERRA-2	Input dataset	uas_Amon_reanalysis_MERRA2_*.nc, psl_Amon_reanalysis_MERRA2_*.nc			https://earthsystemcog.org/doc/list/ana4mips/	(Gelaro et al., 2017)
	ERA-20C	Input dataset	msl_1900-2010.nc			https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era-20c	(Poli et al., 2016)
	HadSLP2	Input dataset	hadslp2.asc, HadSLP2r_lowvar_200501-201212.nc			https://www.metoffice.gov.uk/hadobs/hadslp2/data/download.html	(Allan and Ansell, 2006)
	20CRv3	Input dataset	PRMSL_*_mnmean_mem*.nc			https://portal.nersc.gov/archive/home/projects/incite11/www/20C_Reanalysis_version_3/everymember_anal_netcdf/mnmean/PRMSL/	(Slivinski et al., 2019)
	CERA-20C	Input dataset	msl.1901-2010.ens*.nc			https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/cera-20c	(Laloyaux et al., 2018)
	Figure 3.16 code	Code				Link to ESMValTool	
Figure 3.17	GPCP	Input dataset	pr_GPCP-SG_L3_v2.3_197901-201710.nc			https://esgf-node.llnl.gov/search/obs4mips/	(Huffman et al., 1997, 2009, Adler et al., 2003, 2016)
	GPCC	Input dataset	full_data_monthly_v2018_05.nc			https://www.dwd.de/EN/ourservices	(Schneider et al., 2017)

						/gpcc/gpcc.html	
	CRU-TS	Input dataset	cru_ts4.02.1901.2017.pre.dat.nc			https://crudata.uea.ac.uk/cru/data/hrg/cru_ts_4.02/cruts.1811131722.v4.02/	(Harris et al., 2020)
	CMAP	Input dataset	precip.mon.mean.nc			https://psl.noaa.gov/data/gridded/data.cmap.html	(Xie and Arkin, 1997)
	20CRv3	Input dataset	UGRD200.*.mnmean_mem*.nc, UGRD850.*.mnmean_mem*.nc			https://portal.nersc.gov/archive/home/projects/incite11/www/20C_Reanalysis_version_3/everymember_anal_netcdf/mnmean/UGRD200, https://portal.nersc.gov/archive/home/projects/incite11/www/20C_Reanalysis_version_3/everymember_anal_netcdf/mnmean/UGRD850	(Slivinski et al., 2019)
	ERA-20C	Input dataset	u_1900-2010.nc			https://www.ecmwf.int/en/forecasts/datasets/reanalysis-datasets/era-20c	(Poli et al., 2016)
	ERA5	Input dataset	era5_u_component_of_wind_*_monthly.nc, era5_v_component_of_wind_*_mont		doi: 10.24381/cds.f17050d7	https://cds.climate.copernicus.eu	(Hersbach et al., 2020)

			hly.nc			/cdsapp#!/dataset/reanalysis-era5-pressure-levels-monthly-means	
	JRA-55	Input dataset	ua_Amon_reanalysis_JRA-55_*.nc			https://earthsystemcog.org/doc/list/ana4mips/	(Kobayashi et al., 2015)
	MERRA2	Input dataset	ua_Amon_reanalysis_MERRA2_*.nc			https://earthsystemcog.org/doc/list/ana4mips/	(Gelaro et al., 2017)
	Figure 3.17 Code	Code				Link to ESMValTool	
Figure 3.18	ERA5 Reanalysis Hourly	Input dataset	era5_orography_*_hourly.nc		doi:10.24381/cds.adbb2d47	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-single-levels	(Hersbach et al., 2020)
	Figure 3.18 Code	Code				Link to ESMValTool	
Figure 3.19	ERA5	Input dataset	era5_u_component_of_wind_*_monthly.nc		doi:10.24381/cds.6860a573	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-pressure-levels-monthly-means	(Hersbach et al., 2020; Simmons et al., 2020)
	Figure 3.19 Code	Code				Link to ESMValTool	
Figure 3.20	UHH Sea Ice Area Product	Input dataset	SeaIceArea__NorthernHemisphere__monthly__UHH__v2019_fv0.01.nc SeaIceArea__SouthernHemisphere__monthly__UHH__v2019_fv0.01.nc		doi :10.25592/uhhfdm.8559	https://www.fdr.uni-hamburg.de/record/8559#.YG5C5ehKg2w	
	Figure 3.20 Code	Code				Link to ESMValTool	
Figure 3.21	UHH Sea Ice Area Product	Input dataser	SeaIceArea__NorthernHemisphere__monthly__UHH__v2019_fv0.01.nc SeaIceArea__SouthernHemisphere__		doi :10.25592/uhhfdm.8559	https://www.fdr.uni-hamburg.de/recor	

			monthly__UHH__v2019_fv0.01.nc			d/8559#.YG5C5ehKg2w	
	Figure 3.21 Code	Code				Link to ESMValTool	
Figure 3.22	Mudryk2020	Input dataset	SCE_timeseries.nc		doi: 10.18164/cc133287-1a07-4588-b3b8-40d714edd90e	http://data.ec.gc.ca/data/climate/scientificknowledge/climate-research-publication-based-data/northern-hemisphere-blended-snow-extent-and-snow-mass-time-series/SCE_timeseries.nc	(Mudryk et al., 2020)
	GLDAS2.0	Input dataset	GLDAS_NOAH10_M.A*.020.nc4		doi: 10.5067/QN80TO7ZHFJZ	https://hydro1.gesdisc.eosdis.nasa.gov/data/GLDAS/GLDAS_NOAH10_M.2.0/	
	BR2011	Input dataset	Brown and Robinson 2011 SCE Series.xls		doi : 10.5194/tc-5-219-2011	http://www.the-cryosphere.net/5/219/2011/ tc-5-219-2011-supplement.zip.	(Brown and Robinson, 2011)
	NOAA_CDR	Input dataset	moncov.nam.txt moncov.eurasia.txt		doi: 10.7289/V5N014G9	https://climate.rutgers.edu/snowcover/table_area.php?ui_set=2	(Robinson et al., 2012)
	Figure 3.22 Code	Code				Link to ESMValTool	
Figure 3.23	WOA18	Input dataset	woa18_decav_t00_01.nc, woa18_decav_s00_01.nc			https://www.nodc.noaa.gov/OC5/woa18/woa18data.html	(Locarnini et al., 2018; Zweng et al., 2019)
	Figure 3.23 Code	Code				Link to ESMValTool	

Figure 3.24	HadISST1.1	Input dataset	HadISST_sst.nc			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)
	Figure 3.24 Code	Code				Link to ESMValTool	
Figure 3.25	WOA18	Input dataset	woa18_decav81B0_t00_01.nc woa18_decav81B0_s00_01.nc			https://www.nodc.noaa.gov/OC5/woa18/woa18data.html	(Locarnini et al., 2018; Zweng et al., 2019)
	Figure 3.25 Code	Code				Link to ESMValTool	
Figure 3.26		Input dataset					
	Figure 3.26	Code				Link to ESMValTool	
Figure 3.27		Input dataset					
	Figure 3.27	Code				Link to ESMValTool	
Figure 3.28		Input dataset					
	Figure 3.28	Code				Link to ESMValTool	
Figure 3.29	Figure 3.29	Code				On DMS	
Figure 3.30	RAPID	Input dataset	moc_vertical.nc		doi: 10.5285/aa57e879-4cca-28b6-e053-6c86abc02de5	https://rapid.ac.uk/rapidmoc/rapid_data/datadl.php	
		Inpit dataset	Figure_AR6_DAMIP_AMOC_26N_1000m.json			https://github.com/mattofficeuk/AR6/tree/master/JSON_data	
	Figure 3.30	Code				Link to ESMValTool	
Figure 3.31	NOAA-ESRL-CO2-Globl	Input dataset				https://www.esrl.noaa.gov/gmd/ccgg/trends/gl_data.html	

	Scripps CO2 MLO	Input dataset	monthly_in_situ_co2_mlo.csv		doi:10.3334/CDIAC/atg.035	https://scrippsco2.ucsd.edu/data/atmospheric_co2/mlo.html	
	HadCRUT5	Input dataset	HadCRUT.5.0.1.0.analysis.anomalies.ensemble_mean.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2021)
	GCP	Input dataset			https://doi.org/10.18160/GCP-2019	https://icos-cp.eu/GCP/2019	(Friedlingstein et al., 2019)
	Figure 3.31 Code	Code				Link to ESMValTool	
Figure 3.32	JMA-TRANSCOM	Input dataset					(Maki et al., 2010)
	NOAA-ESRL-CO2	Input dataset			https://doi.org/10.15138/wkgj-f215	https://www.esrl.noaa.gov/gmd/dv/data/	(Dlugokencky and Tans, 2020)
	Figure 3.32 Code	Code				Link to ESMValTool	
Figure 3.33	JRA-55	Input dataset	jra55.mon.PSL.195801-201712.nc			https://jra.kishou.go.jp/JRA-55/index_en.html	(Kobayashi et al., 2015)
	ERA5	Input dataset	era5_mean_sea_level_pressure_*_monthly.nc		doi: 10.24381/cds.f17050d7	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-single-levels-monthly-means	(Hersbach et al., 2020)
	20CRv3	Input dataset	prmsl.mon.mean.nc			https://psl.noaa.gov/data/gridded/data.20thC_ReanV3.monolevel.html	(Slivinski et al., 2019)
	Figure 3.33 Code	Code	recipe_ipccwg1ar6ch3_modes.yml			Link to ESMValTool	
Figure 3.34	JRA-55	Input dataset	jra55.mon.PSL.195801-201712.nc			https://jra.kishou.go.jp/JRA-	(Kobayashi et al., 2015)

						55/index_en.html	
	ERA5	Input dataset	era5_mean_sea_level_pressure_*_monthly.nc		doi: 10.24381/cds.f17050d7	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-single-levels-monthly-means	(Hersbach et al., 2020)
	Figure 3.34 Code	Code	recipe_ipccwg1ar6ch3_modes.yml			Link to ESMValTool	
Figure 3.35	SAM index	Input dataset	abram2014sam.txt			ftp://ftp.ncdc.noaa.gov/pub/data/paleo/contributions_by_author/abram2014/abram2014sam.txt	(Abram et al., 2014)
	SAM index	Input dataset	Reconstructions_Annual_LC.txt			https://www1.ncdc.noaa.gov/pub/data/paleo/reconstructions/datwyler2017/	(Dätwyler et al., 2018)
	Figure 3.35 Code	Code	recipe_ar6ch3_sam_millinnium.yml			Link to ESMValTool	
Figure 3.36	ERSSTv5	Input dataset	sst.mnmean.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.noaa.ersst.v5.html	(Huang et al., 2017)
	HadISST1.1	Input dataset	HadISST_sst.nc			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)
	Figure 3.36 Code	Code	recipe_ar6ch3_enso_cmip5+6.yml			Link to ESMValTool	
Figure 3.37	ERSSTv5	Input dataset	sst.mnmean.nc			https://www.esrl.noaa.gov/psd/d	(Huang et al., 2017))

						ata/gridded/data.noaa.ersst.v5.html	
	HadISST1.1	Input dataset	HadISST_sst.nc			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)
	Figure 3.37 Code	Code	recipe_ar6ch3_enso_cmip5+6.yml			Link to ESMValTool	
Figure 3.38	ERSSTv5	Input dataset	sst.mnmean.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.noaa.ersst.v5.html	(Huang et al., 2017)
	BerkeleyEarth	Input dataset	Complete_TAVG_LatLong1.nc			http://berkeleyearth.org/data-new/	(Rohde et al., 2013)
	GISTEMP	Input dataset	gistemp250_GHCNv4.nc			https://data.giss.nasa.gov/gistemp/	(Lenssen et al., 2019)
	GPCC	Input dataset	full_data_monthly_v2018_05.nc			https://www.dwd.de/EN/ourservices/gpcc/gpcc.html	(Schneider and Deser, 2018)
	GPCP	Input dataset	precip.mon.mean.nc			https://psl.noaa.gov/data/gridded/data.gpcp.html	(Huffman et al., 1997, 2009, Adler et al., 2003, 2016)
	CRU-TS	Input dataset	cru_ts4.02.1901.2017.pre.dat.nc			https://crudata.uea.ac.uk/cru/data/hrg/cru_ts_4.02/cruts.1811131722.v4.02/	(Harris et al., 2020)
	Figure 3.38 Code	Code				Link to ESMValTool	
Figure 3.39	ERSSTv5	Input dataset	sst.mnmean.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.	(Huang et al., 2017)

						noaa.ersst.v5.html	
	HadISST1.1	Input dataset	HadISST_sst.nc			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)
	COBE-SST2	Input dataset	sst.mon.mean.nc			https://psl.noaa.gov/data/gridded/data.cobe2.html	(Hirahara et al., 2014)
	Figure 3.39 Code	Code				Link to ESMValTool	
Figure 3.40	ERSSTv5	Input dataset	sst.mnmean.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.noaa.ersst.v5.html	(Huang et al., 2017)
	HadISST1.1	Input dataset	HadISST_sst.nc			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)
	COBE-SST2	Input dataset	sst.mon.mean.nc			https://psl.noaa.gov/data/gridded/data.cobe2.html	(Hirahara et al., 2014)
	Figure 3.40 Code	Code				Link to ESMValTool	
Figure 3.41	HadCRUT5	Input dataset	HadCRUT.5.0.1.0.analysis.anomalies.ensemble_mean.nc			https://crudata.uea.ac.uk/cru/data/temperature/#datdow	(Morice et al., 2021)
	Global Historical Climatology Network (GHCN) station data	Input dataset	precip.mon.total.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.ghcngridded.html	(Zhang et al., 2007)
	HadISST	Input dataset	HadISST_ice.nc.gz			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)

	OHC assessment from Chapter 2						
	Figure 3.41 Code	Code				Link to ESMValTool	
Figure 3.42	AIRS RetStd-v5	Input dataset	hus_AIRS_L3_RetStd-v5_*.nc				(Susskind et al., 2006; Tian et al., 2013)
	CERES-EBAF	Input dataset				https://ceres.larc.nasa.gov/data/	(Loeb et al., 2012)
	ERA5	Input dataset	era5_*_*_monthly.nc		doi: 10.24381/cds.68d2bb30	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-land-monthly-means	(Hersbach et al., 2020)
	ERA-Interim	Input dataset	ERA-Interim_*_monthly_*.nc hfds			http://apps.ecmwf.int/datasets/data/interim-full-moda/	(Dee et al., 2011)
	ESACCI-SST	Input dataset				ftp://anon-ftp.ceda.ac.uk/neodc/esacci/sst/data/lt/Analysis/L4/v01.1/	(Merchant et al., 2014)
	Global Historical Climatology Network (GHCN) station data	Input dataset	precip.mon.total.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.ghcngridded.html	(Zhang et al., 2007)
	Global Precipitation Climatology Project (GPCP) v2.3	Input dataset	pr_GPCP-SG_L3_v2.3_197901-201710.nc			https://esgf-node.llnl.gov/search/obs4mips/	(Huffman et al., 1997, 2009, Adler et al., 2003, 2016)
	HadISST	Input dataset	HadISST_ice.nc.gz, HadISST_sst.nc.gz			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)
	JRA-55	Input dataset	jra55.mon.PSL.195801-201712.nc			https://jra.kishou.go.jp/JRA-55/index_en.html	(Kobayashi et al., 2015)
	NCEP/NCAR	Input dataset	*.mon.mean.nc			https://psl.noaa.gov/data/gridded/dat	(Kalnay et al., 1996)

						a.ncep.reanalysis.surface.html	
	ESACCI-SOILMOISTURE	Input dataset				ftp://anon-ftp.ceda.ac.uk/neodc/esacci/soil_moisture/data/	
	JMA-TRANSCOM	Input dataset	nbp, fgco2				(Maki et al., 2010)
	FLUXCOM ANN-v1	Input dataset				http://www.bgc-jena.mpg.de/geodb/BGI/Home	
	MTE May12	Input dataset	EnsembleGPP_GL.nc			http://www.bgc-jena.mpg.de/geodb/BGI/Home	
	LAI3g	Input dataset				http://cliveg.bu.edu/modismisr/lai3g-fpar3g.html	Zhu et al., 2013
	Landschuetzer2016	Input dataset	spco2_1982-2015_MPI_SOM-FFN_v2016.nc			https://www.nodc.noaa.gov/archive/arc0105/0160558/3.3/data/0-data/	Landschützer et al., 2016
	LandFlux-EVAL	Input dataset	LandFluxEVAL.merged.89-05.monthly.all.nc			https://data.iac.ethz.ch/landflux/	Mueller et al., 2013
	ATSR	Input dataset					
	Figure 3.42 Code	Code	recipe_ipccwg1ar6ch3_modes.yml			Link to ESMValTool	
Figure 3.43	AIRS RetStd-v5	Input dataset	hus_AIRS_L3_RetStd-v5_*.nc				(Susskind et al., 2006; Tian et al., 2013)
	CERES-EBAF	Input dataset				https://ceres.larc.nasa.gov/data/	(Loeb et al., 2012)
	ERA5	Input dataset	era5_*_*_monthly.nc		doi: 10.24381/cds.68d2bb30	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-land-monthly-means	(Hersbach et al., 2020)
	ESACCI-SST	Input dataset				ftp://anon-ftp.ceda.ac.uk/n	(Merchant et al., 2014)

						eodc/esacci/sst/data/lt/Analysis/L4/v01.1/	
	Global Historical Climatology Network (GHCN) station data	Input dataset	precip.mon.total.nc			https://www.esrl.noaa.gov/psd/data/gridded/data.ghcngridded.html	(Zhang et al., 2007)
	Global Precipitation Climatology Project (GPCP) v2.3	Input dataset	pr_GPCP-SG_L3_v2.3_197901-201710.nc			https://esgf-node.llnl.gov/search/obs4mips/	(Huffman et al., 1997, 2009, Adler et al., 2003, 2016)
	HadISST	Input dataset	HadISST_ice.nc.gz, HadISST_sst.nc.gz			http://www.metoffice.gov.uk/hadobs/hadisst/data/download.html	(Rayner et al., 2003)
	JRA-55	Input dataset	jra55.mon.PSL.195801-201712.nc			https://jra.kishou.go.jp/JRA-55/index_en.html	(Kobayashi et al., 2015)
	NCEP/NCAR	Input dataset	*.mon.mean.nc			https://psl.noaa.gov/data/gridded/data.ncep.reanalysis.surface.html	(Kalnay et al., 1996)
	Figure 3.43 Code	Code				Link to ESMValTool	
Figure 3.44	Bartlein et al., 2011 temperature and precipitation reconstructions for the MidHolocene climate	Input dataset	warmtemp_delta_06ka_ALL_grid_2x2.nc coldtemp_delta_06ka_ALL_grid_2x2.nc map_delta_06ka_ALL_grid_2x2.nc			https://wiki.lsce.ipsl.fr/pmip3/doku.php/pmip3:synth:bartlein:index	(Bartlein et al., 2011; Cleator et al., 2020)
	Cleator2020 (land-based reconstructions of surface temperature anomalies)	Input dataset	LGM_reconstruction.csv	Creative Commons Attribution 4.0 International	http://dx.doi.org/10.17864/1947.244	https://researchdata.reading.ac.uk/244/1/LGM_reconstruction.csv	(Cleator et al., 2020)
	Tierney2019 (land-based reconstructions of surface temperature	Input dataset	Tierney2020_ProxyData_5x5_deltaSST.nc	Creative Commons Attribution 4.0 International		https://doi.pangaea.de/10.1594/PANGAEA.920596	(Tierney et al., 2020)

	anomalies)						
	Figure 3.44 Code	Code				On DMS	
CC-Box 3.1, Figure 1	HadCRUT5	Input dataset	HadCRUT.5.0.1.0.analysis.anomalies.ensemble_mean.nc, HadCRUT.5.0.1.0.analysis.summary_series.global.monthly.nc, HadCRUT.5.0.1.0.analysis.ensemble_series.global.monthly.nc			https://www.metoffice.gov.uk/hadobs/hadcrut5/data/current/download.html	(Morice et al., 2021)
	BerkeleyEarth	Input dataset	Land_and_Ocean_LatLong1_H4.nc				(Rohde and Hausfather, 2020)
	GISTEMP	Input dataset	GLB.Ts+dSST.csv, gistemp1200_GHCNv4_ERSSTv5.nc			https://data.giss.nasa.gov/gistemp/	(Lenssen et al., 2019)
	Kadow	Input dataset	HadCRUT.5.0.1.0.anomalies.Kadow_et_al_2020_20crAI-infilled.ensemble_mean_185001-202012.nc				(Kadow et al., 2020)
	NOAAGlobalTemp-Interim	Input dataset	temp.ano.merg5.asc			https://www.ncei.noaa.gov/pub/data/cmb/ersst/v5/2020.grl.dat/interim.2020/	(Vose et al., 2021)
	ERA5	Input dataset	era5_2m_temperature_*_monthly.nc, era5_sea_surface_temperature_*_monthly.nc, era5_sea_ice_cover_*_monthly.nc		doi: 10.24381/cds.f17050d7	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-single-levels-monthly-means https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-single-levels-monthly-means-preliminary-back-extension	(Hersbach et al., 2020)
	CC-Box 3.1, Figure 1 Code	Code				Link to ESMValTool	

CC-Box 3.2, Figure 1	HadEX3	Input dataset	HadEX3_TXx_ANN.nc			https://www.metoffice.gov.uk/hadobs/hadex3/download.html	(Dunn et al., 2020)
	HadEX3	Input dataset	HadEX3_Rx1day_ANN.nc			https://www.metoffice.gov.uk/hadobs/hadex3/download.html	(Dunn et al., 2020)
	CC-Box 3.2, Figure 1 Code	Code				Link to ESMValTool	
FAQ 3.1, Figure 1							
FAQ 3.2, Figure 1							
FAQ 3.3, Figure 1	JRA-55	Input dataset	jra55.mon.PSL.195801-201712.nc			https://jra.kishou.go.jp/JRA-55/index_en.html	(Kobayashi et al., 2015)
	ERA5	Input dataset	era5_2m_temperature_*_monthly.nc		doi: 10.24381/cds.68d2bb30	https://cds.climate.copernicus.eu/cdsapp#!/dataset/reanalysis-era5-land-monthly-means	(Hersbach et al., 2020)
	Global Precipitation Climatology Project (GPCP) v2.3	Input dataset	pr_GPCP-SG_L3_v2.3_197901-201710.nc			https://esgf-node.llnl.gov/search/obs4mips/	(Huffman et al., 1997, 2009, Adler et al., 2003, 2016)
	FAQ 3.3, Figure 1 Code	Code				Link to ESMValTool	

[END TABLE 3.SM.1 HERE]

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