Datasets contained in this article are noise level measurement carried out at 41 different locations in Ota metropolis, Nigeria. The noise readings were measured at a time interval of 30 min for each site considered using a precision grade sound level meter. The analysis was based on the noise descriptors $L_{Aeq}$, $L_{10}$, $L_{90}$, $L_D$, TNI and NEI. Results from the study reflects that the highest and lowest equivalent noise levels ($L_{Aeq}$) were recorded at commercial areas (96 dB (A)) and residential areas (52 dB (A)), respectively, the background noise level ($L_{90}$) has the highest and lowest values at commercial areas (77 dB (A)) and residential areas (44 dB (A)), respectively and the peak value ($L_{10}$) has the highest value and lowest value at the commercial areas (96 dB (A)) and residential areas (56 dB (A)). Based on the WHO recommendations and standards, only 2 out of the 41 locations considered are under normally acceptable situation while the noise levels of other areas are not acceptable. Noise map developed in this study provides enough information for technical controls and interim legislation against environmental noise pollution in the metropolis. Moreover, considering the noise emission standards, planning and promoting the citizens awareness about the high noise risk could help to mitigate the effect of noise in Ota, Metropolis. The noise data in this study provides enough information for technical controls and interim legislation against environmental noise pollution in the metropolis.
are useful as reference and guideline for future regulations on noise limit to be implemented for urban areas in Nigeria and developing countries at large.

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### Specifications table

| Subject Area                  | Engineering                                      |
|------------------------------|--------------------------------------------------|
| More Specific Subject area   | Mechanical Engineering, Environmental Engineering, Environmental Noise Control |
| Type of Data                 | Tables, Figures and graphs                       |
| How Data was Acquired        | Field noise readings was carried out at 41 – selected locations using Sound Level Meter (SLM) (model: 8922 Digital Sound Level Meter). |
| Data Format                  | Raw and analysed                                  |
| Experimental Factor          | Noise level at a total number of 41 locations comprises of commercial areas, industrial areas, busy roads & road junctions, passengers loading parks and residential areas in Ota Metropolis was carried out. |
| Instrumentation for the field measurements consisted of precision grade sound level meter (according to IEC 651, ANSI S1.4 type 2 class standards), 1/2-in. condenser microphone and 1/3-octave filter with frequency range and measuring level range of 31.5 Hz–8 KHz and 30–130 dB respectively. The instruments were calibrated by the internal sound level calibrator before making measurements at each site. All the instruments comply with IEC standards. Details procedures for the environmental noise measurements can be found in Refs. [1–3]. $L_{ai}$ (A-weighted instantaneous Sound pressure level) measurements were recorded at intervals of 30 s for a period of 30 min, giving 60 m readings per sampling location. This procedure was carried out for morning (7:00–9:00 a.m.), afternoon (1:00–3:00 p.m.) and evening (6:00–8:00 p.m.) measurements. From these readings, commonly used community noise descriptors such as minimum noise level ($L_{min}$), maximum noise level ($L_{max}$), equivalent A-weighted sound pressure level ($L_{Aeq}$), Noise Pollution Level (LNP), Traffic Noise Index (TNI), Noise Climate (NC), Noise Emission Index (NEI), Day Noise Levels ($L_D$), Night Noise Levels ($L_N$), the exceedence percentiles ($L_{10}$, $L_{50}$, $L_{90}$), Noise climate (NC) and Traffic noise index (TNI) were computed. |
| Data source location         | Ota Metropolis, Nigeria                          |
| Data Accessibility           | Data are available within this article           |

### Value of the data

- The given data can be used to develop noise map for Urban Cities in Nigeria and other developing countries.
- The data contained herein can help to establish environmental noise impact criteria levels for various land use purposes. These criteria levels would enable impacts to be determined.
- The given data will show researchers in the field of environmental management and sustainable city development the trend of noise pollution as it relate to commercial activities, industrial activities and traffic volume in urban areas.
The data on noise level measurement can be used in creation of a database for urban planning with localisation of noisy activities and mixed and sensitive zones. The data can be used to evaluate population exposure to noise pollution in urban area.

1. Data

To assess the noise pollution levels in Ota Metropolis, 41 locations were selected for study. These locations were grouped into commercial area, industrial areas, road junctions/busy roads and residential areas. The noise descriptors for each location at respective time of the day are presented in Tables 1–3. Figs. 1 and 2 show the variations and comparison of equivalent noise level at commercial areas and major roads with WHO standards. Fig. 3 presents variations of $L_2$ and $L_N$ values in the selected locations.

### Table 1
Minimum ($L_{\text{min}}$), Maximum ($L_{\text{max}}$) and percentile noise exceeded ($L_{10}, L_{50}, L_{90}$) at selected locations.

| Location         | $L_{\text{min}}$ dB(A) | $L_{\text{max}}$ dB(A) | $L_{10}$ dB(A) | $L_{50}$ dB(A) | $L_{90}$ dB(A) |
|------------------|------------------------|-------------------------|----------------|----------------|----------------|
|                  | M A E                  | M A E                   | M A E          | M A E          | M A E          |
| Sifor Area       | 66 65 61              | 82 86 82               | 72 88 76       | 71 75 70       | 66 68 63       |
| Bells University Junction | 63 66 69             | 78 89 92               | 77 84 80       | 73 74 75       | 69 69 72       |
| Canaan Land      | 65 65 63              | 90 101 85              | 80 88 78       | 72 75 72       | 67 69 67       |
| May And Baker Close | 45 43 31             | 67 65 63               | 56 56 55       | 49 49 45       | 45 45 41       |
| High Court Area  | 63 63 65              | 86 89 83               | 82 79 80       | 77 75 76       | 72 70 70       |
| Nestle           | 68 64 66              | 88 82 97               | 80 78 80       | 75 74 74       | 72 68 69       |
| Iyana-Iyesi Market | 59 60 77            | 81 78 87               | 74 72 82       | 66 67 79       | 63 62 78       |
| Iyana-Iyesi Junction | 69 69 72            | 75 86 89               | 84 83 85       | 78 75 78       | 73 71 74       |
| Oju-Ore Junction | 75 71 71             | 105 93 87              | 90 85 83       | 81 76 78       | 77 73 74       |
| Joju Junction    | 63 63 67              | 89 84 84               | 79 79 79       | 74 73 73       | 68 69 69       |
| Joju Express Road | 73 72 73             | 88 94 94               | 86 88 82       | 80 80 77       | 75 75 75       |
| Sango Under Bridge | 73 75 73            | 102 113 110            | 91 96 87       | 79 83 78       | 75 77 75       |
| Sango Car Park   | 60 55 67              | 92 89 94               | 80 80 84       | 68 71 73       | 61 71 68       |
| Fowobi Junction  | 67 70 67              | 93 87 87               | 84 84 80       | 76 76 76       | 71 72 72       |
| Toll Gate Express | 67 65 71            | 85 98 88               | 86 76 85       | 74 71 78       | 70 67 73       |
| Toll Gate Area   | 70 70 73              | 91 103 99              | 86 86 92       | 78 77 84       | 73 72 76       |
| Obasanjo Junction | 68 70 70             | 92 93 91               | 85 90 85       | 76 80 79       | 79 71 72       |
| Ota-Market Area  | 66 66 67              | 87 94 94               | 82 84 83       | 75 77 77       | 70 72 71       |
| Ogun State Internal Revenue | 58 60 64         | 89 81 85               | 77 74 75       | 67 67 68       | 60 62 65       |
| Ota Local Government Set | 63 63 63       | 91 87 82               | 77 75 77       | 71 70 72       | 66 65 67       |
| Jack Ross Area (Road) | 57 52 59         | 86 84 82               | 76 73 79       | 69 66 70       | 70 62 67       |
| Chelsea (IDL)    | 55 57 69              | 99 83 90               | 80 78 87       | 72 71 82       | 63 63 75       |
| Igmanmode Sec School A/R | 67 65 65       | 91 90 92               | 83 84 90       | 76 76 90       | 72 72 74       |
| All-Over Polytechnic Road | 61 64 75      | 84 95 94               | 82 84 90       | 76 74 81       | 65 66 76       |
| Olopa Palace Junction | 66 65 69        | 90 86 86               | 80 78 80       | 74 73 78       | 70 68 73       |
| Ijoko Road       | 66 59 53              | 90 84 95               | 82 81 85       | 74 77 79       | 70 68 71       |
| Ijako Tipper Garage | 60 60 60         | 82 88 89               | 73 83 78       | 67 70 72       | 62 65 67       |
| Ijoko Railway Station | 59 64 53        | 91 82 81               | 81 80 78       | 70 75 72       | 62 69 65       |
| Ilogbo Road      | 61 64 63              | 82 90 91               | 76 87 86       | 70 79 80       | 66 68 74       |
| Ijoko Market     | 57 58 58              | 77 80 79               | 75 78 78       | 67 73 70       | 61 67 62       |
| Ifo Road         | 68 66 68              | 93 88 87               | 86 83 83       | 80 79 78       | 71 72 70       |
| Ouwode Area      | 64 65 56              | 88 82 85               | 80 80 80       | 74 78 76       | 68 68 66       |
| Dalemo Junction  | 65 64 63              | 82 86 84               | 78 82 81       | 72 76 76       | 68 68 69       |
| Ilo-Awela Road   | 60 62 66              | 84 83 84               | 74 81 82       | 68 73 77       | 63 66 67       |
| Indomie          | 71 73 68              | 94 97 99               | 87 91 94       | 80 83 81       | 75 76 73       |
| Tower Aluminum Company | 51 50 48      | 79 72 71               | 75 71 68       | 59 64 59       | 55 55 53       |
| Kolokate Area    | 55 51 52              | 87 73 74               | 81 61 70       | 62 59 63       | 56 54 56       |
| Ouwode Area      | 64 69 64              | 92 91 90               | 89 86 88       | 78 80 79       | 73 75 73       |
| Idirorok Road (Chelsea Area) | 61 67 65    | 82 89 87               | 86 87 83       | 81 78 77       | 70 74 70       |
| Bells University Drive | 49 52 50        | 84 76 80               | 76 73 76       | 63 67 69       | 54 58 56       |
| Estate           | 55 68 65              | 96 93 97               | 90 88 90       | 78 79 78       | 70 74 69       |

Key: M – Morning; A – Afternoon; E – Evening.
2. Experimental design, materials and methods

The noise measurements were made at the street level (at road junctions/busy roads, commercial centres, industrial areas and residential areas). The instrument (sound level meter) used was held comfortably in hand with the microphone pointed at the suspected noise source at a distance not less than 1 m away from any reflecting object. $L_{Ai}$ (A-weighted instantaneous sound pressure level) measurements were recorded at intervals of 30 s for a period of 30 min, giving 60 readings per sampling location. This procedure was carried out for morning (7:00–8:00 a.m.), afternoon (1:00–3:00 p.m.) and evening (6:00–8:00 p.m.) measurements. From these readings, commonly used community noise assessment quantities such as minimum noise level ($L_{min}$), maximum noise level ($L_{max}$), equivalent A-weighted sound pressure level ($L_{Aeq}$), Noise Pollution Level (LNP), Traffic Noise

![](https://doi.org/10.1016/j.inferred.2019.06.002)

Table 2
Traffic noise Index (TNI), Pollution noise level (LNP) and Average Equivalent Noise Levels ($L_{Aeq}$) for the selected locations.

| Location                        | TNI dB(A) | LNP dB(A) | $L_{Aeq}$ dB(A) |
|--------------------------------|-----------|-----------|-----------------|
|                                | M A E     | M A E     | M A E           |
| Sifor Area                      | 60 118 83 | 79.29 99.55 85.74 | 73.29 79.55 72.74 |
| Bells University Junction       | 71 99 74  | 81.65 92.35 88.33 | 73.65 77.35 80.33 |
| Canaan Land                     | 89 115 81 | 90.65 106.09 86.06 | 77.85 87.09 75.06 |
| May And Baker Close             | 56 59 67  | 62.68 64.42 65.14 | 52.68 53.42 51.14 |
| High Court Area                 | 82 76 80  | 88.52 85.82 86.71 | 78.52 76.82 76.71 |
| Nestle Area                     | 74 78 83  | 85.36 85.32 91.95 | 73.76 75.32 80.95 |
| Iyana-lyesi Market              | 77 72 64  | 81.83 78.93 83.63 | 70.83 68.93 79.63 |
| Iyana-lyesi Junction            | 87 89 88  | 92.44 90.18 91.89 | 81.44 78.83 80.89 |
| Oju-Ore Junction                | 99 91 80  | 102.18 93.80 85.59 | 89.18 81.80 79.59 |
| Joju Junction                   | 82 79 79  | 87.79 85.20 85.13 | 76.79 75.20 75.13 |
| Joju Express Road               | 89 97 73  | 93.16 96.62 87.73 | 82.16 83.62 80.73 |
| Sango Under Bridge              | 109 123 93| 103.92 115.57 105.36 | 87.92 96.57 93.36 |
| Sango Car Park                  | 107 77 102| 95.82 85.80 96.73 | 76.82 76.80 78.03 |
| Fowobi Junction                 | 93 90 74  | 93.88 90.69 85.48 | 80.88 78.69 77.48 |
| Toll Gate Express               | 104 73 91| 93.14 92.11 91.95 | 77.14 83.11 79.95 |
| Toll Gate Area                  | 95 98 110| 95.10 100.98 104.39 | 82.10 86.98 88.39 |
| Obasanjo Junction               | 97 114 88| 94.68 103.59 93.20 | 80.68 85.59 82.20 |
| Ota-Market Area                 | 88 90 89  | 90.01 93.03 92.98 | 78.01 81.03 80.98 |
| Ogun State Internal Revenue Area| 98 80 75  | 92.51 92.01 92.50 | 75.51 70.01 72.50 |
| Ota Local Government Secretariat| 80 75 77  | 87.10 83.30 84.04 | 76.10 73.30 74.04 |
| Jack Ross Area (Road)           | 88 61 94  | 87.28 78.78 88.31 | 73.28 72.78 73.31 |
| Chelsea (IDL)                   | 101 93 93| 99.43 88.22 95.15 | 82.43 73.22 81.35 |
| Iganmode Sec School Area/Road   | 86 90 108| 91.27 91.82 100.52 | 80.27 79.82 84.52 |
| All-Over Polytechnic Road       | 103 108 102| 94.53 98.73 99.43 | 77.53 80.73 85.43 |
| Oloota Palace Junction          | 80 78 71  | 88.04 85.59 85.30 | 78.04 75.59 78.30 |
| Ijoko Road                      | 88 90 97  | 90.64 91.03 90.60 | 76.84 78.03 82.06 |
| Ijako Tipper Garage             | 76 107 81| 81.13 94.91 87.72 | 70.13 76.91 76.72 |
| Ijoko Railway Station           | 108 83 87| 97.05 87.12 86.89 | 78.05 76.12 73.89 |
| Ilogbo Road                     | 76 114 92| 82.45 101.60 94.49 | 72.45 82.60 82.49 |
| Ijoko Market                    | 87 81 96  | 83.70 85.18 88.62 | 69.70 74.18 72.62 |
| Ifo Road                        | 101 86 92| 97.85 91.01 92.40 | 82.85 80.01 79.40 |
| Igbala                          | 86 86 92  | 89.48 88.48 91.11 | 77.48 76.48 77.11 |
| Dalemo Junction                 | 78 94 87  | 84.22 91.93 89.62 | 74.22 77.93 77.62 |
| Ilo-Awela Road                  | 77 96 85  | 83.01 91.64 89.41 | 72.01 76.64 78.41 |
| Indomie Area                    | 93 106 127| 95.34 101.67 109.22 | 83.34 86.67 88.22 |
| Tower Aluminum Company          | 105 89 83| 88.59 82.05 78.66 | 68.59 66.05 63.66 |
| Kolokote Area                   | 126 52 82| 100.30 71.10 80.29 | 75.30 64.10 66.29 |
| Owode Area                      | 107 89 103| 99.61 93.88 98.21 | 83.61 82.88 83.21 |
| Idiroko Road (Chelsea Area)     | 104 96 92| 98.07 95.21 92.26 | 82.07 82.21 79.26 |
| Bells Drive                     | 112 88 106| 93.56 83.48 91.48 | 71.56 68.48 71.48 |
| Estate                          | 120 100 123| 104.57 97.62 106.85 | 84.57 83.62 85.85 |

Key: M – Morning; A – Afternoon; E – Evening.

2. Experimental design, materials and methods

The noise measurements were made at the street level (at road junctions/busy roads, commercial centres, industrial areas and residential areas). The instrument (sound level meter) used was held comfortably in hand with the microphone pointed at the suspected noise source at a distance not less than 1 m away from any reflecting object. $L_{Ai}$ (A-weighted instantaneous sound pressure level) measurements were recorded at intervals of 30 s for a period of 30 min, giving 60 readings per sampling location. This procedure was carried out for morning (7:00–8:00 a.m.), afternoon (1:00–3:00 p.m.) and evening (6:00–8:00 p.m.) measurements. From these readings, commonly used community noise assessment quantities such as minimum noise level ($L_{min}$), maximum noise level ($L_{max}$), equivalent A-weighted sound pressure level ($L_{Aeq}$), Noise Pollution Level (LNP), Traffic Noise
Index (TNI), Noise Climate (NC), Noise Emission Index (NEI), Day Noise Levels (LD), Night Noise Levels (LN), the exceedence percentiles \((L_{10}, L_{50}, L_{90})\), Noise climate (NC) and Traffic noise index (TNI) were computed.

According to the Directive 2002/49/EC of the European Parliament and of the Council, of 25 June 2002 relating to the assessment and management of environmental noise imposes to its Member States the elaboration of noise maps for cities with more than 250,000 inhabitants, this was due on 30 June 2007 [4,5]. Based on this directive, Ota metropolis with population of over 527,242 inhabitants is qualified to be presented with noise map.

| Location                        | NEI       | Noise climate | \(L_{\text{Day}}\) | \(L_{\text{Night}}\) |
|---------------------------------|-----------|---------------|---------------------|----------------------|
|                                 | \(M\) A   | E             | \(M\) A             |                       |
| Sifor Area                      | 1.04      | 1.14          | 1.04                | 6 20 13              |
| Bells University Junction       | 1.05      | 1.11          | 1.15                | 8 15 8               |
| Camaan Land                     | 1.11      | 1.24          | 1.07                | 13 19 11             |
| May And Baker Close             | 0.96      | 0.97          | 0.93                | 10 11 14             |
| High Court Area                 | 1.12      | 1.12          | 1.10                | 10 9 10              |
| Nestle Area                     | 1.05      | 1.08          | 1.16                | 8 10 11              |
| Iyana-Iyesi Market              | 1.09      | 1.06          | 1.45                | 11 10 4              |
| Iyana-Iyesi junction            | 1.16      | 1.12          | 1.16                | 11 12 11             |
| Oju-Ore Junction                | 1.37      | 1.26          | 1.45                | 13 12 9              |
| Joju Junction                   | 1.10      | 1.07          | 1.07                | 11 10 10             |
| Joju Express Road               | 1.17      | 1.20          | 1.11                | 11 13 7              |
| Sango Under Bridge              | 1.35      | 1.49          | 1.70                | 16 19 12             |
| Sango Car Park                  | 1.10      | 1.10          | 1.15                | 19 9 16              |
| Fowobin junction                | 1.16      | 1.12          | 1.11                | 13 12 8              |
| Toll Gate Express               | 1.10      | 1.19          | 1.14                | 16 9 12              |
| Toll Gate Area                  | 1.26      | 1.34          | 1.61                | 13 14 16             |
| Obasanjo Junction               | 1.15      | 1.22          | 1.17                | 14 18 11             |
| Ota-Market Area                 | 1.20      | 1.25          | 1.47                | 12 12 12             |
| Ogun State Internal Revenue Area| 1.37      | 1.27          | 1.61                | 17 12 10             |
| Ota Local Government Sect       | 1.38      | 1.33          | 1.65                | 11 10 10             |
| Jack Ross Area (Road)           | 1.09      | 1.06          | 1.45                | 14 6 15              |
| Chelsea (IDL)                   | 1.10      | 0.98          | 1.28                | 17 15 12             |
| Iganmode Sec School A/R         | 1.15      | 1.14          | 1.21                | 11 12 16             |
| All-Over Polytechnic Road       | 1.11      | 1.14          | 1.22                | 17 18 14             |
| Oloti Palace Junction           | 1.20      | 1.16          | 1.42                | 10 10 7              |
| Ijoko Road                      | 1.12      | 1.11          | 1.17                | 12 13 14             |
| Ijako Tipper Garage             | 1.00      | 1.10          | 1.10                | 11 18 11             |
| Ijoko Railway Station           | 1.20      | 1.17          | 1.34                | 19 11 13             |
| Ilogbo Road                     | 1.04      | 1.18          | 1.19                | 10 19 12             |
| Ijoko Market                    | 1.07      | 1.14          | 1.32                | 14 11 16             |
| Ifo Road                        | 1.18      | 1.14          | 1.13                | 15 11 13             |
| Igbala                          | 1.11      | 1.10          | 1.30                | 12 12 14             |
| Dalemo Junction                 | 1.06      | 1.11          | 1.11                | 10 14 12             |
| Ilo-Awela Road                  | 1.03      | 1.10          | 1.12                | 11 15 11             |
| Indomie Area                    | 1.19      | 1.24          | 1.26                | 12 15 21             |
| Tower Aluminum Company          | 0.91      | 0.88          | 0.98                | 20 16 15             |
| Kolokote Area                   | 1.00      | 0.85          | 1.02                | 25 7 14              |
| Owode Area                      | 1.29      | 1.28          | 1.51                | 16 11 15             |
| Idiroko Road(Chelsea Area)      | 1.17      | 1.17          | 1.13                | 16 13 13             |
| Bells University Drive          | 1.10      | 1.05          | 1.30                | 22 15 20             |
| Estate                          | 1.13      | 1.11          | 1.32                | 20 14 21             |
In this study, ArcGIS 10.5 Software was used to develop the spatial variability mapping of Ota with the use of Inverse Diverse Weighting (IDW) interpolation method. The codes adopted and the geographical positioning systems Coordinates for the 41 chosen locations surveyed in Ota metropolis are shown below in Table 4. Figs. 4–6 show the spatial variation mapping of noise levels in Ota metropolis for the morning, afternoon and evening periods of the day.

According to recommendation of noise levels for specific environments by WHO 2002 (in Arokoyu et al. [6] and Usikalu and Kolawole [7]), all the locations surveyed in this study are categorized based on the noise maps developed into three different zones which are (a) low risk zone (May and baker location) (b) Moderate risk zone (Iyana-Iyesi market, Ilogbo road area, Tower aluminium area, Bells University drive) and (c) High risk zone (Sango under bridge, Oju Ore, Canaan Land area, Nestle area, Idiroko road, Estate and other locations with LAeq exceeds 81 dB (A)).
Table 4
Geographical positioning systems coordinates for the selected locations.

| S/N | Location                      | Latitude    | Longitude   | Elevation (m) |
|-----|-------------------------------|-------------|-------------|---------------|
| 1   | Sifor Area                    | 6° 40' 57.8'' | 3° 10' 24.3'' | 75            |
| 2   | Bells University Junction     | 6° 41' 00.2'' | 3° 10' 38.2'' | 63            |
| 3   | Canaan Land                   | 6° 40' 55.7'' | 3° 10' 03.7'' | 63            |
| 4   | May And Baker Close           | 6° 41' 07.2'' | 3° 11' 02.7'' | 55            |
| 5   | High Court Area               | 6° 40' 52.7'' | 3° 11' 29.2'' | 52            |
| 6   | Nestle Area                   | 6° 40' 48.0'' | 3° 11' 01.8'' | 64            |
| 7   | Iyana-Iyesi Market            | 6° 40' 83.9'' | 3° 11' 04.9'' | 65            |
| 8   | Iyana-Iyesi Junction          | 6° 41' 18.2'' | 3° 13' 32.3'' | 73            |
| 9   | Oju-Junction                  | 6° 41' 55.8'' | 3° 14' 16.7'' | 77            |
| 10  | Joju Express Road             | 6° 42' 35.6'' | 3° 14' 16.5'' | 78            |
| 11  | Sango Under Bridge            | 6° 42' 26.6'' | 3° 14' 33.7'' | 85            |
| 12  | Sango Car Park                | 6° 42' 17.8'' | 3° 14' 45.2'' | 82            |
| 13  | Fowobi Junction               | 6° 41' 11.3'' | 3° 13' 13.0'' | 81            |
| 14  | Toll Gate Express             | 6° 42' 19.3'' | 3° 14' 47.2'' | 80            |
| 15  | Toll Gate Area                | 6° 41' 32.6'' | 3° 15' 25.6'' | 80            |
| 16  | Obasanjo Junction             | 6° 40' 58.2'' | 3° 12' 35.0'' | 68            |
| 17  | Ota-Market Area               | 6° 41' 03.8'' | 3° 12' 55.7'' | 68            |
| 18  | Ogun State Internal Revenue   | 6° 41' 35.6'' | 3° 14' 12.2'' | 80            |
| 19  | Area                          |             |             |               |
| 20  | Ota Local Government Secretariat | 6° 41' 29.0'' | 3° 14' 12.1'' | 72            |
| 21  | Jack Ross Area (Road)         | 6° 40' 04.6'' | 3° 10' 52.6'' | 53            |
| 22  | Chelsea (IDL)                 | 6° 40' 04.4'' | 3° 10' 53.2'' | 67            |
| 23  | Iganmode Sec School Area/ Road| 6° 40' 56.3'' | 3° 10' 53.8'' | 88            |
| 24  | All-Over Polytechnic Road     | 6° 41' 49.2'' | 3° 13' 59.8'' | 84            |
| 25  | Ologa Palace Junction         | 6° 41' 13.6'' | 3° 13' 59.9'' | 78            |
| 26  | Ijoko Road                    | 6° 40' 57.4'' | 3° 12' 30.7'' | 68            |
| 27  | Ijoko Tipper Garage           | 6° 44' 34.3'' | 3° 15' 39.9'' | 90            |
| 28  | Ijoko Railway Station         | 6° 44' 58.0'' | 3° 15' 38.4'' | 71            |
| 29  | Ilogbo Road                   | 6° 44' 57.4'' | 3° 12' 53.4'' | 46            |
| 30  | Ijoko Market                  | 6° 44' 34.2'' | 3° 15' 60.0'' | 92            |
| 31  | Ifo Road                      | 6° 45' 00.9'' | 3° 12' 53.0'' | 47            |

Fig. 3. Variation of $L_D$ and $L_N$ values in the selected locations.
Table 4 (continued)

| S/N | Location                              | Latitude   | Longitude  | Elevation (m) |
|-----|---------------------------------------|------------|------------|---------------|
| 32  | Igbala                                | 6° 42' 42.7'' | 3° 13' 75.0'' | 69            |
| 33  | Dalemo Junction                       | 6° 42' 01.3'' | 3° 15' 08.1'' | 60            |
| 34  | Ilo-Awela Road                         | 6° 41' 50.7'' | 3° 14' 20.9'' | 83            |
| 35  | Indomie Area                           | 6° 41' 08.0'' | 3° 13' 05.9'' | 78            |
| 36  | Tower Aluminum Company                 | 6° 40' 33.2'' | 3° 12' 06.5'' | 67            |
| 37  | Kolokote Area                          | 6° 40' 28.5'' | 3° 12' 04.8'' | 74            |
| 38  | Owode Area                             | 6° 40' 53.4'' | 3° 12' 07.9'' | 69            |
| 39  | Idiroko Road(Chelsea Area)             | 6° 40' 52.7'' | 3° 09' 23.7'' | 64            |
| 40  | Bells Drive                            | 6° 44' 30.0'' | 3° 12' 55.0'' | 51            |
| 41  | Estate                                 | 6° 40' 53.4'' | 3° 12' 07.9'' | 71            |

Fig. 4. Spatial variation mapping of noise levels in Ota metropolis for the morning period.

Fig. 5. Spatial variation mapping of noise levels in Ota metropolis for the afternoon period.
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Transparency document. Supporting information

Transparency data associated with this article can be found in the online version at https://doi.org/10.1016/j.dib.2018.12.049.

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