| node_num | 5 | | 15 | | | | |
|--------------------------------|---------------------|---------|------------------------------|-------|---------------|-----|----------------------|
| nodes | energyConsumed sent | | | | | | recivedPackets ratio |
| 0 | 399 | 4840 | 392.3795971 | 4671 | | | |
| 1 | 393 | | 394.076201 | 4728 | | | 0.25 |
| 2 | 390 | | 399.9809825 | 4749 | | | |
| 3 | 391 | | 408.6893004 | 4750 | | | 0.20 |
| 4 | 398 | | 387.9403965 | 4768 | | | 0.15 |
| 5 | | | 396.5831974 | 4783 | initialLoRaSF | 7 | 0.10 |
| 6 | | | 394.0243935 | 4794 | initialLoRaTP | 7 | 0.10 |
| 7 | | | 386.8287298 | 4812 | initialLoRaBW | 125 | 0.05 |
| 8 | | | 395.4779579 | 4831 | | | 0.00 |
| 9 | | | 398.6874334 | 4841 | | | |
| 10 | | | 399.5329807 | 4842 | | | Energy Consumption |
| 11 | | | 396.6934597 | 4852 | | | Energy Consumption |
| 12 | | | 394.7721254 | 4854 | | | • |
| 13 | | | 391.7827213 | 4883 | | | 0.8 |
| 14 | | | 389.3040074 | 4969 | | | 0.6 |
| | | | | | | | 15 |
| totalEnergyCons | 1971 | | 5926.753484 | | | | 0.4 |
| totalSent | | 23993 | | 72127 | | | 5 |
| | | | | | | | 0.2 |
| totalRecieved receivedPack rat | 4840 | | 9519 | | | | |
| EnergyConsump | | | 0.1319755431 0.6226235407 | | | | 0.0 |
| EnergyConsump | 0.407231405 | | 0.6226235407 | | | | |
| | | | | | | | |
| node_num | 5 | | 15 | | | | |
| | energyConsumer sent | Packets | 10 | | | | |
| 15 | | | 459.6606914 | 1887 | | | |
| 16 | 458.8696841 | | 461.3717441 | 1890 | | | recivedPackets ratio |
| 17 | 460.5288041 | | 462.6254409 | 1891 | | | |
| 18 | 461.4800808 | | 463.1677706 | 1901 | | | 100 |
| 19 | 464.0156345 | | 463.5237995 | 1905 | | | 1.00 |
| 20 | | | 465.1440896 | 1908 | initialLoRaSF | 12 | 0.75 |
| 21 | | | 466.1634389 | 1913 | initialLoRaTP | 7 | 15 |
| 22 | | | 466.9313413 | 1915 | initialLoRaBW | 125 | 0.50 |
| 23 | | | 467.0657451 | 1915 | | | |
| 24 | | | 468.2448739 | 1919 | | | 0.25 |
| 25 | | | 468.486735 | 1920 | | | |
| 26 | | | 468.6527092 | 1921 | | | 0.00 |
| 27 | | | 470.0957058 | 1922 | | | |
| 28 | | | 470.3124324 | 1930 | | | Energy Consumption |
| 29 | | | 471.247886 | 1937 | | | |
| 23 | | | 1.2 | 1001 | | | 0.4 |
| totalEnergyCons | 2301.379005 | | 6992.694404 | | | | |
| totalSent | 200 | 9537 | 5552.551101 | 28674 | | | 0.3 |
| 154.55.11 | | 3331 | | | | | 5 |
| totalRecieved | 9299 | | 21277 | | | | 0.2 |
| receivedPack rat | | | 0.7420311083 | | | | 0.1 |
| EnergyConsump | | | 0.3286503926 | | | | 5.1 |
| | | | | | | | 0.0 |
| | | | | | | | |

| nodo num | 5 | | 15 | | | | |
|-------------------|---------------------|-------------|-----------|-------|---------------|-----|-----------------------|
| node_num nodes | energyConsumecsent | Packets | 15 | | | | |
| 15 | | 4760 412.08 | 869612 | 4705 | | | recivedPackets ratio |
| 16 | | 4772 415.47 | | 4705 | | | Toolvodi dokote ratio |
| | | | | | | | 0.8 |
| 17 | | 4846 417.17 | | 4728 | | | 0.0 |
| 18 | | 4863 417.46 | | 4730 | | | 0.6 |
| 19 | | 4914 417.85 | | 4733 | | _ | 5 |
| 20 | | | 855967 | 4735 | initialLoRaSF | 7 | 0.4 |
| 21 | | | 470404 | 4752 | initialLoRaTP | 14 | 15 |
| 22 | | | 890988 | 4764 | initialLoRaBW | 125 | 0.2 |
| 23 | | | 863377 | 4774 | | | |
| 24 | | | 940987 | 4777 | | | 0.0 |
| 25 | | 423.27 | 712797 | 4780 | | | |
| 26 | | 424.45 | 517142 | 4873 | | | Energy Consumption |
| 27 | | | 875086 | 4891 | | | |
| 28 | | 431.79 | 913496 | 4915 | | | 0.3 |
| 29 | | 433.73 | 169234 | 4941 | | | |
| | | | | | | | 15 |
| totalEnergyCons | 2123.509205 | 632 | 20.575402 | | | | 0.2 |
| totalSent | | 24155 | | 71803 | | | |
| | | | | | | | 0.1 |
| totalRecieved | 14494 | | 23978 | | | | |
| | 0.6000413993 | | 339414788 | | | | |
| EnergyConsump | 0.1465095353 | 0.26 | 35989408 | | | | 0.0 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| node_num | 5 | | 15 | | | | |
| nodes | energyConsumec sent | Packets | | | | | |
| 15 | 693.9439426 | 1896 696.34 | 493726 | 1881 | | | |
| 16 | 697.6170306 | 1899 700.44 | 438608 | 1895 | | | recivedPackets ratio |
| 17 | 700.3496549 | 1910 701.66 | 645338 | 1895 | | | |
| 18 | 701.6229829 | 1912 701.73 | | 1897 | | | 1.00 |
| 19 | | 1920 701.93 | | 1908 | | | 5 15 |
| 20 | | 702.52 | | 1909 | initialLoRaSF | 12 | 0.75 |
| 21 | | | 509741 | 1910 | initialLoRaTP | 14 | |
| 22 | | | 393558 | 1914 | initialLoRaBW | 125 | 0.50 |
| 23 | | | 701331 | 1919 | tidicondbyv | 123 | |
| 24 | | | 663936 | 1919 | | | 0.25 |
| | | | 378561 | | | | 0.00 |
| 25 | | | | 1924 | | | 0.00 |
| 26 | | | 310416 | 1926 | | | |
| 27 | | | 678454 | 1928 | | | Energy Consumption — |
| 28 | | | 888356 | 1932 | | | |
| 29 | | 718.42 | 220927 | 1941 | | | 0.5 |
| | | | | | | | |
| totalEnergyCons | 3499.302404 | | 595.50268 | | | | 0.4 |
| totalSent | | 9537 | | 28698 | | | 0.3 |
| | | | | | | | |
| totalRecieved | 9299 | | 26204 | | | | 0.2 |
| receivedPack rat | 0.9750445633 | | 130949892 | | | | 0.1 |
| | | | | | | | |
| | 0.3763095391 | 0.40 | 043467668 | | | | |
| | 0.3763095391 | 0.40 | 043467668 | | | | 0.0 |

| node_num | 5 | | 15 | | | | |
|-----------------|-----------------|-------------|-------------------------|-------|---------------|-----|---------------------------|
| nodes | energyConsumed | sentPackets | | | | | |
| 1! | 368.2869911 | 4717 | 368.3088952 | 4675 | | | recivedPackets ratio |
| 10 | 375.0801064 | 4776 | 370.6634212 | 4682 | | | |
| 1 | 377.5689052 | 4777 | 373.2158219 | 4752 | | | 1.0 |
| 18 | 377.6345127 | 4801 3 | 375.6484728 | 4759 | | | |
| 19 | 378.6393655 | 4836 3 | 376.1792224 | 4801 | | | 0.5 |
| 20 |) | 3 | 376.1904131 | 4815 | initialLoRaSF | 7 | 5 15 |
| 2: | | | 378.8694204 | 4832 | initialLoRaTP | 7 | 0.0 |
| 23 | | | 379.1346709 | 4835 | initialLoRaBW | 250 | 0.5 |
| 2: | | | 379.3507844 | 4843 | | | -0.5 |
| 24 | | | 379.7463073 | 4844 | | | -1.0 |
| 2! | | | 380.1535202 | 4847 | | | 1.0 |
| 20 | | | 380.6916017 | 4859 | | | |
| | | | | | | | Energy Consumption: DIV/0 |
| 2 | | | 381.5642705 | 4869 | | | |
| 28 | | | 383.6443266 | 4921 | | | 1.0 |
| 29 | | | 386.1382767 | 4923 | | | |
| | . 40== 0==== | | F000 100 :55 | | | | 0.5 |
| totalEnergyCon | s 1877.209881 | 2000= | 5669.499425 | 70057 | | | 5 15 |
| totalSent | | 23907 | | 72257 | | | 0.0 |
| L. L. ID | | | | | | | 0.5 |
| totalRecieved | 0 | | 0 | | | | -0.5 |
| receivedPack ra | | | 0 | | | | -1.0 |
| EnergyConsum | p #DIV/0! | | #DIV/0! | | | | 1.0 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | 5 | | 45 | | | | |
| node_num | | | 15 | | | | |
| nodes | energyConsumed | | 200 7262402 | 4070 | | | |
| 1! | | | 298.7263183 | 1879 | | | recivedPackets ratio |
| 10 | | | 298.7468705 | 1883 | | | |
| 1 | | | 299.9271201 | 1886 | | | • • |
| 18 | | | 300.5264348 | 1897 | | | 1.00 |
| 19 | | | 300.7488025 | 1899 | | | |
| 20 | | | 302.6321338 | 1907 | initialLoRaSF | 12 | 0.75 |
| 2: | | | 302.6681293 | 1910 | initialLoRaTP | 7 | 0.50 |
| 2: | 2 | | 303.5646769 | 1911 | initialLoRaBW | 250 | |
| 2: | 3 | 3 | 303.8982559 | 1912 | | | 0.25 |
| 24 | 1 | | 304.1623645 | 1919 | | | |
| 2! | 5 | 3 | 304.4382346 | 1919 | | | 0.00 |
| 20 | 5 | 3 | 304.5765343 | 1920 | | | |
| 21 | 7 | 3 | 304.7029865 | 1926 | | | Energy Consumption |
| 28 | | | 306.3920291 | 1931 | | | Energy Consumption |
| 29 | | | 307.4045057 | 1936 | | | |
| _ | | | | ,,,, | | | 0.3 |
| totalEnerovCon | s 1506.802418 | | 4543.115397 | | | | 15 |
| totalSent | | 9539 | | 28635 | | | 0.2 |
| Calcont | | 3333 | | 25500 | | | |
| totalRecieved | 9418 | | 16605 | | | | 5 |
| | ot 0.9873152322 | | 0.5798847564 | | | | 0.1 |
| | p 0.1599917624 | | 0.273599241 | | | | |
| Lifergy consum | 0.1000017024 | | 3.210002 - 1 | | | | 0.0 |
| | | | | | | | |
| | | | | | | | |

| node_num | 5 | | 15 | | | | |
|-------------------|-----------------|------------|--------------|-------|---------------|-----|----------------------|
| | energyConsumecs | entPackets | | | | | |
| 15 | 398.3451392 | | 402.4222393 | 4965 | | | |
| 16 | 396.4327878 | | 396.9843251 | 4889 | | | |
| 17 | 394.0327546 | | 395.1128238 | 4854 | | | |
| 18 | 391.5217491 | | 394.8316245 | 4838 | | | recivedPackets ratio |
| 19 | 391.5204866 | | 393.0848885 | 4836 | | | |
| | 391.3204800 | | | | initialLoRaSF | 7 | |
| 20 | | | 391.7617516 | 4836 | | | 0.6 |
| 21 | | | 391.1282034 | 4817 | initialLoRaTP | 14 | |
| 22 | | | 390.0174256 | 4795 | initialLoRaBW | 250 | 0.4 |
| 23 | | | 389.9414031 | 4785 | | | 15 |
| 24 | | | 387.649801 | 4773 | | | 0.2 |
| 25 | | | 387.3729597 | 4755 | | | 0.2 |
| 26 | | | 386.9462602 | 4745 | | | |
| 27 | | | 386.6642642 | 4737 | | | 0.0 |
| 28 | | | 385.4952605 | 4718 | | | |
| 29 | | | 380.465266 | 4684 | | | Energy Consumption |
| | | | | | | | |
| totalEnergyCons | 1971.852917 | | 5859.878496 | | | | 0.25 |
| totalSent | | 24269 | | 72027 | | | 15 |
| | | | | | | | 0.20 |
| totalRecieved | 14532 | | 24095 | | | | 0.15 |
| receivedPack rat | | | 0.33452733 | | | | 5 |
| EnergyConsump | 0.1356904017 | | 0.2431989415 | | | | 0.10 |
| | | | | | | | 0.05 |
| | | | | | | | |
| | | | | | | | 0.00 |
| | | | | | | | |
| | | | | | | | |
| nada num | 5 | | 15 | | | | |
| node_num nodes | energyConsume(s | ontDackets | 15 | | | | |
| 15 | 425.050299 | | 427.535704 | 1932 | | | |
| 16 | 423.030299 | | 425.9418133 | 1923 | | | |
| 17 | 423.5144333 | | 425.5439318 | 1921 | | | recivedPackets ratio |
| | | | 425.1061991 | | | | |
| 18 | 421.0624533 | | | 1920 | | | 400 |
| 19 | 414.2827634 | | 424.8462983 | 1919 | 1 | 10 | 1.00 |
| 20 | | | 424.8076727 | 1916 | initialLoRaSF | 12 | 0.75 |
| 21 | | | 423.8556744 | 1915 | initialLoRaTP | 14 | 55 |
| 22 | | | 423.469945 | 1908 | initialLoRaBW | 250 | 0.50 |
| 23 | | | 423.3433956 | 1907 | | | |
| 24 | | | 421.3240727 | 1906 | | | 0.25 |
| 25 | | | 421.2368748 | 1905 | | | |
| 26 | | | 421.0051773 | 1902 | | | 0.00 |
| 27 | | | 420.1694188 | 1901 | | | |
| 28 | | | 418.137378 | 1896 | | | Energy Consumption |
| 29 | | | 417.9567627 | 1894 | | | |
| | | | | | | | 0.25 |
| totalEnergyCons | 2105.925143 | | 6344.280319 | | | | 45 |
| totalSent | | 9539 | | 28665 | | | 0.205 |
| | | | | | | | 0.15 |
| totalRecieved | 9418 | | 27338 | | | | |
| receivedPack rat | | | 0.9537066108 | | | | 0.10 |
| EnergyConsump | 0.2236064072 | | 0.2320681951 | | | | 0.05 |
| | | | | | | | |
| | | | | | | | 0.00 |
| | | | | | | | |