What is Greenwich Mean Time (GMT)?

Please note that GMT may be listed as Zulu (Z) or Coordinated Universal Time (UTC).

To avoid the confusion caused by all the time zones around the world and changes between standard time and daily savings time, most scientists use the twenty four hour clock and only one time zone, Greenwich Mean Time or <u>GMT</u>. <u>GMT</u> time is the current time measured on the Prime Meridian (0 degrees longitude). The Prime Meridian runs through Greenwich, England, hence the name Greenwich Mean Time or <u>GMT</u>. All over the planet it is the same time. Some people use the names <u>Z</u> or <u>Zulu</u> and <u>UTC</u> or Universal Time Coordinates instead of <u>GMT</u>. <u>GMT</u>, <u>Z</u>, <u>Zulu</u> and <u>UTC</u> all mean the same thing - the current time at the Prime Meridian.

When converting from <u>GMT</u> to local time, first consider the <u>GMT</u> as military time (24 hour clock). Then go back the correct number of hours using the following:

From GMT to Local Standard Time:

Eastern Standard Time (EST) UTC - 5 hours = EST Central Standard Time (CST) UTC - 6 hours = CST Mountain Standard Time (MST) UTC - 7 hours = MST Pacific Standard Time (PST) UTC - 8 hours = PST

Next, the local time is converted to an AM/PM time, if needed.

Friday 2300Z Dec 2

From GMT to Local Daylight Time:

Eastern Standard Time (EDT) UTC - 4 hours = EST Central Standard Time (CDT) UTC - 5 hours = CST Mountain Standard Time (MDT) UTC - 6 hours = MST Pacific Standard Time (PDT) UTC - 7 hours = PST

Consider 2300Z as 2300 hours (basically changing Z time to a 24 clock). Then for Central Standard Time, go back 6 hours. Therefore 2300Z or 23Z Dec 2 is 1700 hours or 500 PM Friday Dec 2nd Central Standard Time.

Monday 0300Z May 9 (Hint: For 0000Z through 0500Z, it is actually the day before)

Consider 0300Z as 0300 hours (basically changing Z time to a 24 clock). Then for Central Daylight Time, go back 5 hours. Therefore 0300Z or 03Z May 9 is 1000 PM on **Sunday May 8** Central Daylight Time.

U. S. Standard Time vs. Universal Time Coordinated (Z-time)

23	7p	d 9	Sp	4	35	2p	4	9a%	
22	6p	<u></u> 2р	4р	39	2p	1p	12N	8a%	
21	5p	4b	35	2p	4	12N	11a	7a%	
20	4b	39	2p	4	12N	11a	10a	6a%	
19	3p	2p	4	12N	11a	10a	9a	5a%	
18	2p	10	12N	11a	10a	9a	8a	4a%	
17	1	12N	11a	10a	9a	8a	7a	3a%	
16	12N	11a	10a	9a	8a	7a	6a	2a%	
15	11a	10a	9a	8a	7a	6a	5a	1a%	
14	10a	9a	8a	7а	6a	5a	49	12M%	
13	9a	88	7a	6a	5a	4a	3a	11p	
12	8a	7a	6a	5a	4a	3a	2a	10p	
#	7а	6a	5a	4a	3a	2a	1a	99	
10	6a	5a	4a	3a	2a	19	12M	89	
6	5a	49	3a	2a	19	12M	11p*	7p	
8	4a	3a	2a	19	12M	11p*	10p*	6p	
7	3a	2a	19	12M	11p*	10p*	*d6	<u></u> 2р	į
9	2a	19	12M	11p*	10p*	*d6	*q8	46	
2	1 <u>a</u>	12M	11p*	10p*	*d6	*q8	7p*	35	:
4	12M	11p*	10p*	*d6	*d8	7p*	,d9	2p	
3	11p*	10p*	*d6	*q8	7p*	*d9	5p*	4	
2	10p*	*d6	*q8	7p*	*d9	5p*	4p*	12N	
-	*d6	*q8	7p*	*d9	5p*	4p*	3p*	11a	
0	*q8	7p*	*d9	5p*	4p*	3p*	2p	10a	
off.	4-	ç	9	-7	φ	6-	-10	+10	
UTC Time	AST	EST	CST	MST	PST	AK	둪	Guam	

Note: AST - Atlantic AK - Alaska time HI - Hawaii time *The previous day %The next day

Daylight Saving Time vs. Universal Time Coordinated (Z-time)

8	0	0	0	0
23	7p	9	55	40
22	6p	Sp.	4	39
21	5p	46	39	20
20	4p	35	2p	4
19	3р	2p	4	12N
18	2p	4	12N	11a
17	1p	12N	11a	10a
16	12N	11a	10a	9a
15	11a	10a	9a	88
14	10a	9a	89	7a
13	9a	8a	7а	6a
12	88	7a	ба	5a
Ħ	7a	6a	5a	49
10	6a	5a	49	33
6	5a	49	3a	2a
8	4a	3a	2a	19
7	3a	2a	19	12M
9	2a	19	12M	11p*
2	1 <u>a</u>	12M	11p*	10p*
4	12M	11p*	10p*	*06
3		10p*	*d6	*08
2	10p*	*d6	*q8	7p*
F	*d6	*q8	7p*	*09
0	*d8	7p*	*qô	5p*
off.	4	ç,	9	-7
UTC	EDT	CDT	MDT	PDT