

Two Line Element (TLE) Format

- TLE is a two-line format used to represent orbital information for space objects, including artificial satellites, tracked and published by the North American Aerospace Defense Command (NORAD).
Reference: CelesTrak, "[Two-Line Element Set Format](#)"
- The format of TLE is shown below.

GCOM-C1 (SHIKISAI)													
(a)													
1	43065U	17082A	18332.22107755	.00000008	00000-0	21232-4	0	9994					
(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
2	43065	98.6528	42.9929	0001247	105.7040	254.4278	14.27265986	48525					
(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)	(y)				

(a) Twenty-four character name

(b) Line Number of Element Data

(c) Satellite Number

(d) Classification (U=Unclassified)

(e) International Designator (Last two digits of launch year)

(f) International Designator (Launch number of the year)

(g) International Designator (Piece of the launch)

(h) Epoch Year (Last two digits of year)

(i) Epoch (Day of the year and fractional portion of the day)

(j) First Time Derivative of the Mean Motion

(k) Second Time Derivative of Mean Motion (decimal point assumed)

(l) BSTAR drag term (decimal point assumed)

(m) Ephemeris type

(n) Element number

(o) Checksum

(p) Line Number of Element Data

(q) Satellite Number

(r) Inclination [Degrees]

(s) Right Ascension of the Ascending Node [Degrees]

(t) Eccentricity (decimal point assumed)

(u) Argument of Perigee [Degrees]

(v) Mean Anomaly [Degrees]

(w) Mean Motion [Revs per day]

(x) Revolution number at epoch *

(y) Checksum

* (x) is for reference only.

TLE File Name Definition

TLE file name definition : **TLEN_XX** or **TLEO_XX** (*)

TLEN : Primary plan which consider the orbital maneuver (Nominal case)

TLEO : Orbital maneuver is not consider (Off-nominal case)

XX = file number

(*) Normally, please use C1TLEN because C1TLEO does not consider the orbital maneuver for orbit calculation.