



## MANGKHUT-18 - Population Exposure Estimation based on bulletin n. 22

The population exposure, summarized by Admin 0, 1 and 2, has been calculated using a 1 km resolution LandScan raster (LandScan Database 2015). Admin boundaries are defined by Gaul 2015 dataset. Windspeed buffers are produced by GDACS (JRC). This is a preliminary analysis and has not yet been validated in the field.

Analysis performed by ADAM (Automated Disaster Analysis and Mapping) on 12-09-2018 at 08:46 UTC  
Contact: [hq.gis@wfp.org](mailto:hq.gis@wfp.org)

admin0	admin1	admin2	population			Total	
			60km/h	90km/h	120km/h		
CHINA	Fujian Sheng	Longyan	31,572			31,572	
		Zhangzhou	2,666,141			2,666,141	
	Guangdong Sheng	Chaozhou	2,416,655			2,416,655	
		Dongguan		8,334,146		8,334,146	
		Foshan	71,458	6,877,753		6,949,211	
		Guangzhou	1,068,624	12,237,689		13,306,313	
		Heyuan	2,951,721	48,682		3,000,403	
		Huizhou	675,238	4,097,370		4,772,608	
		Jiangmen		2,100,854	2,390,077	4,490,931	
		Jieyang	5,469,743	518,633		5,988,376	
		Maoming		3,016	5,968,699	5,971,715	
		Meizhou	4,257,675			4,257,675	
		Qingyuan	3,619,985			3,619,985	
		Shantou	5,566,211			5,566,211	
		Shanwei	231,745	2,801,079		3,032,824	
		Shaoguan	1,890,421			1,890,421	
		Shenzhen		10,407,250		10,407,250	
		Yangjiang		25,100	2,491,529	2,516,629	
		Yunfu		2,207,364	250,014	2,457,378	
		Zhanjiang		1,252,454	5,508,632	6,761,086	
		Zhaoqing	1,636,947	2,246,117		3,883,064	
		Zhongshan		3,015,347	308,833	3,324,180	
	Zhuhai		16,657	1,569,059	1,585,716		
	Guangxi Zhuangzu Zizhiqu	Baise	1,847,750			1,847,750	
		Beihai		1,195	1,496,784	1,497,979	
		Chongzuo	1,492,525	2,650,007	811,214	4,953,746	
		Fangchenggang		17,844	835,521	853,365	
		Guigang	1,095,083	3,094,852	47,568	4,237,503	
		Guilin	734,473			734,473	
		Hechi	1,269,463			1,269,463	
		Hezhou	1,811,499			1,811,499	
		Laibin	2,319,651	209,472		2,529,123	
		Liuzhou	2,189,304			2,189,304	
		Nanning	37,304	943,938	3,143,972	4,125,214	
		Qinzhou			3,071,603	3,071,603	
		Wuzhou	1,418,852	1,535,137	4,891	2,958,880	
		Yulin		1,311,021	4,290,911	5,601,932	
	Hainan Sheng	Haikou		1,236,989		1,236,989	
		Hainan	4,794,459	841,121		5,635,580	
	Hunan Sheng	Chenzhou	16			16	
		Yongzhou	74,327			74,327	
	Jiangxi Sheng	Ganzhou	858,135			858,135	
	CHINA - TOT			52,496,977	68,031,087	32,189,307	152,717,371
	GUAM	---	---		16,297	139,056	155,353
	HONG KONG	---	---		3,125,739	3,743,619	6,869,358
	NORTHERN MARIANA ISLANDS	---	---		43,502	4,165	47,667
PHILIPPINES	Cordillera Administrative region (CAR)	Abra			277,579	277,579	
		Apayao			129,048	129,048	
		Benguet		755,776		755,776	
		Ifugao		149,599	90,877	240,476	
		Kalinga			234,346	234,346	
		Mountain Province		57,145	138,148	195,293	
	National Capital region (NCR)	Metropolitan Manila	13,287,654			13,287,654	
	Region I (Ilocos region)	Ilocos Norte			673,209	673,209	
		Ilocos Sur		172,425	610,164	782,589	
		La Union		816,250		816,250	
		Pangasinan	1,247,088	1,926,668		3,173,756	
	Region II (Cagayan Valley)	Batanes		7,789		7,789	
		Cagayan			1,326,386	1,326,386	
		Isabela		382,885	1,277,725	1,660,610	
		Nueva Vizcaya		494,588		494,588	
		Quirino		191,863		191,863	
	Region III (Central Luzon)	Aurora	23,276	189,026		212,302	

		<b>Bataan</b>	672,163			672,163
		<b>Bulacan</b>	2,952,331			2,952,331
		<b>Nueva Ecija</b>	1,973,824	252,171		2,225,995
		<b>Pampanga</b>	2,290,430			2,290,430
		<b>Tarlac</b>	1,348,851			1,348,851
		<b>Zambales</b>	782,244			782,244
	<b>Region IV-A (Calabarzon)</b>	<b>Batangas</b>	624,744			624,744
		<b>Cavite</b>	2,355,203			2,355,203
		<b>Laguna</b>	3,134,621			3,134,621
		<b>Quezon</b>	2,095,878			2,095,878
		<b>Rizal</b>	1,891,848			1,891,848
	<b>Region V (Bicol region)</b>	<b>Albay</b>	1,234,359			1,234,359
		<b>Camarines Norte</b>	604,906			604,906
		<b>Camarines Sur</b>	2,027,779			2,027,779
		<b>Catanduanes</b>	267,467			267,467
		<b>Sorsogon</b>	91,166			91,166
	<b>Region VIII (Eastern Visayas)</b>	<b>Northern Samar</b>	2,662			2,662
<b>PHILIPPINES - TOT</b>			38,908,494	5,396,185	4,757,482	49,062,161
<b>TAIWAN</b>	<b>Taiwan Sheng</b>	<b>Name Unknown</b>	3,181,212			3,181,212
<b>VIET NAM</b>	<b>Bac Giang</b>	<b>Bac Giang City</b>	112,575			112,575
		<b>Hiep Hoa</b>	4,919			4,919
		<b>Lang Giang</b>	210,210			210,210
		<b>Luc Nam</b>	213,870			213,870
		<b>Luc Ngan</b>	225,247			225,247
		<b>Son Dong</b>	75,190			75,190
		<b>Tan Yen</b>	169,452			169,452
		<b>Viet Yen</b>	139,695			139,695
		<b>Yen Dung</b>	185,537			185,537
		<b>Yen The</b>	106,325			106,325
	<b>Bac Kan</b>	<b>Bac Kan Township</b>	290			290
		<b>Bach Thong</b>	6,131			6,131
		<b>Cho Moi</b>	14,238			14,238
		<b>Na Ri</b>	41,293			41,293
		<b>Ngan Son</b>	28,443			28,443
	<b>Bac Ninh</b>	<b>Bac Ninh Township</b>	14,112			14,112
		<b>Gia Binh</b>	99,089			99,089
		<b>Luong Tai</b>	88,807			88,807
		<b>Que Vo</b>	131,675			131,675
		<b>Yen Phong</b>	2,721			2,721
	<b>Cao Bang</b>	<b>Cao Bang Township</b>	35,849			35,849
		<b>Ha Lang</b>	28,277			28,277
		<b>Ha Quang</b>	29,854			29,854
		<b>Hoa An</b>	93,592			93,592
		<b>Nguyen Binh</b>	18,938			18,938
		<b>Phuc Hoa</b>	24,997			24,997
		<b>Quang Uyen</b>	43,481			43,481
		<b>Thach An</b>	33,552			33,552
		<b>Thong Nong</b>	7,343			7,343
		<b>Tra Linh</b>	23,627			23,627
		<b>Trung Khanh</b>	53,483			53,483
	<b>Hai Duong</b>	<b>Binh Giang</b>	328			328
		<b>Cam Giang</b>	82,014			82,014
		<b>Chi Linh</b>	172,197			172,197
		<b>Gia Loc</b>	121,698			121,698
		<b>Hai Duong City</b>	251,338			251,338
		<b>Kim Thanh</b>	149,837			149,837
		<b>Kinh Mon</b>	158,130			158,130
		<b>Nam Sach</b>	124,546			124,546
		<b>Ninh Giang</b>	72,114			72,114
		<b>Thanh Ha</b>	169,099			169,099
		<b>Tu Ky</b>	174,000			174,000
	<b>Hai Phong City</b>	<b>An Hai</b>	337,742			337,742
		<b>An Lao</b>	149,904			149,904
		<b>Bach Long Vi</b>	300			300
		<b>Cat Hai</b>	30,662			30,662
		<b>Do Son Township</b>	47,608			47,608
		<b>Hong Bang</b>	102,610			102,610
		<b>Kien An</b>	101,339			101,339
		<b>Kien Thuy</b>	189,872			189,872
		<b>Le Chan</b>	174,669			174,669
		<b>Ngo Quyen</b>	203,185			203,185
		<b>Thuy Nguyen Ward</b>	328,976			328,976
		<b>Tien Lang</b>	153,774			153,774
		<b>Vinh Bao</b>	189,095			189,095
	<b>Lang Son</b>	<b>Bac Son</b>	72,301			72,301
		<b>Binh Gia</b>	57,257			57,257
		<b>Cao Loc</b>	73,957	2,861		76,818
		<b>Chi Lang</b>	81,339			81,339
		<b>Dinh Lap</b>	14,439	13,531		27,970

		<b>Huu Lung</b>	124,156			124,156
		<b>Lang Son City</b>	98,675			98,675
		<b>Loc Binh</b>	71,359	15,766		87,125
		<b>Trang Dinh</b>	64,194			64,194
		<b>Van Lang</b>	57,518			57,518
		<b>Van Quan</b>	59,176			59,176
	<b>Quang Ninh</b>	<b>Ba Che</b>	16,016	4,695		20,711
		<b>Binh Lieu</b>		30,646		30,646
		<b>Cam Pha Township</b>	172,956	3,034		175,990
		<b>Co To</b>		5,388		5,388
		<b>Dam Ha</b>		36,518		36,518
		<b>Dong Trieu</b>	171,770			171,770
		<b>Ha Long City</b>	219,151			219,151
		<b>Hai Ha</b>		57,395		57,395
		<b>Hoanh Bo</b>	50,657			50,657
		<b>Mong Cai Township</b>		45,382	51,001	96,383
		<b>Tien Yen</b>		48,667		48,667
		<b>Uong Bi Township</b>	116,195			116,195
		<b>Van Don</b>	20,751	21,751		42,502
		<b>Yen Hung</b>	143,458			143,458
		<b>Thai Binh</b>	<b>Quynh Phu</b>	40,135		
	<b>Thai Thuy</b>		153,823			153,823
	<b>Tien Hai</b>		43			43
	<b>Thai Nguyen</b>	<b>Dong Hy</b>	8,771			8,771
		<b>Phu Binh</b>	46,600			46,600
		<b>Vo Nhai</b>	66,573			66,573
	<b>VIET NAM - TOT</b>		7,749,119	285,634	51,001	8,085,754
	<b>All - TOT</b>		102,335,802	76,898,444	40,884,630	220,118,876