

Trends in tropical bands broadcasting

By Anker Petersen, DSWCI chairman

Since 1972 the Danish Shortwave Club International has published an annual publication which first covered the frequency range of 2.200 to 5.800 kHz and was called the "Tropical Bands Survey". But since 1999 I expanded it as editor to cover all Domestic broadcasting stations on shortwave from 2.200 kHz till 30 MHz. That is now called the Domestic Broadcasting Survey - the DBS- and it is popular worldwide among hard-core DX-ers. Our latest edition was published in April this year.

The task for the editor of the DBS is, throughout the year until the next publication, to check the bands himself and follow the loggings from our members and other DX-ers around the world. For each station in the list, a note is taken of the months when it has been heard. If a station has not been heard by any DX-er during the past 12 months, it is deleted. By this measure, the DBS contains only the active domestic broadcasting stations.

With this systematic registration of broadcasting stations on the Tropical Bands each year, it is possible to make some statistics on how many frequencies were active in each part of the world and compare these numbers.

I have selected the Tropical Bands Surveys published with 12 years intervals in 1973, 1985 and 1997, and the Domestic Broadcasting Surveys from 2003 and 2006. For each of these five years I have then counted the number of active Domestic Broadcasting stations between 2.200 and 5.800 kHz. International broadcasters, Clandestine and Pirate stations are not included in these statistics.

Active domestic transmitters on 2200 – 5800 kHz

<u>Region</u>	<u>1973</u>	<u>1985</u>	<u>1997</u>	<u>2003</u>	<u>2006</u>
Central Africa	102	76	40	26	21
Southern Africa	57	39	33	9	5
Middle East	9	4	1	0	1
Indian Subcontinent	62	45	45	36	35
South East Asia	40	29	21	7	6
Indonesia	171	105	65	19	15
China, Taiwan, Mongolia	119	110	75	44	40
CIS (former USSR)	61	59	47	21	16
Far East	38	28	28	17	13
Papua New Guinea	17	20	20	20	19
Other Pacific	10	4	13	7	11
Central America, Mexico	21	23	24	17	10
Caribbean	29	3	3	4	3
Northwestern South America	98	41	19	5	3
Ecuador	47	33	22	13	10
Peru	78	69	78	53	43
Bolivia	35	42	25	15	20
Brazil	107	87	67	50	48
Southern South America	5	2	1	0	1
Total	1106	819	627	363	320

We are approaching the end of the Era of Domestic broadcasting on the Tropical Bands for two main reasons: The technical standard of a large part of the transmitters in the tropical countries is poor and they cannot be repaired for economical reasons. In more developed countries the domestic shortwave transmitters are being replaced by FM-networks. The trend above is clear: Looking three years back the falling trend continues although it has levelled out the past two years. The average number of closed domestic stations per year during 1997-2003 was 44 whereas it was only 14 during 2003-2006. The extraordinary steep fall at the very end of the 20th century is now replaced by a more "normal" closure of about 15 domestic frequencies per year. This means, that it may last more than 20 years from now, before the last domestic broadcaster closes down on the tropical bands. Countries like Brazil, Peru, China, India, Bolivia and Papua New Guinea are still dominating the tropical bands. However, it is expected that AIR is going to replace SW by FM within a few years.

The following list shows closed frequencies which were used previously by domestic, international and clandestine stations.

Stations on the tropical bands which have closed down in 2004-2005, including Clandestines.

kHz	kW	Station	Country	Last log
2470	0,25	R Cacique, Sorocaba, São Paulo	Brazil	AUG04
3025,5	-	Frontline Soldiers R, Channel 2	North Korea	MAR05
3168,3	0,5	R Naylamp, Lambayeque	Peru	OCT04
3220	0,012	R Colégio Técnico Municipal, Ñemby	Paraguay	AUG04
3259	0,6	NHK, Kasuga	Japan	MAY05
3300	100	SW Radio Africa, via Meyerton	Clandestine	APR05
3324,9	1	R Maya, Barillas, Huehuetenango	Guatemala	OCT04
3346	-	Minsk utility station (USB)	Belarus	FEB05
3365	100	SW Radio Africa, via Meyerton	Clandestine	MAY05
3366	50	GBC, Accra	Ghana	JUL04
3373,5	0,3	NHK, Mihara	Japan	MAY05
3385	10	RRI Kupang, Timor	Indonesia	OCT04
3607,5	0,9	NHK, Shobu-Kuki, Tokyo	Japan	MAY05
3923	0,04	R Samorodinka, Moscow	Russia	MAY04
3970	0,3	NHK Nabeta, Nagoya 1	Japan	MAY05
3970	0,6	NHK, Sapporo 1	Japan	MAY05
3975	100	VOA, Biblis	Germany	AUG04
4025	-	Voice of the People of Kurdistan, No. Iraq	Clandestine	APR05
4428	0,85	R Bambamarca, Hualgayoc, Cajamarca	Peru	OCT04
4461	1	R Norandina, Celendín, Cajamarca	Peru	JUN04
4540	100	R Georgia, Dusheti	Georgia	JUL05
4698,7	0,25	R Amistad, San Pedro La Laguna, Solola	Guatemala	OCT04
4788	1	R Emisora Ballivián, San Borja	Bolivia	MAY04
4790	-	BSKSA, Jeddah, HS 2. Spurious ½ x 9580!	Saudi Arabia	JAN05
4825	100	SW Radio Africa, via Meyerton	Clandestine	MAY05
4830	10	R Táchira, San Cristóbal, Táchira	Venezuela	OCT04
4832	1	R Litoral, La Ceiba	Honduras	JUN04
4845	0,03	R Tangazeni Kristo (RTK), Aru	Congo, Dem. Rep.	SEP04
4855	1	R Por Um Mundo Melhor, Gov. Valadares	Brazil	
4880	100	SW Radio Africa, via Meyerton	Clandestine	MAY05
4919,9	0,75	RRI Biak, PP	Indonesia	MAR05
4940	100	Voice of Russia via Yangiyul	Tajikistan	DEC04
5014,5	0,5	R Juliaca, Juliaca	Peru	DEC04
5025	100	R Tashkent, Toshkent	Uzbekistan	DEC05
5040	100	R Tashkent, Toshkent	Uzbekistan	DEC05
5060	100	R Tashkent, Toshkent	Uzbekistan	DEC05
5384,2	0,3	R Huarmaca, Huarmaca	Peru	MAR05
5428	0,3	NHK, Osaka 2 (USB)	Japan	MAY05
5556	-	R La Inmaculada, Santa Cruz	Peru	JUL04