

The near giant planet in the solar system. Confirmed positions.

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Introduction.

The basis of the search method is transit: reduction magnitude of brightness and eclipse of the star on the trajectory of the movement of the Near Giant Planet. Orbital and physical characteristics of a binary planetary system are defined. Further refinement of the orbital and physical characteristics will occur at the level of measurement error. Undoubtedly, must with to use more powerful equipment. But this is from the category of tactical solutions.

1.Orbital elements. Condition of stability.

Calculated orbital elements of the Nearest Giant Planets (corrected).

Epoch of 2015 September 8.28 = JDT 2457273.78 (at perihelion)

n 0.11497447, Peri 142.447036 °, Node 192.894134 °, a 4.188 5489 ± 0.000 0523, e 0.5381167 ± 0.000 1866, Incl 20.9043 ° ± 0.0118 °, P 8.572

Calculated values of precessions:

- precession of nodes 18. 9662 "/ day;
- increase in the argument of perihelion 25. 50025 "/ day;
- accordingly, the anomalous precession of perihelion 6.53405 "/ day.

Note. Indicated orbital elements of the center of mass Near Giant Planet - Satellite . Orbital elements of the Satellite relative to the Near Giant Planet are calculated very approximately.

a 13,550, 000.0 ± 40, 000.0 km, P 570 ± 5 days, Inclination to the Near Giant Planet plane 6.1 ° ± 0.5 ° to the ecliptic plane 22.0 ° ± 0.5 °. The proportions of the masses approximately are 15 (± 0.5): 1.

The previous provision on changing precession values is not true. These precession values are of a constant nature. The approximate value of the total precession for 1 anomalistic period is about 22.5 °. The anomalistic period is $P_a = 3,177.4 \pm 3.7$ days. In the so-called Kirkwood's Gaps are the result of the gravitational capture of asteroids by both the Near Giant Planet and the triangular points of Lagrange L4 and L5 with a deviation in the heliocentric distance from the existing values of the heliocentric distances of the Kirkwood Gaps, depending on the size of the Hill sphere. However, it should be noted the following: for synchronization of objects of the

Solar System and compliance with the condition of stability in the cycle, there must be a longer anomalistic period. Then the inclinations of daily rotate axes of giants planets of the Solar System will to have existing values.

The motion of the planets of the solar system must be synchronized and meet the stability condition of the rotating system for many bodies. Let me remind you: The rotating system is stable if the center of mass, the center of gravity, the center of rotation of this rotate system are coincide. In our situation there is an additional condition - this point coincides with the central body.

That generally corresponds to all the Three Generalized Laws of Kepler.

In this case it is necessary to take into account the mass of the Sun and the distance of the center of mass of the Sun to the common center of mass, the center of gravity, the center of rotation of Solar System.

$$(\mathbf{x}, \mathbf{y}, \mathbf{z}) \sum \mathbf{m}_i \cdot \mathbf{r}_i (\mathbf{t}) = \mathbf{0} \text{ or } (\mathbf{x}, \mathbf{y}, \mathbf{z}) \sum \mathbf{m}_i \cdot \mathbf{r}_i (\mathbf{t}) = \mathbf{Const} \quad (1)$$

This condition is a consequence of the law of conservation of momentum. For understanding, there is a simpler situation – the “Two-body problem”, where:

$$(\mathbf{x}, \mathbf{y}, \mathbf{z}) \mathbf{m}_1 \cdot \mathbf{r}_1 = \mathbf{m}_2 \cdot \mathbf{r}_2 \quad (2)$$

Taking into account the correction and using the stability condition, the following physical characteristics were obtained:

a. Mass of the Near Giant Planet + Satellite $6.170\,592 (\pm 0.002\,687) e + 26$ kg or $103.322 (\pm 0.045)$ Mass of the Earth.

b. The displacement of the center of mass of the sun relative to the center of gravity, the center of mass, the center of rotation of the Solar System on December 2, 2015 is $484,589.58 \pm 84.22$ km or $0.69655 R_{\odot}$ in the solar equatorial plane. The ecliptic longitude relative to the physical center of the sun is $\lambda = 11.652^{\circ}$, the declination $\beta = -2.835^{\circ}$. The displacement toward the south pole of the ecliptic along the ecliptic axis is $23,971.52 \pm 2.7$ km.

This displacement has an angular velocity along the approximated values equal to 400.91445 "/day, correspondingly to the period $P = 3,232.61$ days or 8.85 years. This bias affects the orbital characteristics of the Moon, in particular, the anomalous precession of the perigee of the Moon.

The linear velocity of the diurnal rotation of the Sun at the equator is 2027.5 ± 2.5 m / sec. This situation involves the displacement of the axis of the diurnal rotation of the Sun relative to the center of mass of the Solar System by $3,233.4 \pm 2.6$ km.

Definite displacement of the axis of the diurnal rotation of the sun in 3233.4 km relative to the center of mass of the solar system and the displacement of the center of mass of the sun relative to the center of gravity, the center of mass, the center of rotation of the Solar System at $484,589.58$ km may indicate the following phenomena and anomalies:

- sinusoidal movement of the Sun;
- complex especially the structure of the Sun;
- both factors combined.

In this situation, one can speak of a complex movement of the internal structures of the Sun, in particular the possible two nuclear structure of the Sun. Base: displacement of the center of mass of the Sun from its physical center and double magnetic field of the Sun. (One magnetic core - one magnetic field, two magnetic cores - two magnetic fields).

2. The object K15P00T / 2015PT. Visibility conditions.

The trajectory K15P00T / 2015PT is pronounced sinusoidal. However, calculations based on the data of the MPC circular [5], give conflicting orbital characteristics. Which in turn does not allow to accurately and qualitatively identify the object.

It is the presence of a massive satellite that creates a strong tidal acceleration. As a result, the dust captured in the asteroid belt does not settle on the surface of the Nearest Giant Planet and its massive satellite and in suspend condition.

Considering that the light source and the observer are on the same side, the dust concentration will not be 320,000 particles per cubic meter as described earlier, but 160,000 particles per cubic meter. Initially, the light that falls on the celestial body is absorbed and scattered, after which the reflected light is absorbed and scattered by dust which in near planetary space.

To determine whether we have an eclipse of a star or a star variable, it is not difficult - look in the catalogs, their fifteen on the Internet.

3. The Sixth particular solution of "Three-body problems".

The "Three-body problem" is one of the tasks of celestial mechanics. Only a few exact solutions are known. The first three solutions were found by Euler in 1767 (the so-called "collinear or linear libration points"). Two more solutions were found by Lagrange in 1772 (the so-called "triangular points of libration").

In 1961, Mikhail Lidov and in 1962 Yoshihide Kozai, independently of each other, discovered the following statistical regularity that the orbital eccentricity can be "exchanged" for inclination and vice versa. And when the tilt angle of the asteroid's orbit is 39.2 degrees, the line of the apses becomes perpendicular to the line of nodes. In this case, the argument of perihelion passes into the state of libration. This phenomenon was called the resonance of Kozai-Lidov.

The question arises: what angle of inclination of the orbital plane should an unknown giant planet have, in which the line of apses becomes perpendicular to the line of nodes in the orbit of the asteroid, reaching an inclination angle of 39.2 degrees and how can it be reliably determined?

The answer is determined by solution "Three-body problem" (a private solution was found in 2012) and this angle is 20.8 degrees. A statistical dependence of the exchange of eccentricity on the angle of inclination and vice versa is mechanically achieved by the equality of inertia forces at the nodes of the asteroid's orbit.

This solution of "Three-body problem" is the Sixth particular solution and looks like this [4]:

$$\mathbf{n}^2 \cdot \mathbf{r} + 2 [\mathbf{n} \times \mathbf{v}] = \mathbf{0} \quad (3)$$

4. General conclusions. Correction of conclusions. [12]

1. "The Pioneer anomaly" is caused by the gravitation of a massive body. The exaggerated role of anisotropic emission in the phenomenon Pioneer Anomaly [2] [12].

2. Problem of the Solar System stability is solved. The stability condition of Solar System as a rotating system is closed.

All three balancing factors of the Solar System are calculated:

- Near Giant Planet. The mass of the Near Giant Planet is determined. By the stability condition of the rotating system, the mass of the binary planetary system (Near Giant Planet + Satellite) is 103.322 ± 0.045 Earth masses or $6.170592 (\pm 0.002687) \cdot 10^{26}$ kg;

- The value of the displacement of the center of mass of the Sun from the center of gravity, the center of mass, the center of rotation of the Solar System on December 2, 2015 is $484\,589.58 \pm 84.22$ km or $0.69655 R_{\odot}$ in the solar equatorial plane;

- The center of mass of known planets.

The search for yet another additional massive celestial body is doomed to failure.

3. The real mechanical causes of the Kozai-Lidov resonance are shown. The determination of the mechanical causes of the Kozai-Lidov resonance is the Sixth particular solution of the "Three-body problem". This particular solution "Three-body problem" reliably determines the inclination of the orbital plane of the Near Giant Planet to the ecliptic plane. Let me remind you that the minimum angle of the asteroid's orbit plane is 39,231 degrees (140,769 degrees for retrograde orbits), in which the precession of the perihelion argument go into libration.

The precession of the perihelion argument has the following reason: the precession of the nodes of the asteroid's orbit. Elimination of the cause - the equilibrium state of inertia forces in the nodes.

4. The displacement of the center of mass of the sun has a period of motion and has an additional effect for:

- the gravitational assist of interplanetary spacecraft;
- trajectories of asteroids;
- gravitational perturbation of planetary orbits.

5. Discovered new physical phenomena affect the trajectory of TNO's . As a consequence, it is necessary to simulate the trajectory of TNO's taking into account new phenomena (anomalous perihelion precession and node precession are possible in TNO's trajectories). The trajectory of the movement has the form of an epicycloid or a kind of flower petals (and has the shape of a sinusoid with respect to an ellipse). An analogy situation with near parabolic comets. The calculated values are indicated in reference [12]. Experimentally obtained results in reference [14].

Near Giant Planet and the displacement of the center of mass of the Sun exert an additional effect on the trajectory of the asteroids.

These phenomena should be used in the calculation of spacecraft trajectories, in calculating gravity assist, in calculating the MOID in the NEO program and in PHO program .

6. The anomalous perihelion precession of Mercury - discovered in 1859 feature motion of the planet Mercury. This feature of Mercury's motion is completely subject to the law of universal gravitation of Newton. And can to be explain by the feature of the structure of the Sun - the displacement of the center of mass of the Sun from its physical center and the presence of Near giant planet. The results obtained with the use of GTR is an accidental coincidence.

7. In general, we can talk about the full logically and consistency of Newton's Theory of Gravitation. The laws of physics work.

8. The asteroid belt is the result of a cosmic catastrophe. Most likely, the collision of the satellite of the Nearest Giant Planet and Venus. Basis : retrograde diurnal rotation of Venus.

5. Ephemeris.

Geocentric Ephemeris for Near Giant Planet(corrected). 2018, Oct-Dec.

00:00 UTC (Coordinated Universal Time)

Date (0 UT)	Calculated R.A. h m s	Calculated Declination ° ' "	Distance to Sun a.u.	Distance to Earth a.u.	Elong °
01 Oct	9:36:58.25	- 00:30:05.7	6. 05566	6. 75014	42.941
02 Oct	9:37:30.73	- 00:33:40.6	6. 05742	6. 74122	43.722
03 Oct	9:38:02.89	- 00:37:15.5	6. 05916	6. 73212	44.507
04 Oct	9:38:34.72	- 00:40:50.5	6. 06091	6. 72284	45.295
05 Oct	9:39:06.21	- 00:44:25.5	6. 06265	6. 71339	46.086
06 Oct	9:39:37.36	- 00:48:00.5	6. 06438	6. 70377	46.880
07 Oct	9:40:08.16	- 00:51:35.4	6. 06611	6. 69397	47.677
08 Oct	9:40:38.61	- 00:55:10.1	6. 06784	6. 68401	48.478
09 Oct	9:41:08.70	- 00:58:44.6	6. 06957	6. 67388	49.281
10 Oct	9:41:38.42	- 01:02:18.8	6. 07128	6. 66358	50.088
11 Oct	9:42:09.86	- 01:06:02.9	6. 07300	6. 65326	50.888
12 Oct	9:42:38.83	- 01:09:36.6	6. 07471	6. 64264	51.700
13 Oct	9:43:07.42	- 01:13:09.8	6. 07642	6. 63187	52.515
14 Oct	9:43:35.62	- 01:16:42.6	6. 07812	6. 62095	53.333
15 Oct	9:44:03.42	- 01:20:14.8	6. 07982	6. 60987	54.154
16 Oct	9:44:30.83	- 01:23:46.5	6. 08151	6. 59865	54.977
17 Oct	9:44:57.82	- 01:27:17.6	6. 08320	6. 58728	55.803
18 Oct	9:45:24.41	- 01:30:48.0	6. 08489	6. 57577	56.632
19 Oct	9:45:50.58	- 01:34:17.7	6. 08657	6. 56412	57.464
20 Oct	9:46:16.33	- 01:37:46.6	6. 08825	6. 55233	58.298
21 Oct	9:46:41.65	- 01:41:14.8	6. 08993	6. 54041	59.136
22 Oct	9:47:06.54	- 01:44:42.0	6. 09160	6. 52836	59.976
23 Oct	9:47:31.00	- 01:48:08.4	6. 09326	6. 51617	60.818
24 Oct	9:47:55.01	- 01:51:33.8	6. 09492	6. 50386	61.664

25 Oct	9:48:18.58	- 01:54:58.2	6. 09658	6. 49143	62.512
26 Oct	9:48:41.69	- 01:58:21.5	6. 09824	6. 47888	63.363
27 Oct	9:49:04.35	- 02:01:43.8	6. 09989	6. 46621	64.216
28 Oct	9:49:26.54	- 02:05:04.9	6. 10153	6. 45342	65.073
29 Oct	9:49:48.27	- 02:08:24.7	6. 10317	6. 44052	65.932
30 Oct	9:50:09.52	- 02:11:43.3	6. 10481	6. 42751	66.795
31 Oct	9:50:30.29	- 02:15:00.6	6. 10644	6. 41440	67.660
01 Nov	9:50:50.58	-02:18:16.5	6. 10807	6. 40118	68.527
02 Nov	9:51:10.37	-02:21:30.9	6. 10970	6. 38786	69.398
03 Nov	9:51:29.66	-02:24:43.9	6. 11132	6. 37444	70.272
04 Nov	9:51:48.44	-02:27:55.2	6. 11294	6. 36093	71.148
05 Nov	9:52:06.71	-02:31:04.9	6. 11455	6. 34733	72.028
06 Nov	9:52:24.47	-02:34:12.9	6. 11616	6. 33365	72.910
07 Nov	9:52:41.70	-02:37:19.2	6. 11776	6. 31988	73.795
08 Nov	9:52:58.39	-02:40:23.6	6. 11936	6. 30603	74.683
09 Nov	9:53:14.56	-02:43:26.1	6. 12096	6. 29211	75.574
10 Nov	9:53:30.18	-02:46:26.7	6. 12255	6. 27812	76.467
11 Nov	9:53:45.26	-02:49:25.2	6. 12414	6. 26406	77.363
12 Nov	9:53:59.78	-02:52:21.6	6. 12573	6. 24995	78.262
13 Nov	9:54:13.76	-02:55:15.9	6. 12731	6. 23577	79.164
14 Nov	9:54:27.17	-02:58:08.0	6. 12884	6. 22125	80.069
15 Nov	9:54:40.02	-03:00:57.8	6. 13046	6. 20726	80.976
16 Nov	9:54:52.51	-03:03:45.2	6. 13202	6. 19294	81.886
17 Nov	9:55:04.00	-03:06:30.3	6. 13359	6. 17857	82.799
18 Nov	9:55:15.14	-03:09:12.8	6. 13515	6. 16417	83.715
19 Nov	9:55:27.52	-03:12:32.6	6. 13671	6. 14974	84.625
20 Nov	9:55:35.65	-03:14:30.4	6. 13826	6. 13528	85.554
21 Nov	9:55:45.04	-03:17:05.2	6. 13981	6. 12079	86.478
22 Nov	9:55:53.83	-03:19:37.3	6. 14135	6. 10678	87.404
23 Nov	9:56:02.02	-03:22:06.7	6. 14289	6. 09177	88.334
24 Nov	9:56:09.61	-03:24:33.2	6. 14443	6. 07724	89.266
25 Nov	9:56:16.61	-03:26:58.0	6. 14596	6. 06270	90.201
26 Nov	9:56:23.00	-03:29:17.6	6. 14749	6. 04816	91.139
27 Nov	9:56:28.71	-03:31:35.0	6. 14901	6. 03361	92.080
28 Nov	9:56:33.94	-03:33:49.9	6. 15053	6. 01908	93.023
29 Nov	9:56:38.50	-03:36:01.5	6. 15204	6. 00455	93.969
30 Nov	9:56:42.41	-03:38:09.5	6. 15356	5. 99005	94.917
01 Dec	9:56:45.70	-03:40:14.6	6. 15506	5. 97554	95.870
02 Dec	9:56:48.37	-03:42:16.2	6. 15657	5. 96107	96.824
03 Dec	9:56:50.40	-03:44:14.3	6. 15807	5. 94663	97.782
04 Dec	9:56:51.80	-03:46:09.0	6. 15956	5. 93222	98.742
05 Dec	9:56:52.56	-03:48:00.1	6. 16105	5. 91785	99.705
06 Dec	9:56:52.68	-03:49:47.6	6. 16254	5. 90353	100.670
07 Dec	9:56:52.16	-03:51:31.2	6. 16402	5. 88925	101.638
08 Dec	9:56:51.00	-03:53:11.2	6. 16550	5. 87504	102.609
09 Dec	9:56:49.19	-03:54:47.4	6. 16698	5. 86088	103.583
10 Dec	9:56:46.74	-03:56:19.6	6. 16845	5. 84678	104.559
11 Dec	9:56:43.66	-03:57:47.9	6. 16992	5. 83276	105.537
12 Dec	9:56:39.91	-03:59:12.1	6. 17138	5. 81882	106.518
13 Dec	9:56:35.52	-04:00:32.3	6. 17284	5. 80495	107.501

14 Dec	9:56:30.50	-04:01:48.3	6. 17430	5. 79118	108.486
15 Dec	9:56:24.83	-04:03:00.1	6. 17575	5. 77749	109.474
16 Dec	9:56:18.52	-04:04:07.7	6. 17719	5. 76390	110.462
17 Dec	9:56:11.85	-04:05:13.0	6. 17864	5. 74959	111.455
18 Dec	9:56:04.00	-04:06:09.9	6. 18008	5. 73704	112.450
19 Dec	9:55:55.78	-04:07:04.5	6. 18151	5. 72377	113.446
20 Dec	9:55:46.94	-04:07:54.5	6. 18294	5. 71062	114.444
21 Dec	9:55:37.47	-04:08:40.2	6. 18437	5. 69759	115.444
22 Dec	9:55:27.36	-04:09:21.2	6. 18579	5. 68469	116.446
23 Dec	9:55:16.63	-04:09:57.7	6. 18721	5. 67191	117.450
24 Dec	9:55:05.30	-04:10:29.6	6. 18863	5. 65928	118.456
25 Dec	9:54:53.54	-04:10:56.8	6. 19004	5. 64678	119.463
26 Dec	9:54:40.75	-04:11:19.2	6. 19144	5. 63440	120.471
27 Dec	9:54:27.58	-04:11:36.9	6. 19285	5. 62223	121.482
28 Dec	9:54:13.79	-04:11:49.8	6. 19425	5. 61010	122.493
29 Dec	9:53:59.39	-04:11:57.9	6. 19564	5. 59830	123.506
30 Dec	9:53:44.41	-04:12:01.0	6. 19703	5. 58659	124.520
31 Dec	9:53:28.83	-04:11:59.2	6. 19842	5. 57504	125.535

Note. Given the sinusoidal motion relative to the common center of mass, the maximum deviation in coordinates will be no more than 3 arc minutes.

Geocentric Ephemeris for Lagrangian point L5 system

Sun- Near Giant Planet. 2018, Sep-Dec.

00:00 UTC (Coordinated Universal Time)

Date (0 UT)	Calculated R.A. h m s	Calculated Declination ° ' "	Distance to Sun a.u.	Distance to Earth a.u.
01 Oct	5:48:52.40	+ 02:44:48.4	6. 05566	5. 8003
02 Oct	5:48:55.44	+ 02:41:05.4	6. 05742	5. 7872
03 Oct	5:48:57.79	+ 02:37:21.9	6. 05916	5. 7741
04 Oct	5:48:59.47	+ 02:33:37.9	6. 06091	5. 7611
05 Oct	5:49:00.47	+ 02:29:53.7	6. 06265	5. 7481
06 Oct	5:49:00.78	+ 02:26:09.1	6. 06438	5. 7352
07 Oct	5:49:00.41	+ 02:22:24.3	6. 06611	5. 7223
08 Oct	5:48:59.35	+ 02:18:39.5	6. 06784	5. 7096
09 Oct	5:48:57.61	+ 02:14:54.6	6. 06957	5. 6969
10 Oct	5:48:55.17	+ 02:11:09.7	6. 07128	5. 6843
11 Oct	5:48:54.55	+ 02:07:28.0	6. 07300	5. 6720
12 Oct	5:48:50.74	+ 02:03:43.4	6. 07471	5. 6596
13 Oct	5:48:46.23	+ 01:59:59.2	6. 07642	5. 6473
14 Oct	5:48:41.05	+ 01:56:15.3	6. 07812	5. 6351
15 Oct	5:48:35.17	+ 01:52:31.8	6. 07982	5. 6230
16 Oct	5:48:28.60	+ 01:48:48.9	6. 08151	5. 6110

17 Oct	5:48:21.35	+ 01:45:06.6	6. 08320	5. 5992
18 Oct	5:48:13.42	+ 01:41:25.0	6. 08489	5. 5875
19 Oct	5:48:04.81	+ 01:37:44.1	6. 08657	5. 5759
20 Oct	5:47:55.50	+ 01:34:04.2	6. 08825	5. 5644
21 Oct	5:47:45.55	+ 01:30:25.1	6. 08993	5. 5531
22 Oct	5:47:34.94	+ 01:26:47.1	6. 09160	5. 5419
23 Oct	5:47:23.61	+ 01:23:10.2	6. 09326	5. 5309
24 Oct	5:47:11.64	+ 01:19:34.4	6. 09492	5. 5200
25 Oct	5:46:59.00	+ 01:15:00.0	6. 09658	5. 5093
26 Oct	5:46:45.71	+ 01:12:26.9	6. 09824	5. 5106
27 Oct	5:46:31.76	+ 01:08:55.2	6. 09989	5. 4884
28 Oct	5:46:17.16	+ 01:05:25.1	6. 10153	5. 4782
29 Oct	5:46:01.39	+ 01:01:58.8	6. 10317	5. 4683
30 Oct	5:45:46.03	+ 00:58:29.7	6. 10481	5. 4582
31 Oct	5:45:29.50	+ 00:55:04.7	6. 10644	5. 4486
01 Nov	5:45:11.94	+ 00:51:41.4	6. 10807	5. 4390
02 Nov	5:44:59.09	+ 00:48:25.7	6. 10970	5. 4300
03 Nov	5:44:36.17	+ 00:45:01.4	6. 11132	5. 4206
04 Nov	5:44:17.16	+ 00:41:44.6	6. 11294	5. 4117
05 Nov	5:43:57.55	+ 00:38:30.0	6. 11455	5. 4030
06 Nov	5:43:37.34	+ 00:35:17.8	6. 11616	5. 3945
07 Nov	5:43:16.52	+ 00:32:08.3	6. 11776	5. 3864
08 Nov	5:42:55.18	+ 00:29:01.0	6. 11936	5. 3782
09 Nov	5:42:33.25	+ 00:25:53.2	6. 12096	5. 3704
10 Nov	5:42:10.76	+ 00:22:54.9	6. 12255	5. 3628
11 Nov	5:41:47.73	+ 00:19:56.1	6. 12414	5. 3554
12 Nov	5:41:24.17	+ 00:17:00.2	6. 12573	5. 3483
13 Nov	5:41:00.10	+ 00:14:07.3	6. 12731	5. 3414
14 Nov	5:40:35.52	+ 00:11:17.6	6. 12884	5. 3347
15 Nov	5:40:10.45	+ 00:08:31.1	6. 13046	5. 3283
16 Nov	5:39:44.90	+ 00:05:47.9	6. 13202	5. 3222
17 Nov	5:39:18.89	+ 00:03:08.1	6. 13359	5. 3162
18 Nov	5:38:49.72	+ 00:00:28.8	6. 13515	5. 3105
19 Nov	5:38:25.52	- 00:02:01.1	6. 13671	5. 3052
20 Nov	5:37:58.30	- 00:04:30.3	6. 13826	5. 3001
21 Nov	5:37:30.48	- 00:06:55.8	6. 13981	5. 2952
22 Nov	5:37:02.96	- 00:09:17.6	6. 14135	5. 2906
23 Nov	5:36:33.20	- 00:11:36.0	6. 14289	5. 2863
24 Nov	5:36:05.00	- 00:13:49.6	6. 14443	5. 2882
25 Nov	5:35:35.79	- 00:15:59.7	6. 14596	5. 2785
26 Nov	5:35:06.25	- 00:18:05.8	6. 14749	5. 2749
27 Nov	5:34:36.39	- 00:20:07.7	6. 14901	5. 2717
28 Nov	5:34:06.23	- 00:22:05.5	6. 15053	5. 2688
29 Nov	5:33:35.79	- 00:23:59.1	6. 15204	5. 2661
30 Nov	5:33:05.12	- 00:25:48.2	6. 15356	5. 2637
01 Dec	5:32:34.12	- 00:27:33.2	6. 15506	5. 2616
02 Dec	5:32:02.93	- 00:29:13.7	6. 15657	5. 2599
03 Dec	5:31:31.53	- 00:30:49.6	6. 15807	5. 2584
04 Dec	5:30:59.93	- 00:32:32.2	6. 15956	5. 2571

05 Dec	5:30:28.16	- 00:33:47.9	6. 16105	5. 2562
06 Dec	5:29:56.23	- 00:35:10.1	6. 16254	5. 2556
07 Dec	5:29:24.17	- 00:36:27.6	6. 16402	5. 2553
08 Dec	5:28:51.99	- 00:37:40.3	6. 16550	5. 2553
09 Dec	5:28:19.69	- 00:38:47.6	6. 16698	5. 2556
10 Dec	5:27:47.36	- 00:39:51.5	6. 16845	5. 2562
11 Dec	5:27:14.95	- 00:40:49.9	6. 16992	5. 2570
12 Dec	5:26:42.50	- 00:41:43.7	6. 17138	5. 2582
13 Dec	5:26:10.06	- 00:42:32.1	6. 17284	5. 2597
14 Dec	5:25:37.61	- 00:43:15.8	6. 17430	5. 2615
15 Dec	5:25:05.19	- 00:43:54.7	6. 17575	5. 2636
16 Dec	5:24:32.81	- 00:44:28.7	6. 17719	5. 2660
17 Dec	5:24:00.50	- 00:44:57.7	6. 17864	5. 2687
18 Dec	5:23:28.27	- 00:45:21.8	6. 18008	5. 2717
19 Dec	5:22:56.15	- 00:45:40.8	6. 18151	5. 2749
20 Dec	5:22:24.14	- 00:45:55.4	6. 18294	5. 2785
21 Dec	5:21:52.27	- 00:46:04.8	6. 18437	5. 2824
22 Dec	5:21:20.56	- 00:46:09.3	6. 18579	5. 2866
23 Dec	5:20:49.03	- 00:46:09.0	6. 18721	5. 2911
24 Dec	5:20:17.68	- 00:46:03.8	6. 18863	5. 2958
25 Dec	5:19:46.55	- 00:45:53.8	6. 19004	5. 3009
26 Dec	5:19:15.64	- 00:45:38.9	6. 19144	5. 3062
27 Dec	5:18:45.17	- 00:45:34.8	6. 19285	5. 3122
28 Dec	5:18:14.58	- 00:45:30.7	6. 19425	5. 3177
29 Dec	5:17:44.46	- 00:44:25.4	6. 19564	5. 3239
30 Dec	5:17:14.64	- 00:43:51.6	6. 19703	5. 3304
31 Dec	5:16:45.12	- 00:43:12.9	6. 19842	5. 3372

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