

## MANILA NORTH HARBOR

LAT 14° 36'N LONG 120° 57'E

TIMES AND HEIGHTS OF HIGH AND LOW WATERS

September			October			November			December		
Time	Ht.		Time	Ht.		Time	Ht.		Time	Ht.	
h. min.	m.		h. min.	m.		h. min.	m.		h. min.	m.	
<b>1</b> FRI	02 45 0.42 10 45 1.33 18 34 0.15		<b>16</b> SAT	03 47 0.37 11 03 0.98 18 09 0.24 23 45 0.65		<b>1</b> WED	07 41 -0.07 23 42 1.18		<b>1</b> FRI	08 41 -0.19	
<b>2</b> SAT	00 05 0.59 04 09 0.41 11 34 1.18 18 56 0.27		<b>17</b> SUN	04 57 0.33 11 44 0.87 18 02 0.33		<b>2</b> THU	08 36 -0.08		<b>2</b> SAT	00 19 1.13 09 39 -0.18	
<b>3</b> SUN	00 24 0.71 05 42 0.39 12 27 0.99 19 12 0.39		<b>18</b> MON	00 01 0.74 06 11 0.29 12 31 0.75 17 40 0.41		<b>3</b> FRI	00 30 1.15 09 39 -0.06		<b>3</b> SUN	01 08 1.09 10 33 -0.17	
<b>4</b> MON	00 47 0.83 07 12 0.34 13 24 0.81 19 20 0.48		<b>19</b> TUE	00 19 0.83 07 23 0.24 13 27 0.63 17 24 0.45		<b>4</b> SAT	01 23 1.10 10 52 -0.04		<b>4</b> MON	01 53 1.02 11 20 -0.13	
<b>5</b> TUE	01 16 0.93 08 30 0.28 14 39 0.64 19 24 0.53		<b>20</b> WED	00 36 0.92 08 31 0.20 14 37 0.52 17 16 0.47		<b>5</b> SUN	02 17 1.05 12 06 -0.03 ☾		<b>5</b> TUE	02 33 0.92 11 57 -0.08 ☾	
<b>6</b> WED	01 51 1.00 09 42 0.24 18 14 0.54 18 58 0.54		<b>21</b> THU	00 58 1.00 09 47 0.16		<b>6</b> MON	03 09 0.99 13 11 -0.01		<b>6</b> WED	03 12 0.78 12 24 -0.01	
<b>7</b> THU	02 34 1.04 11 06 0.22 ☾		<b>22</b> FRI	01 35 1.08 11 27 0.13		<b>7</b> TUE	04 00 0.91 14 00 0.01		<b>7</b> THU	03 52 0.62 12 38 0.08 20 54 0.52	
<b>8</b> FRI	03 25 1.05 13 03 0.20		<b>23</b> SAT	02 34 1.14 13 06 0.07 ☾		<b>8</b> WED	04 57 0.81 14 35 0.06 22 22 0.54		<b>8</b> FRI	01 39 0.42 05 02 0.45 12 37 0.17 20 22 0.62	
<b>9</b> SAT	04 27 1.04 14 41 0.15		<b>24</b> SUN	03 51 1.19 14 16 0.02		<b>9</b> THU	00 11 0.53 06 16 0.70 14 54 0.13 21 46 0.59		<b>9</b> SAT	03 32 0.25 07 45 0.33 14 00 0.27 20 19 0.75	
<b>10</b> SUN	05 39 1.04 15 48 0.09		<b>25</b> MON	05 11 1.24 15 08 -0.02		<b>10</b> FRI	02 37 0.43 08 00 0.61 14 56 0.20 21 30 0.69		<b>10</b> SUN	04 14 0.09 09 55 0.31 12 18 0.28 20 33 0.88	
<b>11</b> MON	07 00 1.06 16 36 0.05		<b>26</b> TUE	06 32 1.27 15 48 -0.02		<b>11</b> SAT	03 51 0.29 09 18 0.55 14 45 0.28 21 30 0.81		<b>11</b> MON	04 47 -0.07 11 21 0.30 12 10 0.30 20 54 1.01	
<b>12</b> TUE	08 12 1.09 17 10 0.03		<b>27</b> WED	07 48 1.28 16 21 0.03 22 36 0.54		<b>12</b> SUN	04 39 0.14 10 19 0.50 14 33 0.33 21 41 0.93		<b>12</b> TUE	05 21 -0.19 21 21 1.12	
<b>13</b> WED	09 03 1.12 17 36 0.04 23 44 0.44		<b>28</b> THU	00 42 0.52 08 54 1.24 16 47 0.11 22 32 0.63		<b>13</b> MON	05 20 0.01 11 17 0.46 14 27 0.37 21 56 1.04 ●		<b>13</b> WED	06 02 -0.27 21 53 1.21 ●	
<b>14</b> THU	01 26 0.43 09 45 1.11 17 54 0.08 23 28 0.48		<b>29</b> FRI	02 33 0.45 09 52 1.15 17 08 0.23 22 42 0.75 ○		<b>14</b> TUE	06 01 -0.09 12 21 0.41 14 24 0.38 22 16 1.13		<b>14</b> THU	06 50 -0.32 22 31 1.28	
<b>15</b> FRI	02 41 0.40 10 24 1.07 18 06 0.15 23 32 0.56 ●		<b>30</b> SAT	04 00 0.36 10 47 1.01 17 24 0.35 22 57 0.88		<b>15</b> WED	06 48 -0.16 22 42 1.20		<b>15</b> FRI	07 46 -0.34 23 17 1.31	
			<b>15</b> SUN	04 55 0.23 11 00 0.71 16 15 0.35 22 46 0.88 ●		<b>30</b> MON	05 55 0.04 12 19 0.55 15 19 0.50 22 33 1.17		<b>30</b> SAT	08 35 -0.28	
			<b>31</b> TUE	06 48 -0.04 23 03 1.19					<b>31</b> SUN	00 10 1.08 09 17 -0.26	

TIME MERIDIAN 120 DEG. EAST. 0000 IS MIDNIGHT, 1200 IS NOON

HEIGHTS ARE IN METERS AND RECKONED FROM THE DATUM OF SOUNDINGS ON CHARTS OF THE LOCALITY WHICH IS MEAN LOWER LOW WATER