UFO ACTIVITY IN RELATION TO NIGHT-OF-THE-WEEK

Jacques Vallée

This contribution was prepared on January 10, 1971, and revised by Dr. Vallée on January 23, 1971.

ONE of the remarkable properties of UFO phenomena is their occurrence in well-defined (but still unpredictable) time intervals. On a long-term scale, we observe a pattern of sharp, sudden "waves" that sweep a large area over a period of one or two months. On a local scale, we have "flaps" that last a few days to a week. And we also have the fairly low "noise level" of world-wide, apparently random, sightings that never disappears completely between waves.

Although the wave pattern has been under study for a long time, it is only recently that attention has been directed to the distribution of sightings in relation to the hour of the day and the day of the week. In a recent analysis of 100 Spanish landings, the "law of the times" first proposed in FSR in 1964 (*Flying Saucer Review* X, 1, p.11) has been verified for three sets of data: all landings before 1962, all landings between 1963 and 1970 and all Iberian landings. These three curves give a maximum between 9 and 10 p.m., indicating that we are observing a very stable phenomenon: stable in space (same pattern in France, Spain, USA and the rest of the world) and also in time (no significant difference between "old" and "recent" cases).[1]

In the last two years, attempts have also been made by Keel,[2] Vallée,[3] Saunders[4] and Ballester and Vallée[1] to analyse their various catalogues in efforts to discover a pattern related to the day-of-the-week. The results of these investigations vary widely. According to Keel:

> 'As soon as I had organised the sightings by dates the first significant pattern became apparent. This was that sightings tended to collect around specific days of the week. Wednesday had the greatest number of sightings, and these were usually reported between the hours of 8 to 11 p.m.'

Unfortunately, the data-base in this case is unavailable. It seems to have consisted exclusively of American sightings for the single year of 1966. The statistics were computed for a third of this sample, consisting of cases in Keel's Group I. The distribution found by Keel for this subset (730 cases) is shown in line 1 of the following table, where we have also listed:

—in line 2, the distribution found for the published MAGONIA catalogue [American edition only—ED].
—in line 3, the distribution for the American cases in MAGONIA.
—in line 4, Saunders' distribution using UFOCAT-70.
—in line 5, Ballester's distribution of Iberian landings.
—in line 6, the distribution found when we took all the cases in our latest catalogue of landings for which we knew both the day *and the time*.

Author	Sample	M.	Tu.	W.	Th.	F.	Sa.	Su.
1. Keel	730	13·5	7·0	20·5	17·5	15·5	15·0	11·0
2. Vallée	858	16·5	14·1	14·3	13·8	16·4	13·6	11·0
3. Vallée (US)	300	14·6	14·0	15·3	16·3	16·6	13·0	10·0
4. Saunders	7,025	14·7	15·1	15·3	14·3	13·7	12·8	13·8
5. Ballester	81	14·8	9·8	12·3	16·0	16·0	12·3	18·5
6. Vallée	746	15·9	13·5	14·8	14·0	14·8	13·8	12·8

Table I
Percentages of UFO events related to day-of-the-week

Discussing his results in the *Flying Saucer Review*, Saunders remarks:

> 'The nature of the inequalities argues strongly against the USAF view (Saturday should rank first instead of last) and against the Keel view (Tuesday should rank last instead of almost first). It should be noted, though, that Keel's view is based on analysis of Type I sightings only.'

This statement calls for several comments. Keel's definition for Type I is not the definition usually adopted (landing or near-landing): on page 15 of his book, Keel reports an observation by Lambert and Rose outside Charleston S.C. on March 30, 1966, in which the object was estimated to be 800 *to* 900 *feet above the ground.* Keel adds: "This was what ufologists call a Type I sighting—a low-level object observed and reported by reliable witnesses!"*

Keeping this definition in mind (and keeping in mind that there is no way for a "reliable observer" to estimate the altitude of an unidentified object unless that object is very close to the ground or to some reference point) it is difficult to compare his results with those of Saunders, who works from a much larger sample and, incidentally,

* If we reconstruct the sample described on page 19 of Keel's book, it would seem that he used Groups I and II (respectively, "low-level objects and high-altitude objects performing in a controlled manner") for his statistics. This would lead to a sample size of 3,300 cases. Both Saunders and myself had first interpreted Keel's data in this way. However, Dr. Saunders indicated that in correspondence with Mr. Keel he learned that "the 1966 study was based on 730 good low-level sightings."

	M.	Tu.	W.	Th.	Fri.	Sa.	Su.
0-4	29	14	14	13	17	27	22
4-8	14	10	16	11	10	12	8
8–12	5	12	8	5	11	7	1
12-16	8	4	8	11	15	11	9
16-20	23	15	23	28	19	20	19
20-24	40	46	42	37	39	26	37

Table II
Type I events related to day and time

does find a maximum on Wednesday too (see Fig. 1 for a comparison of Keel's data and Saunders' results).

Looking at Keel's distribution, we observe that the differences between Tuesday and Wednesday are indeed very large, and will deserve a serious examination if and when the data are ever made available to interested researchers.

In dealing with large catalogues in other areas of science (astronomy, psychology) it is customary to discuss sources, selection effects, known biases, availability and reliability of data, gathering techniques, etc., before attempting secondary analysis of the fine structure. Here, neither Keel nor Saunders have provided such an overall discussion, and we have little to go on when we attempt to reconcile their results.

In the study of Iberian landings [1] we were working from a small sample and we stated that frequencies were distributed "as we would expect them to be by chance". We found "no pattern in this distribution, other than a reflection of the habits of potential witnesses". Coming back to this statement in the light of Saunders' formal

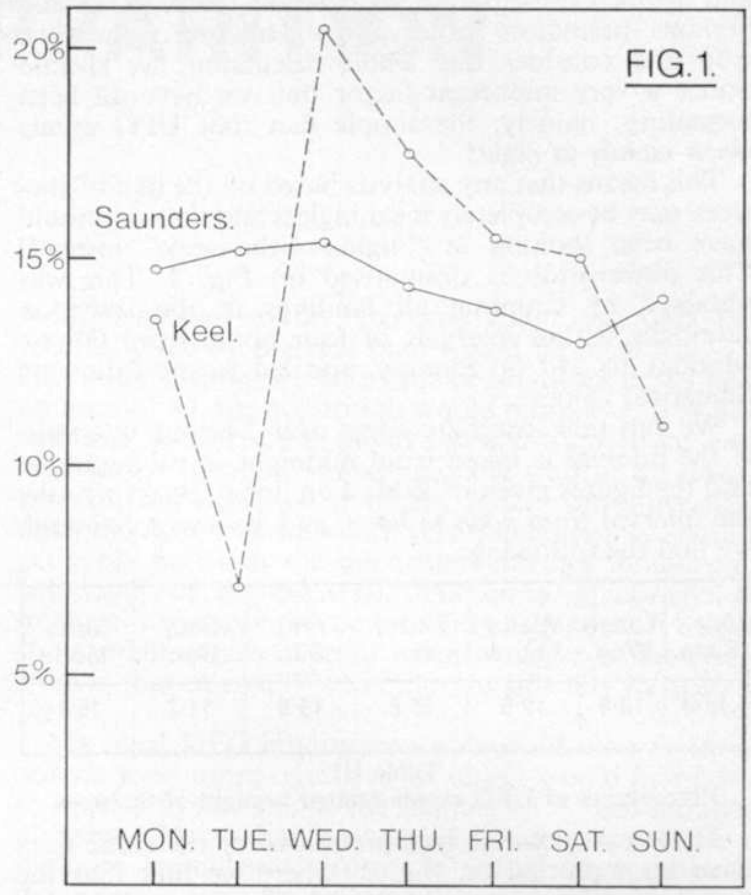

Fig. 1. Comparing daily percentages for Keel and Saunders

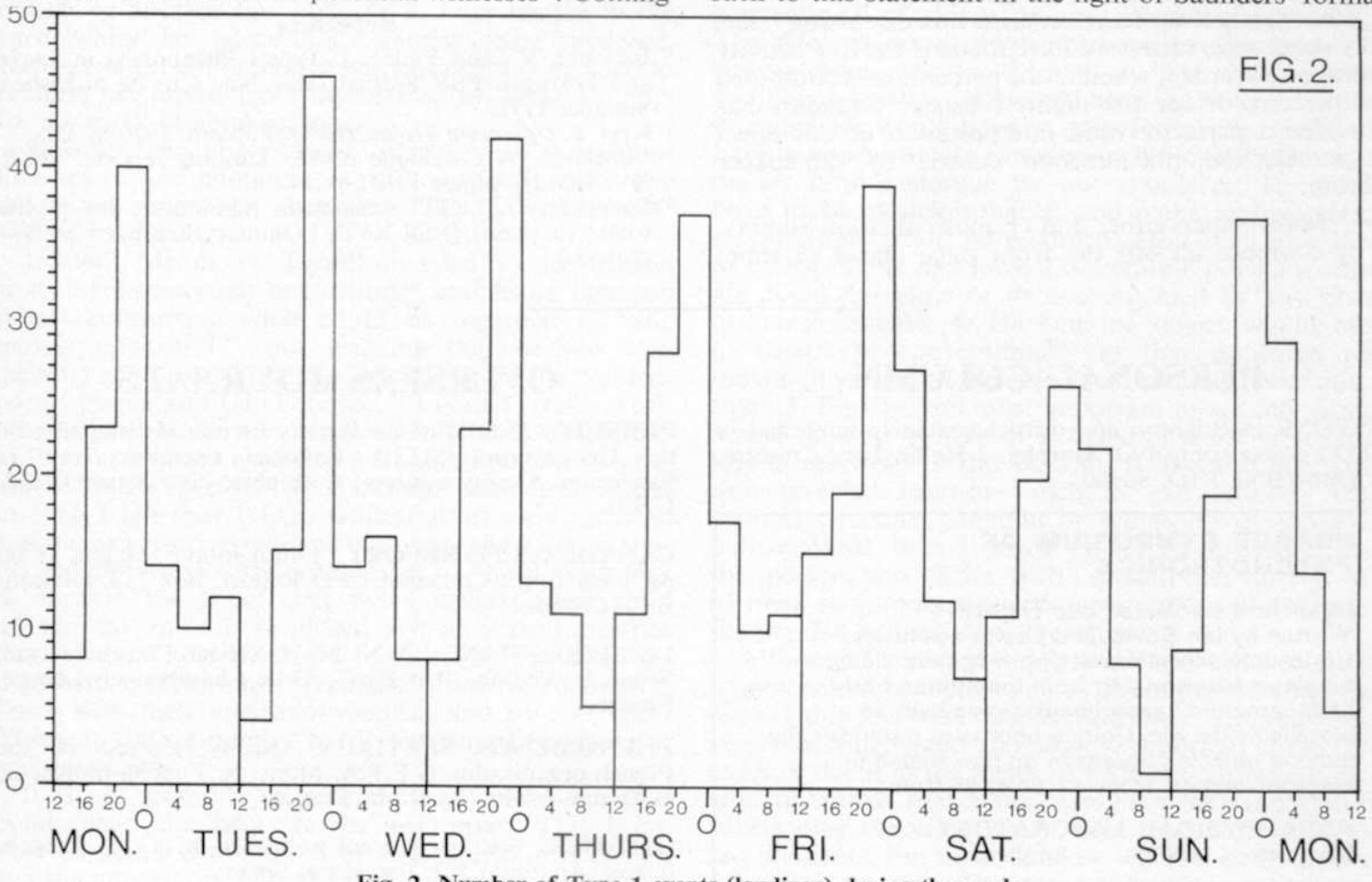

Fig. 2. Number of Type 1 events (landings) during the week

and detailed presentation, ours seems like a harsh and perhaps premature observation. However, when we stop and consider this whole discussion, we should notice a very important factor that we have all been forgetting: namely, the simple fact that **UFO events occur mainly at night!**

This means that any analysis based on the day-of-the-week may be completely meaningless and that we should have been looking at "nights-of-the-week" instead! This observation is dramatised on Fig. 2. This was obtained by counting all landings in the MAGONIA catalogue within intervals of four hours from 0^H on Monday to 24^H on Sunday, and led to the following numerical values:

We can now compute sums over 24-hour intervals. If the interval is taken from midnight to midnight we find the figures given in Table I on line 6. But if we take the interval *from noon to noon*, as I believe we should, we find the following:

Mon./ Tues.	Tues./ Wed.	Wed./ Thurs.	Thur·/ Fri.	Fri./ Sat.	Sat./ Sun.	Sun./ Mon.
14·3	13·8	13·6	15·2	15·9	11·7	15·1

Table III
Percentages of UFO events related to night-of-the-week

These two possible interpretations of the same data have been plotted on Fig. 3, where we find that the distribution has changed considerably.

The *lowest* proportion of landings is observed on Saturday night, the *highest* on Friday night.

What can we say to summarise this discussion? The only solid observation we have made is the low activity found on Saturday, whether the percentage is computed for the day or for the night. I believe Saunders has provided a perfectly valid interpretation of this effect as a selection phenomenon caused by newspaper editors:

> 'Many papers either don't publish at all on Sunday, or compose all but the front page ahead of time; assuming most papers want to print "news", a sighting that takes place on Saturday would have relatively fewer ways of becoming known.'

The other variations found on the other nights of the week do not appear to be incompatible with what could be expected from chance variations. However, it will be extremely interesting to refine this analysis if other researchers can provide statistics based on a nightly, rather than daily, interval.

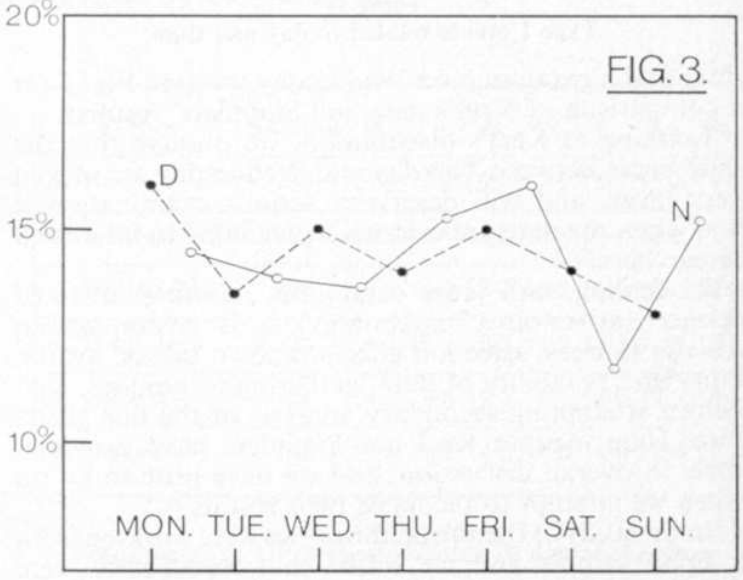

FIG. 3.

Fig. 3. Comparing "nightly" and "daily" percentages for the same data (MAGONIA)

References

1 Ballester, V., and Vallée, J. Type-I Phenomena in Spain and Portugal. FSR Special Issue No. 4 to be published Summer 1971.

2 Keel, J. *Operation Trojan Horse*. Putnam, 1970, p. 20.

3 Vallée, J. "A Catalogue of 923 Landing reports." FSR XV, 4 (July/August 1969), p. 14.

4 Saunders, D. "UFO Activity in relation to day of the week" (in press). [FSR XVII, 1 (January/February 1971)—EDITOR.]

PERSONAL COLUMN

ANYONE in Brighton and district genuinely interested in UFO's please contact G. Murphy, 2 Hollingbury Crescent, Brighton BN1 7HD, Sussex.

OVERSEAS JOURNALS

PURSUIT Journal of the Society for the Investigation of the Unexplained (SITU). Editorial Director: Ivan T. Sanderson. Society address: Columbia, New Jersey 07832, U.S.A.

CANADIAN UFO REPORT Editor John F. Magor. $1·00 per copy from: Canadian UFO Report, Box 758, Duncan, B.C., Canada.

LUMIERES DANS LA NUIT Excellent French journal. Mons. R. Veillith, "Les Pins", 43-Le Chambon-sur-Lignon, France.

PHENOMENES SPATIAUX Quality journal of the French organisation G.E.P.A. Mons. R. Fouéré, 69 Rue de la Tombe-Issoire, Paris 14e, France.

STENDEK Spanish journal published by C. E. I. Stendekcei, Apartado 282, Barcelona, Spain.