TABLE VII-6 – *Narrow-band statistics of aeronautical mobile-ground links[[1]](#footnote-1)+*

Frequency *f* (GHz) \_ \_ \_ \_ \_ \_

Polarization (L/C) \_

Polarization tilt angle *p* (degrees) \_ \_ \_ \_

**Signal source**

Ground Station latitude (–90…+90) (degrees)\_ \_

Ground Station longitude (–90…+90) (degrees)\_ \_

TX antenna gain towards mobile (dBi) \_ \_ \_

TX 3 dB beamwidth *r* (degrees) \_ \_ \_ \_ \_

Local ground site characteristics (5)

TX antenna height ag *ht* (m) \_ \_ \_

**Aeronautical mobile station**

RX Aircraft Type \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

RX country(1) \_ \_

RX Path Type (linear, oval, etc.)(2)

RX start latitude (–90…+90) (degrees) \_ \_ \_ \_ \_ \_ \_

RX start longitude (0..360) (degrees) E \_ \_ \_ \_ \_ \_ \_

RX end latitude (–90…+90) (degrees) \_ \_ \_ \_ \_ \_ \_

RX end longitude (0…360) (degrees) E \_ \_ \_ \_ \_ \_ \_

RX average altitude amsl *hgr* (m) \_ \_ \_ \_ \_

RX antenna type \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

RX 3 dB beamwidth *r* (degrees) \_ \_ \_ \_ \_

RX antenna gain (dBi) \_ \_ \_

RX figure of merit (dB(K–1)) \_ \_ \_ \_ \_

RX multipath reduction? (Y/N) \_

RX dynamic range (dB) \_ \_ \_ \_ \_

RX integration time (s) \_ \_ \_ \_

Data sampling interval (s) \_ \_ \_ \_ \_ \_ \_

Calibration interval (days) \_ \_ \_ \_ \_

Data resolution (dB) \_ \_ \_ \_ \_ \_ \_

**Measurement:** Experiment No. \_ \_ \_

Start date (yyyy.mm.dd) \_ \_ \_ \_ \_ \_ \_ \_

End date (yyyy.mm.dd) \_ \_ \_ \_ \_ \_ \_ \_

Duration *d* (days) (3) \_ \_ \_ \_ \_ \_ \_

Average elevation angle (degrees) \_ \_ \_

Range of elevation angles (degrees) \_\_\_\_\_\_\_

Average velocity of aircraft (m/s) \_ \_ \_

**Environment**

Weather conditions(4)

Ground temperature range at TX

Land mobile terrain type(5) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Land mobile building type(5) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Land mobile vegetation type(5) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Land mobile surface shape(6) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Sea state \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

80% CDF of basic transmission loss, L80 (dB) \_ \_ \_

90% CDF of basic transmission loss, L90 (dB) \_ \_ \_

**Table a: (7)**

Fade depth relative to LOS (dB) exceeded for percentage of time

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage of time | 0.1 | 1 | 5 | 10 | 30 | 50 | 90 | 99 | 99.9 |
| Fade depth A (dB) | – | – | – | – | – | – | – | – | – |
|  |  |  |  |  |  |  |  |  |  |

**Table b:** (7)

Fade duration (s) NOT exceeded for percentage of time at given fade levels

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage  of time | 0.1 | 1 | 5 | 10 | 30 | 50 | 90 | 99 | 99.9 |
| 00 dB 02 dB 05 dB 10 dB | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – |

**Table c:** (8)

Fade length (m) NOT exceeded for percentage of time at given fade levels

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage  of time | 0.1 | 1 | 5 | 10 | 30 | 50 | 90 | 99 | 99.9 |
| 00 dB 02 dB 05 dB 10 dB | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – | – – – – |

**References:**

**Comments:**

(1) Use ISO 3166-1 alpha-2 country codes.

(2) Description of oval, or other flight track shapes

(3) Duration is the total time of valid measurements for this dataset, expressed as a real number (e.g. 8157.312 hours).   
The ratio of duration to the period identified by the start and the end dates of this dataset is the availability (e.g. start=2001/1/1, end=2001/12/31, duration= 8157.312 hours corresponds to 93.12 % availability).

(4) Weather conditions can be one or more of the following: clear, partly cloudy, rain, fog, snow, sleet, hail, etc.

(5) See Annex 3 for environment types. Note: <https://www.itu.int/oth/R0A04/en>

(6) Terrain surface shape can be given as: FL: flat, HI: hilly, MO: mountainous.

(7) Submissions should comply with the acceptance criteria specified in Rec. ITU-R P.311.

(8) The precise point-of-incidence of the fade-length interval corresponds to a statistically derived parameter which will vary depending on the specific flight path.

1. + In addition to the tables provided in this document the submitter is requested to provide the data files according to the instructions available on ITU-R SG 3 Web page: [Study Group 3 databanks – DBSG3](http://www.itu.int/ITU-R/index.asp?category=study-groups&rlink=sg3-dtbank-dbsg3&lang=en). [↑](#footnote-ref-1)