

Supplemental Table S1: Radiance of brightest areas of each Megacity

Population in millions, radiance in nW/cm²sr

Megacities			Brightest location in the megacities					
			VIIRS			Google Earth		
City	Country	Pop	Lat	Lon	Radiance	Lat	Lon	Light source
Rhein-Ruhr	Germany	11.3	50.8437	6.9481	916	50.8437	6.9481	Industrial area
Bagdad	Iraq	11.8	33.2854	44.427	661	33.2718	44.4228	Dora Refinery
New York	USA	23.3	40.7604	-73.99	396	40.7604	-73.994	Downtown
Moskow	Russia	14.9	55.7604	37.611	315	55.7604	37.6106	Downtown
Jakarta	Indonesia	19.2	-6.1313	107.02	266	-6.1328	107.029	Factories
Seoul	South Korea	22.7	37.5729	127.01	241	37.567	127.01	Dongdaemun Stadium
Osaka (Kansei)	Japan	17.4	34.6729	135.5	237	34.6729	135.498	Downtown
Cairo	Egypt	16.4	30.1437	31.294	228	30.1437	31.2939	Factories
Buenos Aires	Argentina	14.6	-34.602	-58.38	215	-34.602	-58.377	Harbor, factories
Tokyo-Yokohama	Japan	37.7	35.6979	139.7	211	35.6962	139.7	Train station
Istanbul	Turkey	14.4	41.0146	28.952	206	41.0146	28.9523	Downtown
London	UK	13.4	51.5604	-0.285	206	51.556	-0.2796	Wembley Stadium
Shanghai	China	18.6	31.3229	121.66	200	31.3229	121.665	Harbor
Teheran	Iran	13.2	35.6229	51.373	198	35.6229	51.3731	Factories
Los Angeles	USA	18.0	34.1062	-118.3	178	34.1062	-118.34	Hollywood Hills Hotel
Paris	France	12.0	48.8729	2.298	178	48.8729	2.298	Arc de Triomphe
Rio de Janeiro	Brasil	12.1	-22.906	-43.21	162	-22.909	-43.208	Train station
Bangkok	Thailand	10.1	13.7562	100.49	156	13.7562	100.49	Downtown
Delhi	India	18.9	28.5604	77.082	143	28.5604	77.0815	DEL Airport
Sao Paulo	Brasil	20.8	-23.59	-46.69	139	-23.59	-46.689	Downtown
Kolkata	India	15.6	22.5812	88.357	121	22.5812	88.3565	Downtown
Beijing	China	12.5	39.8687	116.48	117	39.8711	116.478	Stadium
Khartum	Sudan	10.1	15.5979	32.544	112	15.5979	32.5439	KRT Airport
Mexico City	Mexico	23.6	19.4395	-99.14	100	19.4395	-99.14	Downtown
Mumbai	India	21.9	19.102	72.869	93	19.09	72.8688	BOM Airport
Manila	Philippines	20.7	14.5229	121.01	93	14.5229	121.015	MNL Airport
Karachi	Pakistan	13.2	24.827	66.973	92	24.827	66.9731	Harbor
Lagos	Nigeria	13.7	6.452	3.3939	70	6.452	3.3939	Harbor
Kinshasa-Brazzaville	Dem Rep Congo	10.3	-4.3146	15.273	67	-4.3146	15.2731	Downtown
Dhaka	Bangladesh	14.3	23.852	90.398	48	23.852	90.3981	DAC Airport

Supplemental Table S2: Radiance of brightest areas of each European capital

Radiance is in nW/cm²sr

Capital cities of Europe			Brightest location in European capitals					
			VIIRS			Google Earth		
City	Country	Population	Lat	Lon	Radiance	Lat	Lon	Source
Moscow	Russia	11503501	55.7604	37.6106	315	55.7604	37.6106	Downtown
Skopje	Macedonia	506926	42.0021	21.4272	225	42.0055	21.4258	National Arena
Tallinn	Estonia	417150	59.4396	24.7439	217	59.4396	24.7439	Train station, harbor
London	UK	8308369	51.5604	-0.2852	206	51.556	-0.2796	Wembley Stadium
Belgrade	Serbia	1154589	44.8146	20.4564	200	44.8146	20.4564	Downtown
Brussels	Belgium	1160478	50.8521	4.3481	197	50.8521	4.3481	Downtown
Madrid	Spain	3198645	40.4562	-3.6894	183	40.4523	-3.6895	Santiago Bernabeu Stadium
Paris	France	2243833	48.8729	2.2981	178	48.8738	2.295	Arc de Triomphe
Athen	Greece	655790	37.9604	23.5897	177	37.9604	23.5897	Harbor
Warsaw	Poland	1715517	52.2354	20.9981	173	52.2301	21.0027	Shopping center
Ankara	Turkey	4630735	39.9187	32.8481	166	39.9187	32.8481	Downtown
Rome	Italy	2638842	41.9062	12.4897	160	41.9006	12.5028	Downtown
Vatican City	Vatican City	836	41.9062	12.4897	160	41.9006	12.5028	Downtown
Lisbon	Portugal	545245	38.7187	-9.1478	156	38.7187	-9.1478	Downtown
Luxembourg	Luxembourg	103641	49.6021	6.1231	153	49.5997	6.1343	Downtown
Copenhagen	Denmark	559440	55.7062	12.5647	147	55.7027	12.5722	Østerbro Stadium
Bucharest	Romania	1883425	44.4354	26.0940	140	44.4354	26.094	Downtown
Helsinki	Finland	604380	60.1729	24.9356	134	60.171	24.9415	Helsinki train station
Monaco	Monaco	36371	43.7347	7.4324	132	43.7347	7.4324	Marina
Dublin	Ireland	527612	53.3396	-6.2352	122	53.3396	-6.2352	Harbor
Vienna	Austria	1741246	48.1229	16.5522	115	48.1229	16.5522	VIE Airport
Sofia	Bulgaria	1204685	42.6979	23.3231	109	42.6979	23.3231	Downtown
Tirana	Albania	624642	41.3312	19.8147	105	41.3312	19.8147	Downtown, museums, hotels
Zagreb	Croatia	790017	45.8146	15.9689	104	45.8146	15.9689	Downtown
Reykjavík	Iceland	119547	-21.8790	64.1434	104	-21.902	64.1354	Laugardalsvöllur Stadium
Sarajevo	Bosnia & Herzegovina	311161	43.8604	18.3939	100	43.8604	18.3939	Downtown
Riga	Latvia	699203	56.9521	24.1022	96	56.9521	24.1022	Downtown
Bratislava	Slovakia	413192	48.1271	17.1772	96	48.1271	17.1772	Factories, Train station
Podgorica	Montenegro	185937	42.4437	19.2522	96	42.4437	19.2522	Downtown
Budapest	Hungary	1733685	47.4354	19.2522	94	47.433	19.2624	BUD Airport
Valetta	Malta	6295	35.8979	14.5022	91	35.8979	14.5022	Harbor
Andorra la Vella	Andorra	22398	42.5104	1.5272	88	42.5104	1.5272	Downtown
Berlin	Germany	3375222	52.5604	13.2814	87	52.5604	13.2814	TXL Airport
Vilnius	Lithuania	542932	54.6896	25.2606	83	54.6896	25.2606	Downtown
Prague	Czech Republic	1246780	50.0771	14.5314	82	50.0771	14.5314	Shopping center, Factories
Amsterdam	The Netherlands	799345	4.8939	52.3812	77	4.8939	52.3812	Harbor
Stockholm	Sweden	868141	59.3396	18.0647	73	59.3396	18.0647	Downtown
Oslo	Norway	626953	59.9146	10.7356	73	59.9146	10.7356	Harbor
Nicosia	Cyprus	276410	35.1729	33.3523	62	35.1729	33.3523	Downtown
San Marino	San Marino	32471	43.9396	12.4439	62	43.9396	12.4439	Downtown

Kiev	Ukraine	2816504	50.4354	30.5189	55	50.4334	30.5219	National Sports Complex
Minsk	Belarus	1904300	27.5564	53.9062	51	27.5564	53.9062	Downtown
Ljubljana	Slovenia	278638	46.0562	14.4939	44	46.0562	14.4939	Downtown, shopping center
Bern	Switzerland	125681	46.9521	7.4397	40	46.9521	7.4397	Train station
Chişinău	Moldova	723500	47.0271	28.8314	35	47.0271	28.8314	Downtown
Vaduz	Liechtenstein	5236	47.1771	9.5064	17	47.1771	9.5064	Factories

Supplemental Table S3: Radiance of brightest areas of the world's 10 largest airports by passengers

Passengers are given in millions, radiance in nW/cm²sr

Ten largest airports by passengers 2012					Brightest point at airport		
City	Airport	Google Earth		Passengers 2012	VIIRS		
		Lat	Lon		Lat	Lon	Radiance
Atlanta	ATL	33.6392	-84.4278	95.5	33.6437	-84.4437	197
Beijing	PEK	40.0801	116.5846	81.9	40.0854	116.5773	237
London	LHR	51.4775	-0.4614	70.0	51.4771	-0.4728	82
Tokyo	HND	35.5523	139.7797	66.8	35.5479	139.7898	55
Chicago	ORD	41.9786	-87.9048	66.6	41.9812	-87.9103	246
Los Angeles	LAX	33.9425	-118.4081	63.7	33.9479	-118.4062	165
Paris	CDG	49.0128	2.55	61.6	49.0104	2.5772	179
Dallas/Fort Worth	DFW	32.8968	-97.038	58.6	32.902	-97.0437	217
Jakarta	CGK	-6.1256	106.6559	57.8	-6.123	106.6565	62
Dubai	DXB	25.2528	55.3644	57.7	25.2479	55.3564	193