TABLE 1. Comparison Table

Task	Lubridate	Date	POSIXct
now (system time zone)	now()		Sys.time()
now (GMT)	now("GMT")	Sys.Date()	
origin	origin	structure(0, class= "Date")	structure(0, class = c("POSIXt","POSIXct"))
x days since origin	origin + days(x)	structure(floor(x), class="Date")	structure(x*24*60*60, class=c("POSIXt", "POSIXct"))
next day	date + days(1)	date + 1	seq(date, length=2, by="day")[2]
previous day	date - days(1)	date - 1	seq(date, length = 2, by ="-1 day")[2]
DST and Time Zones			
x days since date			
(day exactly 24 hours)	options(DST="exact"); date + days(x)		seq(date, length=2, by=paste(x, "day"))[2]
(allowing for DST)	options(DST="relative"); date + days(x)	date + floor(x)	seq(date, length=2, by=paste(x,"DSTday"))[2]
display date in new time zone	with_tz(date, "TZ")		as.POSIXct(format(as.POSIXct(date), tz = "TZ"), tz = "TZ")
keep clock time, replace time zone	replace_tz(date,"TZ")		
Exploring			
sequence	date + c(0:9) * days(1)	seq(date, length=10, by = "day")	seq(date, length = 10, by = "DSTday")
every 2nd week	date + c(0:2) * weeks(2)	seq(date, length = 3, by = "2 week")	seq(date, length = 3, by = "2 week"
first day of month	floor_date(date, "month")	as.Date(format(date, "&Y-%m-01"))	as.POSIXct(format(date, "&Y-%m-01"))
round to nearest first of month	round_date(date, "month")		
year value	year(date)	as.numeric(format(date,"%Y"))	as.numeric(format(date,"%Y"))
change year value	year(date) <- z	as.Date(format(date, "z-%m-%d"))	as.POSIXct(format(date, "z-%m-%d"))
day of week	wday(date) #Sun = 1	as.numeric(format(date,"%w")) #Sun = 0	as.numeric(format(date,"%w")) #Sun = 0
day of year	yday(date)	as.numeric(format(date,"%j"))	as.numeric(format(date,"%j"))
express as decimal of year	decimal_date(date)		
Input			
"1970-10-15"	ymd(z)	as.Date(z)	as.POSIXct(z)
"10/15/1970"	mdy(z)	as.Date(z, "%m/%d/%Y")	as.POSIXct(strptime(z, "%m/%d/%Y"))
15101970	dym(z)	as.Date(as.character(z),format="%d%m%Y")	as.POSIXct(as.character(z),tz="GMT",format="%d%m%Y")
identify date format	guess_format(dates)		
Plotting			
create pretty date breaks (for axis or binning)	pretty.dates(z)		

Durations Comparison

Duration	Lubridate	base::R
1 second	seconds(1)	as.difftime(1, unit = "secs")
5 days, 3 hours and - 1 minute	new_duration(day = 5, hour = 3, minute = -1)	as.difftime(60*24*5 + 60*3 - 1, unit = "mins")
	# 5 days, 2 hours and 59 minutes	# Time difference of 7379 mins
1 month	months(1)	
1 year	years(1)	