

ANEXO 4.1

INFORMACIÓN METEOROLÓGICA DE LA ESTACIÓN LIMÓN BAY

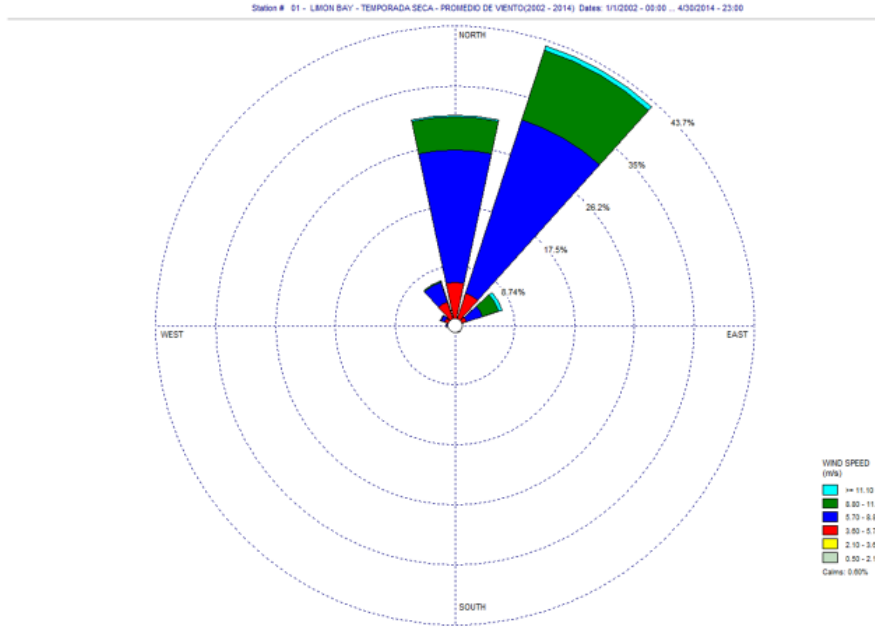
COORDENADAS UTM: 619176.66 E, 1034280.22 N

**INFORMACIÓN SUMINISTRADA POR LA SECCIÓN DE RECURSOS
HÍDRICOS DE**

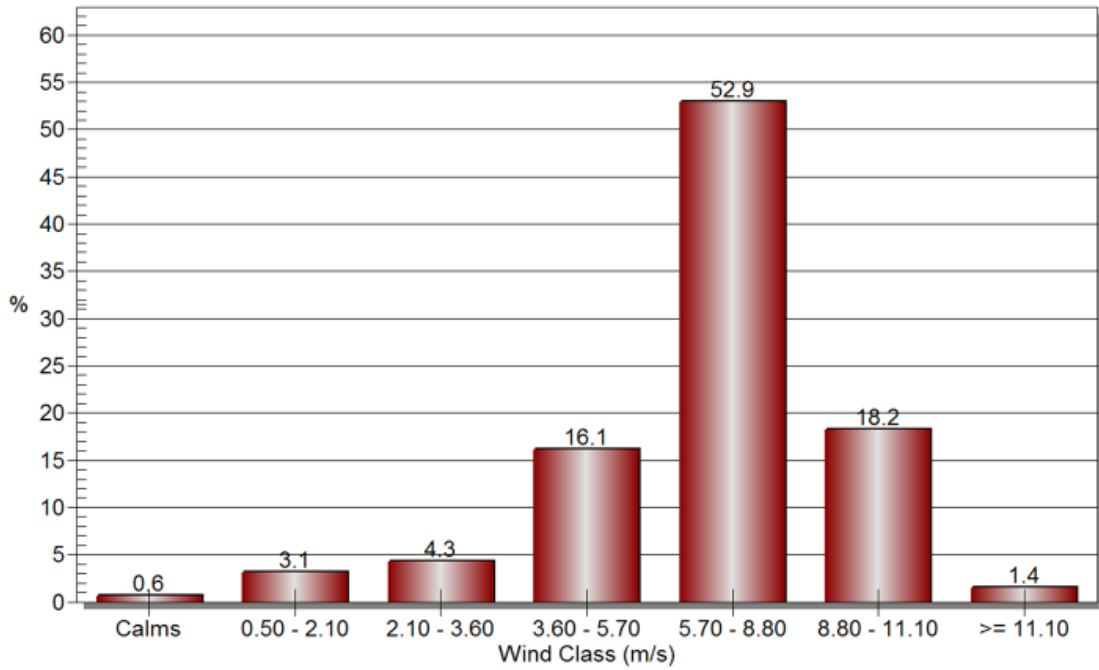
LA AUTORIDAD DEL CANAL DE PANAMÁ

LIMON BAY

ROSA DE LOS VIENTOS PARA LA TEMPORADA SECA (2002-2014)

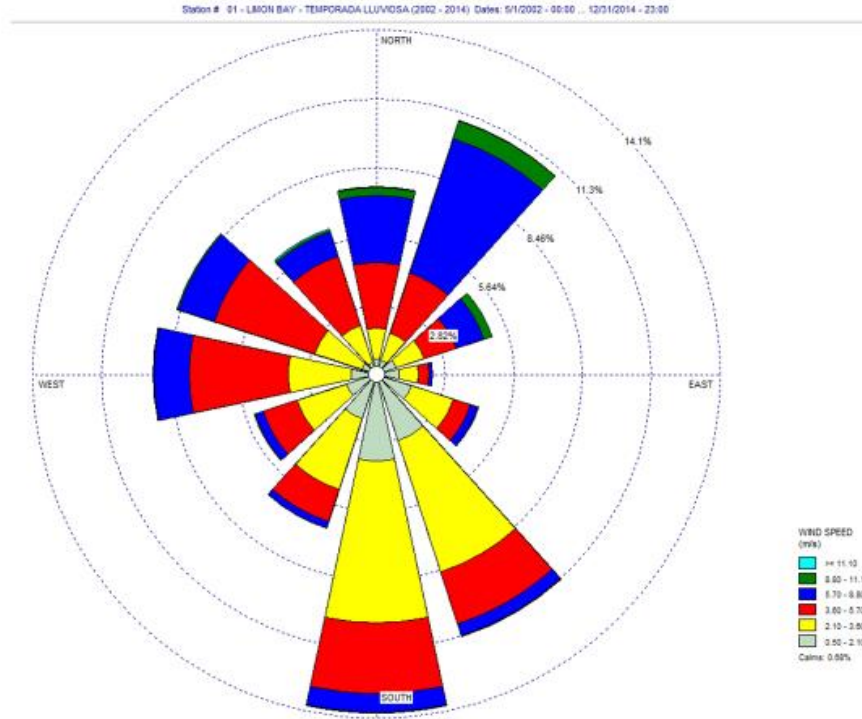


Wind Class Frequency Distribution

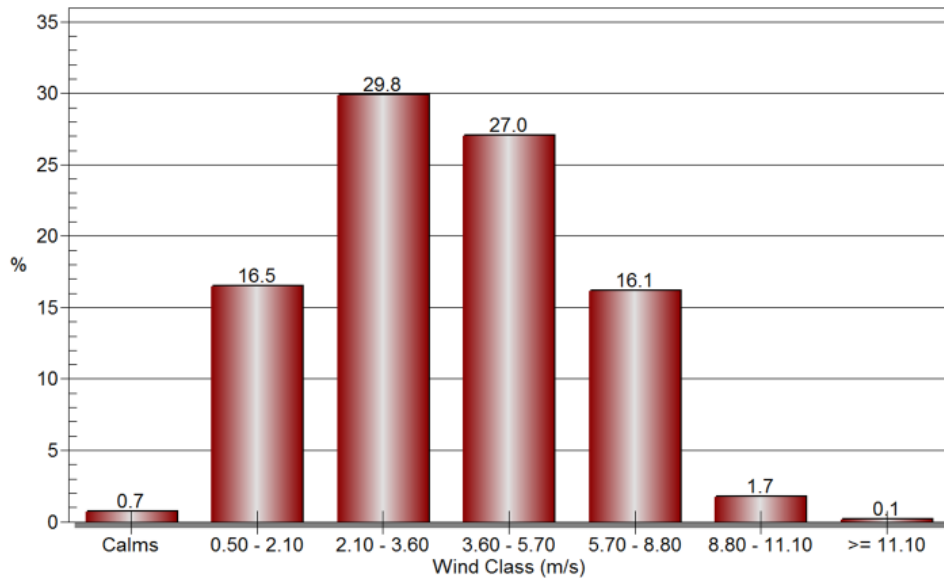


LIMON BAY

ROSA DE LOS VIENTOS PARA LA TEMPORADA LLUVIOSA (2002-2014)



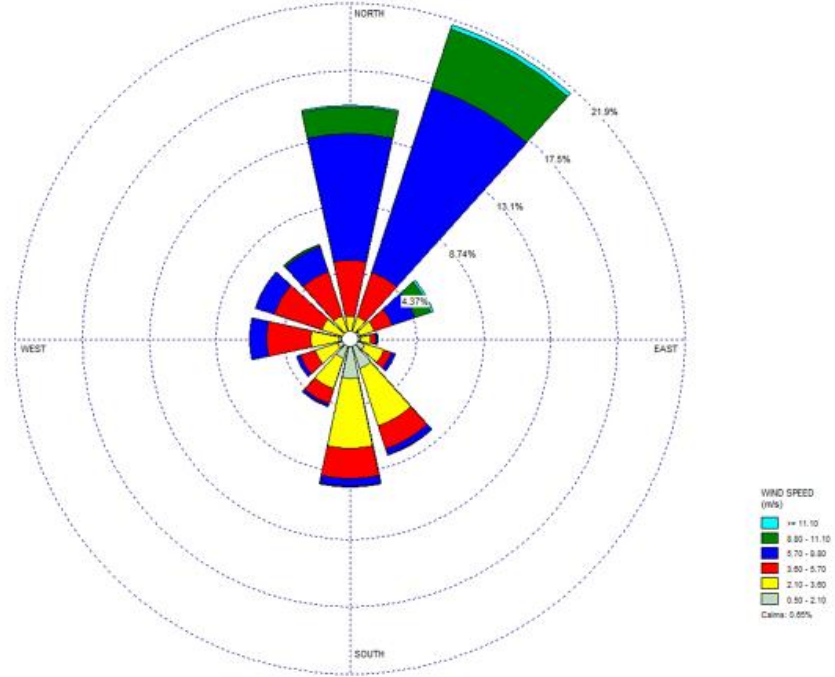
Wind Class Frequency Distribution



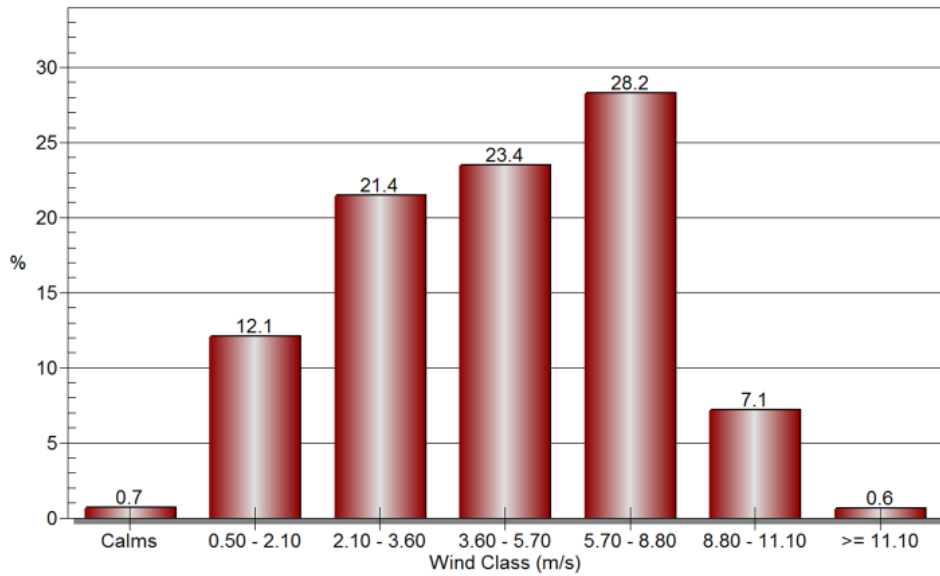
LIMON BAY

ROSA DE LOS VIENTOS PARA TODO EL AÑO (2002-2014)

Station # 01 - LIMON BAY - TODO EL AÑO (2002 - 2014) Dates: 01/01/2002 - 01/01 .. 12/31/2014 - 23:00



Wind Class Frequency Distribution



LIMON BAY

PROMEDIO

TEMPERATURA DEL AIRE (°C)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC	PROM
1985	21.9	24.1	24.0	25.3	24.1	22.7	23.5	23.2	22.6	22.5	23.0	23.0	23.3
1986	26.6	26.4	26.7	27.1	27.0	26.9	26.8	26.8	26.2	25.6	27.0	27.2	26.7
1987	27.0	27.0	27.8	28.1	27.8	28.3	27.7	27.7	27.4	27.1	27.7	28.1	27.6
1988	27.9	27.6	27.8	28.2	28.1	27.4	27.0	26.9	27.1	26.7	26.7	27.0	27.4
1989	27.4	26.9	27.0	27.8	27.7	27.6	27.3	27.0	27.2	27.0	27.1	27.3	27.3
1990	27.7	27.5	27.5	28.0	27.6	27.8	27.4	27.4	27.2	26.8	27.3	27.6	27.5
1991	27.7	27.5	27.9	28.4	27.9	27.9	28.1	27.8	27.3	26.9	26.9	27.5	27.7
1992	27.5	27.5	27.2	27.5	26.9	27.2	26.6	26.4	26.2	26.4	26.6	26.8	26.9
1993	26.7	26.9	27.1	27.4	27.4	27.1	27.2	26.9	26.1	26.5	26.3	26.8	26.9
1994	27.0	26.7	27.1	27.5	27.0	26.8	27.1	26.6	26.8	26.6	26.4	27.3	26.9
1995	27.2	27.2	27.2	27.6	26.8	27.0	26.8	27.0	27.0	26.5	26.3	26.4	26.9
1996	26.7	27.0	27.1	27.5	26.9	26.5							
1997													
1998													
1999													
2000													
2001	26.3	26.6	26.7	27.1	27.4	28.1	27.4	28.3	27.4	27.9	27.2	27.6	
2002	27.4	27.0	26.9	27.3	27.5	27.4	27.2	27.4	27.4	27.1	27.1	27.7	27.3
2003	27.4	27.2	27.3	27.5	27.3	26.3	26.3	26.1	26.2	26.1	25.5	25.9	26.6
2004	26.6	26.6	26.7	26.7	26.6	26.6	26.1	26.3	26.1	26.2	25.9	26.6	26.4
2005	26.2	25.9	26.7	27.1	26.5	26.9	27.8	27.2	26.8	26.7	26.3	27.3	26.8
2006	27.0	26.7	27.5	26.9	27.2	27.3	27.2	27.4	27.1	26.8	26.5	27.2	27.1
2007	27.3	26.9	27.2	27.3	27.0	27.2	27.0	26.6	26.8	26.4	26.4	25.8	26.8
2008	26.8	26.6	26.7	27.1	27.0	27.0	26.5	26.8	27.2	26.8	25.9	26.4	26.7
2009	26.7	26.6	26.3	27.1	27.2	27.2	27.3	27.1	27.5	26.9	26.6	27.5	27.0
2010	27.3	27.4	27.6	27.9	28.0	27.2	26.9	26.8	26.7	26.4	25.8	25.4	26.9
2011	26.3	26.7	26.7	26.8	27.2	27.0	26.9	26.9	27.0	26.6	26.4	26.7	26.8
2012	27.1	26.4	26.7	26.9	27.1	27.4	27.0	26.7	26.9	26.5	26.3	26.7	26.8
2013	26.4	26.8	26.9	27.4	27.0	26.9	26.9	26.6	26.8	26.8	27.2	27.3	26.9
2014	26.9	26.7	26.9	27.2	27.3	27.3	s.d.	s.d.	26.7	26.6	26.4	s.d.	s.d.
2015	s.d.	25.9	26.8	27.4	27.5	27.8	27.3	27.4	27.4	27.4	27.2	28.1	27.3
2016	27.6	27.3	27.2	27.7	27.9	s.d.	27.1	27.4	27.0	26.8	26.0	26.9	27.2
2017	26.8	26.9	27.1	27.6	27.2	27.3	s.d.	27.2	27.2	27.3	26.4		
PROMED	26.8	26.8	27.0	27.4	27.2	27.1	26.9	26.9	26.8	26.6	26.4	26.9	26.9

*Los datos resaltados en gris corresponden a la estación Coco Solo

LIMON BAY
EXTREMA
TEMPERATURA MÁXIMA DEL AIRE (°C)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC	MAX	AÑO
1985														1985
1986	27.9	27.9	28.2	28.4	29.3	29.6	28.2	28.6	28.8	28.3	29.6	29.7	29.7	1986
1987	29.0	29.1	30.7	30.2	30.4	31.1	30.6	30.5	31.2	30.5	30.2	30.4	31.2	1987
1988	30.3	29.7	30.2	30.7	31.4	31.6	30.5	31.9	31.9	30.6	30.3	29.8	31.9	1988
1989	29.9	29.2	29.0	30.2	30.7	31.2	30.5	30.3	31.5	30.3	30.7	30.3	31.5	1989
1990	30.4	30.3	30.3	30.9	31.0	30.6	30.2	30.5	30.9	31.4	31.1	30.4	31.4	1990
1991	30.2	29.5	30.4	30.9	31.3	30.8	30.7	30.7	31.0	31.3	29.9	29.9	31.3	1991
1992	29.5	29.9	29.3	29.8	29.5	31.0	29.9	29.4	30.3	29.7	29.8	29.3	31.0	1992
1993	29.1	29.1	29.4	30.0	31.2	30.6	29.7	29.8	29.6	30.0	29.0	29.1	31.2	1993
1994	29.1	28.9	29.2	30.1	30.2	29.5	29.5	29.5	30.2	30.8	29.7	30.0	30.8	1994
1995	29.4	29.4	30.0	30.4	30.3	30.9	30.0	31.4	31.5	31.3	29.3	29.4	31.5	1995
1996	29.3	29.4	29.5	29.9	31.1	30.3							31.1	1996
1997														1997
1998														1998
1999														1999
2000														2000
2001	28.9	29.8	29.8	29.9	33.3	32.8	31.6	32.8	31.7	32.2	32.2	32.4	33.3	2001
2002	31.3	33.0	29.9	30.6	32.2	32.0	31.4	32.2	32.2	31.7	32.2	31.4	33.0	2002
2003	30.7	30.5	32.8	32.1	31.7	31.1	29.7	30.6	31.7	31.1	30.6	30.9	32.8	2003
2004	32.1	29.7	29.3	30.6	31.1	30.7	30.2	30.2	31.7	32.2	30.6	29.8	32.2	2004
2005	29.6	28.9	29.4	28.9	31.7	32.3	32.2	33.3	31.1	31.7	31.1	32.3	33.3	2005
2006	30.2	29.8	30.3	30.2	31.1	30.4	30.0	30.0	30.6	31.1	31.1	30.6	31.1	2006
2007	28.3	29.6	29.4	31.1	31.1	31.1	30.0	31.4	31.7	31.1	30.9	29.4	31.7	2007
2008	28.9	30.3	30.4	30.3	33.4	31.0	31.6	31.1	31.7	31.7	30.0	31.3	33.4	2008
2009	27.8	27.8	30.0	28.3	30.0	31.1	29.4	29.4	30.6	31.7	30.0	28.9	31.7	2009
2010	28.3	31.1	32.2	32.2	32.2	31.7	31.7	31.7	31.1	30.6	30.6	27.8	32.2	2010
2011	28.3	28.3	28.3	28.9	31.7	31.7	31.7	31.1	32.2	31.7	30.0	28.9	32.2	2011
2012	28.9	27.2	27.8	30.0	31.1	31.7	29.4	30.0	30.6	30.0	29.4	28.9	31.7	2012
2013	27.8	27.8	28.3	28.9	32.2	30.6	30.0	30.6	31.1	30.0	29.4	29.4	32.2	2013
2014	28.3	27.8	28.3	30.0	29.4	29.4	s.d.	s.d.	138.3	31.1	30.0	s.d.		2014
2015	s.d	s.d	27.8	29.1	28.9	30.6	28.8	29.4	31.3	32.8	31.5	29.5	32.8	2015
2016	28.9	28.2	28.5	31.5	32.1	s.d	30.8	30.5	31.0	32.3	30.5	30.8	32.3	2016
2017	28.7	28.7	28.4	31.7	32.5	31.3	s.d.	31.5	32.1	31.2	31.1			2017
MAX	32.1	33.0	32.8	32.2	33.4	32.8	32.2	33.3	32.2	32.8	32.2	32.4	33.4	

*Los datos resaltados en gris corresponden a la estación Coco Solo

LIMON BAY
EXTREMA
TEMPERATURA MÍNIMA DEL AIRE (°C)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC	MIN	AÑO
1985														1985
1986	25.3	24.6	24.9	25.5	24.8	24.4	25.1	24.7	24.1	23.4	24.5	24.9	23.4	1986
1987	25.3	25.0	25.7	26.2	25.4	25.6	25.2	25.3	24.9	24.8	25.1	26.0	24.8	1987
1988	26.0	25.5	25.9	26.3	25.9	24.7	24.5	24.7	24.6	24.3	24.3	24.4	24.3	1988
1989	25.4	24.9	25.3	26.1	25.4	25.4	24.5	24.4	24.4	24.1	24.3	24.6	24.1	1989
1990	25.7	25.7	25.7	26.0	25.2	25.6	24.9	24.8	24.4	24.3	24.9	25.7	24.3	1990
1991	25.7	25.9	26.0	26.6	25.8	25.6	25.9	25.4	24.5	24.1	24.2	25.3	24.1	1991
1992	26.0	25.7	25.4	25.3	24.6	24.3	23.7	23.7	23.5	23.8	23.8	24.5	23.5	1992
1993	24.7	25.2	25.0	24.8	24.7	24.4	24.6	23.8	22.8	23.2	23.1	23.9	22.8	1993
1994	24.6	24.3	25.0	25.2	24.4	24.0	24.6	23.7	24.1	23.6	23.5	24.7	23.5	1994
1995	25.1	25.3	24.7	25.2	24.1	24.2	24.1	24.1	24.1	23.7	23.5	23.4	23.4	1995
1996	24.0	24.8	24.6	25.1	24.1	23.9							23.9	1996
1997														1997
1998														1998
1999														1999
2000						22.0	20.5	21.7	22.2	22.2	22.8	21.7		2000
2001	22.7	24.4	24.4	25.0	23.9	23.3	22.6	23.9	23.3	23.3	22.8	21.1	21.1	2001
2002	22.2	22.0	23.9	24.4	23.9	23.3	21.7	22.8	18.7	22.2	21.6	22.5	18.7	2002
2003	22.5	23.0	23.3	23.4	21.3	22.1	22.4	22.2	22.2	22.7	22.1	21.7	21.3	2003
2004	21.6	23.3	22.8	23.2	22.8	20.5	21.7	21.1	22.1	22.2	22.1	22.2	20.5	2004
2005	20.6	21.6	23.4	23.1	22.2	22.7	23.3	22.3	22.2	22.2	21.7	21.7	20.6	2005
2006	23.9	24.2	25.6	23.9	22.7	24.3	22.8	23.3	23.3	22.2	22.2	22.8	22.2	2006
2007	25.0	24.4	23.9	23.9	23.9	23.3	23.3	22.8	22.8	22.8	22.2	21.7	21.7	2007
2008	23.3	23.3	23.3	23.3	23.3	22.2	22.8	22.8	23.3	23.2	22.8	22.9	22.2	2008
2009	23.3	23.3	23.3	24.4	23.9	22.8	22.2	22.8	23.3	23.3	23.3	23.9	22.2	2009
2010	22.8	25.0	24.4	23.9	24.4	22.2	23.9	22.8	22.8	22.8	20.6	21.7	20.6	2010
2011	22.8	23.3	22.8	23.3	22.8	23.3	22.2	22.8	22.8	23.3	22.8	22.8	22.2	2011
2012	24.1	23.9	23.3	23.3	23.3	22.8	22.2	23.9	22.8	23.3	22.2	21.7	21.7	2012
2013	21.7	23.3	22.8	22.2	23.3	23.0	22.8	22.8	22.8	23.9	24.4	23.3	21.7	2013
2014	23.9	23.9	23.9	23.9	21.1	23.9	s.d.	s.d.	23.3	22.8	22.2	s.d.	21.1	2014
2015	s.d.	s.d.	23.6	24.6	23.3	21.8	22.5	21.0	20.9	21.5	22.7	24.6	20.9	2015
2016	25.0	23.1	24.2	24.7	23.5	s.d.	21.1	23.1	21.7	23.2	22.0	22.7	21.1	2016
2017	21.3	23.4	23.1	23.4	21.8	23.0	s.d.	23.0	22.2	22.1	23.1			2017
ATE xtMi nMin	20.6	21.6	22.8	22.2	21.1	20.5	20.5	21.0	18.7	21.5	20.6	21.1	18.7	

*Los datos resaltados en gris corresponden a la estación Coco Solo

LIMON BAY
PROMEDIO
HUMEDAD RELATIVA (%)

AÑO	ENE	FEB	MAR	ABR	MAY	JUN	JUL	AGO	SEP	OCT	NOV	DIC	PROM	AÑO
1987	67.9	70.9	77.1	76.1	79.6	79.2	79.3	78.2	79.2	77.9	76.3	71.7	76.1	1987
1988	65.9	68.3	66.4	67.6	71.9	74.9	81.0	79.2	77.2	77.5	77.4	70.7	73.2	1988
1989	65.5	64.1	69.1	70.5	74.2	76.9	77.8	77.6	75.9	77.4	77.9	72.4	73.3	1989
1990	71.3	67.0	67.8	68.4	75.6	77.7	76.1	76.7	77.3	76.2	74.9	73.0	73.5	1990
1991	71.0	69.9	70.8	71.5	75.6	77.7	75.5	78.7	77.5	74.4	74.8	67.6	73.7	1991
1992	67.4	67.1	69.5	68.9	72.2	71.7	73.0	75.4	80.8	78.6	74.8	68.2	72.3	1992
1993	67.5	64.2	65.9	68.9	70.4	73.9	71.8	71.7	73.0	73.0	71.6	67.5	69.9	1993
1994	61.0	61.2	60.6	69.1	84.2	86.7	85.5	86.5	86.5	84.3	84.4	79.1	77.4	1994
1995	76.8	73.2	74.9	79.9	84.9	83.7	83.8	81.7	82.7	82.4	85.1	82.5	81.0	1995
1996	77.8	75.8	73.3	76.1	81.2	83.3							77.9	1996
1997														1997
1998														1998
1999														1999
2000														2000
2001	85.0	83.8	85.1	86.2	87.7	87.8	89.6	89.8	89.3	89.6	90.2	86.2	87.5	2001
2002	87.4	84.6	86.1	86.5	89.4	90.2	91.2	99.3	99.0	99.1	92.4	85.0	90.9	2002
2003	83.1	84.1	83.6	85.6	89.9	90.4	91.1	90.7	89.7	90.1	91.5	89.5	88.3	2003
2004	84.6	84.4	85.3	87.5	89.7	89.9	90.3	91.3	92.7	92.5	90.5	86.7	88.8	2004
2005	87.3	85.6	86.8	87.6	91.4	91.8	89.8	92.5	96.3	94.1	91.1	83.1	89.8	2005
2006	83.8	85.4	87.5		91.3	89.8	90.2	89.1	90.1	91.1	90.5	88.4	88.8	2006
2007	84.2	83.6	83.7	86.2	89.3	89.1	89.6	89.6	89.2	89.4	91.0	91.9	88.1	2007
2008	82.8	84.1	82.6	84.1	86.5	88.6	89.5	88.8	87.0	87.2	90.8	89.5	86.8	2008
2009	84.5	84.0	83.6	84.3	87.4	86.7					90.3	86.3	85.9	2009
2010	83.9	85.2	85.3	85.9	85.0	79.7	83.7	86.0	84.0	83.3	84.4	83.7	84.2	2010
2011	83.5	76.9	82.6	85.9	88.0	89.0	88.9	89.0	60.0				83.2	2011
2012		83.5	85.6	66.0	83.7	81.2	86.4	87.5	86.8	87.3	89.0	90.0	85.6	2012
2013	85.7	85.7	87.8	87.7	89.8	90.9	91.4	91.3	91.0	89.8	89.0	87.7	89.0	2013
2014	86.5	86.1	85.9	89.2	90.8	92.4	s.d.	s.d.	90.9	92.4	93.6	s.d.		2014
2015	s.d	76.9	77.4	82.1	84.9	85.4	85.9	86.5	87.1	85.6	85.3	82.7	83.6	2015
2016	76.0	77.7	79.5	80.6	83.3	s.d	85.5	84.6	84.9	84.9	87.4	82.6	82.5	2016
2017	77.2	77.5	77.8	81.1	85.6	84.2	s.d.	85.2	84.5	83.5	85.7		82.2	2017
RHProm	77.7	77.1	78.2	79.1	83.5	84.1	84.2	84.7	84.0	84.5	84.7	80.6	81.9	

*Los datos resaltados en gris corresponden a la estación Coco Solo