

DATI ASTRONOMICI MENSILI 2010

Spiegazioni

Obiettivo

Il documento vuole fornire agli astrofili che compiono osservazioni (visuali, astrofotografia, utilizzo di CCD) uno strumento per pianificare in anticipo le osservazioni. Si tratta quindi di uno strumento *pratico*, senza pretese di assoluto rigore scientifico.

Dati riportati

Orari: Tutti gli orari sono espressi in ora "Corrente" vale a dire l'ora segnata dagli orologi sia che si tratti di periodo di ora legale o no

Giorno: E' nella forma Mese/data . L'asterisco riportato dopo il giorno della settimana significa che é attiva l'Ora Legale

Sole: Sono riportati i tempi per :

- Alba Inizio del crepuscolo del mattino
momento in cui il Sole sale sopra -18° rispetto all'orizzonte astronomico (secondo la teoria in quel momento l'oscurità comincia a diminuire e cessano di essere visibili le stelle di 6^a magnitudine)
- Sorgere
- Tramonto
- Crepuscolo Fine del crepuscolo della sera
momento in cui il Sole scende sotto i -18° rispetto all'orizzonte astronomico (l'oscurità diventa totale e diventano visibili le stelle di 6^a magnitudine)

Luna I dati riportati per Fase si riferiscono alle ore 20 (solari) del giorno in questione

- Sorgere Momento in cui la Luna sale sopra l'orizzonte astronomico
- Tramonto Momento in cui la Luna scende sotto l'orizzonte astronomico
- Fase. Percentuale del disco lunare illuminato (1= 100%, 0.50 = 50%)

Buio - Finestra di osservazione: Durata e periodo di possibile osservazione in condizioni di completa oscurità (notte fonda e assenza di Luna) nella notte a cavallo tra il giorno presente e il successivo.

Tenere presente che:

- In presenza di Luna con percentuale di illuminazione inferiore al 5% (due o tre giorni prima e dopo Luna nuova) il disturbo é quasi del tutto trascurabile, tranne che per la zona di cielo in cui la Luna si trova.
- In caso di osservazione di pianeti o stelle di magnitudine inferiore alla sesta, la finestra di osservazione é naturalmente più estesa.

Considerazioni generali

- Tutti i dati sono relativi a Milano (lat. $45^\circ 27'$ Nord, long. $9^\circ 12'$ Est)
- Per altre località di osservazione in Lombardia, Piemonte e Liguria le correzioni da apportare sono dell'ordine massimo di qualche minuto (mai più di 10) e quindi non significative agli effetti degli obiettivi del presente documento
- Si riferiscono al momento in cui il centro dell'oggetto (Sole o Luna) attraversa l'orizzonte; sono quindi approssimati di circa 1-2 minuti in quanto Sole e Luna sono oggetti estesi (circa $1/2$ grado)
- Sono riportati in **grassetto** i dati relativi ai Sabati
- Sono riportati *in corsivo e/o sottolineati* i dati relativi a giorni precedenti feste nazionali o religiose

Dati astronomici del mese di Gennaio 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
12/31	Gio	06:16	08:03	16:50	18:37	16:29	07:47	0.99	00:00	-----	-----
1/1	Ven	06:16	08:03	16:51	18:38	17:50	08:37	1.00	00:00	-----	-----
1/2	Sab	06:16	08:03	16:51	18:39	19:14	09:15	0.98	00:35	18:39	19:14
1/3	Dom	06:16	08:03	16:52	18:40	20:36	09:46	0.93	01:56	18:40	20:36
1/4	Lun	06:16	08:03	16:53	18:40	21:56	10:12	0.86	03:15	18:40	21:56
<u>1/5</u>	<u>Mar</u>	<u>06:16</u>	<u>08:03</u>	<u>16:54</u>	<u>18:41</u>	<u>23:12</u>	<u>10:36</u>	<u>0.76</u>	<u>04:31</u>	<u>18:41</u>	<u>23:12</u>
1/6	Mer	06:16	08:03	16:56	18:42	-----	10:58	0.66	05:44	18:42	00:27
1/7	Gio	06:16	08:03	16:57	18:43	00:27	11:21	0.55	06:56	18:43	01:39
1/8	Ven	06:16	08:02	16:58	18:44	01:39	11:47	0.44	08:07	18:44	02:51
1/9	Sab	06:16	08:02	16:59	18:45	02:51	12:16	0.34	09:15	18:45	04:00
1/10	Dom	06:16	08:02	17:00	18:46	04:00	12:51	0.25	10:18	18:46	05:04
1/11	Lun	06:16	08:01	17:01	18:47	05:04	13:33	0.16	11:14	18:47	06:02
1/12	Mar	06:15	08:01	17:02	18:48	06:02	14:23	0.10	11:27	18:48	06:15
1/13	Mer	06:15	08:01	17:04	18:49	06:51	15:19	0.05	11:25	18:49	06:15
1/14	Gio	06:15	08:00	17:05	18:50	07:31	16:21	0.02	11:24	18:50	06:14
1/15	Ven	06:14	08:00	17:06	18:51	08:03	17:25	0.00	11:23	18:51	06:14
1/16	Sab	06:14	07:59	17:07	18:52	08:30	18:29	0.00	11:21	18:52	06:14
1/17	Dom	06:14	07:58	17:09	18:54	08:53	19:32	0.03	10:41	19:32	06:13
1/18	Lun	06:13	07:58	17:10	18:55	09:13	20:35	0.06	09:37	20:35	06:13
1/19	Mar	06:13	07:57	17:11	18:56	09:32	21:38	0.12	08:34	21:38	06:12
1/20	Mer	06:12	07:56	17:13	18:57	09:50	22:41	0.19	07:30	22:41	06:11
1/21	Gio	06:11	07:55	17:14	18:58	10:09	23:46	0.27	06:25	23:46	06:11
1/22	Ven	06:11	07:55	17:16	18:59	10:30	-----	0.36	05:17	00:53	06:10
1/23	Sab	06:10	07:54	17:17	19:01	10:55	00:53	0.45	04:06	02:03	06:10
1/24	Dom	06:10	07:53	17:18	19:02	11:25	02:03	0.56	02:54	03:15	06:09
1/25	Lun	06:09	07:52	17:20	19:03	12:05	03:15	0.66	01:44	04:24	06:08
1/26	Mar	06:08	07:51	17:21	19:04	12:55	04:24	0.76	00:39	05:28	06:07
1/27	Mer	06:07	07:50	17:23	19:05	14:00	05:28	0.85	00:00	-----	-----
1/28	Gio	06:06	07:49	17:24	19:07	15:16	06:22	0.93	00:00	-----	-----
1/29	Ven	06:06	07:48	17:25	19:08	16:39	07:07	0.98	00:00	-----	-----
1/30	Sab	06:05	07:47	17:27	19:09	18:04	07:42	1.00	00:00	-----	-----
1/31	Dom	06:04	07:46	17:28	19:10	19:28	08:11	0.99	00:17	19:10	19:28
2/1	Lun	06:03	07:44	17:30	19:12	20:49	08:37	0.95	01:37	19:12	20:49

Dati astronomici del mese di Febbraio 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
1/31	Dom	06:04	07:46	17:28	19:10	19:28	08:11	0.99	00:17	19:10	19:28
2/ 1	Lun	06:03	07:44	17:30	19:12	20:49	08:37	0.95	01:37	19:12	20:49
2/ 2	Mar	06:02	07:43	17:31	19:13	22:07	09:00	0.89	02:54	19:13	22:07
2/ 3	Mer	06:01	07:42	17:33	19:14	23:24	09:24	0.81	04:10	19:14	23:24
2/ 4	Gio	06:00	07:41	17:34	19:15	----	09:49	0.71	05:23	19:15	00:38
2/ 5	Ven	05:59	07:40	17:36	19:17	00:38	10:18	0.61	06:33	19:17	01:50
2/ 6	Sab	05:58	07:38	17:37	19:18	01:50	10:51	0.50	07:39	19:18	02:57
2/ 7	Dom	05:56	07:37	17:38	19:19	02:57	11:32	0.40	08:38	19:19	03:57
2/ 8	Lun	05:55	07:36	17:40	19:20	03:57	12:19	0.30	09:28	19:20	04:48
2/ 9	Mar	05:54	07:34	17:41	19:22	04:48	13:13	0.22	10:09	19:22	05:31
2/10	Mer	05:53	07:33	17:43	19:23	05:31	14:13	0.14	10:28	19:23	05:51
2/11	Gio	05:51	07:31	17:44	19:24	06:06	15:16	0.08	10:26	19:24	05:50
2/12	Ven	05:50	07:30	17:46	19:26	06:35	16:20	0.04	10:23	19:26	05:49
2/13	Sab	05:49	07:28	17:47	19:27	06:59	17:24	0.01	10:21	19:27	05:47
2/14	Dom	05:47	07:27	17:49	19:28	07:19	18:27	0.00	10:18	19:28	05:46
2/15	Lun	05:46	07:25	17:50	19:30	07:39	19:30	0.01	10:15	19:30	05:45
2/16	Mar	05:45	07:24	17:52	19:31	07:57	20:33	0.03	09:10	20:33	05:43
2/17	Mer	05:43	07:22	17:53	19:32	08:16	21:37	0.07	08:04	21:37	05:42
2/18	Gio	05:42	07:21	17:54	19:34	08:36	22:43	0.13	06:57	22:43	05:40
2/19	Ven	05:40	07:19	17:56	19:35	08:59	23:51	0.21	05:48	23:51	05:39
2/20	Sab	05:39	07:17	17:57	19:36	09:27	00:53	0.29	04:37	01:00	05:37
2/21	Dom	05:37	07:16	17:59	19:38	10:02	01:00	0.39	03:27	02:09	05:36
2/22	Lun	05:36	07:14	18:00	19:39	10:46	02:09	0.50	02:21	03:13	05:34
2/23	Mar	05:34	07:12	18:02	19:40	11:42	03:13	0.61	01:23	04:09	05:32
2/24	Mer	05:32	07:11	18:03	19:42	12:50	04:09	0.71	00:34	04:57	05:31
2/25	Gio	05:31	07:09	18:04	19:43	14:07	04:57	0.81	00:00	----	----
2/26	Ven	05:29	07:07	18:06	19:44	15:30	05:35	0.90	00:00	----	----
2/27	Sab	05:27	07:06	18:07	19:46	16:53	06:07	0.96	00:00	----	----
2/28	Dom	05:26	07:04	18:09	19:47	18:16	06:35	0.99	00:00	----	----
3/ 1	Lun	05:24	07:02	18:10	19:48	19:37	07:00	1.00	00:00	----	----

Dati astronomici del mese di Marzo 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
2/28	Dom	05:26	07:04	18:09	19:47	18:16	06:35	0.99	00:00	-----	-----
3/ 1	Lun	05:24	07:02	18:10	19:48	19:37	07:00	1.00	00:00	-----	-----
3/ 2	Mar	05:22	07:00	18:11	19:50	20:57	07:24	0.97	01:07	19:50	20:57
3/ 3	Mer	05:20	06:59	18:13	19:51	22:15	07:49	0.92	02:24	19:51	22:15
3/ 4	Gio	05:19	06:57	18:14	19:52	23:31	08:17	0.85	03:39	19:52	23:31
3/ 5	Ven	05:17	06:55	18:15	19:54	-----	08:50	0.76	04:49	19:54	00:42
3/ 6	Sab	05:15	06:53	18:17	19:55	00:42	09:29	0.67	05:52	19:55	01:47
3/ 7	Dom	05:13	06:51	18:18	19:57	01:47	10:14	0.57	06:46	19:57	02:43
3/ 8	Lun	05:11	06:49	18:20	19:58	02:43	11:07	0.47	07:31	19:58	03:29
3/ 9	Mar	05:09	06:48	18:21	19:59	03:29	12:06	0.37	08:07	19:59	04:07
3/10	Mer	05:07	06:46	18:22	20:01	04:07	13:08	0.28	08:36	20:01	04:37
3/11	Gio	05:05	06:44	18:24	20:02	04:37	14:12	0.20	09:01	20:02	05:03
3/12	Ven	05:03	06:42	18:25	20:04	05:03	15:15	0.13	08:58	20:04	05:02
3/13	Sab	05:02	06:40	18:26	20:05	05:25	16:18	0.07	08:54	20:05	05:00
3/14	Dom	05:00	06:38	18:28	20:07	05:45	17:21	0.03	08:51	20:07	04:58
3/15	Lun	04:58	06:36	18:29	20:08	06:04	18:25	0.01	08:48	20:08	04:56
3/16	Mar	04:56	06:34	18:30	20:09	06:23	19:29	0.00	08:44	20:09	04:54
3/17	Mer	04:54	06:33	18:32	20:11	06:43	20:35	0.01	08:17	20:35	04:51
3/18	Gio	04:51	06:31	18:33	20:12	07:05	21:42	0.04	07:07	21:42	04:49
3/19	Ven	04:49	06:29	18:34	20:14	07:32	22:51	0.09	05:56	22:51	04:47
3/20	Sab	04:47	06:27	18:35	20:15	08:04	23:59	0.16	04:46	23:59	04:45
3/21	Dom	04:45	06:25	18:37	20:17	08:45	00:53	0.25	03:39	01:04	04:43
3/22	Lun	04:43	06:23	18:38	20:18	09:36	01:04	0.34	02:39	02:02	04:41
3/23	Mar	04:41	06:21	18:39	20:20	10:38	02:02	0.45	01:48	02:51	04:39
3/24	Mer	04:39	06:19	18:41	20:21	11:49	02:51	0.56	01:06	03:31	04:37
3/25	Gio	04:37	06:17	18:42	20:23	13:06	03:31	0.67	00:30	04:05	04:35
3/26	Ven	04:35	06:16	18:43	20:25	14:26	04:05	0.78	00:00	-----	-----
3/27	Sab	04:33	06:14	18:45	20:26	15:47	04:33	0.87	00:00	-----	----- (*)
3/28	Dom*	05:30	07:12	19:46	21:28	18:07	05:59	0.94	00:00	-----	-----
3/29	Lun*	05:28	07:10	19:47	21:29	19:27	06:23	0.98	00:00	-----	-----
3/30	Mar*	05:26	07:08	19:48	21:31	20:46	06:48	1.00	00:00	-----	-----
3/31	Mer*	05:24	07:06	19:50	21:32	22:04	07:15	0.99	00:32	21:32	22:04
4/ 1	Gio*	05:22	07:04	19:51	21:34	23:20	07:46	0.95	01:46	21:34	23:20

(*) Cambio ora Solare - Ora Estiva

Dati astronomici del mese di Aprile 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
3/31	Mer*	05:24	07:06	19:50	21:32	22:04	07:15	0.99	00:32	21:32	22:04
4/ 1	Gio*	05:22	07:04	19:51	21:34	23:20	07:46	0.95	01:46	21:34	23:20
4/ 2	Ven*	05:19	07:02	19:52	21:36	-----	08:23	0.89	02:54	21:36	00:30
4/ 3	Sab*	05:17	07:00	19:54	21:37	00:30	09:07	0.82	03:54	21:37	01:31
4/ 4	Dom*	05:15	06:59	19:55	21:39	01:31	09:58	0.73	04:43	21:39	02:22
4/ 5	Lun*	05:13	06:57	19:56	21:41	02:22	10:56	0.64	05:23	21:41	03:04
4/ 6	Mar*	05:10	06:55	19:58	21:42	03:04	11:58	0.54	05:55	21:42	03:37
4/ 7	Mer*	05:08	06:53	19:59	21:44	03:37	13:01	0.44	06:21	21:44	04:05
4/ 8	Gio*	05:06	06:51	20:00	21:46	04:05	14:05	0.35	06:43	21:46	04:28
4/ 9	Ven*	05:04	06:49	20:01	21:47	04:28	15:08	0.26	07:02	21:47	04:49
4/10	Sab*	05:01	06:47	20:03	21:49	04:49	16:11	0.19	07:10	21:49	04:59
4/11	Dom*	04:59	06:46	20:04	21:51	05:08	17:14	0.12	07:06	21:51	04:57
4/12	Lun*	04:57	06:44	20:05	21:53	05:28	18:18	0.06	07:02	21:53	04:55
4/13	Mar*	04:55	06:42	20:07	21:55	05:48	19:23	0.02	06:58	21:55	04:52
4/14	Mer*	04:52	06:40	20:08	21:56	06:10	20:31	0.00	06:54	21:56	04:50
4/15	Gio*	04:50	06:38	20:09	21:58	06:35	21:40	0.00	06:50	21:58	04:48
4/16	Ven*	04:48	06:37	20:10	22:00	07:06	22:50	0.02	05:56	22:50	04:45
4/17	Sab*	04:45	06:35	20:12	22:02	07:45	23:56	0.07	04:47	23:56	04:43
4/18	Dom*	04:43	06:33	20:13	22:04	08:33	-----	0.13	03:44	00:57	04:41
4/19	Lun*	04:41	06:31	20:14	22:06	09:32	00:57	0.21	02:50	01:48	04:39
4/20	Mar*	04:39	06:30	20:16	22:07	10:40	01:48	0.31	02:06	02:31	04:36
4/21	Mer*	04:36	06:28	20:17	22:09	11:55	02:31	0.41	01:29	03:05	04:34
4/22	Gio*	04:34	06:26	20:18	22:11	13:12	03:05	0.53	00:57	03:34	04:32
4/23	Ven*	04:32	06:25	20:19	22:13	14:29	03:34	0.64	00:29	04:00	04:29
4/24	Sab*	04:29	06:23	20:21	22:15	15:47	04:00	0.75	00:03	04:24	04:27
4/25	Dom*	04:27	06:21	20:22	22:17	17:04	04:24	0.84	00:00	-----	-----
4/26	Lun*	04:25	06:20	20:23	22:19	18:21	04:48	0.92	00:00	-----	-----
4/27	Mar*	04:23	06:18	20:25	22:21	19:39	05:14	0.97	00:00	-----	-----
4/28	Mer*	04:20	06:17	20:26	22:23	20:55	05:43	1.00	00:00	-----	-----
4/29	Gio*	04:18	06:15	20:27	22:25	22:08	06:17	1.00	00:00	-----	-----
4/30	Ven*	04:16	06:13	20:28	22:27	23:14	06:58	0.97	00:47	22:27	23:14
5/ 1	Sab*	04:13	06:12	20:30	22:29	-----	07:46	0.93	01:42	22:29	00:11

Pasqua 12 Aprile

Dati astronomici del mese di Maggio 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
4/30	Ven*	04:16	06:13	20:28	22:27	23:14	06:58	0.97	00:47	22:27	23:14
5/ 1	Sab*	04:13	06:12	20:30	22:29	----	07:46	0.93	01:42	22:29	00:11
5/ 2	Dom*	04:11	06:10	20:31	22:31	00:11	08:43	0.87	02:27	22:31	00:58
5/ 3	Lun*	04:09	06:09	20:32	22:33	00:58	09:44	0.79	03:02	22:33	01:35
5/ 4	Mar*	04:07	06:08	20:33	22:35	01:35	10:48	0.70	03:30	22:35	02:05
5/ 5	Mer*	04:04	06:06	20:35	22:37	02:05	11:52	0.61	03:53	22:37	02:30
5/ 6	Gio*	04:02	06:05	20:36	22:39	02:30	12:56	0.52	04:13	22:39	02:52
5/ 7	Ven*	04:00	06:03	20:37	22:41	02:52	13:59	0.42	04:31	22:41	03:12
5/ 8	Sab*	03:58	06:02	20:38	22:43	03:12	15:01	0.33	04:48	22:43	03:31
5/ 9	Dom*	03:56	06:01	20:40	22:46	03:31	16:04	0.24	05:05	22:46	03:51
5/10	Lun*	03:53	05:59	20:41	22:48	03:51	17:09	0.17	05:04	22:48	03:51
5/11	Mar*	03:51	05:58	20:42	22:50	04:12	18:16	0.10	04:59	22:50	03:49
5/12	Mer*	03:49	05:57	20:43	22:52	04:36	19:25	0.05	04:55	22:52	03:47
5/13	Gio*	03:47	05:56	20:44	22:54	05:06	20:35	0.01	04:51	22:54	03:45
5/14	Ven*	03:45	05:54	20:46	22:56	05:42	21:44	0.00	04:47	22:56	03:43
5/15	Sab*	03:43	05:53	20:47	22:58	06:28	22:48	0.01	04:42	22:58	03:41
5/16	Dom*	03:41	05:52	20:48	23:00	07:24	23:44	0.05	03:55	23:44	03:39
5/17	Lun*	03:39	05:51	20:49	23:02	08:31	----	0.10	03:07	00:30	03:37
5/18	Mar*	03:37	05:50	20:50	23:05	09:45	00:30	0.18	02:28	01:07	03:35
5/19	Mer*	03:35	05:49	20:51	23:07	11:02	01:07	0.28	01:55	01:38	03:33
5/20	Gio*	03:33	05:48	20:52	23:09	12:19	01:38	0.39	01:27	02:04	03:31
5/21	Ven*	03:31	05:47	20:54	23:11	13:36	02:04	0.50	01:01	02:28	03:29
5/22	Sab*	03:29	05:46	20:55	23:13	14:51	02:28	0.62	00:36	02:51	03:27
5/23	Dom*	03:27	05:45	20:56	23:15	16:06	02:51	0.72	00:09	03:16	03:25
5/24	Lun*	03:25	05:44	20:57	23:17	17:21	03:16	0.82	00:00	----	----
5/25	Mar*	03:23	05:43	20:58	23:19	18:36	03:42	0.90	00:00	----	----
5/26	Mer*	03:21	05:42	20:59	23:21	19:50	04:14	0.95	00:00	----	----
5/27	Gio*	03:20	05:42	21:00	23:23	20:58	04:51	0.99	00:00	----	----
5/28	Ven*	03:18	05:41	21:01	23:25	21:59	05:36	1.00	00:00	----	----
5/29	Sab*	03:16	05:40	21:02	23:27	22:50	06:30	0.99	00:00	----	----
5/30	Dom*	03:15	05:40	21:03	23:28	23:31	07:30	0.96	00:03	23:28	23:31
5/31	Lun*	03:13	05:39	21:03	23:30	----	08:33	0.91	00:34	23:30	00:04
6/ 1	Mar*	03:12	05:38	21:04	23:32	00:04	09:38	0.84	01:00	23:32	00:32

Dati astronomici del mese di Giugno 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
5/31	Lun*	03:13	05:39	21:03	23:30	-----	08:33	0.91	00:34	23:30	00:04
6/ 1	Mar*	03:12	05:38	21:04	23:32	00:04	09:38	0.84	01:00	23:32	00:32
6/ 2	Mer*	03:10	05:38	21:05	23:34	00:32	10:43	0.77	01:21	23:34	00:55
6/ 3	Gio*	03:09	05:37	21:06	23:35	00:55	11:46	0.68	01:40	23:35	01:15
6/ 4	Ven*	03:07	05:37	21:07	23:37	01:15	12:48	0.59	01:58	23:37	01:34
6/ 5	Sab*	03:06	05:36	21:08	23:39	01:34	13:50	0.49	02:15	23:39	01:54
6/ 6	Dom*	03:05	05:36	21:08	23:40	01:54	14:54	0.40	02:34	23:40	02:14
6/ 7	Lun*	03:04	05:36	21:09	23:41	02:14	15:59	0.31	02:55	23:41	02:37
6/ 8	Mar*	03:03	05:35	21:10	23:43	02:37	17:06	0.22	03:19	23:43	03:02
6/ 9	Mer*	03:02	05:35	21:10	23:44	03:03	18:16	0.14	03:17	23:44	03:01
6/10	Gio*	03:01	05:35	21:11	23:45	03:36	19:26	0.07	03:15	23:45	03:00
6/11	Ven*	03:00	05:35	21:12	23:47	04:18	20:33	0.03	03:13	23:47	02:59
6/12	Sab*	02:59	05:34	21:12	23:48	05:11	21:34	0.00	03:11	23:48	02:59
6/13	Dom*	02:59	05:34	21:13	23:49	06:15	22:25	0.00	03:10	23:49	02:58
6/14	Lun*	02:58	05:34	21:13	23:50	07:29	23:06	0.03	03:08	23:50	02:58
6/15	Mar*	02:58	05:34	21:14	23:50	08:48	23:40	0.09	03:07	23:50	02:57
6/16	Mer*	02:57	05:34	21:14	23:51	10:07	-----	0.16	02:49	00:08	02:57
6/17	Gio*	02:57	05:34	21:14	23:52	11:25	00:08	0.26	02:24	00:33	02:57
6/18	Ven*	02:57	05:34	21:15	23:52	12:41	00:33	0.37	02:01	00:56	02:57
6/19	Sab*	02:57	05:34	21:15	23:53	13:57	00:56	0.48	01:37	01:20	02:57
6/20	Dom*	02:57	05:34	21:15	23:53	15:11	01:20	0.59	01:11	01:46	02:57
6/21	Lun*	02:57	05:35	21:15	23:53	16:25	01:46	0.70	00:42	02:15	02:57
6/22	Mar*	02:57	05:35	21:16	23:53	17:38	02:15	0.79	00:08	02:49	02:58
6/23	Mer*	02:58	05:35	21:16	23:53	18:47	02:49	0.87	00:00	-----	-----
6/24	Gio*	02:58	05:35	21:16	23:53	19:49	03:31	0.94	00:00	-----	-----
6/25	Ven*	02:58	05:36	21:16	23:53	20:43	04:21	0.98	00:00	-----	-----
6/26	Sab*	02:59	05:36	21:16	23:53	21:28	05:18	1.00	00:00	-----	-----
6/27	Dom*	03:00	05:37	21:16	23:52	22:04	06:20	1.00	00:00	-----	-----
6/28	Lun*	03:01	05:37	21:16	23:52	22:34	07:25	0.98	00:00	-----	-----
6/29	Mar*	03:01	05:37	21:16	23:51	22:58	08:30	0.94	00:00	-----	-----
6/30	Mer*	03:02	05:38	21:16	23:51	23:19	09:34	0.89	00:00	-----	-----
7/ 1	Gio*	03:03	05:39	21:16	23:50	23:39	10:36	0.82	00:00	-----	-----

Dati astronomici del mese di Luglio 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
6/30	Mer*	03:02	05:38	21:16	23:51	23:19	09:34	0.89	00:00	-----	-----
7/ 1	Gio*	03:03	05:39	21:16	23:50	23:39	10:36	0.82	00:00	-----	-----
7/ 2	Ven*	03:05	05:39	21:15	23:49	23:58	11:38	0.74	00:09	23:49	23:58
7/ 3	Sab*	03:06	05:40	21:15	23:48	-----	12:40	0.65	00:29	23:48	00:17
7/ 4	Dom*	03:07	05:40	21:15	23:47	00:17	13:44	0.56	00:51	23:47	00:38
7/ 5	Lun*	03:08	05:41	21:14	23:46	00:38	14:49	0.46	01:16	23:46	01:03
7/ 6	Mar*	03:10	05:42	21:14	23:45	01:03	15:56	0.37	01:47	23:45	01:32
7/ 7	Mer*	03:11	05:42	21:14	23:44	01:32	17:05	0.27	02:25	23:44	02:09
7/ 8	Gio*	03:13	05:43	21:13	23:43	02:09	18:14	0.18	03:13	23:43	02:56
7/ 9	Ven*	03:15	05:44	21:13	23:41	02:56	19:18	0.10	03:35	23:41	03:16
7/10	Sab*	03:16	05:45	21:12	23:40	03:55	20:13	0.05	03:38	23:40	03:18
7/11	Dom*	03:18	05:46	21:12	23:38	05:05	21:00	0.01	03:41	23:38	03:20
7/12	Lun*	03:20	05:46	21:11	23:37	06:23	21:38	0.00	03:44	23:37	03:21
7/13	Mar*	03:21	05:47	21:10	23:35	07:45	22:09	0.02	03:48	23:35	03:23
7/14	Mer*	03:23	05:48	21:10	23:34	09:06	22:36	0.07	03:51	23:34	03:25
7/15	Gio*	03:25	05:49	21:09	23:32	10:26	23:00	0.14	03:55	23:32	03:27
7/16	Ven*	03:27	05:50	21:08	23:30	11:44	23:25	0.24	03:58	23:30	03:29
7/17	Sab*	03:29	05:51	21:07	23:29	13:00	23:50	0.34	03:41	23:50	03:31
7/18	Dom*	03:31	05:52	21:07	23:27	14:15	-----	0.45	03:15	00:18	03:33
7/19	Lun*	03:33	05:53	21:06	23:25	15:29	00:18	0.57	02:44	00:51	03:35
7/20	Mar*	03:35	05:54	21:05	23:23	16:39	00:51	0.67	02:07	01:30	03:37
7/21	Mer*	03:37	05:55	21:04	23:21	17:43	01:30	0.76	01:22	02:17	03:39
7/22	Gio*	03:39	05:56	21:03	23:19	18:39	02:17	0.85	00:30	03:11	03:41
7/23	Ven*	03:41	05:57	21:02	23:17	19:26	03:11	0.91	00:00	-----	-----
7/24	Sab*	03:43	05:58	21:01	23:15	20:05	04:11	0.96	00:00	-----	-----
7/25	Dom*	03:45	05:59	21:00	23:13	20:36	05:14	0.99	00:00	-----	-----
7/26	Lun*	03:47	06:00	20:59	23:11	21:02	06:19	1.00	00:00	-----	-----
7/27	Mar*	03:49	06:01	20:58	23:09	21:25	07:23	0.99	00:00	-----	-----
7/28	Mer*	03:51	06:02	20:56	23:07	21:45	08:26	0.97	00:00	-----	-----
7/29	Gio*	03:53	06:04	20:55	23:05	22:04	09:28	0.92	00:00	-----	-----
7/30	Ven*	03:55	06:05	20:54	23:03	22:23	10:30	0.87	00:00	-----	-----
7/31	Sab*	03:57	06:06	20:53	23:01	22:43	11:32	0.79	00:00	-----	-----
8/ 1	Dom*	03:59	06:07	20:52	22:58	23:05	12:36	0.71	00:07	22:58	23:05

Dati astronomici del mese di Agosto 2010

		SOLE			LUNA			BUIO			
Giorno	Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A	
7/31	Sab*	03:57	06:06	20:53	23:01	22:43	11:32	0.79	00:00	-----	-----
8/ 1	Dom*	03:59	06:07	20:52	22:58	23:05	12:36	0.71	00:07	22:58	23:05
8/ 2	Lun*	04:01	06:08	20:50	22:56	23:32	13:41	0.62	00:36	22:56	23:32
8/ 3	Mar*	04:03	06:09	20:49	22:54	-----	14:48	0.52	01:10	22:54	00:04
8/ 4	Mer*	04:05	06:10	20:48	22:52	00:04	15:55	0.42	01:53	22:52	00:45
8/ 5	Gio*	04:07	06:12	20:46	22:50	00:45	17:00	0.32	02:47	22:50	01:37
8/ 6	Ven*	04:09	06:13	20:45	22:47	01:37	17:59	0.22	03:53	22:47	02:41
8/ 7	Sab*	04:11	06:14	20:43	22:45	02:41	18:49	0.14	05:09	22:45	03:55
8/ 8	Dom*	04:13	06:15	20:42	22:43	03:55	19:31	0.07	05:32	22:43	04:15
8/ 9	Lun*	04:15	06:16	20:40	22:41	05:15	20:06	0.02	05:37	22:41	04:17
8/10	Mar*	04:17	06:18	20:39	22:38	06:38	20:35	0.00	05:41	22:38	04:19
8/11	Mer*	04:19	06:19	20:37	22:36	08:00	21:02	0.01	05:45	22:36	04:21
8/12	Gio*	04:21	06:20	20:36	22:34	09:22	21:27	0.05	05:49	22:34	04:23
8/13	Ven*	04:23	06:21	20:34	22:32	10:41	21:53	0.12	05:54	22:32	04:25
8/14	Sab*	04:25	06:22	20:33	22:29	12:00	22:21	0.21	05:58	22:29	04:27
8/15	Dom*	04:27	06:24	20:31	22:27	13:16	22:53	0.31	05:36	22:53	04:29
8/16	Lun*	04:29	06:25	20:29	22:25	14:29	23:30	0.42	05:01	23:30	04:31
8/17	Mar*	04:31	06:26	20:28	22:22	15:36	-----	0.53	04:18	00:15	04:33
8/18	Mer*	04:33	06:27	20:26	22:20	16:35	00:15	0.63	03:28	01:07	04:35
8/19	Gio*	04:35	06:29	20:24	22:18	17:25	01:07	0.73	02:32	02:05	04:36
8/20	Ven*	04:36	06:30	20:23	22:15	18:06	02:05	0.81	01:31	03:07	04:38
8/21	Sab*	04:38	06:31	20:21	22:13	18:39	03:07	0.88	00:29	04:11	04:40
8/22	Dom*	04:40	06:32	20:19	22:11	19:07	04:11	0.94	00:00	-----	-----
8/23	Lun*	04:42	06:33	20:18	22:08	19:30	05:15	0.97	00:00	-----	-----
8/24	Mar*	04:44	06:35	20:16	22:06	19:51	06:18	1.00	00:00	-----	-----
8/25	Mer*	04:46	06:36	20:14	22:04	20:10	07:20	1.00	00:00	-----	-----
8/26	Gio*	04:47	06:37	20:12	22:02	20:30	08:22	0.98	00:00	-----	-----
8/27	Ven*	04:49	06:38	20:11	21:59	20:49	09:24	0.95	00:00	-----	-----
8/28	Sab*	04:51	06:40	20:09	21:57	21:11	10:27	0.90	00:00	-----	-----
8/29	Dom*	04:53	06:41	20:07	21:55	21:36	11:31	0.84	00:00	-----	-----
8/30	Lun*	04:54	06:42	20:05	21:52	22:05	12:36	0.76	00:13	21:52	22:05
8/31	Mar*	04:56	06:43	20:03	21:50	22:42	13:42	0.68	00:52	21:50	22:42
9/ 1	Mer*	04:58	06:44	20:01	21:48	23:28	14:46	0.58	01:40	21:48	23:28

Dati astronomici del mese di Settembre 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
8/31	Mar*	04:56	06:43	20:03	21:50	22:42	13:42	0.68	00:52	21:50	22:42
9/ 1	Mer*	04:58	06:44	20:01	21:48	23:28	14:46	0.58	01:40	21:48	23:28
9/ 2	Gio*	04:59	06:46	20:00	21:45	-----	15:46	0.47	02:39	21:45	00:24
9/ 3	Ven*	05:01	06:47	19:58	21:43	00:24	16:38	0.37	03:48	21:43	01:31
9/ 4	Sab*	05:03	06:48	19:56	21:41	01:31	17:23	0.26	05:06	21:41	02:47
9/ 5	Dom*	05:04	06:49	19:54	21:39	02:47	18:00	0.17	06:28	21:39	04:07
9/ 6	Lun*	05:06	06:50	19:52	21:36	04:07	18:32	0.09	07:31	21:36	05:07
9/ 7	Mar*	05:07	06:52	19:50	21:34	05:29	19:00	0.03	07:35	21:34	05:09
9/ 8	Mer*	05:09	06:53	19:48	21:32	06:51	19:26	0.00	07:39	21:32	05:11
9/ 9	Gio*	05:11	06:54	19:46	21:29	08:13	19:52	0.00	07:43	21:29	05:12
9/10	Ven*	05:12	06:55	19:44	21:27	09:34	20:20	0.04	07:46	21:27	05:14
9/11	Sab*	05:14	06:57	19:43	21:25	10:54	20:51	0.10	07:50	21:25	05:15
9/12	Dom*	05:15	06:58	19:41	21:23	12:11	21:28	0.18	07:49	21:28	05:17
9/13	Lun*	05:17	06:59	19:39	21:21	13:23	22:11	0.27	07:07	22:11	05:18
9/14	Mar*	05:18	07:00	19:37	21:18	14:26	23:01	0.37	06:18	23:01	05:20
9/15	Mer*	05:20	07:01	19:35	21:16	15:20	23:58	0.48	05:23	23:58	05:21
9/16	Gio*	05:21	07:03	19:33	21:14	16:05	-----	0.58	04:23	01:00	05:23
9/17	Ven*	05:23	07:04	19:31	21:12	16:41	01:00	0.67	03:21	02:03	05:24
9/18	Sab*	05:24	07:05	19:29	21:10	17:10	02:03	0.76	02:19	03:07	05:26
9/19	Dom*	05:26	07:06	19:27	21:07	17:35	03:07	0.84	01:17	04:10	05:27
9/20	Lun*	05:27	07:07	19:25	21:05	17:57	04:10	0.90	00:16	05:12	05:28
9/21	Mar*	05:28	07:09	19:23	21:03	18:17	05:12	0.95	00:00	-----	-----
9/22	Mer*	05:30	07:10	19:21	21:01	18:36	06:14	0.98	00:00	-----	-----
9/23	Gio*	05:31	07:11	19:19	20:59	18:56	07:16	1.00	00:00	-----	-----
9/24	Ven*	05:33	07:12	19:17	20:57	19:17	08:19	1.00	00:00	-----	-----
9/25	Sab*	05:34	07:14	19:16	20:55	19:41	09:23	0.98	00:00	-----	-----
9/26	Dom*	05:35	07:15	19:14	20:53	20:09	10:28	0.94	00:00	-----	-----
9/27	Lun*	05:37	07:16	19:12	20:51	20:44	11:33	0.88	00:00	-----	-----
9/28	Mar*	05:38	07:17	19:10	20:49	21:26	12:37	0.81	00:37	20:49	21:26
9/29	Mer*	05:40	07:19	19:08	20:47	22:18	13:37	0.72	01:31	20:47	22:18
9/30	Gio*	05:41	07:20	19:06	20:45	23:19	14:31	0.62	02:34	20:45	23:19
10/ 1	Ven*	05:42	07:21	19:04	20:43	-----	15:17	0.52	03:46	20:43	00:29

Dati astronomici del mese di Ottobre 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
9/30	Gio*	05:41	07:20	19:06	20:45	23:19	14:31	0.62	02:34	20:45	23:19
10/ 1	Ven*	05:42	07:21	19:04	20:43	-----	15:17	0.52	03:46	20:43	00:29
10/ 2	Sab*	05:44	07:22	19:02	20:41	00:29	15:56	0.41	05:03	20:41	01:44
10/ 3	Dom*	05:45	07:24	19:00	20:39	01:44	16:29	0.30	06:24	20:39	03:02
10/ 4	Lun*	05:46	07:25	18:58	20:37	03:02	16:58	0.20	07:45	20:37	04:22
10/ 5	Mar*	05:48	07:26	18:57	20:35	04:22	17:24	0.11	09:07	20:35	05:42
10/ 6	Mer*	05:49	07:27	18:55	20:33	05:42	17:50	0.05	09:17	20:33	05:50
10/ 7	Gio*	05:50	07:29	18:53	20:31	07:03	18:17	0.01	09:21	20:31	05:52
10/ 8	Ven*	05:52	07:30	18:51	20:29	08:24	18:47	0.00	09:24	20:29	05:53
10/ 9	Sab*	05:53	07:31	18:49	20:27	09:44	19:22	0.02	09:27	20:27	05:54
10/10	Dom*	05:54	07:33	18:47	20:25	11:00	20:03	0.07	09:30	20:25	05:56
10/11	Lun*	05:56	07:34	18:45	20:24	12:10	20:52	0.14	09:05	20:52	05:57
10/12	Mar*	05:57	07:35	18:44	20:22	13:10	21:48	0.22	08:10	21:48	05:58
10/13	Mer*	05:58	07:37	18:42	20:20	13:59	22:50	0.31	07:10	22:50	05:59
10/14	Gio*	05:59	07:38	18:40	20:18	14:39	23:53	0.41	06:07	23:53	06:01
10/15	Ven*	06:01	07:39	18:38	20:17	15:11	-----	0.51	05:04	00:58	06:02
10/16	Sab*	06:02	07:40	18:37	20:15	15:38	00:58	0.61	04:02	02:01	06:03
10/17	Dom*	06:03	07:42	18:35	20:13	16:01	02:01	0.70	03:01	03:04	06:05
10/18	Lun*	06:05	07:43	18:33	20:12	16:21	03:04	0.78	02:00	04:05	06:06
10/19	Mar*	06:06	07:45	18:31	20:10	16:41	04:05	0.85	01:00	05:07	06:07
10/20	Mer*	06:07	07:46	18:30	20:08	17:01	05:07	0.91	00:00	-----	-----
10/21	Gio*	06:08	07:47	18:28	20:07	17:22	06:10	0.96	00:00	-----	-----
10/22	Ven*	06:10	07:49	18:26	20:05	17:45	07:13	0.99	00:00	-----	-----
10/23	Sab*	06:11	07:50	18:25	20:04	18:13	08:19	1.00	00:00	-----	-----
10/24	Dom*	06:12	07:51	18:23	20:02	18:45	09:25	0.99	00:00	-----	-----
10/25	Lun*	06:13	07:53	18:22	20:01	19:26	10:30	0.96	00:00	-----	-----
10/26	Mar*	06:15	07:54	18:20	19:59	20:15	11:31	0.91	00:16	19:59	20:15
10/27	Mer*	06:16	07:55	18:18	19:58	21:13	12:27	0.85	01:16	19:58	21:13
10/28	Gio*	06:17	07:57	18:17	19:56	22:20	13:15	0.76	02:24	19:56	22:20
10/29	Ven*	06:18	07:58	18:15	19:55	23:32	13:55	0.67	03:37	19:55	23:32
10/30	Sab*	06:20	08:00	18:14	19:54	-----	14:29	0.56	04:53	19:54	00:47 (*)
<i>10/31</i>	<i>Dom</i>	<i>05:21</i>	<i>07:01</i>	<i>17:12</i>	<i>18:52</i>	<i>00:47</i>	<i>13:58</i>	<i>0.45</i>	<i>06:11</i>	<i>18:52</i>	<i>01:03</i>
11/ 1	Lun	05:22	07:02	17:11	18:51	01:03	14:25	0.33	07:29	18:51	02:20

(*) Cambio Ora Estiva - Ora Solare

Dati astronomici del mese di Novembre 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
10/31	Dom	05:21	07:01	17:12	18:52	00:47	13:58	0.45	06:11	18:52	01:03
11/ 1	Lun	05:22	07:02	17:11	18:51	01:03	14:25	0.33	07:29	18:51	02:20
11/ 2	Mar	05:23	07:04	17:09	18:50	02:20	14:50	0.23	08:48	18:50	03:37
11/ 3	Mer	05:25	07:05	17:08	18:48	03:37	15:16	0.14	10:08	18:48	04:56
11/ 4	Gio	05:26	07:07	17:07	18:47	04:56	15:44	0.07	10:40	18:47	05:27
11/ 5	Ven	05:27	07:08	17:05	18:46	06:15	16:16	0.02	10:42	18:46	05:28
11/ 6	Sab	05:28	07:09	17:04	18:45	07:33	16:54	0.00	10:44	18:45	05:29
11/ 7	Dom	05:29	07:11	17:03	18:44	08:47	17:39	0.01	10:47	18:44	05:31
11/ 8	Lun	05:31	07:12	17:01	18:43	09:53	18:33	0.04	10:49	18:43	05:32
11/ 9	Mar	05:32	07:14	17:00	18:42	10:48	19:34	0.10	09:59	19:34	05:33
11/10	Mer	05:33	07:15	16:59	18:41	11:33	20:39	0.17	08:56	20:39	05:34
11/11	Gio	05:34	07:16	16:58	18:40	12:09	21:44	0.25	07:51	21:44	05:35
11/12	Ven	05:35	07:18	16:57	18:39	12:39	22:49	0.34	06:48	22:49	05:37
11/13	Sab	05:37	07:19	16:56	18:38	13:03	23:52	0.44	05:46	23:52	05:38
11/14	Dom	05:38	07:20	16:54	18:37	13:25	-----	0.53	04:45	00:54	05:39
11/15	Lun	05:39	07:22	16:53	18:36	13:45	00:54	0.62	03:44	01:56	05:40
11/16	Mar	05:40	07:23	16:52	18:35	14:05	01:56	0.71	02:44	02:58	05:41
11/17	Mer	05:41	07:25	16:51	18:35	14:25	02:58	0.79	01:42	04:01	05:42
11/18	Gio	05:42	07:26	16:50	18:34	14:48	04:01	0.87	00:38	05:05	05:44
11/19	Ven	05:44	07:27	16:50	18:33	15:14	05:05	0.93	00:00	-----	-----
11/20	Sab	05:45	07:29	16:49	18:33	15:45	06:12	0.97	00:00	-----	-----
11/21	Dom	05:46	07:30	16:48	18:32	16:23	07:18	0.99	00:00	-----	-----
11/22	Lun	05:47	07:31	16:47	18:31	17:10	08:22	1.00	00:00	-----	-----
11/23	Mar	05:48	07:33	16:46	18:31	18:06	09:21	0.98	00:00	-----	-----
11/24	Mer	05:49	07:34	16:46	18:30	19:12	10:12	0.94	00:41	18:30	19:12
11/25	Gio	05:50	07:35	16:45	18:30	20:23	10:55	0.88	01:53	18:30	20:23
11/26	Ven	05:51	07:36	16:44	18:29	21:38	11:31	0.80	03:08	18:29	21:38
11/27	Sab	05:52	07:38	16:44	18:29	22:53	12:01	0.71	04:24	18:29	22:53
11/28	Dom	05:53	07:39	16:43	18:29	-----	12:28	0.60	05:39	18:29	00:08
11/29	Lun	05:54	07:40	16:43	18:28	00:08	12:53	0.48	06:55	18:28	01:23
11/30	Mar	05:55	07:41	16:42	18:28	01:23	13:18	0.37	08:11	18:28	02:39
12/ 1	Mer	05:56	07:42	16:42	18:28	02:39	13:44	0.26	09:27	18:28	03:55

Dati astronomici del mese di Dicembre 2010

		SOLE			LUNA			BUIO			
Giorno		Alba	Sorge	Tram.	Crep.	Sorge	Tram.	Fase	Ore	Da	A
11/30	Mar	05:55	07:41	16:42	18:28	01:23	13:18	0.37	08:11	18:28	02:39
12/ 1	Mer	05:56	07:42	16:42	18:28	02:39	13:44	0.26	09:27	18:28	03:55
12/ 2	Gio	05:57	07:44	16:41	18:28	03:55	14:13	0.17	10:44	18:28	05:11
12/ 3	Ven	05:58	07:45	16:41	18:27	05:11	14:47	0.09	11:32	18:27	05:59
12/ 4	Sab	05:59	07:46	16:41	18:27	06:26	15:29	0.04	11:33	18:27	06:00
12/ 5	Dom	06:00	07:47	16:41	18:27	07:35	16:19	0.01	11:34	18:27	06:01
12/ 6	Lun	06:01	07:48	16:40	18:27	08:35	17:17	0.00	11:35	18:27	06:02
12/ 7	Mar	06:02	07:49	16:40	18:27	09:25	18:20	0.02	11:36	18:27	06:03
12/ 8	Mer	06:03	07:50	16:40	18:27	10:05	19:27	0.06	10:37	19:27	06:04
12/ 9	Gio	06:04	07:51	16:40	18:27	10:38	20:33	0.11	09:32	20:33	06:05
12/10	Ven	06:05	07:52	16:40	18:27	11:04	21:38	0.18	08:28	21:38	06:05
12/11	Sab	06:05	07:53	16:40	18:27	11:27	22:41	0.27	07:25	22:41	06:06
12/12	Dom	06:06	07:54	16:40	18:28	11:48	23:43	0.35	06:24	23:43	06:07
12/13	Lun	06:07	07:55	16:40	18:28	12:08	----	0.45	05:23	00:44	06:08
12/14	Mar	06:08	07:55	16:40	18:28	12:28	00:44	0.54	04:22	01:46	06:08
12/15	Mer	06:08	07:56	16:41	18:28	12:49	01:46	0.63	03:20	02:50	06:09
12/16	Gio	06:09	07:57	16:41	18:29	13:13	02:50	0.72	02:15	03:55	06:10
12/17	Ven	06:10	07:58	16:41	18:29	13:42	03:55	0.81	01:10	05:01	06:10
12/18	Sab	06:10	07:58	16:41	18:29	14:16	05:01	0.88	00:05	06:06	06:11
12/19	Dom	06:11	07:59	16:42	18:30	15:00	06:06	0.94	00:00	----	----
12/20	Lun	06:12	07:59	16:42	18:30	15:53	07:08	0.98	00:00	----	----
12/21	Mar	06:12	08:00	16:43	18:31	16:57	08:04	1.00	00:00	----	----
12/22	Mer	06:13	08:00	16:43	18:31	18:08	08:52	0.99	00:00	----	----
12/23	Gio	06:13	08:01	16:44	18:32	19:24	09:31	0.97	00:52	18:32	19:24
12/24	Ven	06:13	08:01	16:44	18:32	20:41	10:04	0.91	02:09	18:32	20:41
12/25	Sab	06:14	08:02	16:45	18:33	21:58	10:32	0.84	03:25	18:33	21:58
12/26	Dom	06:14	08:02	16:46	18:33	23:13	10:58	0.74	04:40	18:33	23:13
12/27	Lun	06:15	08:02	16:46	18:34	----	11:23	0.64	05:55	18:34	00:29
12/28	Mar	06:15	08:03	16:47	18:35	00:29	11:48	0.52	07:09	18:35	01:44
12/29	Mer	06:15	08:03	16:48	18:35	01:44	12:16	0.41	08:23	18:35	02:59
12/30	Gio	06:15	08:03	16:49	18:36	02:59	12:47	0.30	09:36	18:36	04:12
12/31	Ven	06:16	08:03	16:49	18:37	04:12	13:25	0.20	10:44	18:37	05:21