

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

JANUARY 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| WE | 01 | 170 | 177 | 179 | 175 | 169 | 165 | 164 | 167 | 174 | 183 | 196 | 212 | 229 | 244 | 251 | 249 | 243 | 232 | 218 | 198 | 176 | 156 | 144 | 142 |
| TH | 02 | 150 | 164 | 176 | 184 | 188 | 187 | 184 | 181 | 181 | 182 | 185 | 193 | 206 | 222 | 236 | 243 | 244 | 239 | 228 | 209 | 185 | 160 | 139 | 128 |
| FR | 03 | 132 | 146 | 166 | 186 | 200 | 207 | 206 | 200 | 193 | 186 | 181 | 180 | 187 | 200 | 218 | 233 | 242 | 242 | 235 | 218 | 193 | 164 | 137 | 118 |
| SA | 04 | 115 | 127 | 151 | 180 | 206 | 224 | 229 | 223 | 210 | 195 | 182 | 173 | 172 | 182 | 199 | 220 | 236 | 244 | 240 | 225 | 201 | 169 | 137 | 112 |
| SU | 05 | 101 | 109 | 133 | 168 | 205 | 234 | 249 | 248 | 233 | 211 | 189 | 171 | 162 | 165 | 181 | 204 | 227 | 243 | 245 | 233 | 209 | 176 | 140 | 109 |
| MO | 06 | 90 | 91 | 113 | 151 | 196 | 237 | 265 | 272 | 259 | 234 | 203 | 176 | 157 | 152 | 162 | 186 | 214 | 239 | 250 | 243 | 220 | 186 | 147 | 110 |
| TU | 07 | 84 | 76 | 92 | 129 | 179 | 231 | 273 | 293 | 287 | 262 | 225 | 189 | 160 | 144 | 146 | 166 | 197 | 229 | 251 | 254 | 235 | 200 | 158 | 116 |
| WE | 08 | 82 | 65 | 72 | 104 | 156 | 215 | 270 | 306 | 313 | 293 | 254 | 210 | 171 | 144 | 135 | 146 | 176 | 214 | 246 | 261 | 252 | 221 | 176 | 129 |
| TH | 09 | 87 | 61 | 56 | 78 | 126 | 189 | 254 | 306 | 331 | 324 | 289 | 240 | 192 | 154 | 133 | 131 | 153 | 191 | 232 | 260 | 266 | 245 | 203 | 151 |
| FR | 10 | 102 | 65 | 49 | 57 | 93 | 153 | 225 | 290 | 334 | 347 | 325 | 278 | 224 | 175 | 141 | 126 | 133 | 163 | 207 | 247 | 269 | 264 | 233 | 183 |
| SA | 11 | 129 | 82 | 52 | 46 | 66 | 114 | 183 | 256 | 317 | 352 | 351 | 318 | 264 | 208 | 163 | 135 | 126 | 139 | 175 | 219 | 255 | 269 | 257 | 219 |
| SU | 12 | 167 | 114 | 72 | 51 | 53 | 81 | 136 | 209 | 279 | 333 | 357 | 346 | 306 | 250 | 197 | 157 | 134 | 129 | 146 | 183 | 225 | 254 | 263 | 245 |
| MO | 13 | 207 | 157 | 108 | 74 | 60 | 68 | 101 | 157 | 226 | 290 | 336 | 351 | 334 | 292 | 239 | 191 | 157 | 137 | 133 | 150 | 184 | 220 | 245 | 251 |
| TU | 14 | 234 | 199 | 155 | 115 | 88 | 79 | 89 | 121 | 173 | 234 | 290 | 327 | 338 | 318 | 279 | 232 | 191 | 160 | 140 | 135 | 149 | 178 | 209 | 231 |
| WE | 15 | 238 | 226 | 199 | 165 | 133 | 113 | 105 | 112 | 138 | 181 | 232 | 279 | 311 | 318 | 301 | 267 | 228 | 193 | 163 | 141 | 132 | 141 | 164 | 192 |
| TH | 16 | 216 | 228 | 225 | 208 | 185 | 161 | 143 | 132 | 133 | 149 | 180 | 221 | 262 | 290 | 298 | 286 | 259 | 226 | 194 | 163 | 137 | 123 | 127 | 147 |
| FR | 17 | 176 | 205 | 225 | 232 | 227 | 212 | 193 | 173 | 157 | 148 | 153 | 173 | 206 | 242 | 269 | 280 | 274 | 253 | 225 | 191 | 157 | 127 | 110 | 111 |
| SA | 18 | 131 | 164 | 200 | 231 | 250 | 254 | 244 | 224 | 199 | 174 | 155 | 149 | 161 | 190 | 225 | 253 | 268 | 266 | 249 | 220 | 184 | 145 | 113 | 94 |
| SU | 19 | 96 | 121 | 161 | 207 | 247 | 275 | 283 | 272 | 247 | 215 | 181 | 153 | 140 | 148 | 177 | 214 | 246 | 263 | 263 | 244 | 211 | 170 | 128 | 95 |
| MO | 20 | 79 | 86 | 119 | 169 | 224 | 273 | 304 | 310 | 292 | 259 | 218 | 177 | 143 | 129 | 139 | 172 | 213 | 247 | 265 | 261 | 236 | 196 | 151 | 109 |
| TU | 21 | 79 | 68 | 85 | 128 | 188 | 251 | 303 | 330 | 328 | 301 | 258 | 210 | 165 | 131 | 120 | 138 | 177 | 221 | 255 | 268 | 256 | 223 | 177 | 129 |
| WE | 22 | 90 | 66 | 65 | 94 | 148 | 217 | 283 | 330 | 347 | 333 | 295 | 245 | 194 | 150 | 121 | 119 | 146 | 191 | 236 | 265 | 269 | 247 | 205 | 154 |
| TH | 23 | 108 | 75 | 62 | 73 | 114 | 178 | 250 | 312 | 349 | 352 | 326 | 279 | 225 | 176 | 138 | 119 | 127 | 163 | 211 | 251 | 271 | 264 | 231 | 183 |
| FR | 24 | 132 | 92 | 70 | 68 | 93 | 144 | 213 | 281 | 332 | 354 | 343 | 306 | 255 | 204 | 162 | 133 | 125 | 144 | 185 | 229 | 261 | 269 | 250 | 210 |
| SA | 25 | 160 | 114 | 84 | 75 | 86 | 122 | 179 | 245 | 303 | 339 | 345 | 322 | 280 | 230 | 186 | 155 | 137 | 140 | 166 | 205 | 241 | 261 | 257 | 229 |
| SU | 26 | 187 | 140 | 104 | 88 | 91 | 114 | 156 | 213 | 269 | 313 | 333 | 325 | 294 | 252 | 209 | 176 | 156 | 148 | 159 | 186 | 219 | 243 | 251 | 237 |
| MO | 27 | 206 | 166 | 128 | 105 | 102 | 117 | 147 | 190 | 239 | 282 | 309 | 314 | 297 | 264 | 227 | 195 | 174 | 163 | 163 | 176 | 199 | 222 | 236 | 234 |
| TU | 28 | 215 | 185 | 152 | 126 | 117 | 126 | 147 | 178 | 216 | 253 | 282 | 295 | 289 | 267 | 238 | 210 | 189 | 177 | 172 | 174 | 186 | 202 | 216 | 221 |
| WE | 29 | 215 | 197 | 172 | 149 | 136 | 138 | 152 | 175 | 203 | 231 | 255 | 271 | 274 | 263 | 241 | 219 | 200 | 188 | 180 | 177 | 178 | 186 | 195 | 203 |
| TH | 30 | 206 | 200 | 187 | 171 | 159 | 156 | 163 | 177 | 196 | 215 | 233 | 248 | 255 | 252 | 240 | 223 | 208 | 197 | 188 | 180 | 175 | 173 | 177 | 183 |
| FR | 31 | 191 | 195 | 195 | 189 | 182 | 178 | 179 | 185 | 195 | 205 | 216 | 226 | 234 | 237 | 234 | 224 | 213 | 204 | 195 | 185 | 174 | 165 | 161 | 163 |

Datum of Predictions is Lowest Astronomical Tide (Predictions - secondary port quality) © The State of Queensland(DTMR) 2019
 Moon Symbols ● New Moon ○ First Quarter ○ Full Moon ● Last Quarter Constants: C100000.97

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

FEBRUARY 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SA | 01 | 171 | 183 | 193 | 200 | 203 | 202 | 201 | 200 | 200 | 201 | 203 | 207 | 212 | 219 | 223 | 223 | 218 | 211 | 203 | 191 | 176 | 161 | 149 | 145 |
| SU | 02 | 151 | 165 | 184 | 203 | 218 | 226 | 227 | 222 | 214 | 205 | 197 | 192 | 193 | 199 | 208 | 216 | 220 | 219 | 212 | 201 | 183 | 161 | 142 | 130 |
| MO | 03 | 130 | 144 | 167 | 197 | 225 | 245 | 253 | 249 | 235 | 217 | 199 | 184 | 176 | 179 | 190 | 206 | 220 | 226 | 224 | 213 | 193 | 168 | 141 | 120 |
| TU | 04 | 112 | 121 | 146 | 182 | 222 | 257 | 276 | 277 | 262 | 238 | 210 | 184 | 166 | 161 | 170 | 191 | 214 | 232 | 238 | 229 | 208 | 179 | 145 | 116 |
| WE | 05 | 99 | 99 | 121 | 160 | 210 | 258 | 293 | 305 | 294 | 265 | 229 | 193 | 164 | 148 | 150 | 171 | 203 | 232 | 250 | 230 | 197 | 157 | 118 | |
| TH | 06 | 90 | 80 | 93 | 131 | 186 | 247 | 299 | 328 | 327 | 299 | 256 | 210 | 169 | 142 | 133 | 148 | 183 | 224 | 257 | 270 | 258 | 224 | 178 | 130 |
| FR | 07 | 89 | 66 | 67 | 96 | 152 | 222 | 290 | 339 | 356 | 338 | 294 | 238 | 186 | 145 | 123 | 126 | 156 | 204 | 251 | 281 | 285 | 259 | 212 | 155 |
| SA | 08 | 101 | 63 | 49 | 63 | 109 | 181 | 262 | 330 | 370 | 372 | 336 | 278 | 215 | 160 | 124 | 112 | 128 | 172 | 228 | 276 | 300 | 292 | 253 | 195 |
| SU | 09 | 131 | 77 | 45 | 42 | 70 | 131 | 215 | 298 | 361 | 388 | 374 | 324 | 257 | 190 | 139 | 111 | 108 | 136 | 190 | 250 | 293 | 308 | 290 | 242 |
| MO | 10 | 177 | 112 | 63 | 41 | 47 | 87 | 158 | 245 | 324 | 376 | 389 | 361 | 303 | 232 | 170 | 126 | 106 | 112 | 149 | 206 | 262 | 299 | 306 | 280 |
| TU | 11 | 228 | 164 | 104 | 65 | 52 | 66 | 112 | 185 | 265 | 333 | 373 | 374 | 338 | 277 | 211 | 157 | 123 | 110 | 122 | 161 | 214 | 263 | 292 | 293 |
| WE | 12 | 266 | 217 | 160 | 111 | 83 | 77 | 95 | 139 | 204 | 272 | 326 | 353 | 346 | 307 | 251 | 196 | 153 | 128 | 119 | 132 | 167 | 212 | 251 | 275 |
| TH | 13 | 276 | 253 | 213 | 169 | 134 | 115 | 112 | 126 | 162 | 212 | 263 | 304 | 321 | 310 | 276 | 231 | 189 | 158 | 137 | 129 | 138 | 165 | 200 | 232 |
| FR | 14 | 255 | 259 | 246 | 221 | 192 | 170 | 155 | 148 | 154 | 174 | 207 | 242 | 272 | 284 | 275 | 251 | 220 | 192 | 167 | 147 | 135 | 138 | 155 | 181 |
| SA | 15 | 211 | 236 | 249 | 250 | 240 | 225 | 209 | 193 | 178 | 170 | 174 | 190 | 215 | 238 | 251 | 249 | 237 | 219 | 199 | 176 | 153 | 136 | 130 | 140 |
| SU | 16 | 162 | 193 | 225 | 250 | 265 | 268 | 261 | 245 | 222 | 195 | 173 | 163 | 169 | 188 | 211 | 229 | 237 | 236 | 225 | 206 | 180 | 152 | 129 | 117 |
| MO | 17 | 123 | 147 | 184 | 226 | 264 | 289 | 299 | 291 | 268 | 235 | 197 | 163 | 145 | 148 | 169 | 198 | 223 | 240 | 244 | 233 | 209 | 177 | 143 | 116 |
| TU | 18 | 103 | 111 | 141 | 189 | 242 | 288 | 318 | 324 | 308 | 275 | 231 | 184 | 146 | 127 | 135 | 164 | 201 | 234 | 253 | 254 | 236 | 204 | 164 | 127 |
| WE | 19 | 100 | 91 | 107 | 149 | 208 | 269 | 317 | 341 | 338 | 310 | 265 | 213 | 163 | 127 | 116 | 135 | 175 | 219 | 254 | 269 | 261 | 231 | 189 | 145 |
| TH | 20 | 109 | 87 | 87 | 116 | 171 | 238 | 300 | 342 | 354 | 336 | 296 | 243 | 188 | 142 | 115 | 118 | 151 | 199 | 245 | 274 | 278 | 257 | 216 | 167 |
| FR | 21 | 124 | 93 | 81 | 95 | 139 | 204 | 273 | 329 | 357 | 352 | 320 | 269 | 213 | 163 | 127 | 114 | 133 | 177 | 229 | 269 | 287 | 277 | 242 | 193 |
| SA | 22 | 143 | 105 | 86 | 88 | 118 | 174 | 242 | 305 | 346 | 356 | 335 | 291 | 236 | 185 | 145 | 123 | 127 | 160 | 209 | 256 | 284 | 287 | 262 | 217 |
| SU | 23 | 165 | 121 | 96 | 91 | 109 | 152 | 214 | 277 | 326 | 348 | 339 | 305 | 255 | 204 | 163 | 137 | 132 | 151 | 191 | 237 | 273 | 286 | 273 | 238 |
| MO | 24 | 189 | 141 | 109 | 99 | 110 | 142 | 192 | 250 | 301 | | | | | | | | | | | | | | | |

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

MARCH 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SU | 01 | 211 | 215 | 216 | 211 | 206 | 202 | 202 | 205 | 208 | 213 | 216 | 218 | 218 | 215 | 207 | 196 | 186 | 180 | 177 | 174 | 171 | 169 | 171 | 177 |
| MO | 02 | 187 | 200 | 213 | 223 | 228 | 229 | 228 | 224 | 217 | 210 | 203 | 198 | 196 | 198 | 199 | 199 | 197 | 194 | 191 | 185 | 175 | 164 | 157 | 156 |
| TU | 03 | 163 | 179 | 201 | 224 | 243 | 255 | 256 | 249 | 235 | 218 | 200 | 185 | 177 | 178 | 187 | 197 | 206 | 210 | 208 | 200 | 185 | 167 | 149 | 138 |
| WE | 04 | 139 | 153 | 180 | 214 | 249 | 274 | 285 | 279 | 260 | 234 | 205 | 179 | 162 | 158 | 169 | 190 | 211 | 226 | 230 | 222 | 202 | 176 | 148 | 126 |
| TH | 05 | 116 | 124 | 152 | 194 | 242 | 285 | 310 | 312 | 292 | 258 | 219 | 182 | 153 | 140 | 148 | 174 | 208 | 238 | 254 | 251 | 229 | 194 | 155 | 120 |
| FR | 06 | 98 | 95 | 116 | 162 | 222 | 282 | 327 | 344 | 330 | 292 | 243 | 193 | 151 | 126 | 124 | 149 | 193 | 239 | 272 | 282 | 265 | 227 | 176 | 126 |
| SA | 07 | 89 | 71 | 80 | 120 | 186 | 261 | 327 | 366 | 368 | 335 | 279 | 216 | 160 | 121 | 104 | 119 | 164 | 232 | 276 | 305 | 304 | 270 | 214 | 151 |
| SU | 08 | 95 | 60 | 52 | 76 | 136 | 219 | 303 | 366 | 393 | 376 | 324 | 253 | 183 | 127 | 95 | 93 | 126 | 188 | 256 | 308 | 330 | 314 | 265 | 196 |
| MO | 09 | 125 | 70 | 42 | 46 | 87 | 162 | 255 | 338 | 392 | 402 | 367 | 300 | 220 | 150 | 101 | 80 | 93 | 142 | 214 | 284 | 330 | 340 | 312 | 252 |
| TU | 10 | 177 | 106 | 58 | 41 | 57 | 110 | 193 | 284 | 358 | 397 | 390 | 341 | 266 | 187 | 124 | 87 | 79 | 104 | 163 | 236 | 300 | 336 | 337 | 301 |
| WE | 11 | 237 | 164 | 102 | 66 | 59 | 83 | 140 | 220 | 299 | 357 | 379 | 359 | 302 | 229 | 160 | 111 | 87 | 89 | 122 | 181 | 248 | 300 | 328 | 322 |
| TH | 12 | 284 | 225 | 163 | 115 | 92 | 91 | 116 | 168 | 234 | 295 | 336 | 343 | 315 | 261 | 199 | 146 | 113 | 100 | 108 | 141 | 192 | 246 | 288 | 308 |
| FR | 13 | 301 | 269 | 222 | 177 | 146 | 131 | 130 | 148 | 186 | 232 | 273 | 298 | 298 | 270 | 226 | 182 | 147 | 127 | 120 | 127 | 153 | 192 | 232 | 265 |
| SA | 14 | 283 | 281 | 261 | 232 | 205 | 186 | 173 | 166 | 171 | 189 | 215 | 240 | 255 | 252 | 233 | 206 | 180 | 161 | 148 | 140 | 142 | 157 | 182 | 211 |
| SU | 15 | 240 | 261 | 268 | 265 | 254 | 240 | 226 | 208 | 190 | 178 | 178 | 188 | 203 | 216 | 219 | 214 | 204 | 193 | 181 | 168 | 155 | 148 | 151 | 165 |
| MO | 16 | 189 | 219 | 247 | 268 | 280 | 282 | 274 | 256 | 229 | 197 | 171 | 157 | 159 | 173 | 191 | 205 | 213 | 216 | 212 | 199 | 180 | 160 | 143 | 137 |
| TU | 17 | 147 | 172 | 209 | 248 | 281 | 303 | 309 | 297 | 270 | 231 | 188 | 152 | 134 | 137 | 158 | 185 | 211 | 229 | 236 | 229 | 209 | 182 | 153 | 131 |
| WE | 18 | 122 | 134 | 166 | 213 | 262 | 303 | 326 | 327 | 305 | 267 | 217 | 168 | 130 | 116 | 129 | 161 | 199 | 232 | 253 | 255 | 238 | 208 | 172 | 139 |
| TH | 19 | 116 | 111 | 131 | 175 | 232 | 287 | 326 | 342 | 330 | 296 | 247 | 193 | 143 | 112 | 110 | 137 | 181 | 226 | 259 | 273 | 263 | 234 | 194 | 154 |
| FR | 20 | 122 | 104 | 109 | 143 | 199 | 261 | 314 | 344 | 345 | 318 | 273 | 218 | 164 | 122 | 105 | 120 | 161 | 212 | 257 | 282 | 283 | 258 | 217 | 172 |
| SA | 21 | 133 | 108 | 102 | 122 | 170 | 233 | 293 | 334 | 348 | 332 | 292 | 238 | 184 | 138 | 111 | 112 | 144 | 195 | 246 | 282 | 294 | 278 | 240 | 191 |
| SU | 22 | 147 | 116 | 104 | 114 | 150 | 207 | 268 | 318 | 342 | 336 | 304 | 254 | 201 | 154 | 122 | 113 | 133 | 178 | 231 | 274 | 296 | 291 | 260 | 212 |
| MO | 23 | 163 | 127 | 109 | 113 | 139 | 187 | 245 | 298 | 329 | 333 | 309 | 265 | 213 | 165 | 132 | 119 | 129 | 164 | 214 | 261 | 291 | 296 | 275 | 233 |
| TU | 24 | 183 | 140 | 117 | 115 | 135 | 174 | 226 | 277 | 313 | 324 | 308 | 270 | 221 | 174 | 139 | 123 | 128 | 154 | 197 | 244 | 279 | 294 | 284 | 251 |
| WE | 25 | 204 | 158 | 128 | 120 | 134 | 166 | 210 | 257 | 294 | 311 | 303 | 272 | 226 | 180 | 144 | 126 | 146 | 182 | 225 | 263 | 285 | 286 | 264 | |
| TH | 26 | 225 | 180 | 145 | 129 | 136 | 160 | 197 | 239 | 274 | 294 | 294 | 271 | 231 | 186 | 149 | 128 | 125 | 139 | 167 | 205 | 243 | 270 | 281 | 271 |
| FR | 27 | 243 | 205 | 168 | 146 | 144 | 159 | 187 | 221 | 253 | 274 | 279 | 265 | 233 | 193 | 157 | 134 | 127 | 135 | 156 | 186 | 220 | 249 | 266 | 268 |
| SA | 28 | 254 | 226 | 194 | 170 | 160 | 166 | 184 | 208 | 233 | 252 | 259 | 253 | 232 | 200 | 167 | 144 | 134 | 138 | 150 | 171 | 198 | 225 | 244 | 255 |
| SU | 29 | 254 | 240 | 219 | 197 | 185 | 183 | 190 | 202 | 217 | 230 | 237 | 235 | 224 | 203 | 178 | 157 | 146 | 147 | 153 | 165 | 181 | 201 | 219 | 233 |
| MO | 30 | 242 | 243 | 235 | 223 | 212 | 207 | 206 | 208 | 210 | 213 | 215 | 214 | 210 | 200 | 186 | 171 | 162 | 161 | 163 | 167 | 173 | 182 | 194 | 208 |
| TU | 31 | 221 | 233 | 240 | 242 | 239 | 235 | 230 | 223 | 215 | 206 | 198 | 193 | 191 | 190 | 188 | 184 | 181 | 179 | 179 | 176 | 172 | 170 | 173 | 180 |

Datum of Predictions is Lowest Astronomical Tide (Predictions - secondary port quality) © The State of Queensland(DTMR) 2019
 Moon Symbols ● New Moon ○ First Quarter ○ Full Moon ● Last Quarter Constants: C100000.97

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

APRIL 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| WE | 01 | 194 | 209 | 230 | 248 | 258 | 260 | 255 | 243 | 225 | 205 | 186 | 172 | 167 | 171 | 180 | 190 | 196 | 199 | 197 | 189 | 176 | 163 | 153 | 151 |
| TH | 02 | 160 | 181 | 212 | 245 | 272 | 287 | 286 | 271 | 246 | 216 | 186 | 161 | 148 | 151 | 168 | 191 | 212 | 224 | 225 | 214 | 192 | 167 | 144 | 130 |
| FR | 03 | 129 | 146 | 182 | 228 | 274 | 307 | 318 | 306 | 276 | 236 | 193 | 156 | 132 | 127 | 146 | 180 | 218 | 246 | 258 | 249 | 222 | 184 | 146 | 116 |
| SA | 04 | 102 | 109 | 142 | 196 | 258 | 312 | 344 | 344 | 315 | 266 | 211 | 160 | 122 | 105 | 116 | 155 | 207 | 255 | 285 | 288 | 264 | 218 | 165 | 117 |
| SU | 05 | 86 | 78 | 98 | 149 | 222 | 296 | 351 | 373 | 356 | 307 | 241 | 176 | 122 | 90 | 86 | 117 | 177 | 243 | 295 | 320 | 310 | 268 | 205 | 141 |
| MO | 06 | 90 | 62 | 64 | 100 | 170 | 256 | 333 | 380 | 386 | 349 | 283 | 206 | 136 | 87 | 66 | 80 | 132 | 207 | 279 | 329 | 344 | 319 | 262 | 188 |
| TU | 07 | 119 | 71 | 51 | 65 | 116 | 198 | 287 | 357 | 391 | 379 | 325 | 247 | 166 | 101 | 63 | 57 | 88 | 155 | 237 | 308 | 350 | 353 | 316 | 249 |
| WE | 08 | 173 | 107 | 68 | 58 | 82 | 141 | 225 | 306 | 362 | 379 | 351 | 286 | 206 | 131 | 78 | 55 | 63 | 108 | 181 | 260 | 323 | 355 | 348 | 304 |
| TH | 09 | 237 | 166 | 111 | 82 | 81 | 109 | 168 | 242 | 307 | 346 | 347 | 308 | 242 | 169 | 109 | 73 | 63 | 82 | 132 | 202 | 271 | 323 | 345 | 333 |
| FR | 10 | 289 | 229 | 171 | 130 | 111 | 113 | 138 | 187 | 243 | 290 | 312 | 302 | 261 | 203 | 146 | 104 | 84 | 85 | 107 | 154 | 213 | 269 | 309 | 325 |
| SA | 11 | 313 | 276 | 230 | 189 | 162 | 147 | 146 | 161 | 193 | 229 | 258 | 269 | 255 | 220 | 178 | 140 | 117 | 108 | 112 | 132 | 168 | 212 | 255 | 287 |
| SU | 12 | 301 | 294 | 271 | 242 | 217 | 197 | 181 | 170 | 171 | 184 | 204 | 221 | 226 | 216 | 195 | 171 | 152 | 141 | 136 | 137 | 148 | 171 | 201 | 234 |
| MO | 13 | 262 | 279 | 283 | 275 | 262 | 246 | 227 | 204 | 181 | 167 | 165 | 174 | 186 | 194 | 195 | 189 | 182 | 175 | 168 | 160 | 154 | 154 | 165 | 184 |
| TU | 14 | 212 | 242 | 267 | 282 | 288 | 284 | 270 | 246 | 212 | 178 | 152 | 142 | 148 | 163 | 179 | 193 | 202 | 205 | 201 | 190 | 175 | 160 | 151 | 152 |
| WE | 15 | 168 | 197 | 233 | 266 | 292 | 304 | 301 | 282 | 248 | 205 | 162 | 132 | 121 | 132 | 156 | 184 | 208 | 225 | 229 | 220 | 201 | 178 | 155 | 140 |
| TH | 16 | 139 | 158 | 193 | 237 | 277 | 306 | 318 | 308 | 279 | 236 | 186 | 141 | 113 | 110 | 131 | 166 | 203 | 233 | 249 | 246 | 228 | 200 | 170 | 144 |
| FR | 17 | 129 | 132 | 159 | 203 | 252 | 294 | 320 | 322 | 301 | 262 | 211 | 160 | 119 | 101 | 112 | 146 | 191 | 232 | 259 | 266 | 252 | 223 | 188 | 155 |
| SA | 18 | 131 | 122 | 136 | 173 | 224 | 275 | 311 | 325 | 313 | 280 | 232 | 180 | 133 | 104 | 101 | 128 | 174 | 222 | 260 | 278 | 272 | 244 | 207 | 169 |
| SU | 19 | 140 | 123 | 126 | 153 | 199 | 252 | 296 | 319 | 317 | 290 | 247 | 196 | 148 | 112 | 99 | 115 | 156 | 208 | 254 | 282 | 285 | 264 | 226 | 184 |
| MO | 20 | 149 | 128 | 124 | 141 | 180 | 231 | 279 | 309 | 314 | 295 | 255 | 206 | 158 | 120 | 102 | 108 | 141 | 191 | 242 | 279 | 293 | 280 | 246 | 201 |
| TU | 21 | 161 | 134 | 126 | 136 | 167 | 213 | 261 | 296 | 308 | 295 | 260 | 213 | 164 | 125 | 103 | 104 | 129 | 175 | 227 | 271 | 294 | 292 | 265 | 221 |
| WE | 22 | 176 | 143 | 128 | 134 | 158 | 198 | 244 | 281 | 300 | 293 | 262 | 217 | 169 | 128 | 103 | 99 | 118 | 158 | 209 | 257 | 289 | 299 | 281 | 243 |
| TH | 23 | 197 | 157 | 135 | 133 | 151 | 184 | 226 | 264 | 287 | 288 | 264 | 222 | 174 | 132 | 104 | 96 | 108 | 142 | 189 | 239 | 277 | 297 | 293 | 264 |
| FR | 24 | 222 | 179 | 148 | 138 | 147 | | | | | | | | | | | | | | | | | | | |

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

MAY 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FR | 01 | ● | 179 | 208 | 242 | 272 | 289 | 291 | 276 | 251 | 219 | 186 | 156 | 137 | 134 | 148 | 173 | 198 | 217 | 224 | 218 | 200 | 175 | 151 | 134 | 128 |
| SA | 02 | | 139 | 168 | 212 | 259 | 297 | 316 | 311 | 284 | 245 | 200 | 158 | 125 | 111 | 119 | 150 | 191 | 228 | 252 | 256 | 240 | 207 | 168 | 134 | 112 |
| SU | 03 | | 107 | 126 | 169 | 227 | 285 | 325 | 339 | 321 | 279 | 224 | 169 | 123 | 93 | 89 | 115 | 165 | 220 | 265 | 289 | 284 | 252 | 204 | 154 | 113 |
| MO | 04 | | 91 | 92 | 122 | 180 | 250 | 313 | 349 | 351 | 317 | 259 | 192 | 131 | 87 | 66 | 78 | 124 | 190 | 255 | 302 | 320 | 303 | 256 | 196 | 138 |
| TU | 05 | | 96 | 77 | 86 | 129 | 199 | 275 | 334 | 360 | 346 | 296 | 226 | 153 | 94 | 58 | 51 | 80 | 143 | 221 | 289 | 333 | 341 | 311 | 253 | 185 |
| WE | 06 | | 126 | 87 | 75 | 93 | 145 | 220 | 293 | 342 | 354 | 325 | 263 | 187 | 116 | 65 | 41 | 50 | 95 | 169 | 250 | 316 | 352 | 350 | 310 | 246 |
| TH | 07 | ○ | 177 | 122 | 91 | 84 | 109 | 164 | 235 | 298 | 334 | 331 | 290 | 223 | 150 | 88 | 51 | 41 | 63 | 118 | 195 | 272 | 330 | 357 | 346 | 302 |
| FR | 08 | | 238 | 176 | 130 | 105 | 103 | 129 | 180 | 240 | 288 | 310 | 296 | 250 | 186 | 123 | 76 | 54 | 56 | 86 | 143 | 215 | 282 | 331 | 350 | 334 |
| SA | 09 | | 290 | 234 | 183 | 147 | 128 | 126 | 147 | 187 | 233 | 266 | 276 | 256 | 212 | 159 | 111 | 81 | 71 | 80 | 112 | 164 | 225 | 281 | 320 | 333 |
| SU | 10 | | 317 | 281 | 237 | 198 | 171 | 152 | 146 | 157 | 184 | 215 | 236 | 239 | 220 | 186 | 148 | 117 | 100 | 98 | 108 | 135 | 177 | 225 | 270 | 301 |
| MO | 11 | | 312 | 301 | 275 | 245 | 217 | 193 | 172 | 158 | 159 | 172 | 191 | 205 | 207 | 195 | 175 | 153 | 136 | 127 | 126 | 132 | 151 | 181 | 217 | 253 |
| TU | 12 | | 280 | 293 | 290 | 276 | 257 | 235 | 210 | 183 | 160 | 150 | 154 | 167 | 181 | 187 | 186 | 179 | 170 | 161 | 154 | 149 | 149 | 158 | 177 | 204 |
| WE | 13 | | 235 | 263 | 280 | 286 | 282 | 268 | 247 | 217 | 182 | 153 | 136 | 136 | 149 | 167 | 182 | 191 | 195 | 192 | 185 | 175 | 164 | 157 | 157 | 168 |
| TH | 14 | | 192 | 223 | 253 | 276 | 288 | 288 | 274 | 249 | 212 | 172 | 138 | 121 | 123 | 141 | 166 | 189 | 207 | 216 | 213 | 202 | 186 | 169 | 156 | 151 |
| FR | 15 | ● | 161 | 185 | 219 | 253 | 279 | 293 | 290 | 271 | 239 | 197 | 154 | 121 | 108 | 118 | 144 | 177 | 207 | 228 | 235 | 227 | 209 | 187 | 166 | 150 |
| SA | 16 | | 146 | 158 | 187 | 225 | 260 | 285 | 294 | 284 | 257 | 218 | 173 | 132 | 106 | 103 | 123 | 159 | 198 | 231 | 248 | 247 | 231 | 206 | 180 | 158 |
| SU | 17 | | 144 | 145 | 164 | 199 | 239 | 271 | 289 | 288 | 268 | 232 | 188 | 144 | 110 | 96 | 107 | 140 | 184 | 225 | 254 | 262 | 251 | 225 | 195 | 168 |
| MO | 18 | | 148 | 141 | 151 | 179 | 218 | 255 | 280 | 286 | 272 | 240 | 198 | 154 | 116 | 95 | 97 | 124 | 167 | 215 | 253 | 272 | 268 | 245 | 212 | 179 |
| TU | 19 | | 154 | 141 | 144 | 165 | 200 | 239 | 269 | 281 | 272 | 244 | 204 | 160 | 120 | 95 | 90 | 110 | 150 | 200 | 246 | 276 | 282 | 265 | 232 | 194 |
| WE | 20 | | 162 | 143 | 140 | 155 | 185 | 223 | 256 | 275 | 271 | 247 | 209 | 164 | 123 | 94 | 84 | 97 | 133 | 183 | 234 | 274 | 292 | 284 | 254 | 214 |
| TH | 21 | | 175 | 149 | 139 | 146 | 171 | 206 | 241 | 265 | 269 | 251 | 214 | 170 | 127 | 94 | 79 | 86 | 116 | 164 | 217 | 264 | 294 | 298 | 276 | 238 |
| FR | 22 | | 195 | 161 | 142 | 141 | 158 | 189 | 224 | 252 | 264 | 253 | 222 | 178 | 134 | 98 | 78 | 78 | 100 | 142 | 195 | 247 | 286 | 304 | 295 | 263 |
| SA | 23 | ● | 220 | 180 | 153 | 143 | 150 | 172 | 204 | 234 | 252 | 252 | 229 | 190 | 147 | 108 | 83 | 76 | 89 | 121 | 170 | 223 | 268 | 297 | 303 | 284 |
| SU | 24 | | 247 | 206 | 172 | 154 | 151 | 161 | 185 | 213 | 234 | 242 | 232 | 203 | 163 | 124 | 96 | 83 | 87 | 107 | 145 | 194 | 241 | 278 | 298 | 296 |
| MO | 25 | | 271 | 235 | 199 | 173 | 161 | 161 | 171 | 191 | 212 | 226 | 226 | 210 | 180 | 145 | 115 | 97 | 93 | 103 | 127 | 165 | 209 | 250 | 279 | 293 |
| TU | 26 | | 285 | 261 | 229 | 200 | 181 | 171 | 169 | 176 | 190 | 204 | 212 | 208 | 192 | 166 | 139 | 119 | 109 | 109 | 120 | 143 | 177 | 215 | 249 | 274 |
| WE | 27 | | 285 | 278 | 256 | 230 | 207 | 190 | 178 | 171 | 172 | 180 | 190 | 196 | 194 | 183 | 165 | 147 | 133 | 126 | 125 | 133 | 151 | 179 | 211 | 243 |
| TH | 28 | | 268 | 280 | 276 | 260 | 238 | 216 | 196 | 178 | 165 | 160 | 164 | 174 | 184 | 188 | 185 | 176 | 164 | 152 | 142 | 136 | 138 | 151 | 173 | 204 |
| FR | 29 | | 237 | 265 | 282 | 282 | 269 | 247 | 222 | 195 | 169 | 150 | 141 | 146 | 161 | 179 | 193 | 199 | 196 | 186 | 170 | 153 | 141 | 136 | 143 | 163 |
| SA | 30 | ● | 195 | 234 | 269 | 290 | 293 | 279 | 252 | 218 | 183 | 150 | 127 | 119 | 130 | 156 | 185 | 210 | 223 | 223 | 208 | 185 | 159 | 138 | 128 | 131 |
| SU | 31 | | 153 | 191 | 237 | 278 | 302 | 304 | 284 | 248 | 204 | 160 | 123 | 101 | 99 | 121 | 160 | 202 | 236 | 253 | 250 | 228 | 194 | 159 | 131 | 117 |

Datum of Predictions is Lowest Astronomical Tide (Predictions - secondary port quality) © The State of Queensland(DTMR) 2019
 Moon Symbols ● New Moon ○ First Quarter ○ Full Moon ● Last Quarter Constants: C100000.97

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

JUNE 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| MO | 01 | | 120 | 146 | 192 | 246 | 290 | 314 | 310 | 280 | 233 | 180 | 131 | 94 | 76 | 85 | 122 | 175 | 228 | 267 | 285 | 275 | 243 | 198 | 156 | 123 |
| TU | 02 | | 107 | 112 | 145 | 199 | 257 | 301 | 319 | 306 | 264 | 208 | 149 | 99 | 66 | 58 | 81 | 133 | 198 | 258 | 300 | 312 | 294 | 251 | 198 | 150 |
| WE | 03 | | 116 | 100 | 110 | 149 | 208 | 267 | 307 | 316 | 291 | 239 | 176 | 116 | 70 | 46 | 51 | 88 | 152 | 225 | 288 | 327 | 333 | 304 | 253 | 195 |
| TH | 04 | | 146 | 112 | 99 | 114 | 158 | 218 | 272 | 304 | 302 | 267 | 209 | 144 | 88 | 50 | 38 | 55 | 104 | 177 | 252 | 313 | 346 | 343 | 306 | 250 |
| FR | 05 | | 191 | 144 | 114 | 104 | 122 | 168 | 224 | 271 | 292 | 280 | 238 | 179 | 117 | 70 | 44 | 42 | 70 | 127 | 202 | 274 | 329 | 354 | 342 | 301 |
| SA | 06 | ○ | 244 | 189 | 147 | 120 | 113 | 133 | 176 | 225 | 261 | 273 | 254 | 210 | 154 | 101 | 65 | 50 | 58 | 92 | 151 | 222 | 288 | 334 | 350 | 332 |
| SU | 07 | | 291 | 238 | 190 | 154 | 131 | 124 | 142 | 179 | 219 | 246 | 249 | 227 | 186 | 138 | 97 | 73 | 67 | 81 | 117 | 172 | 235 | 291 | 328 | 336 |
| MO | 08 | | 317 | 279 | 234 | 195 | 164 | 142 | 135 | 149 | 177 | 207 | 226 | 226 | 205 | 171 | 134 | 106 | 91 | 91 | 106 | 139 | 187 | 239 | 285 | 313 |
| TU | 09 | | 317 | 300 | 269 | 234 | 202 | 175 | 152 | 142 | 150 | 170 | 193 | 206 | 205 | 190 | 166 | 141 | 123 | 115 | 117 | 130 | 157 | 195 | 236 | 272 |
| WE | 10 | | 294 | 297 | 285 | 262 | 236 | 209 | 182 | 158 | 144 | 146 | 160 | 177 | 190 | 192 | 184 | 171 | 155 | 144 | 139 | 140 | 149 | 168 | 195 | 227 |
| TH | 11 | | 257 | 276 | 281 | 274 | 258 | 237 | 213 | 184 | 157 | 140 | 138 | 148 | 165 | 179 | 187 | 188 | 182 | 173 | 165 | 160 | 157 | 161 | 172 | 192 |
| FR | 12 | | 218 | 244 | 262 | 269 | 267 | 255 | 236 | 209 | 178 | 149 | 131 | 128 | 139 | 158 | 178 | 192 | 199 | 198 | 191 | 182 | 174 | 167 | 166 | 172 |
| SA | 13 | ● | 188 | 211 | 236 | 254 | 263 | 262 | 250 | 228 | 198 | 164 | 135 | 118 | 119 | 135 | 160 | 185 | 204 | 214 | 213 | 204 | 192 | 180 | 170 | 165 |
| SU | 14 | | 169 | 185 | 210 | 234 | 251 | 259 | 255 | 239 | 212 | 178 | 144 | 117 | 107 | 115 | 140 | 172 | 202 | 223 | 231 | 226 | 212 | 195 | 179 | 166 |
| MO | 15 | | 161 | 168 | 187 | 213 | 237 | 252 | 254 | 243 | 220 | 188 | 152 | 120 | 101 | 101 | 121 | 154 | 193 | 225 | 244 | 246 | 233 | 212 | 190 | 171 |
| TU | 16 | | 159 | 158 | 170 | 194 | 221 | 242 | 251 | 245 | 225 | 194 | 158 | 123 | 98 | 90 | 104 | 136 | 179 | 220 | 251 | 263 | 255 | 233 | 205 | 179 |
| WE | 17 | | 160 | 152 | 158 | 177 | 205 | 231 | 246 | 246 | 229 | 200 | 163 | 126 | 96 | 82 | 90 | 118 | 161 | 209 | 251 | 275 | 275 | 256 | 225 | 192 |
| TH | 18 | | 165 | 150 | 148 | 162 | 188 | 217 | 240 | 246 | 234 | 207 | 170 | 131 | 97 | 77 | 77 | 100 | 142 | 193 | 243 | 279 | 292 | 279 | 249 | 211 |
| FR | 19 | | 177 | 152 | 142 | 149 | 171 | 202 | 229 | 244 | 240 | 216 | 180 | 139 | 102 | 76 | 68 | 83 | 120 | 172 | 227 | 274 | 301 | 300 | 275 | 236 |
| SA | 20 | | 195 | 162 | 143 | 140 | 155 | 183 | 215 | 238 | 243 | 227 | 194 | 152 | 112 | 80 | 65 | 70 | 98 | 147 | 204 | 259 | 298 | 313 | 299 | 263 |
| SU | 21 | ● | 220 | 180 | 151 | 139 | 143 | 164 | 196 | 225 | 240 | 236 | 210 | 171 | 128 | 92 | 69 | 64 | 81 | 119 | 175 | 233 | 283 | 313 | 315 | 290 |
| MO | 22 | | 249 | 205 | 169 | 146 | 139 | 149 | 174 | 205 | 229 | 237 | 224 | 193 | 151 | 112 | 82 | 67 | 72 | 97 | 142 | 200 | 255 | 298 | 318 | 310 |
| TU | 23 | | 279 | 236 | 194 | | | | | | | | | | | | | | | | | | | | | |

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

JULY 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| WE | 01 | 123 | 128 | 154 | 197 | 240 | 269 | 276 | 258 | 220 | 172 | 125 | 85 | 62 | 62 | 89 | 140 | 201 | 257 | 296 | 309 | 294 | 258 | 214 | 171 |
| TH | 02 | 136 | 117 | 121 | 151 | 197 | 241 | 268 | 270 | 246 | 202 | 150 | 101 | 65 | 49 | 58 | 96 | 157 | 226 | 286 | 324 | 330 | 306 | 262 | 211 |
| FR | 03 | 165 | 129 | 110 | 118 | 153 | 201 | 244 | 267 | 262 | 230 | 181 | 127 | 81 | 52 | 44 | 63 | 112 | 181 | 254 | 312 | 344 | 341 | 308 | 257 |
| SA | 04 | 203 | 156 | 122 | 107 | 121 | 160 | 209 | 248 | 264 | 251 | 213 | 160 | 108 | 68 | 47 | 48 | 77 | 135 | 208 | 279 | 331 | 353 | 340 | 299 |
| SU | 05 | 245 | 192 | 148 | 118 | 109 | 129 | 170 | 216 | 249 | 256 | 236 | 194 | 143 | 95 | 63 | 52 | 62 | 100 | 161 | 232 | 297 | 339 | 349 | 327 |
| MO | 06 | 284 | 231 | 183 | 145 | 120 | 117 | 140 | 180 | 220 | 244 | 244 | 219 | 177 | 130 | 91 | 69 | 67 | 85 | 126 | 186 | 251 | 304 | 334 | 334 |
| TU | 07 | 308 | 264 | 217 | 177 | 146 | 127 | 129 | 152 | 187 | 218 | 233 | 227 | 201 | 163 | 124 | 96 | 85 | 89 | 112 | 153 | 207 | 260 | 301 | 319 |
| WE | 08 | 312 | 284 | 246 | 208 | 176 | 151 | 137 | 140 | 160 | 187 | 210 | 218 | 210 | 186 | 155 | 126 | 109 | 107 | 116 | 140 | 176 | 219 | 260 | 288 |
| TH | 09 | 297 | 286 | 261 | 231 | 202 | 178 | 157 | 145 | 147 | 162 | 181 | 197 | 202 | 195 | 177 | 155 | 137 | 129 | 132 | 143 | 163 | 191 | 223 | 252 |
| FR | 10 | 270 | 273 | 262 | 243 | 220 | 199 | 179 | 160 | 148 | 147 | 157 | 171 | 184 | 190 | 186 | 175 | 163 | 153 | 152 | 156 | 165 | 179 | 198 | 220 |
| SA | 11 | 239 | 251 | 252 | 243 | 229 | 213 | 196 | 176 | 157 | 144 | 141 | 148 | 161 | 175 | 184 | 186 | 183 | 177 | 173 | 172 | 174 | 178 | 185 | 197 |
| SU | 12 | 212 | 226 | 235 | 236 | 230 | 220 | 206 | 188 | 167 | 147 | 133 | 130 | 139 | 155 | 174 | 188 | 197 | 199 | 196 | 191 | 187 | 183 | 181 | 183 |
| MO | 13 | 190 | 203 | 216 | 224 | 226 | 222 | 212 | 197 | 175 | 151 | 130 | 119 | 120 | 135 | 158 | 183 | 203 | 215 | 218 | 213 | 203 | 193 | 183 | 176 |
| TU | 14 | 175 | 182 | 196 | 210 | 219 | 221 | 216 | 203 | 182 | 156 | 130 | 111 | 106 | 115 | 138 | 170 | 202 | 226 | 238 | 236 | 224 | 207 | 190 | 175 |
| WE | 15 | 166 | 166 | 177 | 193 | 209 | 219 | 219 | 209 | 189 | 162 | 133 | 108 | 95 | 98 | 119 | 153 | 193 | 229 | 253 | 259 | 249 | 228 | 203 | 179 |
| TH | 16 | 161 | 154 | 160 | 176 | 197 | 215 | 222 | 216 | 198 | 171 | 139 | 108 | 88 | 83 | 99 | 132 | 177 | 224 | 260 | 278 | 274 | 252 | 221 | 190 |
| FR | 17 | 163 | 147 | 146 | 159 | 183 | 207 | 224 | 225 | 209 | 182 | 148 | 113 | 85 | 73 | 81 | 110 | 156 | 210 | 258 | 290 | 296 | 278 | 245 | 207 |
| SA | 18 | 172 | 147 | 136 | 143 | 167 | 196 | 221 | 232 | 224 | 198 | 162 | 123 | 88 | 67 | 66 | 87 | 131 | 188 | 246 | 292 | 313 | 304 | 273 | 231 |
| SU | 19 | 188 | 153 | 133 | 130 | 148 | 181 | 214 | 236 | 238 | 218 | 182 | 139 | 98 | 68 | 56 | 66 | 103 | 159 | 224 | 282 | 319 | 326 | 303 | 260 |
| MO | 20 | 211 | 168 | 137 | 124 | 131 | 160 | 198 | 231 | 246 | 239 | 208 | 164 | 117 | 77 | 54 | 52 | 75 | 124 | 190 | 257 | 310 | 336 | 329 | 293 |
| TU | 21 | 242 | 191 | 150 | 126 | 120 | 137 | 173 | 214 | 243 | 251 | 234 | 196 | 147 | 99 | 64 | 49 | 57 | 90 | 149 | 219 | 284 | 328 | 342 | 323 |
| WE | 22 | 278 | 223 | 174 | 138 | 119 | 121 | 145 | 185 | 224 | 248 | 249 | 225 | 183 | 134 | 89 | 61 | 53 | 69 | 110 | 172 | 241 | 299 | 335 | 338 |
| TH | 23 | 310 | 261 | 207 | 161 | 131 | 117 | 123 | 151 | 190 | 225 | 245 | 242 | 216 | 175 | 129 | 90 | 69 | 67 | 86 | 130 | 190 | 252 | 303 | 329 |
| FR | 24 | 325 | 292 | 243 | 194 | 155 | 129 | 117 | 125 | 152 | 188 | 219 | 236 | 233 | 210 | 173 | 134 | 103 | 88 | 88 | 107 | 146 | 199 | 253 | 294 |
| SA | 25 | 314 | 305 | 273 | 229 | 186 | 152 | 128 | 117 | 123 | 147 | 178 | 207 | 225 | 225 | 209 | 181 | 151 | 127 | 114 | 112 | 126 | 157 | 199 | 242 |
| SU | 26 | 277 | 292 | 283 | 254 | 218 | 182 | 151 | 127 | 113 | 116 | 136 | 164 | 194 | 215 | 223 | 216 | 198 | 177 | 157 | 142 | 135 | 139 | 158 | 189 |
| MO | 27 | 225 | 255 | 268 | 262 | 240 | 210 | 179 | 149 | 122 | 106 | 105 | 122 | 150 | 183 | 212 | 229 | 233 | 225 | 208 | 187 | 167 | 151 | 144 | 152 |
| TU | 28 | 174 | 205 | 233 | 248 | 247 | 232 | 206 | 176 | 143 | 114 | 94 | 92 | 108 | 140 | 180 | 217 | 245 | 258 | 255 | 238 | 212 | 183 | 157 | 140 |
| WE | 29 | 139 | 157 | 187 | 217 | 236 | 240 | 228 | 203 | 169 | 133 | 101 | 80 | 78 | 98 | 137 | 186 | 234 | 270 | 288 | 283 | 260 | 226 | 188 | 152 |
| TH | 30 | 128 | 124 | 143 | 176 | 210 | 234 | 240 | 227 | 197 | 159 | 118 | 85 | 66 | 68 | 95 | 144 | 203 | 259 | 300 | 315 | 303 | 271 | 227 | 181 |
| FR | 31 | 140 | 114 | 112 | 137 | 177 | 215 | 240 | 244 | 225 | 188 | 144 | 101 | 69 | 54 | 64 | 102 | 162 | 230 | 290 | 327 | 333 | 310 | 268 | 216 |

Datum of Predictions is Lowest Astronomical Tide (Predictions - secondary port quality) © The State of Queensland(DTMR) 2019
 Moon Symbols ● New Moon ○ First Quarter ○ Full Moon ● Last Quarter Constants: C100000.97

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

AUGUST 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SA | 01 | 165 | 125 | 102 | 109 | 142 | 188 | 229 | 251 | 248 | 220 | 175 | 126 | 84 | 57 | 50 | 70 | 120 | 190 | 262 | 318 | 346 | 340 | 305 | 254 |
| SU | 02 | 198 | 148 | 111 | 97 | 114 | 157 | 206 | 244 | 258 | 245 | 208 | 157 | 107 | 70 | 51 | 55 | 87 | 148 | 222 | 290 | 337 | 351 | 331 | 287 |
| MO | 03 | 231 | 177 | 133 | 104 | 102 | 130 | 178 | 224 | 254 | 258 | 234 | 190 | 138 | 92 | 64 | 56 | 71 | 115 | 180 | 251 | 310 | 342 | 341 | 310 |
| TU | 04 | 261 | 207 | 159 | 125 | 108 | 117 | 152 | 198 | 236 | 255 | 248 | 216 | 169 | 120 | 84 | 68 | 72 | 99 | 148 | 212 | 273 | 316 | 332 | 318 |
| WE | 05 | 281 | 232 | 185 | 149 | 125 | 119 | 136 | 172 | 211 | 238 | 246 | 229 | 194 | 150 | 110 | 88 | 85 | 99 | 132 | 181 | 236 | 282 | 309 | 310 |
| TH | 06 | 287 | 248 | 206 | 171 | 147 | 133 | 135 | 155 | 185 | 214 | 230 | 228 | 208 | 174 | 137 | 111 | 102 | 110 | 131 | 165 | 207 | 248 | 278 | 290 |
| FR | 07 | 280 | 253 | 219 | 187 | 164 | 150 | 144 | 149 | 167 | 189 | 207 | 215 | 208 | 188 | 160 | 136 | 123 | 125 | 139 | 162 | 191 | 222 | 248 | 263 |
| SA | 08 | 263 | 248 | 223 | 197 | 176 | 162 | 154 | 151 | 157 | 169 | 184 | 195 | 199 | 192 | 177 | 158 | 146 | 144 | 152 | 166 | 184 | 204 | 223 | 237 |
| SU | 09 | 242 | 236 | 219 | 200 | 183 | 171 | 162 | 156 | 152 | 155 | 163 | 173 | 182 | 185 | 177 | 169 | 165 | 168 | 175 | 185 | 195 | 204 | 213 | |
| MO | 10 | 219 | 220 | 212 | 199 | 187 | 178 | 169 | 160 | 151 | 146 | 146 | 152 | 162 | 175 | 184 | 189 | 190 | 189 | 189 | 189 | 190 | 191 | 192 | 194 |
| TU | 11 | 197 | 201 | 201 | 196 | 190 | 183 | 176 | 166 | 153 | 141 | 133 | 133 | 141 | 156 | 175 | 193 | 206 | 212 | 213 | 209 | 203 | 195 | 186 | 180 |
| WE | 12 | 178 | 181 | 186 | 190 | 191 | 189 | 184 | 175 | 159 | 141 | 126 | 118 | 121 | 135 | 159 | 187 | 213 | 231 | 238 | 234 | 222 | 205 | 188 | 172 |
| TH | 13 | 162 | 162 | 169 | 181 | 190 | 195 | 194 | 185 | 169 | 147 | 124 | 108 | 103 | 114 | 138 | 173 | 210 | 241 | 258 | 259 | 246 | 223 | 197 | 172 |
| FR | 14 | 153 | 146 | 152 | 168 | 186 | 200 | 205 | 199 | 182 | 156 | 128 | 103 | 90 | 94 | 115 | 153 | 198 | 243 | 273 | 283 | 272 | 246 | 213 | 179 |
| SA | 15 | 151 | 135 | 136 | 153 | 179 | 203 | 217 | 215 | 199 | 171 | 137 | 104 | 82 | 76 | 91 | 128 | 179 | 234 | 280 | 303 | 299 | 273 | 234 | 192 |
| SU | 16 | 155 | 130 | 122 | 136 | 166 | 200 | 226 | 234 | 221 | 191 | 152 | 111 | 78 | 62 | 67 | 98 | 152 | 216 | 275 | 315 | 324 | 304 | 263 | 213 |
| MO | 17 | 166 | 131 | 112 | 118 | 147 | 189 | 227 | 249 | 247 | 220 | 177 | 127 | 83 | 54 | 47 | 67 | 116 | 185 | 257 | 314 | 342 | 335 | 297 | 242 |
| TU | 18 | 185 | 139 | 109 | 102 | 122 | 166 | 216 | 254 | 267 | 252 | 212 | 157 | 102 | 58 | 37 | 42 | 78 | 143 | 222 | 294 | 344 | 357 | 332 | 279 |
| WE | 19 | 216 | 157 | 115 | 94 | 100 | 134 | 188 | 240 | 272 | 276 | 249 | 198 | 137 | 80 | 43 | 31 | 49 | 98 | 173 | 255 | 322 | 359 | 356 | 317 |
| TH | 20 | 255 | 188 | 133 | 99 | 88 | 104 | 149 | 207 | 255 | 280 | 275 | 240 | 184 | 122 | 70 | 42 | 40 | 66 | 123 | 200 | 276 | 333 | 356 | 340 |
| FR | 21 | 292 | 226 | 163 | 117 | 92 | 89 | 113 | 162 | 216 | 258 | 277 | 266 | 228 | 173 | 117 | 76 | 57 | 62 | 92 | 148 | 218 | 282 | 325 | 337 |
| SA | 22 | 312 | 261 | 200 | 147 | 111 | 93 | 95 | 122 | 168 | 215 | 250 | 264 | 253 | 219 | 172 | 128 | 98 | 86 | 92 | 119 | 167 | 222 | 272 | 302 |
| SU | 23 | 305 | 278 | 232 | 182 | 141 | 114 | 100 | 103 | 127 | 164 | 203 | 234 | 248 | 241 | 216 | 183 | 153 | 132 | 122 | 124 | 141 | 173 | 212 | 247 |
| MO | 24 | 268 | 267 | 244 | 209 | 173 | 144 | 122 | 109 | 108 | 125 | 153 | 186 | 215 | 233 | | | | | | | | | | |

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

SEPTEMBER 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| TU | 01 | 199 | 147 | 107 | 90 | 102 | 144 | 197 | 243 | 267 | 263 | 232 | 183 | 130 | 89 | 68 | 67 | 92 | 142 | 209 | 273 | 318 | 333 | 316 | 274 |
| WE | 02 | 221 | 168 | 127 | 103 | 102 | 128 | 174 | 223 | 256 | 265 | 247 | 207 | 156 | 110 | 83 | 76 | 90 | 127 | 182 | 242 | 291 | 316 | 312 | 281 |
| TH | 03 | 235 | 185 | 145 | 119 | 110 | 123 | 156 | 200 | 237 | 256 | 251 | 223 | 180 | 134 | 101 | 89 | 97 | 123 | 165 | 216 | 262 | 292 | 298 | 278 |
| FR | 04 | 241 | 196 | 157 | 131 | 121 | 125 | 146 | 180 | 215 | 238 | 244 | 229 | 197 | 157 | 122 | 105 | 108 | 127 | 158 | 198 | 237 | 266 | 278 | 268 |
| SA | 05 | 239 | 201 | 165 | 140 | 129 | 130 | 142 | 166 | 194 | 217 | 230 | 227 | 207 | 177 | 145 | 125 | 122 | 135 | 158 | 188 | 218 | 242 | 255 | 252 |
| SU | 06 | 232 | 201 | 170 | 146 | 134 | 134 | 141 | 156 | 176 | 196 | 210 | 215 | 209 | 190 | 167 | 148 | 141 | 147 | 163 | 183 | 204 | 221 | 232 | 232 |
| MO | 07 | 221 | 198 | 172 | 151 | 140 | 138 | 141 | 149 | 161 | 176 | 189 | 198 | 201 | 196 | 185 | 172 | 164 | 165 | 173 | 184 | 195 | 205 | 210 | 211 |
| TU | 08 | 205 | 192 | 174 | 157 | 147 | 144 | 145 | 147 | 151 | 158 | 167 | 176 | 185 | 192 | 194 | 192 | 189 | 188 | 190 | 192 | 194 | 194 | 192 | 189 |
| WE | 09 | 186 | 181 | 172 | 162 | 156 | 154 | 153 | 151 | 147 | 146 | 148 | 154 | 164 | 178 | 192 | 203 | 210 | 213 | 213 | 209 | 201 | 191 | 180 | 171 |
| TH | 10 | 166 | 165 | 166 | 166 | 166 | 166 | 165 | 160 | 151 | 140 | 134 | 133 | 141 | 158 | 181 | 205 | 224 | 236 | 238 | 232 | 217 | 197 | 177 | 159 |
| FR | 11 | 149 | 149 | 156 | 165 | 174 | 180 | 180 | 174 | 160 | 142 | 126 | 117 | 119 | 134 | 162 | 196 | 229 | 253 | 263 | 257 | 238 | 211 | 181 | 154 |
| SA | 12 | 136 | 133 | 143 | 161 | 180 | 194 | 198 | 191 | 174 | 149 | 123 | 105 | 98 | 109 | 137 | 179 | 225 | 264 | 284 | 283 | 263 | 230 | 192 | 156 |
| SU | 13 | 129 | 118 | 127 | 152 | 182 | 207 | 219 | 215 | 194 | 162 | 127 | 97 | 81 | 83 | 108 | 154 | 211 | 264 | 301 | 311 | 293 | 256 | 209 | 163 |
| MO | 14 | 126 | 105 | 108 | 135 | 175 | 214 | 239 | 243 | 223 | 185 | 140 | 97 | 68 | 59 | 75 | 120 | 184 | 252 | 307 | 334 | 326 | 289 | 235 | 178 |
| TU | 15 | 129 | 97 | 89 | 110 | 156 | 209 | 251 | 269 | 258 | 221 | 167 | 111 | 66 | 43 | 45 | 80 | 144 | 223 | 296 | 344 | 354 | 326 | 270 | 203 |
| WE | 16 | 141 | 96 | 75 | 83 | 124 | 185 | 244 | 282 | 290 | 263 | 209 | 144 | 83 | 41 | 28 | 45 | 97 | 176 | 262 | 331 | 365 | 357 | 310 | 240 |
| TH | 17 | 166 | 107 | 70 | 62 | 88 | 145 | 215 | 273 | 303 | 298 | 258 | 193 | 122 | 63 | 31 | 28 | 59 | 123 | 209 | 292 | 349 | 367 | 341 | 280 |
| FR | 18 | 203 | 132 | 81 | 57 | 62 | 102 | 168 | 238 | 289 | 310 | 294 | 246 | 178 | 110 | 60 | 38 | 45 | 84 | 152 | 234 | 304 | 345 | 347 | 309 |
| SA | 19 | 242 | 168 | 106 | 69 | 57 | 73 | 120 | 186 | 248 | 291 | 303 | 282 | 233 | 170 | 113 | 76 | 63 | 75 | 114 | 175 | 242 | 295 | 321 | 311 |
| SU | 20 | 267 | 204 | 142 | 96 | 71 | 69 | 90 | 135 | 193 | 245 | 278 | 287 | 267 | 224 | 174 | 132 | 108 | 100 | 109 | 139 | 185 | 232 | 268 | 281 |
| MO | 21 | 266 | 226 | 176 | 131 | 101 | 86 | 87 | 106 | 143 | 188 | 229 | 258 | 267 | 254 | 225 | 192 | 166 | 149 | 139 | 138 | 152 | 178 | 207 | 230 |
| TU | 22 | 237 | 224 | 195 | 163 | 135 | 117 | 107 | 104 | 116 | 141 | 174 | 207 | 235 | 250 | 249 | 238 | 222 | 205 | 188 | 170 | 155 | 150 | 158 | 174 |
| WE | 23 | 190 | 198 | 194 | 182 | 167 | 152 | 139 | 125 | 116 | 116 | 129 | 153 | 185 | 217 | 242 | 256 | 260 | 255 | 240 | 216 | 185 | 155 | 135 | 131 |
| TH | 24 | 142 | 159 | 175 | 185 | 188 | 184 | 174 | 157 | 136 | 117 | 108 | 113 | 134 | 168 | 209 | 246 | 274 | 287 | 283 | 263 | 228 | 184 | 142 | 113 |
| FR | 25 | 105 | 119 | 145 | 172 | 194 | 207 | 206 | 191 | 166 | 136 | 109 | 94 | 96 | 121 | 164 | 215 | 263 | 297 | 310 | 300 | 268 | 221 | 167 | 119 |
| SA | 26 | 90 | 89 | 112 | 150 | 188 | 217 | 230 | 223 | 198 | 163 | 126 | 95 | 79 | 87 | 121 | 175 | 235 | 287 | 318 | 323 | 300 | 256 | 200 | 142 |
| SU | 27 | 96 | 75 | 86 | 124 | 172 | 216 | 244 | 249 | 229 | 192 | 149 | 109 | 80 | 71 | 89 | 136 | 199 | 262 | 310 | 330 | 320 | 283 | 229 | 170 |
| MO | 28 | 115 | 79 | 73 | 100 | 150 | 203 | 245 | 263 | 254 | 221 | 175 | 129 | 92 | 71 | 74 | 106 | 164 | 231 | 289 | 323 | 327 | 300 | 252 | 194 |
| TU | 29 | 138 | 94 | 74 | 86 | 128 | 184 | 235 | 266 | 270 | 245 | 201 | 151 | 108 | 81 | 74 | 92 | 138 | 201 | 262 | 307 | 322 | 307 | 267 | 213 |
| WE | 30 | 157 | 112 | 84 | 83 | 112 | 163 | 218 | 258 | 274 | 261 | 224 | 174 | 127 | 95 | 82 | 90 | 123 | 176 | 236 | 284 | 309 | 304 | 273 | 224 |

Datum of Predictions is Lowest Astronomical Tide (Predictions - secondary port quality) © The State of Queensland(DTMR) 2019
 Moon Symbols ● New Moon ○ First Quarter ○ Full Moon ● Last Quarter Constants: C100000.97

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

OCTOBER 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| TH | 01 | 171 | 126 | 96 | 88 | 105 | 146 | 198 | 243 | 269 | 268 | 241 | 196 | 147 | 110 | 93 | 96 | 119 | 161 | 214 | 261 | 291 | 294 | 271 | 229 |
| FR | 02 | 180 | 135 | 105 | 94 | 103 | 134 | 179 | 224 | 256 | 266 | 251 | 214 | 168 | 127 | 105 | 104 | 121 | 153 | 197 | 240 | 271 | 280 | 265 | 229 |
| SA | 03 | 184 | 141 | 111 | 98 | 103 | 126 | 163 | 205 | 239 | 257 | 253 | 228 | 189 | 149 | 121 | 113 | 125 | 150 | 185 | 222 | 250 | 262 | 254 | 226 |
| SU | 04 | 186 | 146 | 115 | 101 | 103 | 120 | 150 | 186 | 219 | 241 | 248 | 235 | 207 | 172 | 142 | 128 | 133 | 151 | 177 | 206 | 230 | 242 | 240 | 220 |
| MO | 05 | 187 | 150 | 121 | 105 | 105 | 117 | 139 | 168 | 198 | 221 | 234 | 234 | 218 | 193 | 166 | 149 | 147 | 157 | 174 | 194 | 211 | 221 | 221 | 209 |
| TU | 06 | 185 | 155 | 128 | 113 | 110 | 118 | 133 | 154 | 178 | 199 | 214 | 222 | 219 | 207 | 189 | 174 | 168 | 171 | 178 | 188 | 197 | 202 | 201 | 193 |
| WE | 07 | 179 | 158 | 137 | 124 | 121 | 125 | 134 | 146 | 161 | 177 | 190 | 201 | 209 | 210 | 205 | 198 | 193 | 191 | 192 | 192 | 190 | 186 | 181 | 175 |
| TH | 08 | 167 | 157 | 145 | 136 | 135 | 138 | 143 | 146 | 151 | 158 | 167 | 177 | 189 | 202 | 211 | 215 | 216 | 216 | 212 | 204 | 192 | 179 | 166 | 157 |
| FR | 09 | 152 | 150 | 149 | 149 | 150 | 154 | 156 | 154 | 149 | 146 | 146 | 152 | 165 | 184 | 206 | 224 | 236 | 240 | 236 | 223 | 204 | 180 | 158 | 142 |
| SA | 10 | 136 | 139 | 148 | 158 | 167 | 173 | 174 | 167 | 154 | 140 | 130 | 129 | 139 | 160 | 191 | 224 | 250 | 263 | 261 | 246 | 221 | 189 | 157 | 132 |
| SU | 11 | 120 | 124 | 141 | 163 | 183 | 195 | 197 | 186 | 165 | 141 | 120 | 108 | 111 | 131 | 168 | 213 | 255 | 282 | 289 | 274 | 243 | 203 | 162 | 127 |
| MO | 12 | 105 | 106 | 127 | 160 | 194 | 218 | 225 | 214 | 186 | 151 | 117 | 92 | 85 | 98 | 136 | 190 | 247 | 293 | 314 | 306 | 272 | 224 | 172 | 126 |
| TU | 13 | 94 | 84 | 103 | 144 | 193 | 233 | 254 | 249 | 220 | 175 | 126 | 87 | 65 | 66 | 96 | 153 | 224 | 288 | 329 | 336 | 308 | 255 | 192 | 133 |
| WE | 14 | 88 | 66 | 74 | 114 | 174 | 233 | 273 | 284 | 263 | 215 | 155 | 98 | 59 | 44 | 59 | 108 | 182 | 261 | 324 | 353 | 342 | 293 | 223 | 151 |
| TH | 15 | 92 | 55 | 48 | 76 | 137 | 210 | 271 | 305 | 304 | 266 | 203 | 133 | 75 | 42 | 37 | 66 | 130 | 214 | 294 | 346 | 359 | 327 | 262 | 182 |
| FR | 16 | 109 | 57 | 34 | 44 | 91 | 165 | 243 | 300 | 325 | 310 | 260 | 188 | 117 | 64 | 40 | 46 | 86 | 157 | 241 | 310 | 348 | 343 | 295 | 221 |
| SA | 17 | 141 | 76 | 37 | 29 | 54 | 114 | 193 | 266 | 316 | 330 | 305 | 249 | 178 | 113 | 70 | 55 | 69 | 112 | 181 | 253 | 307 | 328 | 308 | 253 |
| SU | 18 | 179 | 109 | 58 | 35 | 39 | 74 | 137 | 212 | 276 | 315 | 322 | 293 | 239 | 176 | 123 | 93 | 84 | 98 | 136 | 192 | 247 | 284 | 291 | 263 |
| MO | 19 | 209 | 146 | 92 | 59 | 49 | 61 | 97 | 155 | 218 | 271 | 302 | 305 | 279 | 234 | 186 | 148 | 127 | 118 | 125 | 151 | 189 | 225 | 247 | 246 |
| TU | 20 | 219 | 175 | 130 | 95 | 76 | 74 | 86 | 117 | 163 | 212 | 254 | 281 | 285 | 268 | 239 | 207 | 182 | 163 | 148 | 142 | 151 | 170 | 192 | 206 |
| WE | 21 | 204 | 186 | 159 | 133 | 114 | 104 | 101 | 107 | 127 | 159 | 195 | 231 | 258 | 269 | 266 | 252 | 235 | 215 | 192 | 166 | 146 | 138 | 144 | 157 |
| TH | 22 | 170 | 175 | 171 | 162 | 152 | 142 | 133 | 124 | 120 | 127 | 146 | 174 | 209 | 240 | 262 | 273 | 272 | 261 | 240 | 208 | 169 | 136 | 117 | 116 |
| FR | 23 | 129 | 148 | 165 | 176 | 182 | 179 | 170 | 154 | 136 | 122 | 118 | 129 | 156 | 194 | 233 | 266 | 286 | 291 | 279 | 250 | 207 | 158 | 117 | 94 |
| SA | 24 | 95 | 115 | 145 | 174 | 197 | 208 | 205 | 189 | 164 | 137 | 115 | 105 | 115 | 146 | 191 | 238 | 278 | 301 | 303 | 283 | 244 | 191 | 137 | 94 |
| SU | 25 | 76 | 86 | 117 | 158 | 197 | 224 | 233 | 221 | 195 | 162 | 129 | 104 | 95 | 110 | 149 | 202 | | | | | | | | |

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

NOVEMBER 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SU | 01 | ○ | 135 | 99 | 78 | 77 | 96 | 132 | 180 | 225 | 259 | 273 | 263 | 233 | 192 | 155 | 133 | 129 | 142 | 167 | 199 | 228 | 245 | 244 | 222 | 184 |
| MO | 02 | | 142 | 105 | 82 | 77 | 90 | 120 | 161 | 205 | 241 | 263 | 266 | 248 | 215 | 179 | 152 | 141 | 146 | 162 | 186 | 210 | 227 | 230 | 217 | 187 |
| TU | 03 | | 149 | 114 | 90 | 82 | 90 | 111 | 144 | 183 | 219 | 245 | 258 | 254 | 232 | 202 | 175 | 159 | 156 | 164 | 177 | 194 | 208 | 212 | 206 | 187 |
| WE | 04 | | 157 | 126 | 103 | 93 | 96 | 110 | 133 | 163 | 195 | 222 | 240 | 247 | 240 | 222 | 200 | 183 | 175 | 174 | 178 | 184 | 191 | 194 | 190 | 180 |
| TH | 05 | | 161 | 138 | 118 | 108 | 108 | 116 | 130 | 149 | 172 | 196 | 215 | 230 | 236 | 232 | 220 | 207 | 198 | 192 | 188 | 183 | 180 | 177 | 173 | 167 |
| FR | 06 | | 159 | 147 | 134 | 126 | 125 | 129 | 135 | 143 | 155 | 171 | 188 | 205 | 220 | 231 | 233 | 229 | 222 | 215 | 205 | 192 | 177 | 165 | 156 | 151 |
| SA | 07 | | 150 | 149 | 147 | 146 | 146 | 147 | 147 | 146 | 146 | 150 | 160 | 176 | 196 | 218 | 236 | 246 | 247 | 240 | 226 | 207 | 183 | 160 | 142 | 134 |
| SU | 08 | ● | 136 | 144 | 155 | 164 | 170 | 171 | 166 | 156 | 145 | 137 | 136 | 146 | 166 | 196 | 228 | 254 | 267 | 266 | 252 | 227 | 195 | 162 | 133 | 116 |
| MO | 09 | | 116 | 131 | 154 | 176 | 193 | 199 | 193 | 176 | 154 | 132 | 119 | 117 | 132 | 164 | 207 | 249 | 280 | 292 | 281 | 253 | 213 | 170 | 130 | 102 |
| TU | 10 | | 93 | 107 | 140 | 178 | 210 | 228 | 228 | 208 | 176 | 141 | 112 | 97 | 100 | 126 | 173 | 229 | 278 | 308 | 310 | 284 | 239 | 186 | 134 | 94 |
| WE | 11 | | 72 | 78 | 112 | 162 | 212 | 249 | 263 | 250 | 214 | 167 | 122 | 90 | 78 | 90 | 130 | 191 | 257 | 307 | 329 | 316 | 272 | 211 | 147 | 93 |
| TH | 12 | | 58 | 50 | 75 | 129 | 194 | 252 | 287 | 291 | 263 | 212 | 153 | 103 | 72 | 66 | 89 | 143 | 216 | 284 | 328 | 336 | 305 | 245 | 173 | 105 |
| FR | 13 | | 56 | 32 | 41 | 85 | 156 | 230 | 289 | 318 | 310 | 267 | 204 | 140 | 90 | 64 | 66 | 99 | 163 | 238 | 301 | 333 | 325 | 279 | 207 | 131 |
| SA | 14 | | 68 | 29 | 20 | 45 | 106 | 186 | 263 | 317 | 337 | 317 | 265 | 196 | 132 | 88 | 68 | 77 | 117 | 182 | 252 | 304 | 321 | 299 | 242 | 167 |
| SU | 15 | ● | 95 | 42 | 17 | 23 | 62 | 132 | 214 | 286 | 333 | 343 | 315 | 258 | 191 | 134 | 97 | 83 | 95 | 135 | 194 | 253 | 290 | 294 | 262 | 202 |
| MO | 16 | | 133 | 72 | 34 | 24 | 40 | 86 | 157 | 233 | 297 | 334 | 337 | 306 | 252 | 193 | 145 | 116 | 105 | 114 | 148 | 196 | 239 | 264 | 258 | 222 |
| TU | 17 | | 169 | 112 | 68 | 44 | 44 | 65 | 111 | 175 | 240 | 294 | 324 | 323 | 295 | 249 | 202 | 166 | 141 | 127 | 130 | 152 | 186 | 216 | 230 | 222 |
| WE | 18 | | 192 | 150 | 109 | 80 | 68 | 71 | 91 | 130 | 182 | 236 | 280 | 305 | 306 | 285 | 252 | 218 | 189 | 164 | 144 | 137 | 147 | 167 | 187 | 198 |
| TH | 19 | | 193 | 173 | 147 | 122 | 105 | 98 | 99 | 113 | 141 | 180 | 222 | 260 | 285 | 291 | 281 | 260 | 236 | 210 | 181 | 152 | 134 | 133 | 144 | 160 |
| FR | 20 | | 173 | 176 | 170 | 159 | 146 | 135 | 127 | 122 | 126 | 142 | 170 | 205 | 241 | 268 | 281 | 282 | 271 | 251 | 223 | 186 | 149 | 123 | 114 | 122 |
| SA | 21 | | 141 | 160 | 174 | 181 | 181 | 173 | 162 | 149 | 137 | 131 | 138 | 158 | 190 | 227 | 258 | 279 | 286 | 279 | 258 | 224 | 180 | 137 | 107 | 97 |
| SU | 22 | ● | 108 | 133 | 161 | 185 | 201 | 205 | 197 | 181 | 161 | 142 | 130 | 131 | 149 | 183 | 222 | 257 | 281 | 290 | 280 | 253 | 212 | 163 | 118 | 89 |
| MO | 23 | | 85 | 104 | 138 | 174 | 205 | 224 | 225 | 211 | 189 | 164 | 140 | 125 | 127 | 148 | 185 | 227 | 263 | 285 | 288 | 271 | 236 | 189 | 139 | 97 |
| TU | 24 | | 76 | 82 | 112 | 155 | 197 | 229 | 243 | 237 | 216 | 187 | 158 | 134 | 122 | 129 | 156 | 197 | 238 | 270 | 284 | 276 | 249 | 207 | 158 | 111 |
| WE | 25 | | 79 | 71 | 91 | 132 | 181 | 223 | 250 | 255 | 239 | 210 | 177 | 149 | 129 | 124 | 139 | 172 | 214 | 251 | 273 | 274 | 254 | 217 | 171 | 124 |
| TH | 26 | | 87 | 69 | 78 | 112 | 161 | 211 | 249 | 265 | 258 | 231 | 196 | 164 | 139 | 127 | 132 | 156 | 194 | 233 | 260 | 267 | 253 | 221 | 178 | 132 |
| FR | 27 | | 93 | 70 | 71 | 97 | 142 | 196 | 242 | 270 | 272 | 252 | 217 | 179 | 149 | 132 | 131 | 147 | 178 | 215 | 246 | 259 | 251 | 223 | 182 | 137 |
| SA | 28 | | 97 | 72 | 66 | 85 | 125 | 178 | 230 | 267 | 282 | 270 | 238 | 198 | 163 | 139 | 132 | 141 | 166 | 199 | 231 | 250 | 248 | 225 | 187 | 143 |
| SU | 29 | | 102 | 73 | 63 | 75 | 110 | 159 | 213 | 258 | 284 | 284 | 259 | 221 | 181 | 150 | 136 | 138 | 156 | 185 | 216 | 238 | 243 | 227 | 193 | 150 |
| MO | 30 | ○ | 109 | 77 | 63 | 69 | 96 | 140 | 193 | 242 | 277 | 290 | 277 | 244 | 203 | 167 | 145 | 140 | 149 | 171 | 199 | 223 | 234 | 227 | 199 | 160 |

Datum of Predictions is Lowest Astronomical Tide (Predictions - secondary port quality) © The State of Queensland(DTMR) 2019
 Moon Symbols ● New Moon ○ First Quarter ○ Full Moon ● Last Quarter Constants: C100000.97

TOWNSVILLE FAIRWAY BEACON

LAT 19° 07' S LONG 146° 54' E

TIME ZONE -1000

HOURLY TIDE HEIGHTS IN CMS

DECEMBER 2020

| | | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| TU | 01 | | 119 | 88 | 69 | 69 | 88 | 125 | 173 | 223 | 264 | 288 | 288 | 266 | 229 | 192 | 164 | 151 | 152 | 165 | 186 | 209 | 223 | 224 | 206 | 173 |
| WE | 02 | | 135 | 102 | 80 | 74 | 84 | 111 | 151 | 198 | 241 | 272 | 286 | 278 | 251 | 217 | 187 | 167 | 160 | 163 | 174 | 192 | 207 | 213 | 205 | 183 |
| TH | 03 | | 151 | 120 | 96 | 85 | 88 | 104 | 133 | 172 | 213 | 248 | 272 | 278 | 266 | 240 | 212 | 189 | 176 | 170 | 171 | 178 | 189 | 197 | 197 | 186 |
| FR | 04 | | 165 | 140 | 117 | 103 | 100 | 107 | 123 | 150 | 184 | 218 | 247 | 266 | 270 | 258 | 237 | 214 | 197 | 185 | 176 | 171 | 173 | 178 | 182 | 181 |
| SA | 05 | | 173 | 158 | 141 | 127 | 119 | 118 | 123 | 136 | 158 | 186 | 216 | 242 | 260 | 266 | 257 | 241 | 222 | 205 | 189 | 174 | 163 | 159 | 161 | 166 |
| SU | 06 | | 170 | 169 | 162 | 153 | 145 | 138 | 134 | 134 | 141 | 157 | 181 | 209 | 238 | 259 | 268 | 264 | 249 | 230 | 208 | 184 | 161 | 145 | 139 | 144 |
| MO | 07 | | 155 | 168 | 177 | 179 | 175 | 166 | 155 | 144 | 136 | 137 | 149 | 172 | 204 | 238 | 265 | 278 | 275 | 258 | 232 | 201 | 168 | 139 | 121 | 118 |
| TU | 08 | ● | 131 | 154 | 178 | 196 | 205 | 201 | 187 | 167 | 147 | 132 | 128 | 138 | 165 | 204 | 245 | 277 | 291 | 284 | 260 | 223 | 182 | 142 | 110 | 94 |
| WE | 09 | | 100 | 126 | 163 | 199 | 225 | 236 | 228 | 204 | 173 | 144 | 123 | 116 | 128 | 161 | 209 | 257 | 291 | 302 | 287 | 252 | 204 | 153 | 109 | 79 |
| TH | 10 | | 71 | 90 | 132 | 183 | 229 | 260 | 268 | 251 | 215 | 174 | 137 | 112 | 106 | 122 | 164 | 219 | 270 | 302 | 306 | 280 | 232 | 174 | 119 | 75 |
| FR | 11 | | 52 | 57 | 91 | 149 | 212 | 264 | 295 | 296 | 267 | 221 | 171 | 129 | 103 | 99 | 122 | 171 | 231 | 281 | 307 | 301 | 263 | 204 | 140 | 84 |
| SA | 12 | | 46 | 34 | 53 | 104 | 174 | 245 | 299 | 325 | 316 | 277 | 221 | 166 | 123 | 98 | 98 | 127 | 181 | 241 | 287 | 304 | 286 | 237 | 172 | 106 |
| SU | 13 | | 55 | 27 | 28 | 61 | 124 | 203 | 276 | 328 | 347 | 327 | 279 | 218 | 161 | 120 | 98 | 102 | 135 | 191 | 247 | 285 | 292 | 263 | 208 | 141 |
| MO | 14 | | 80 | 38 | 22 | 34 | 78 | 150 | 231 | 302 | 347 | 356 | 329 | 275 | 214 | 160 | 123 | 104 | 110 | 145 | 197 | 246 | 275 | 272 | 237 | 180 |
| TU | 15 | ● | 118 | 66 | 35 | 30 | 51 | 101 | 174 | 252 | 316 | 353 | 354 | 322 | 268 | 211 | 163 | 131 | 114 | 121 | 153 | 199 | 239 | 258 | 248 | 212 |
| WE | 16 | | 160 | 106 | 65 | 46 | 48 | 74 | 126 | 195 | 264 | 319 | 347 | 342 | 309 | 261 | 211 | 171 | 142 | 126 | 131 | 158 | 194 | 225 | 237 | 225 |
| TH | 17 | | 192 | 149 | 107 | 78 | 67 | 74 | 100 | 147 | 207 | 265 | 310 | 331 | 324 | 295 | 255 | 215 | 182 | 154 | 137 | 138 | 157 | 184 | 207 | 215 |
| FR | 18 | | 205 | 180 | 148 | 119 | 100 | 95 | 102 | 124 | 163 | 211 | 258 | 294 | 310 | 304 | 282 | 252 | 222 | 192 | 164 | 143 | 139 | 150 | 170 | 188 |
| SA | 19 | | 197 | 193 | 178 | 157 | 139 | 127 | 123 | 127 | 143 | 171 | 207 | 245 | 274 | 289 | 287 | 273 | 252 | 227 | 199 | 168 | 143 | 133 | 139 | 154 |
| SU | 20 | | 172 | 185 | 189 | 184 | 173 | 162 | 154 | 148 | 148 | 156 | 174 | 200 | 231 | 257 | 272 | 275 | 267 | 251 | 228 | 197 | 164 | 136 | 123 | 126 |
| MO | 21 | | 142 | 163 | 182 | 194 | 197 | 193 | 185 | 176 | 167 | 160 | 161 | 172 | 193 | 220 | 244 | 261 | 267 | 262 | 247 | 221 | 187 | 151 | 122 | 110 |
| TU | 22 | ● | 116 | 136 | 164 | 189 | 207 | 215 | 212 | 203 | 190 | 176 | 165 | 161 | 168 | 188 | 215 | 239 | 255 | 261 | 254 | 235 | 205 | 168 | 131 | 106 |
| WE | 23 | | 99 | 112 | 141 | 175 | 206 | 227 | 234 | 228 | 213 | 195 | 177 | 163 | 158 | 167 | 189 | 215 | 238 | 252 | 254 | 241 | 216 | 180 | 142 | 109 |
| TH | 24 | | 91 | 95 | 119 | 156 | 196 | 229 | | | | | | | | | | | | | | | | | | |