Figures and Tables

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DISCLAIMER: All the data and figures shown in this work are from my PhD thesis and should be used as a template to create your own tables or figures.

1 Two figures in a single row using minipage

This section shows the usage of minipages for depicting two figures side by side. This will help in presenting the results professionally.

1.1 Example 1

This example shows only the figure number in the caption. The example also shows the use of the degree symbol, bold text, and delta symbol in the text. See how the height of the figures is used to align the figure and caption.

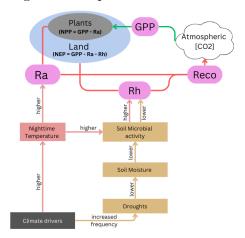


Figure 1: Schematic showing uptake of CO_2 by plants (GPP) and ecosystem respiration (R_{eco}) combination of respiration from plants (R_a) and the land (R_h). The impact of climate drivers, higher nighttime temperature, and low water availability on respiration terms.

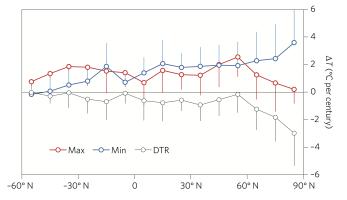


Figure 2: The area-weighing rates of temperature change (Δ T °C per century) along latitudes with a 10° interval (bars represent the standard deviation) over the period 1948 to 2010 (Xia et al., 2014). Max- Mean daily maximum temperature, Min- Mean daily minimum temperature, DTR- Mean diurnal temperature range.

1.2 Example 2

This example has the chapter and figure number in the caption. See the usage of figure width (in LATEX code) to control how the figure is shown.

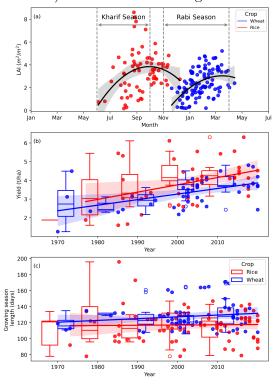


Figure 1.3: Analyzing the observational data for (a) LAI, (b) yield, and (c) growing season length in rice and wheat crops.

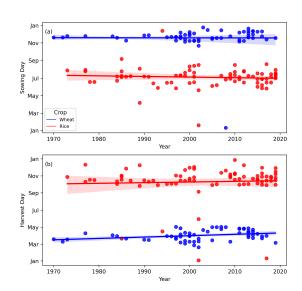


Figure 1.4: Analyzing the observational data for (a) sowing date and (b) harvest date in rice and wheat crops.

2 Complex Tables in LaTeX

Table 2.1: Table for complex data (multiple rows)

Site name	Event ID's in PANGEA repository	Latitude [°N]	$\begin{array}{c} \textbf{Longitude} \\ [^{\circ}\textbf{E}] \end{array}$	Altitude [m] (above sea level)
Anantapur	IND_RI_RED_2000 IND_RI_RED_2001*	14.68	77.6	350
Cooch Behar	IND_SW_COB_2000 IND_SW_COB_2001*	26.34	89.40	43
Faizabad	IND_SW_FAZ_2002 IND_SW_FAZ_2003 IND_SW_FAZ_2004*	26.78	82.20	113
Hyderabad	IND_RI_HYD_2010	17.19	78.23	542
Jabalpur	IND_RI_JAB_2009 IND_RI_JAB_2010* IND_RI_JAB_2011*	24.49	80.58	412
Jobner	IND_SW_JOB_2013	26.08	75.34	427
Kaul	IND_RI_KAU_2008	29.51	76.41	241
Kuthulia	IND_RI_KUT_2013	24.30	80.15	366
Ludhiana	IND_SW_COB_2011 IND_SW_LUD_2012*	30.93	75.87	247
Meerut	IND_SW_MEE_2011 IND_SW_MEE_2012 IND_SW_MEE_2013*	29.07	77.70	237
Nadia	IND_SW_NAD_2000 IND_SW_NAD_2000 IND_SW_NAD_2002 IND_SW_NAD_2008 IND_SW_NAD_2009* IND_SW_NAD_2013*	22.88	89.00	10
Pantnagar	IND_SW_PAN_2007 IND_SW_PAN_2008* IND_RI_PAN_2011 IND_RI_PAN_2012*	29.00	79.48	244
Parbhani	IND_SW_PAR_2001 IND_SW_PAR_2005 IND_SW_PAR_2009*	19.27	76.78	409
Raipur	IND_RI_RAI_2009	21.04	81.39	293

^{*}Site data used for validation. The remaining data is used for calibration. NOTE: This example shows the usage of multirows where one entry in column 1 has multiple entries in column 2 and others. This is highly useful in reporting data in scientific reports and manuscripts.

Table 2.2: Table in landscape

Parameter	Description (units)	CLM5_Def	Wheat CLM5_Mod1	CLM5_Def	Rice CLM5_Mod1
min_NH-planting_date	Minimum planting date for the northern hemisphere (MMDD)	401	1115 (calibrated in this study)	101	701 (calibrated in this study)
max_NH_planting_date	Maximum planting date for the northern hemisphere (MMDD)	615	1231 (calibrated in this study)	228	815 (calibrated in this study)
min_planting_temp	Avergare 5-day daily minimum temperature needed for planting (K)	272.15	283.15 (Rao et al., 2015)	283.15	294.15 (Kumar et al., 2023)
planting_temp	Avergare 10-day temperature needed for planting (K)	280.15	290.15 (Asseng et al., 2016; Mukherjee et al., 2019)	294.15	300.15 (Jat et al., 2019)
baset	Base Temperature (°C)	0	5 (Mukherjee et al., 2019; Mehta and Dhaliwal, 2023)	10	10 (Thakur et al., 2022)
grnfill	Grain fill parameter	0.6	0.6 (calibrated in this study)	0.4	0.65 (calibrated in this study)
hydgdd	Growing Degree Days for maturity (°C-days)	1700	1700 (calibrated in this study)	2100	2100 (calibrated in this study)
baset_mapping	Parameter to switch on/off latitudinal variation in baset in tropics (available options: 'constant'; 'varytropicsbylat')	'constant'	'constant'	'constant'	'constant'

Table 2.3: Creating two tables in a page (in landscape orientation)

Season	Region/Location	$\mathbf{GPP}~(\mathbf{gC/m}^2)$	$ m TER~(gC/m^2)$	(gC/m^2) TER (gC/m^2) NEP (gC/m^2) TER/GPP Reference	$\mathrm{TER}/\mathrm{GPP}$	Reference
Mean of (1980-2014)	Mean of (1980-2014) Indian wheat growing region	390±42.5	230.03 ± 26.92	160.81 ± 28.67	0.58	CLM5_Rf (This study)
Mean of $(1980-2014)$	Indian wheat growing region	763 ± 59.9	483.41 ± 34.26	279.6 ± 36.19	0.63	CLM5_Ir (This study)
Mean of (1980-2014)	Indian wheat growing region	335.47 ± 22.6	150.59 ± 8.02	186.66 ± 17.27	0.45	ISAM (This study)
2009-10	Meerut, India		 	393.15		Patel et al. (2011)
2007-08	Selhausen, Germany	1304 ± 18	676 ± 29	627 ± 15	0.51	Schmidt et al. (2012)
2008-09		1067 ± 27	529 ± 35	537 ± 12	0.49	
2007-08	Shouxian, Huaihe River basin, China	1220	637	583	0.52	Chen et al. (2015)
2008-09		1135	623	512	0.54	
2009-10		859	459	451	0.53	
2014-15	Saharanpur, India	621.47	429.17	192.30	69.0	Patel et al. (2021)
2013-14	IARI, New Delhi, India	888	304	576	0.34	Kumar et al. (2021)

Table 2.4: Second table in a landscape orientation

0.57 ± 0.045 0.43 ± 0.045 $-$ This study (CLM5) 0.74 ± 0.001 0.26 ± 0.001 0.5006 This study (ISAM) $\sim0.3-0.6$ Amthor and Baldocchi (2001) 0.76 0.24 0.59 Zhang et al. (2020) 0.56 0.44 0.60 Aubinet et al. (2009) 0.52 0.48 0.57 Aubinet et al. (2016) 0.51 0.49 0.71 Demyan et al. (2016) 0.54 0.46 0.61 Moureaux et al. (2008) 0.55 0.45 0.45 Suleau et al. (2011) 0.57 0.45 0.45 Wang et al. (2015)	NPP/GPP	m AR/GPP	NPP/GPP AR/GPP TER/GPP References	References
0.26±0.001 0.5006 ~0.3-0.6 0.24 0.59 0.48 0.57 0.49 0.71 0.46 0.61 0.45 0.57 0.45 0.61	0.57 ± 0.045	0.43 ± 0.045	ı	This study (CLM5)
~0.3-0.6 0.24 0.24 0.44 0.60 0.48 0.57 0.49 0.46 0.41 0.45 0.45 0.43 0.66	0.74 ± 0.001	0.26 ± 0.001	0.5006	This study (ISAM)
0.24 0.59 7 0.44 0.60 7 0.48 0.57 4 0.49 0.71 1 0.46 0.61 1 0.45 0.57 8 0.43 0.66 7		\sim 0.3-0.6		Amthor and Baldocchi (2001)
0.44 0.60 2.48 0.57 2.40 0.46 0.71 1 0.45 0.57 8.00 0.43 0.66 1 0.43 0.66 1 0.43 0.66 1 0.43 0.66 1 0.43 0.66 1 0.44 0.48 0.66 1 0.44 0.44 0.66 0.44 0.44 0.66 0.44 0.44	0.76	0.24	0.59	Zhang et al. (2020)
0.48 0.57 0.49 0.71 1 0.46 0.61 1 0.45 0.57 9 0.43 0.66 7	0.56	0.44	0.60	Aubinet et al. (2009)
0.49 0.71 1 0.46 0.61 1 0.45 0.57 5 0.43 0.66 7	0.52	0.48	0.57	Aubinet et al. (2009)
0.46 0.61 1 0.45 0.57 9 0.43 0.66 1	0.51	0.49	0.71	Demyan et al. (2016)
0.45 0.57 0.43 0.66	0.54	0.46	0.61	Moureaux et al. (2008)
0.43 0.66	0.55	0.45	0.57	Suleau et al. (2011)
	0.57	0.43	99.0	Wang et al. (2015)