

KARNAPHULI RIVER

TIDE TABLES

2018



Department of Hydrography
CHITTAGONG PORT AUTHORITY
www.cpa.gov.bd



CHITTAGONG PORT AUTHORITY

Country moves with us

Bandar Bhaban
Chittagong-4100
Bangladesh

+880-31-2522200-29 T
+880-31-2510889 F
info@cpa.gov.bd E

KARNAPHULI RIVER

Handbook of Tide Tables

2018



Department of Hydrography
CHITTAGONG PORT AUTHORITY

www.cpa.gov.bd

Tide Tables 2018

KARNAPHULI RIVER

Hand Book of Tide Tables at
Kalurghat, Sadarghat, Khal No-10 & Khal No-18

Prediction datum is the CD (ISLWL)

Time zone is BST (+6 GMT)

- Full Moon
- New Moon

Printed in Bangladesh by
NOKSHA | Chawkbazar, Chittagong-4203
www.nokshaworld.com

Published and Copyright © 2018 by
Department of Hydrography
Chittagong Port Authority
Bangladesh

www.cpa.gov.bd



CHITTAGONG PORT AUTHORITY

Country moves with us



About Chittagong Port Authority

The Chittagong Port is the principal seaport of Bangladesh handling about 92% of import-export trade of the country. It provides a major gateway for the country's trade with the outside world. As such its importance in the national economy is paramount. The Chittagong Port Authority (CPA) is a basic services provider. Its Objectives focuses mainly on providing necessary services and facilities to the port users efficiently & effectively at competitive price.



3



Historical Background

The history of CPA can be traced to the 4th century BC. During the 9th-15th century AD, Chittagong was known as “SHETGANG” to early European mariners. In the 16th century, Portuguese sailors took great interest in the locality around Chittagong which was then popularly known as ‘Porte Grande’. The port was established at its present location in 1887. By 1910; four jetties were constructed to handle 0.5 million tons of cargo annually. Since then the port has grown gradually to its present shape.

Location

Chittagong port is situated in the estuary of the river Karnaphuli; its main berths being around eight nautical inshore from the port’s outer anchorage.

Administration

The Chittagong Port Authority was established through promulgation of the Chittagong Port Ordinance 1976. The CPA now comprises of the Chairman and four other Members. The Chairman is appointed by the Government and also is the Chief Executive of the port. The Port operates under the administrative control of the Ministry of Shipping of the Government of the People’s Republic of Bangladesh.

Commitments

Our commitments are to help sustain the economy of Bangladesh and support the quality of life for communities along the river by:

- Keeping the river safe for all users-from the largest ships to the smallest rowing boats.
- Realizing the river’s sustainable development potential-principally making sure freight movements can switch from road to water.
- Protecting the river’s environment-making sure that developments in the river are properly managed.

Port Limit

- Upper Limit- The upper port limit extended up to 2.5 km of Halda & Karnaphuli River and
- Lower Limit- The lower limit extended up to 13 km radius drawn from Patenga Beacon to seaward.

Karnaphuli River

Karnaphuli, the largest and most important river in Chittagong and the Chittagong Hill Tracts. It is a 667 meters wide river in the south-eastern part of Bangladesh. Originating from the Lushai hills in Mizoram, India, it flows 270 km southwest through Chittagong Hill Tracts and Chittagong into the Bay of Bengal.

There are three bars in the river, one at the mouth of Karnaphuli River called the outer bar, second the inner bar at 2.26 km from the outer bar and third is the Gupta bar at 8.58 km from the outer bar. The least depth at outer bar is 5.3 meters (approx) from the chart datum (CD) i.e. from Indian Spring Low Water Level (ISLWL). The Least depth at the inner and Gupta bar are 7.2 meters, 6.9 meters respectively from Indian Spring Low Water Level (ISLWL).

Anchorage Area

The anchorage is divided into three areas 'A' 'B' & 'C'.

- Anchorage "A" is formed by extending 2 (Two) lines up to port limit, one (1st) having bearing $337^{\circ}45'$ and the other (2nd) $310^{\circ}30'$ from the point having lat $22^{\circ}12'30''$ N and long $91^{\circ}47'00''$ E.
- Anchorage "B" is formed in between 4th and 5th line having bearing 234° extended up to port limit from the previous point.
- Anchorage "C" is between 4th and 5th line having bearing $23^{\circ}40'$ & 157° respectively, extended up to Port limit from a point of lat $22^{\circ}12'00''$ N and long $91^{\circ}47'12''$ E.

The space between 3rd and 4th lines is prohibited anchorage.

- “A” Anchorage is for vessels over 9.2 m draught.
- “B” Anchorage is for vessels entering the port within 24 hours.
- “C” Anchorage is for vessels lightering and other vessels not scheduled to enter the port within 24 hours.

The holding ground at the anchorage is soft mud which is considered poor holding ground. Due to very strong current of up to 6 knots dragging of anchor by vessels is common at Chittagong outer anchorage. There is no limit imposed by Chittagong Port Authority in terms of number of vessels that can anchor within the limited area or the maximum draft of vessels that may be allowed. To improve the safety at Chittagong outer anchorage the port authority may need to consider imposing certain controls relating to maximum draft and number of vessels in the anchorage.

Important Telephone Number

- | | |
|-----------------------------|-----------------|
| • Chairman | +88 031 2510870 |
| • Member (Admin & Planning) | +88 031 2526004 |
| • Member (Finance) | +88 031 2510871 |
| • Member (Engineering) | +88 031 2510872 |
| • Member (Harbour & Marine) | +88 031 2510873 |
| • Deputy Conservator | +88 031 2510842 |
| • Director (Security) | +88 031 2510884 |
| • Chief Hydrographer | +88 031 2510840 |
| • Secretary | +88 031 2510869 |
| • Chief Medical Officer | +88 031 2510876 |

CHITTAGONG PORT AUTHORITY

HYDROGRAPHIC SERVICE

With a statutory responsibility to survey within port limit, CPA has the most sophisticated in-house survey capability. Take advantage of a service that offers:

- **Value-** low mobilization or weather downtime costs.
- **Experience-** time served surveyors and local crews.
- **Quality-** purpose built craft and latest equipment, including side scan sonar.
- **Response-** most surveys completed within a week of receiving instruction.



Digital Hydrographic Survey

Services include Bathymetric charting, dredging & dredging monitoring, volume computations, sampling and analysis, wreck detection & measurement of sound velocity including current observation in the port limit area.

Hydrographic Department

Chititagong Port Authority has its own Hydrographic Department comprising 07 in number survey vessels, one trailing suction hopper dredger (Capacity-2500 cum) and 298 manpower's. The department has in-house specialist in hydrographic, oceanographic, cartographic and GIS.

Department is headed by Chief Hydrographer including 2 Senior Hydrographer and 3 other Hydrographers in different disciplines. With the modern equipments the department maintains IHO (SP-44) standard survey. The main responsibilities of this department are:

- To carryout bathymetric survey and production of bathymetric data sheet for onward distribution to the pilots for safe navigation in the channel. Apprise the management about the up-to-date information to its entire port limits.

- To identify wrecks/underwater obstructions in the channel and apprise the same to the concerns.
- To identify sound velocity and current information within port limit area.
- Carryout capital and maintenance dredging in the port limit area to maintain the safe depth for navigation. Provide support to all stakeholders (various companies) at both bank of the river.
- Maintain, collect, preserve & analysis of tidal data from five tide gauges. Prediction and publish pocket Tide Tables for the users. Assist national agencies/organizations with relevant data for analysis or research purpose with the approval of competent Authority.

Information about navigation and hydrographic matters can be found of the CPA website at www.cpa.gov.bd

Trailing suction hopper dredger-MD KHANAK

CPA has its own dredger to maintain the channel depth as per the requirement. MD KHANAK is one of the largest dredger in Bangladesh. Dredger is also deployed to other places for dredging activities as per the requirement of the country. Dredger is controlled by hydrographic department.



General Properties

IMO number: 8900206

Call Sign: S2TB

Vessel type: TSHD

Flag: BD

Owner: CPA

Manager: CPA

Built in: 1991

Physical Properties

Length (OA): 83.5 m

Length (BP): 80 m

Width: 16.5 m

Depth: 6.75 M

Draft (loaded): 5.5 M

Numbr of engines: 2

Engine specs: Wartsila-8L26L-4Str-8cyl-26.00x32.00-850 rpm

Speed (loaded): 12 knts

Total power: 3220 kW

Hopper volume: 2500 m³

Dredging depth: 15 m

Sucition pipe diameter: 0.55 m

Number of dredging pipes: 2

Shah Amanat Bridge

Shah Amanat Bridge It is the first cable-stayed type bridge over the Karnaphuli river in the country. The length of the four-lane bridge is 950 m and its breadth is 24.40 m. The clearance of which is 16.10 m from high water level. It was constructed during the year 2006-2010 to enhance the connectivity of commercial capital Chittagong to south Chittagong as well as Cox'sbazar, the tourism city of Bangladesh.



Kalurghat Bridge

An old bridge, once the only link between the southern region of Chittagong division on the bank of the river Karnaphuli with the rest of the country. This 239 m long bridge was installed as a simple rail bridge of steel structure between Janalihat and Gomdandi railway stations in 1930. The bridge was commissioned for operation of trains in Chittagong-Dohazari section in the year 1931. Thirty-one years after its inauguration, considering the suffering of the people it was modified with decking and carpeting and turned into a rail and road-bridge in 1962. The clearance of which is 5.19 m from high water level.



IMPORTANT NOTES

The chart datum of Karnaphuli River at Sadarghat is 6.56 m below the Bench Mark 'A' in front of old CPA Building at Sadarghat.

The prediction has been Predicted from the Geo Tide 3.0.18 software. This book is meant for departmental use & not for sale.

The total predicted depth in the channel is the sum of the charted depth & the height of tide.

The predictions in this booklet do not include exceptional changes due to meteorological disturbances.

All communications relating to this publication should be made to the

Chief Hydrographer

Hydrography Department

Chittagong Port Authority

Annex Building (3rd Floor)

Bandar Bhaban

Chittagong, Bangladesh

Phone : +88 (031) 2510840

E-mail : ch@cpa.gov.bd

PHASES OF THE MOON 2018
(DAY: HOUR: MINUTE)

MONTH	NEW MOON	FULL MOON
JANUARY	17:08:17	02:08:24
		31:19:27
FEBRUARY	16:03:05	
MARCH	17:19:12	02:06:51
		31:18:37
APRIL	16:07:57	30:06:58
MAY	15:17:48	29:20:20
JUNE	14:01:43	28:10:53
JULY	13:08:48	28:02:20
AUGUST	11:15:58	26:17:56
SEPTEMBER	10:00:01	25:08:53
OCTOBER	09:09:47	24:22:45
NOVEMBER	07:22:02	23:11:39
DECEMBER	07:13:20	22:23:49

LIST OF CPA TIDE GAUGE STATION

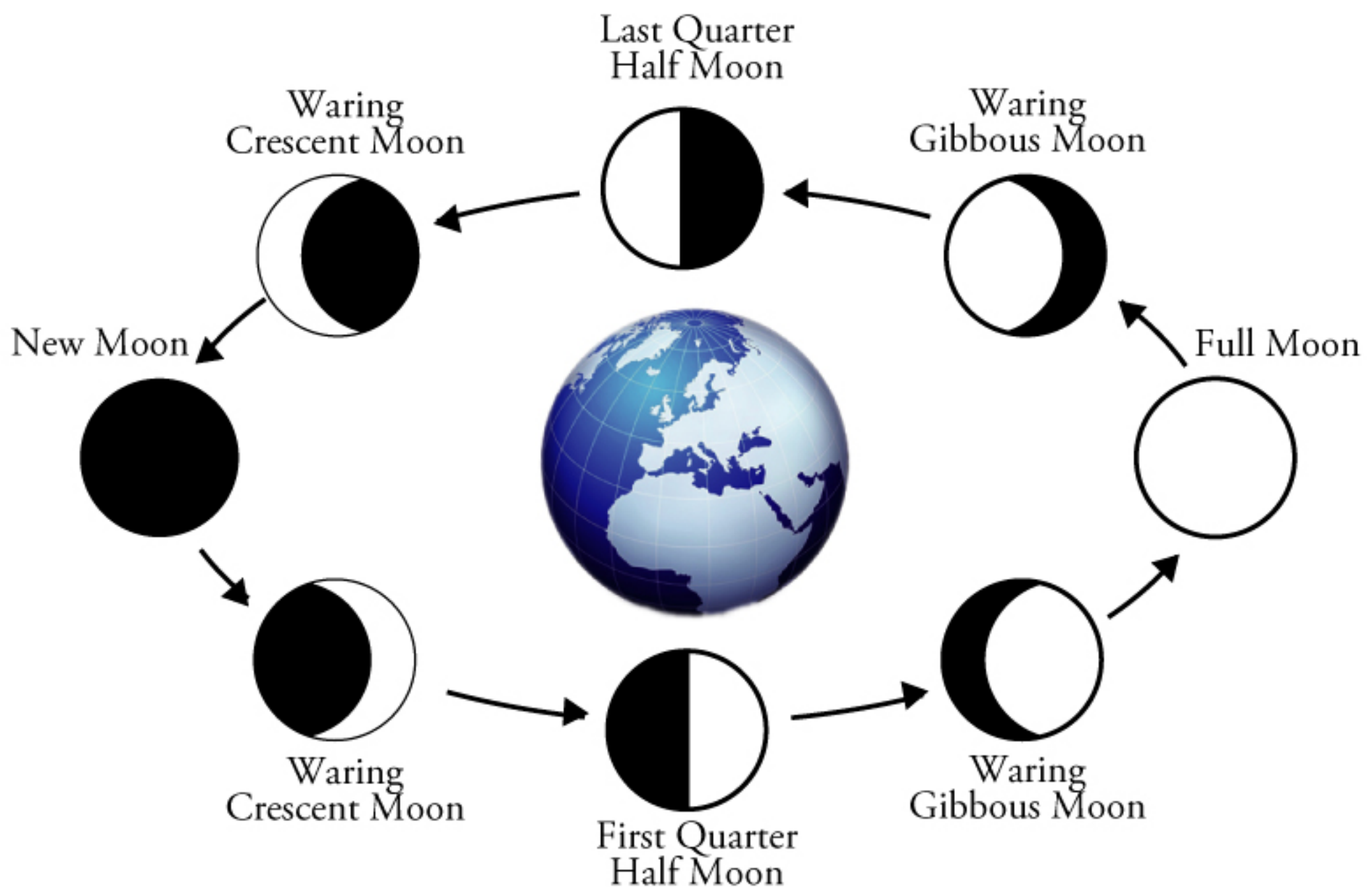
SL	TIDE GAUGE STATION (AUTO)	POSITION(AP.)
01	KHAL NO- 18	Lat:22°13'33"N Long:91°48'18"E
02	KHAL NO- 10	Lat:22°16'1.5"N Long:91°49'27"E
03	KALURGHAT	Lat:22°23'51"N Long:91°53'17"E
04	KAPTAI	Lat:22°29'37.5"N Long:92°11'34.5"E
05	SADARGHAT	Lat:22°19'27"N Long:91°50'0.5"E
06	DOCK OFFICE	Lat:22°18'06.8"N Long:91°47'47.7"E

PHASES OF THE MOON 2017

(DAY: HOUR: MINUTE)

MONTH	FIRST QTR.	LAST QTR.
JANUARY	25:04:20	09:04:25
FEBRUARY	23:14:09	07:21:54
MARCH	24:21:35	09:17:20
APRIL	23:03:46	08:13:18
MAY	22:09:49	08:08:09
JUNE	20:16:51	07:00:32
JULY	20:01:52	06:13:51
AUGUST	18:13:49	05:00:18
SEPTEMBER	17:05:15	03:08:37
OCTOBER	17:00:02	02:15:45
		31:22:40
NOVEMBER	15:20:54	30:06:19
DECEMBER	15:17:49	29:15:03

PHASES OF THE MOON



HIGHEST & LOWEST TIDE OF 2017 IN SELECTED TIDE STATION

SADARGHAT STATION (MANUAL)

HIGHEST			LOWEST		
Ht(m).	Time	Date	Ht(m).	Time	Date
5.60	13:40	24/07/17	-0.15	10:30	02/03/17

KHAL NO-10 AUTO TIDE STATION

HIGHEST			LOWEST		
Ht(m).	Time	Date	Ht(m).	Time	Date
5.95	12:30	23/07/17	-0.10	07:40	28/03/17
Online Check: http://stormcentral.waterlog.com/public/cpahydrography1					

KHAL NO-18 AUTO TIDE STATION

HIGHEST			LOWEST		
Ht(m).	Time	Date	Ht(m).	Time	Date
6.25	13:00	24/07/17	0.00	08:55	31/03/17

KALURGHAT AUTO TIDE STATION

HIGHEST			LOWEST		
Ht(m).	Time	Date	Ht(m).	Time	Date
5.57	14:20	24/07/17	-0.50	22:00	28/02/17
Online Check: http://stormcentral.waterlog.com/public/cpahydrography2					

MAX CURRENT VELOCITY OPPOSITE

KHAL NO-10 IS AS UNDER

Spring tides (S.W Monsoon) 4.5 to 5.5 kn

Neap tides (S.W Monsoon) 2.5 to 3.5 kn

Spring tides (Winter Months) upto 3 kn

Neap tides (Winter Months) upto 2 kn

Freshet Ebbs upto 8 knots

TIDAL RANGES

The tides are semi diurnal with prominent diurnal effect

At Patenga Khal no-18	1.5m - 5.5m
At Khal no-10	1.5m - 4.8m
At Sadarghat	1.2m - 4.2m
At Kalurghat	1.0m - 4.1m

01 | JANUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 MO	0048	3.55	0016	3.88	0636	0.22	0610	0.42	1 MO
	0748	-0.17	0705	0.05	1215	3.77	1155	4.12	
	1310	3.08	1242	3.49	1838	0.05	1818	0.30	
	1946	-0.32	1909	-0.07					
2 TU	0131	3.63	0101	3.96	0032	4.37	0016	4.64	2 TU
	0840	-0.18	0756	0.02	0727	0.14	0701	0.31	
	1356	3.18	1327	3.57	1300	3.88	1241	4.24	
	2036	-0.30	2000	-0.08	1928	0.01	1909	0.23	
3 WE	0214	3.67	0145	4.00	0116	4.41	0100	4.70	3 WE
	0929	-0.16	0845	0.00	0814	0.09	0749	0.24	
	1442	3.23	1412	3.60	1345	3.91	1327	4.29	
	2125	-0.24	2050	-0.05	2016	0.02	1958	0.21	
4 TH	0259	3.64	0232	3.98	0201	4.38	0146	4.69	4 TH
	1016	-0.15	0932	0.00	0901	0.08	0836	0.21	
	1530	3.22	1459	3.57	1432	3.88	1414	4.26	
	2213	-0.15	2139	0.01	2103	0.10	2046	0.26	
5 FR	0345	3.57	0320	3.91	0248	4.27	0232	4.61	5 FR
	1101	-0.15	1017	0.02	0947	0.09	0921	0.22	
	1618	3.17	1548	3.50	1522	3.80	1502	4.18	
	2302	-0.06	2228	0.07	2150	0.23	2132	0.35	
6 SA	0432	3.44	0409	3.80	0338	4.12	0319	4.47	6 SA
	1146	-0.16	1102	0.04	1032	0.13	1006	0.27	
	1708	3.09	1640	3.42	1615	3.71	1553	4.06	
	2350	0.04	2317	0.15	2239	0.38	2219	0.49	
7 SU	0521	3.27	0501	3.64	0432	3.93	0409	4.26	7 SU
	1230	-0.16	1147	0.07	1118	0.19	1052	0.38	
	1801	2.99	1737	3.34	1715	3.62	1650	3.92	
					2331	0.56	2310	0.68	
8 MO	0041	0.14	0009	0.23	0531	3.70	0505	3.99	8 MO
	0613	3.03	0555	3.43	1207	0.32	1142	0.54	
	1317	-0.12	1235	0.15	1818	3.52	1752	3.78	
	1903	2.87	1840	3.25					

01 | JANUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 TU	0140	0.24	0105	0.33	0033	0.74	0009	0.89	9 TU
	0718	2.75	0655	3.16	0634	3.42	0609	3.69	
	1410	-0.04	1329	0.27	1302	0.49	1240	0.75	
	2012	2.77	1946	3.16	1924	3.42	1900	3.66	
10 WE	0246	0.32	0208	0.44	0141	0.87	0116	1.07	10 WE
	0829	2.49	0801	2.89	0739	3.15	0719	3.41	
	1509	0.06	1432	0.40	1403	0.65	1344	0.93	
	2120	2.72	2054	3.10	2033	3.38	2011	3.60	
11 TH	0357	0.32	0316	0.51	0254	0.93	0231	1.15	11 TH
	0938	2.32	0916	2.70	0853	2.96	0839	3.24	
	1612	0.10	1539	0.46	1510	0.74	1455	1.02	
	2226	2.76	2201	3.12	2140	3.41	2124	3.65	
12 FR	0521	0.22	0435	0.48	0429	0.81	0401	1.06	12 FR
	1052	2.29	1037	2.68	1013	2.94	1002	3.25	
	1716	0.07	1647	0.42	1625	0.71	1609	0.96	
	2325	2.87	2301	3.21	2238	3.53	2225	3.79	
13 SA	0628	0.03	0544	0.35	0524	0.61	0503	0.87	13 SA
	1158	2.39	1139	2.79	1116	3.05	1058	3.39	
	1814	-0.02	1745	0.31	1719	0.58	1705	0.82	
			2350	3.33	2325	3.67	2311	3.97	
14 SU	0014	3.02	0633	0.22	0607	0.46	0547	0.71	14 SU
	0714	-0.11	1224	2.95	1159	3.21	1138	3.54	
	1245	2.54	1831	0.20	1801	0.45	1748	0.68	
	1900	-0.11					2347	4.11	
15 MO	0053	3.13	0030	3.45	0003	3.80	0624	0.60	15 MO
	0753	-0.15	0712	0.14	0644	0.38	1211	3.66	
	1321	2.66	1258	3.08	1232	3.34	1823	0.58	
	1938	-0.15	1908	0.12	1836	0.35			
16 TU	0127	3.20	0105	3.53	0036	3.89	0020	4.20	16 TU
	0825	-0.13	0745	0.11	0715	0.34	0655	0.54	
	1351	2.75	1328	3.17	1301	3.44	1240	3.75	
	2010	-0.16	1941	0.09	1907	0.28	1854	0.52	

01 | JANUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 WE	0156	3.24	0136	3.59	0105	3.93	0049	4.24	17 WE
	0854	-0.08	0815	0.10	0744	0.31	0724	0.50	
	1418	2.84	1356	3.23	1328	3.50	1308	3.81	
	2039	-0.17	2011	0.06	1938	0.22	1924	0.48	
18 TH	0224	3.29	0206	3.63	0132	3.96	0117	4.25	18 TH
	0921	-0.07	0845	0.08	0813	0.27	0753	0.45	
	1445	2.92	1423	3.28	1353	3.55	1335	3.85	
	2112	-0.18	2043	0.04	2010	0.18	1955	0.46	
19 FR	0255	3.32	0236	3.65	0201	3.97	0145	4.25	19 FR
	0952	-0.09	0915	0.05	0844	0.22	0824	0.42	
	1518	2.96	1452	3.29	1422	3.57	1404	3.85	
	2148	-0.16	2118	0.04	2045	0.19	2028	0.48	
20 SA	0330	3.29	0308	3.62	0233	3.93	0215	4.22	20 SA
	1025	-0.11	0947	0.04	0917	0.20	0856	0.41	
	1554	2.93	1524	3.26	1455	3.54	1436	3.82	
	2226	-0.12	2155	0.07	2121	0.25	2103	0.52	
21 SU	0407	3.18	0342	3.55	0307	3.85	0247	4.15	21 SU
	1058	-0.13	1020	0.05	0950	0.20	0928	0.43	
	1631	2.85	1559	3.22	1530	3.50	1510	3.77	
	2304	-0.05	2232	0.12	2157	0.33	2137	0.59	
22 MO	0444	3.05	0417	3.45	0344	3.75	0322	4.06	22 MO
	1132	-0.16	1053	0.05	1023	0.19	1001	0.45	
	1707	2.79	1636	3.19	1608	3.47	1547	3.74	
	2342	-0.01	2310	0.16	2235	0.41	2212	0.65	
23 TU	0521	2.94	0455	3.36	0423	3.64	0400	3.96	23 TU
	1207	-0.22	1128	0.03	1058	0.18	1035	0.47	
	1747	2.80	1718	3.21	1650	3.47	1630	3.74	
			2352	0.18	2316	0.49	2253	0.73	
24 WE	0024	0.02	0538	3.25	0508	3.52	0445	3.82	24 WE
	0604	2.83	1209	0.03	1140	0.20	1118	0.53	
	1249	-0.27	1807	3.22	1741	3.47	1721	3.73	
	1833	2.82					2345	0.86	

01 | JANUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 TH	0115	0.07	0042	0.23	0008	0.60	0542	3.63	25 TH
	0655	2.70	0630	3.10	0601	3.34	1213	0.65	
	1342	-0.24	1302	0.10	1234	0.31	1832	3.70	
	1933	2.80	1913	3.20	1855	3.43			
26 FR	0230	0.15	0149	0.32	0131	0.72	0059	1.00	26 FR
	0802	2.51	0743	2.92	0724	3.14	0704	3.43	
	1455	-0.15	1414	0.21	1353	0.44	1327	0.78	
	2115	2.82	2045	3.23	2027	3.49	2001	3.74	
27 SA	0402	0.13	0318	0.35	0259	0.68	0233	0.99	27 SA
	0941	2.42	0915	2.85	0853	3.07	0831	3.38	
	1618	-0.14	1541	0.23	1515	0.45	1453	0.80	
	2238	2.98	2205	3.36	2140	3.64	2118	3.89	
28 SU	0523	0.02	0440	0.27	0416	0.56	0352	0.84	28 SU
	1103	2.51	1038	2.95	1011	3.16	0951	3.49	
	1731	-0.20	1656	0.14	1626	0.38	1606	0.69	
	2344	3.18	2312	3.54	2245	3.83	2227	4.11	
29 MO	0639	-0.10	0556	0.15	0533	0.39	0505	0.64	29 MO
	1214	2.69	1146	3.14	1120	3.35	1057	3.71	
	1837	-0.25	1803	0.04	1734	0.26	1713	0.54	
					2338	4.02	2320	4.33	
30 TU	0038	3.35	0007	3.70	0631	0.22	0605	0.44	30 TU
	0741	-0.19	0658	0.03	1212	3.56	1147	3.93	
	1307	2.88	1238	3.32	1832	0.13	1812	0.37	
	1936	-0.28	1902	-0.04					
31 WE	0122	3.46	0053	3.82	0023	4.16	0005	4.51	31 WE
	0832	-0.23	0750	-0.04	0720	0.09	0654	0.28	
	1350	3.04	1321	3.45	1254	3.72	1231	4.11	
	2028	-0.27	1954	-0.08	1922	0.04	1902	0.24	

02 | FEBRUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 TH	0202	3.52	0136	3.88	0104	4.24	0047	4.61	1 TH
	0917	-0.22	0835	-0.07	0804	0.02	0738	0.18	
	1431	3.14	1402	3.52	1334	3.82	1314	4.21	
	2116	-0.23	2042	-0.08	2008	0.02	1948	0.19	
2 FR	0242	3.53	0218	3.90	0146	4.24	0129	4.64	2 FR
	1000	-0.20	0917	-0.06	0846	0.00	0820	0.14	
	1512	3.19	1444	3.54	1415	3.84	1356	4.24	
	2202	-0.16	2127	-0.04	2052	0.06	2032	0.20	
3 SA	0324	3.48	0302	3.85	0229	4.17	0211	4.59	3 SA
	1041	-0.19	0957	-0.05	0927	0.01	0901	0.14	
	1554	3.18	1528	3.51	1458	3.82	1439	4.20	
	2246	-0.08	2210	0.02	2134	0.15	2114	0.27	
4 SU	0407	3.38	0347	3.76	0313	4.04	0252	4.46	4 SU
	1119	-0.18	1035	-0.02	1005	0.05	0939	0.18	
	1635	3.14	1612	3.47	1541	3.77	1522	4.13	
	2328	-0.02	2252	0.08	2215	0.26	2153	0.38	
5 MO	0450	3.23	0431	3.63	0358	3.88	0335	4.27	5 MO
	1155	-0.17	1111	0.01	1041	0.11	1016	0.27	
	1717	3.07	1657	3.41	1626	3.70	1606	4.03	
			2332	0.14	2255	0.38	2233	0.53	
6 TU	0007	0.05	0515	3.45	0445	3.68	0420	4.03	6 TU
	0533	3.04	1148	0.07	1117	0.23	1054	0.42	
	1229	-0.14	1744	3.31	1715	3.59	1655	3.89	
	1801	2.95			2339	0.56	2317	0.74	
7 WE	0047	0.13	0014	0.24	0536	3.40	0511	3.72	7 WE
	0620	2.77	0602	3.18	1157	0.42	1138	0.66	
	1303	-0.06	1228	0.20	1815	3.42	1750	3.70	
	1857	2.78	1839	3.16					
8 TH	0139	0.25	0105	0.39	0039	0.77	0013	1.00	8 TH
	0721	2.44	0658	2.85	0636	3.07	0612	3.36	
	1351	0.09	1321	0.41	1256	0.68	1236	0.96	
	2011	2.60	1945	2.99	1925	3.23	1857	3.50	

02 | FEBRUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 FR	0251	0.34	0212	0.55	0151	0.94	0126	1.23	9 FR
	0838	2.15	0808	2.53	0747	2.76	0725	3.04	
	1510	0.23	1437	0.59	1411	0.89	1351	1.19	
	2129	2.52	2101	2.87	2042	3.13	2016	3.38	
10 SA	0408	0.33	0330	0.61	0312	0.99	0257	1.29	10 SA
	1001	2.02	0944	2.39	0921	2.63	0909	2.92	
	1629	0.23	1558	0.62	1531	0.94	1517	1.24	
	2244	2.61	2222	2.92	2159	3.21	2146	3.47	
11 SU	0555	0.15	0509	0.49	0502	0.77	0440	1.08	11 SU
	1133	2.15	1117	2.55	1058	2.78	1038	3.10	
	1744	0.10	1717	0.48	1655	0.78	1640	1.08	
	2348	2.80	2328	3.11	2304	3.41	2250	3.71	
12 MO	0653	-0.10	0613	0.27	0550	0.53	0530	0.83	12 MO
	1230	2.40	1210	2.81	1149	3.04	1124	3.35	
	1843	-0.07	1814	0.29	1745	0.57	1731	0.86	
					2348	3.62	2331	3.94	
13 TU	0035	2.99	0015	3.30	0627	0.36	0607	0.64	13 TU
	0733	-0.23	0655	0.11	1221	3.26	1157	3.57	
	1309	2.61	1246	3.02	1823	0.40	1809	0.68	
	1926	-0.17	1855	0.15					
14 WE	0111	3.12	0051	3.45	0021	3.77	0003	4.10	14 WE
	0806	-0.24	0728	0.04	0657	0.27	0637	0.51	
	1339	2.75	1315	3.16	1247	3.42	1225	3.73	
	2001	-0.18	1929	0.08	1855	0.28	1841	0.55	
15 TH	0141	3.19	0121	3.55	0048	3.87	0031	4.22	15 TH
	0837	-0.19	0758	0.02	0726	0.21	0705	0.42	
	1405	2.87	1341	3.27	1311	3.55	1251	3.87	
	2032	-0.17	1959	0.04	1926	0.19	1910	0.44	
16 FR	0208	3.27	0149	3.63	0114	3.95	0058	4.30	16 FR
	0906	-0.15	0827	0.00	0755	0.15	0733	0.32	
	1430	2.99	1405	3.36	1334	3.65	1317	3.98	
	2103	-0.17	2030	0.01	1958	0.12	1940	0.36	

02 | FEBRUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 SA	0237	3.33	0216	3.68	0141	3.99	0124	4.36	17 SA
	0935	-0.15	0856	-0.03	0825	0.10	0803	0.25	
	1459	3.08	1432	3.41	1401	3.71	1343	4.04	
	2138	-0.16	2104	-0.01	2032	0.09	2012	0.33	
18 SU	0309	3.33	0246	3.69	0211	3.98	0151	4.37	18 SU
	1006	-0.16	0927	-0.05	0856	0.06	0834	0.21	
	1532	3.09	1501	3.42	1431	3.73	1412	4.05	
	2214	-0.12	2139	0.01	2107	0.12	2045	0.35	
19 MO	0344	3.26	0318	3.64	0245	3.91	0222	4.32	19 MO
	1037	-0.18	0958	-0.06	0928	0.05	0905	0.21	
	1606	3.05	1534	3.41	1505	3.72	1443	4.03	
	2250	-0.08	2214	0.04	2141	0.17	2118	0.39	
20 TU	0420	3.14	0352	3.57	0320	3.83	0255	4.23	20 TU
	1109	-0.23	1029	-0.08	0959	0.02	0936	0.21	
	1640	3.02	1609	3.41	1541	3.73	1519	4.03	
	2326	-0.07	2250	0.05	2216	0.22	2151	0.44	
21 WE	0456	3.03	0429	3.49	0358	3.75	0332	4.12	21 WE
	1142	-0.31	1102	-0.12	1032	-0.01	1008	0.22	
	1717	3.03	1649	3.44	1621	3.74	1559	4.04	
			2328	0.05	2254	0.27	2229	0.52	
22 TH	0004	-0.07	0511	3.38	0441	3.62	0417	3.96	22 TH
	0537	2.92	1141	-0.11	1110	0.04	1047	0.31	
	1221	-0.35	1736	3.43	1709	3.70	1648	3.99	
	1802	3.01			2341	0.41	2317	0.68	
23 FR	0051	-0.03	0015	0.11	0534	3.40	0512	3.71	23 FR
	0628	2.74	0602	3.18	1200	0.22	1139	0.52	
	1310	-0.29	1231	0.02	1812	3.54	1751	3.85	
	1900	2.90	1837	3.31					
24 SA	0201	0.09	0118	0.28	0055	0.63	0027	0.91	24 SA
	0735	2.49	0713	2.91	0650	3.10	0631	3.41	
	1421	-0.11	1341	0.25	1316	0.51	1252	0.81	
	2045	2.77	2013	3.20	1956	3.43	1927	3.72	

02 | FEBRUARY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 SU	0334	0.14	0250	0.41	0234	0.71	0209	1.03	25 SU
	0924	2.33	0855	2.76	0833	2.96	0812	3.28	
	1551	-0.01	1516	0.38	1452	0.62	1430	0.95	
	2222	2.89	2147	3.26	2122	3.50	2100	3.79	
26 MO	0510	0.07	0428	0.36	0410	0.61	0345	0.90	26 MO
	1101	2.45	1034	2.88	1010	3.07	0947	3.41	
	1717	-0.04	1647	0.31	1620	0.55	1600	0.86	
	2335	3.10	2303	3.45	2236	3.70	2219	4.02	
27 TU	0638	-0.12	0555	0.17	0531	0.36	0505	0.63	27 TU
	1216	2.70	1144	3.14	1122	3.35	1057	3.71	
	1838	-0.13	1804	0.15	1736	0.36	1715	0.63	
					2332	3.91	2314	4.28	
28 WE	0030	3.28	0000	3.63	0624	0.15	0559	0.38	28 WE
	0735	-0.26	0654	-0.01	1209	3.59	1144	3.98	
	1305	2.93	1234	3.36	1830	0.19	1810	0.40	
	1936	-0.20	1901	0.02			2356	4.49	

03 | MARCH | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 TH	0112	3.41	0045	3.77	0014	4.08	0643	0.21	1 TH
	0821	-0.29	0739	-0.09	0708	0.02	1222	4.19	
	1343	3.11	1313	3.52	1244	3.78	1854	0.24	
	2024	-0.21	1948	-0.05	1915	0.07			
2 FR	0148	3.49	0123	3.86	0051	4.19	0034	4.62	2 FR
	0901	-0.26	0819	-0.10	0747	-0.05	0722	0.11	
	1417	3.24	1348	3.62	1318	3.93	1259	4.34	
	2106	-0.19	2030	-0.06	1956	0.02	1935	0.16	
3 SA	0224	3.53	0202	3.91	0129	4.23	0111	4.68	3 SA
	0939	-0.22	0856	-0.10	0825	-0.06	0759	0.06	
	1452	3.33	1424	3.68	1353	4.01	1336	4.42	
	2147	-0.15	2109	-0.04	2036	0.03	2014	0.16	
4 SU	0303	3.52	0241	3.91	0208	4.19	0149	4.64	4 SU
	1014	-0.20	0930	-0.08	0900	-0.04	0834	0.07	
	1528	3.36	1502	3.69	1431	4.02	1414	4.42	
	2226	-0.10	2147	0.00	2113	0.09	2051	0.22	
5 MO	0343	3.44	0322	3.83	0248	4.09	0227	4.54	5 MO
	1047	-0.19	1003	-0.06	0933	0.00	0908	0.12	
	1606	3.33	1542	3.65	1509	3.99	1452	4.37	
	2302	-0.06	2223	0.05	2148	0.17	2125	0.30	
6 TU	0423	3.31	0402	3.71	0328	3.94	0305	4.37	6 TU
	1118	-0.18	1035	-0.04	1003	0.06	0940	0.20	
	1643	3.28	1620	3.60	1547	3.93	1530	4.28	
	2336	-0.03	2256	0.09	2222	0.25	2158	0.42	
7 WE	0502	3.13	0441	3.55	0408	3.77	0345	4.16	7 WE
	1145	-0.18	1106	0.01	1033	0.15	1012	0.34	
	1722	3.17	1700	3.52	1627	3.83	1610	4.15	
			2331	0.15	2256	0.38	2233	0.59	
8 TH	0008	0.01	0521	3.31	0451	3.52	0428	3.88	8 TH
	0543	2.89	1139	0.12	1105	0.33	1046	0.57	
	1213	-0.12	1744	3.36	1714	3.63	1656	3.94	
	1806	2.99			2338	0.60	2315	0.87	

03 | MARCH | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 FR	0044	0.11	0010	0.29	0541	3.19	0518	3.51	9 FR
	0631	2.56	0607	2.99	1144	0.63	1129	0.92	
	1247	0.03	1219	0.35	1813	3.35	1753	3.66	
	1903	2.72	1840	3.12					
10 SA	0142	0.27	0105	0.51	0047	0.89	0019	1.20	10 SA
	0736	2.19	0708	2.62	0646	2.81	0626	3.12	
	1337	0.28	1319	0.66	1249	1.01	1236	1.31	
	2030	2.48	1956	2.88	1937	3.10	1910	3.40	
11 SU	0313	0.38	0230	0.70	0214	1.05	0152	1.41	11 SU
	0912	1.97	0837	2.36	0822	2.57	0756	2.88	
	1541	0.47	1505	0.84	1444	1.18	1423	1.49	
	2201	2.48	2129	2.81	2109	3.06	2043	3.35	
12 MO	0440	0.29	0405	0.68	0400	0.98	0343	1.32	12 MO
	1059	2.10	1038	2.48	1020	2.71	1001	3.03	
	1711	0.32	1639	0.73	1618	1.04	1601	1.35	
	2316	2.69	2253	3.00	2229	3.27	2214	3.59	
13 TU	0612	0.03	0537	0.44	0520	0.68	0500	1.00	13 TU
	1205	2.44	1142	2.83	1123	3.07	1100	3.40	
	1818	0.08	1749	0.47	1722	0.75	1706	1.05	
			2348	3.26	2323	3.55	2306	3.89	
14 WE	0009	2.95	0625	0.21	0558	0.43	0539	0.72	14 WE
	0700	-0.17	1222	3.13	1158	3.37	1134	3.71	
	1246	2.73	1833	0.27	1802	0.51	1747	0.78	
	1905	-0.08			2357	3.77	2340	4.13	
15 TH	0048	3.13	0027	3.46	0629	0.28	0610	0.53	15 TH
	0737	-0.22	0701	0.09	1223	3.60	1202	3.96	
	1316	2.93	1251	3.33	1835	0.34	1819	0.58	
	1942	-0.12	1908	0.16					
16 FR	0119	3.25	0057	3.61	0025	3.92	0008	4.31	16 FR
	0809	-0.18	0732	0.04	0659	0.19	0638	0.38	
	1342	3.07	1316	3.48	1246	3.77	1227	4.14	
	2015	-0.10	1940	0.11	1907	0.22	1849	0.43	

03 | MARCH | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 SA	0146	3.34	0124	3.72	0051	4.04	0035	4.44	17 SA
	0840	-0.14	0801	0.01	0728	0.12	0707	0.25	
	1406	3.21	1340	3.60	1308	3.91	1252	4.29	
	2049	-0.09	2012	0.06	1940	0.13	1920	0.32	
18 SU	0214	3.43	0150	3.80	0117	4.11	0100	4.54	18 SU
	0911	-0.13	0831	-0.02	0759	0.05	0737	0.14	
	1434	3.33	1405	3.68	1335	4.02	1318	4.40	
	2124	-0.08	2046	0.04	2014	0.09	1953	0.25	
19 MO	0245	3.47	0219	3.85	0148	4.12	0128	4.59	19 MO
	0942	-0.15	0902	-0.06	0831	0.00	0808	0.08	
	1506	3.39	1435	3.73	1406	4.08	1347	4.45	
	2201	-0.06	2121	0.03	2050	0.08	2026	0.24	
20 TU	0321	3.44	0253	3.84	0222	4.09	0159	4.57	20 TU
	1014	-0.18	0934	-0.09	0903	-0.03	0840	0.06	
	1541	3.40	1509	3.75	1441	4.11	1420	4.47	
	2237	-0.05	2157	0.04	2125	0.11	2100	0.27	
21 WE	0358	3.35	0329	3.78	0259	4.02	0235	4.48	21 WE
	1047	-0.23	1007	-0.12	0936	-0.06	0912	0.07	
	1618	3.38	1546	3.76	1519	4.13	1457	4.47	
	2313	-0.05	2233	0.04	2201	0.13	2135	0.31	
22 TH	0437	3.23	0409	3.69	0339	3.93	0315	4.35	22 TH
	1121	-0.29	1042	-0.13	1010	-0.05	0947	0.13	
	1658	3.36	1628	3.76	1602	4.10	1539	4.43	
	2351	-0.06	2312	0.06	2239	0.20	2214	0.40	
23 FR	0521	3.09	0454	3.55	0425	3.78	0402	4.15	23 FR
	1201	-0.29	1123	-0.07	1050	0.06	1028	0.29	
	1745	3.27	1718	3.68	1651	3.98	1630	4.32	
			2359	0.16	2328	0.37	2303	0.60	
24 SA	0040	0.00	0548	3.31	0520	3.52	0500	3.86	24 SA
	0614	2.86	1214	0.13	1142	0.33	1121	0.59	
	1252	-0.16	1822	3.49	1755	3.74	1734	4.09	
	1847	3.07							

03 | MARCH | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 SU	0152	0.13	0104	0.36	0044	0.63	0013	0.88	25 SU
	0730	2.58	0704	3.01	0644	3.20	0621	3.54	
	1405	0.07	1327	0.43	1300	0.69	1237	0.96	
	2034	2.90	1958	3.31	1938	3.54	1909	3.87	
26 MO	0320	0.19	0237	0.51	0221	0.73	0156	1.03	26 MO
	0920	2.47	0851	2.88	0827	3.09	0807	3.43	
	1538	0.20	1506	0.59	1442	0.82	1423	1.11	
	2207	2.97	2135	3.33	2108	3.57	2046	3.88	
27 TU	0507	0.10	0424	0.45	0408	0.60	0338	0.90	27 TU
	1101	2.65	1030	3.06	1011	3.28	0944	3.63	
	1722	0.15	1648	0.49	1625	0.70	1600	0.97	
	2321	3.14	2252	3.50	2227	3.74	2208	4.09	
28 WE	0626	-0.11	0546	0.22	0518	0.35	0453	0.63	28 WE
	1207	2.93	1136	3.34	1114	3.58	1050	3.95	
	1838	0.00	1802	0.28	1731	0.47	1710	0.69	
			2349	3.66	2322	3.93	2303	4.33	
29 TH	0016	3.30	0638	0.06	0607	0.17	0543	0.40	29 TH
	0719	-0.21	1222	3.56	1157	3.81	1133	4.23	
	1253	3.15	1853	0.14	1820	0.30	1759	0.46	
	1930	-0.08					2342	4.52	
30 FR	0057	3.41	0031	3.79	0001	4.08	0623	0.25	30 FR
	0801	-0.20	0720	0.01	0647	0.08	1207	4.46	
	1328	3.31	1257	3.71	1228	4.00	1839	0.30	
	2012	-0.08	1935	0.08	1901	0.19			
31 SA	0131	3.52	0106	3.90	0034	4.21	0016	4.67	31 SA
	0838	-0.15	0756	0.00	0724	0.03	0659	0.15	
	1358	3.45	1327	3.84	1257	4.17	1239	4.63	
	2051	-0.06	2013	0.07	1939	0.12	1916	0.21	

04 | APRIL | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 SU	0205	3.60	0141	3.99	0109	4.29	0051	4.75	1 SU
	0911	-0.13	0829	-0.01	0757	0.00	0732	0.10	
	1429	3.56	1400	3.93	1330	4.29	1313	4.73	
	2127	-0.04	2048	0.08	2015	0.11	1951	0.20	
2 MO	0242	3.62	0218	4.01	0147	4.28	0127	4.76	2 MO
	0943	-0.13	0900	-0.02	0829	0.00	0804	0.10	
	1504	3.60	1436	3.96	1405	4.32	1348	4.75	
	2202	-0.01	2122	0.10	2049	0.14	2025	0.23	
3 TU	0321	3.56	0257	3.96	0225	4.20	0203	4.67	3 TU
	1014	-0.13	0932	-0.01	0900	0.04	0835	0.14	
	1540	3.58	1513	3.92	1441	4.29	1423	4.69	
	2236	0.01	2154	0.14	2122	0.20	2057	0.30	
4 WE	0359	3.43	0335	3.84	0302	4.07	0240	4.53	4 WE
	1044	-0.11	1002	0.02	0929	0.11	0906	0.22	
	1616	3.51	1550	3.86	1517	4.23	1459	4.60	
	2308	0.03	2226	0.16	2153	0.26	2128	0.39	
5 TH	0435	3.26	0411	3.68	0339	3.91	0316	4.35	5 TH
	1112	-0.08	1033	0.08	0958	0.20	0937	0.36	
	1652	3.41	1626	3.78	1554	4.12	1536	4.47	
	2339	0.05	2258	0.20	2226	0.36	2201	0.53	
6 FR	0513	3.04	0447	3.49	0418	3.71	0355	4.12	6 FR
	1141	-0.03	1104	0.18	1029	0.37	1009	0.58	
	1731	3.25	1705	3.64	1635	3.95	1616	4.29	
			2335	0.30	2303	0.53	2238	0.76	
7 SA	0014	0.11	0528	3.23	0501	3.43	0439	3.81	7 SA
	0555	2.77	1141	0.39	1105	0.65	1047	0.90	
	1214	0.11	1751	3.41	1721	3.68	1704	4.02	
	1818	3.00			2352	0.81	2327	1.08	
8 SU	0100	0.26	0020	0.50	0556	3.09	0536	3.46	8 SU
	0647	2.45	0619	2.91	1152	1.03	1138	1.31	
	1258	0.35	1229	0.69	1828	3.36	1812	3.71	
	1920	2.70	1855	3.13					

04 | APRIL | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 MO	0215	0.43	0127	0.75	0121	1.06	0049	1.38	9 MO
	0807	2.19	0739	2.63	0724	2.82	0703	3.19	
	1403	0.63	1348	1.00	1342	1.37	1315	1.63	
	2105	2.55	2027	2.95	2007	3.19	1941	3.54	
10 TU	0350	0.42	0307	0.84	0250	1.08	0227	1.43	10 TU
	1009	2.25	0932	2.65	0916	2.89	0844	3.24	
	1627	0.61	1546	1.00	1526	1.28	1503	1.57	
	2232	2.70	2159	3.05	2134	3.31	2109	3.64	
11 WE	0508	0.25	0434	0.70	0410	0.89	0350	1.23	11 WE
	1124	2.60	1055	2.99	1033	3.25	1009	3.59	
	1737	0.37	1703	0.77	1636	1.01	1617	1.29	
	2332	2.96	2305	3.31	2238	3.59	2219	3.92	
12 TH	0609	0.07	0538	0.47	0509	0.64	0449	0.95	12 TH
	1210	2.94	1141	3.35	1116	3.61	1055	3.97	
	1830	0.17	1756	0.53	1726	0.73	1708	0.98	
			2349	3.56	2320	3.85	2304	4.20	
13 FR	0015	3.18	0621	0.30	0549	0.45	0529	0.71	13 FR
	0655	-0.02	1215	3.61	1147	3.89	1127	4.27	
	1243	3.18	1836	0.37	1804	0.52	1746	0.73	
	1912	0.09			2352	4.04	2336	4.42	
14 SA	0049	3.33	0023	3.74	0623	0.32	0602	0.51	14 SA
	0733	-0.02	0655	0.21	1212	4.10	1155	4.50	
	1311	3.35	1243	3.80	1840	0.37	1820	0.54	
	1950	0.09	1912	0.29					
15 SU	0118	3.46	0052	3.87	0021	4.18	0004	4.59	15 SU
	0807	0.01	0728	0.16	0655	0.22	0634	0.34	
	1338	3.51	1308	3.94	1238	4.29	1221	4.69	
	2028	0.09	1948	0.24	1916	0.27	1854	0.39	
16 MO	0147	3.57	0121	3.98	0051	4.28	0032	4.74	16 MO
	0842	0.01	0801	0.10	0729	0.12	0706	0.19	
	1408	3.64	1336	4.05	1308	4.43	1249	4.84	
	2107	0.10	2025	0.20	1953	0.20	1929	0.29	

04 | APRIL | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 TU	0222	3.64	0153	4.05	0124	4.33	0104	4.83	17 TU
	0917	-0.02	0835	0.05	0803	0.05	0740	0.09	
	1442	3.74	1409	4.12	1342	4.53	1322	4.93	
	2146	0.10	2103	0.18	2031	0.16	2005	0.24	
18 WE	0300	3.64	0230	4.07	0202	4.33	0140	4.84	18 WE
	0952	-0.05	0911	0.01	0839	0.01	0815	0.05	
	1520	3.77	1446	4.16	1421	4.57	1359	4.97	
	2226	0.10	2142	0.17	2110	0.16	2043	0.24	
19 TH	0341	3.58	0311	4.02	0243	4.28	0220	4.78	19 TH
	1029	-0.08	0949	0.00	0916	0.01	0852	0.09	
	1601	3.76	1528	4.16	1503	4.56	1440	4.94	
	2305	0.10	2221	0.18	2150	0.19	2121	0.28	
20 FR	0425	3.47	0355	3.93	0327	4.18	0304	4.64	20 FR
	1107	-0.09	1028	0.04	0955	0.07	0931	0.20	
	1646	3.69	1615	4.11	1548	4.49	1525	4.86	
	2348	0.11	2304	0.22	2233	0.27	2204	0.38	
21 SA	0513	3.30	0444	3.77	0416	4.01	0354	4.43	21 SA
	1151	-0.03	1113	0.16	1039	0.25	1016	0.42	
	1738	3.55	1708	3.98	1641	4.32	1618	4.68	
			2355	0.33	2326	0.44	2256	0.60	
22 SU	0041	0.17	0543	3.53	0517	3.76	0454	4.14	22 SU
	0612	3.07	1209	0.39	1135	0.56	1113	0.77	
	1246	0.13	1816	3.76	1750	4.05	1724	4.40	
	1845	3.33							
23 MO	0150	0.24	0102	0.50	0042	0.64	0008	0.87	23 MO
	0737	2.85	0705	3.28	0644	3.51	0618	3.85	
	1401	0.35	1325	0.66	1258	0.88	1234	1.11	
	2022	3.17	1949	3.57	1923	3.83	1855	4.15	
24 TU	0313	0.26	0228	0.61	0208	0.72	0139	1.02	24 TU
	0915	2.83	0846	3.23	0821	3.46	0758	3.79	
	1536	0.43	1502	0.77	1434	0.97	1412	1.22	
	2148	3.17	2118	3.55	2049	3.79	2025	4.10	

04 | APRIL | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 WE	0447	0.17	0404	0.56	0342	0.64	0311	0.97	25 WE
	1046	3.02	1015	3.42	0953	3.67	0926	3.99	
	1714	0.33	1636	0.66	1610	0.85	1542	1.09	
	2302	3.26	2234	3.65	2208	3.89	2144	4.21	
26 TH	0600	0.04	0520	0.41	0451	0.48	0426	0.78	26 TH
	1149	3.26	1117	3.66	1053	3.92	1029	4.28	
	1823	0.20	1745	0.48	1714	0.65	1650	0.85	
	2358	3.37	2330	3.76	2303	4.02	2242	4.37	
27 FR	0652	0.00	0613	0.30	0540	0.36	0516	0.61	27 FR
	1234	3.43	1202	3.84	1134	4.12	1111	4.53	
	1913	0.15	1835	0.37	1801	0.51	1739	0.65	
					2342	4.14	2322	4.53	
28 SA	0040	3.46	0012	3.86	0620	0.30	0556	0.49	28 SA
	0733	0.05	0653	0.25	1204	4.29	1144	4.74	
	1308	3.56	1235	3.97	1841	0.40	1818	0.51	
	1954	0.17	1915	0.33			2355	4.67	
29 SU	0113	3.56	0046	3.97	0015	4.26	0630	0.38	29 SU
	0809	0.09	0728	0.22	0655	0.24	1214	4.91	
	1337	3.69	1304	4.11	1233	4.47	1853	0.42	
	2031	0.18	1952	0.31	1918	0.33			
30 MO	0146	3.67	0119	4.08	0049	4.37	0029	4.79	30 MO
	0840	0.08	0800	0.18	0727	0.19	0701	0.30	
	1407	3.79	1335	4.21	1306	4.59	1247	5.02	
	2106	0.19	2025	0.31	1952	0.30	1927	0.38	

05 | MAY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 TU	0222	3.71	0156	4.13	0126	4.39	0104	4.83	1 TU
	0911	0.05	0831	0.15	0759	0.17	0733	0.27	
	1440	3.83	1410	4.24	1341	4.62	1321	5.03	
	2139	0.20	2057	0.32	2025	0.32	1959	0.40	
2 WE	0259	3.67	0233	4.09	0203	4.34	0140	4.78	2 WE
	0942	0.06	0902	0.17	0829	0.21	0804	0.31	
	1516	3.80	1446	4.20	1417	4.58	1356	4.96	
	2212	0.23	2129	0.35	2057	0.37	2030	0.45	
3 TH	0335	3.56	0309	3.98	0239	4.22	0215	4.67	3 TH
	1014	0.10	0934	0.22	0900	0.28	0836	0.39	
	1551	3.74	1522	4.13	1451	4.50	1431	4.87	
	2244	0.25	2201	0.38	2129	0.42	2102	0.52	
4 FR	0410	3.42	0344	3.85	0314	4.09	0250	4.53	4 FR
	1045	0.15	1005	0.29	0931	0.38	0907	0.52	
	1626	3.66	1557	4.05	1527	4.42	1506	4.77	
	2317	0.26	2233	0.41	2202	0.48	2135	0.61	
5 SA	0446	3.26	0419	3.70	0350	3.94	0327	4.36	5 SA
	1116	0.21	1038	0.39	1003	0.53	0941	0.71	
	1704	3.54	1634	3.95	1604	4.28	1544	4.63	
	2352	0.29	2309	0.47	2239	0.60	2211	0.76	
6 SU	0526	3.07	0457	3.53	0430	3.75	0408	4.16	6 SU
	1151	0.33	1115	0.55	1039	0.76	1019	0.97	
	1746	3.36	1716	3.78	1646	4.08	1627	4.43	
			2351	0.60	2322	0.79	2255	0.99	
7 MO	0034	0.37	0543	3.32	0517	3.51	0457	3.91	7 MO
	0614	2.86	1200	0.79	1124	1.06	1106	1.29	
	1233	0.51	1808	3.55	1737	3.82	1720	4.17	
	1837	3.13					2352	1.26	
8 TU	0130	0.50	0044	0.79	0021	1.01	0605	3.69	8 TU
	0713	2.67	0645	3.11	0626	3.31	1211	1.59	
	1328	0.73	1300	1.04	1224	1.36	1838	3.93	
	1942	2.92	1921	3.34	1857	3.59			

05 | MAY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 WE	0251 0847 1504 2123	0.57 2.63 0.86 2.89	0157 0820 1433 2051	0.95 3.07 1.18 3.32	0152 0804 1427 2026	1.12 3.30 1.45 3.57	0114 0737 1354 2003	1.45 3.67 1.69 3.90	9 WE
10 TH	0411 1022 1644 2237	0.49 2.88 0.70 3.07	0326 0947 1602 2203	0.93 3.30 1.05 3.48	0306 0924 1539 2136	1.03 3.55 1.24 3.74	0240 0856 1516 2114	1.41 3.89 1.51 4.04	10 TH
11 FR	0513 1118 1744 2329	0.35 3.20 0.50 3.29	0435 1046 1705 2258	0.77 3.63 0.83 3.70	0407 1020 1636 2229	0.87 3.89 0.99 3.96	0345 0958 1615 2211	1.21 4.23 1.23 4.27	11 FR
12 SA	0605 1200 1834	0.25 3.48 0.37	0528 1128 1755 2340	0.60 3.93 0.65 3.90	0457 1100 1724 2311	0.69 4.21 0.77 4.17	0435 1041 1703 2254	0.97 4.56 0.96 4.51	12 SA
13 SU	0010 0651 1235 1920	3.47 0.21 3.69 0.32	0611 1204 1839	0.47 4.14 0.54	0540 1134 1807 2348	0.53 4.46 0.60 4.34	0517 1116 1744 2329	0.73 4.83 0.74 4.72	13 SU
14 MO	0046 0732 1308 2004	3.62 0.19 3.85 0.31	0017 0651 1236 1922	4.06 0.38 4.31 0.48	0619 1207 1849	0.39 4.68 0.47	0555 1148 1824	0.52 5.07 0.56	14 MO
15 TU	0122 0813 1343 2048	3.75 0.18 3.99 0.31	0053 0731 1309 2004	4.18 0.30 4.43 0.44	0024 0658 1242 1931	4.47 0.27 4.85 0.37	0004 0633 1222 1904	4.91 0.34 5.25 0.43	15 TU
16 WE	0200 0853 1421 2132	3.84 0.16 4.08 0.31	0130 0811 1346 2046	4.27 0.24 4.52 0.41	0103 0738 1321 2014	4.56 0.18 4.95 0.32	0042 0712 1259 1945	5.04 0.22 5.36 0.35	16 WE

05 | MAY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 TH	0242	3.87	0211	4.30	0144	4.59	0123	5.09	17 TH
	0934	0.15	0852	0.21	0819	0.15	0753	0.18	
	1504	4.13	1428	4.55	1403	4.99	1341	5.39	
	2216	0.32	2129	0.40	2058	0.30	2028	0.32	
18 FR	0327	3.83	0256	4.27	0229	4.56	0207	5.05	18 FR
	1016	0.16	0935	0.23	0901	0.17	0836	0.24	
	1550	4.11	1514	4.53	1448	4.96	1426	5.35	
	2300	0.32	2213	0.41	2142	0.32	2111	0.35	
19 SA	0416	3.74	0344	4.18	0316	4.47	0254	4.94	19 SA
	1100	0.20	1020	0.30	0945	0.28	0921	0.37	
	1639	4.04	1604	4.45	1537	4.86	1514	5.23	
	2348	0.32	2300	0.45	2231	0.38	2158	0.45	
20 SU	0509	3.60	0437	4.05	0409	4.32	0346	4.75	20 SU
	1148	0.29	1109	0.44	1034	0.47	1010	0.59	
	1734	3.90	1700	4.31	1632	4.68	1608	5.03	
			2353	0.52	2326	0.49	2252	0.62	
21 MO	0042	0.33	0538	3.86	0513	4.13	0448	4.50	21 MO
	0612	3.43	1208	0.64	1132	0.73	1110	0.89	
	1246	0.44	1808	4.10	1741	4.43	1714	4.75	
	1841	3.70					2358	0.83	
22 TU	0145	0.34	0056	0.63	0032	0.62	0607	4.28	22 TU
	0730	3.30	0656	3.70	0633	3.97	1226	1.15	
	1359	0.58	1320	0.83	1251	0.98	1836	4.49	
	2002	3.53	1930	3.91	1901	4.20			
23 WE	0256	0.34	0209	0.71	0144	0.70	0112	0.99	23 WE
	0855	3.29	0825	3.67	0758	3.93	0734	4.22	
	1523	0.62	1443	0.91	1412	1.08	1348	1.27	
	2119	3.44	2050	3.82	2019	4.06	1956	4.35	
24 TH	0410	0.32	0327	0.74	0258	0.74	0228	1.06	24 TH
	1016	3.42	0945	3.80	0919	4.05	0853	4.34	
	1645	0.57	1606	0.86	1536	1.04	1508	1.23	
	2232	3.42	2204	3.82	2135	4.04	2110	4.32	

05 | MAY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 FR	0520	0.30	0441	0.69	0412	0.71	0343	1.02	25 FR
	1120	3.57	1048	3.96	1020	4.23	0957	4.54	
	1755	0.48	1718	0.74	1647	0.89	1620	1.07	
	2332	3.46	2303	3.87	2235	4.10	2213	4.39	
26 SA	0616	0.31	0539	0.62	0506	0.65	0440	0.92	26 SA
	1208	3.69	1135	4.10	1104	4.39	1043	4.75	
	1849	0.44	1811	0.65	1737	0.75	1713	0.91	
			2348	3.94	2319	4.18	2258	4.51	
27 SU	0018	3.52	0623	0.56	0549	0.59	0524	0.80	27 SU
	0701	0.35	1210	4.21	1138	4.54	1119	4.93	
	1245	3.79	1854	0.61	1819	0.65	1755	0.77	
	1933	0.44			2355	4.30	2335	4.65	
28 MO	0054	3.61	0025	4.04	0625	0.52	0601	0.67	28 MO
	0738	0.36	0700	0.51	1210	4.70	1152	5.10	
	1316	3.89	1241	4.34	1857	0.58	1832	0.68	
	2011	0.45	1931	0.59					
29 TU	0127	3.71	0100	4.15	0031	4.41	0010	4.78	29 TU
	0811	0.33	0733	0.45	0659	0.45	0634	0.56	
	1346	3.98	1313	4.43	1244	4.80	1225	5.20	
	2046	0.46	2005	0.59	1932	0.55	1905	0.63	
30 WE	0202	3.77	0135	4.21	0107	4.46	0045	4.85	30 WE
	0843	0.30	0805	0.42	0732	0.42	0706	0.51	
	1419	4.02	1348	4.47	1319	4.83	1259	5.21	
	2119	0.48	2037	0.61	2005	0.56	1937	0.63	
31 TH	0236	3.77	0211	4.20	0142	4.44	0119	4.85	31 TH
	0916	0.31	0838	0.43	0804	0.44	0739	0.53	
	1452	4.02	1422	4.44	1354	4.80	1332	5.17	
	2151	0.51	2108	0.63	2037	0.59	2008	0.66	

06 | JUNE | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 FR	0310	3.71	0245	4.13	0216	4.37	0153	4.78	1 FR
	0948	0.36	0910	0.48	0836	0.50	0811	0.60	
	1526	3.99	1456	4.39	1427	4.75	1406	5.10	
	2223	0.52	2140	0.64	2110	0.62	2040	0.69	
2 SA	0344	3.64	0319	4.04	0250	4.29	0226	4.70	2 SA
	1021	0.41	0943	0.55	0909	0.58	0844	0.71	
	1601	3.95	1531	4.34	1502	4.69	1440	5.02	
	2257	0.52	2214	0.66	2144	0.65	2114	0.74	
3 SU	0421	3.55	0354	3.95	0325	4.20	0302	4.60	3 SU
	1056	0.48	1018	0.63	0943	0.70	0920	0.85	
	1639	3.87	1608	4.26	1538	4.60	1517	4.92	
	2333	0.52	2250	0.68	2220	0.70	2151	0.82	
4 MO	0502	3.44	0432	3.86	0404	4.09	0341	4.47	4 MO
	1132	0.56	1056	0.74	1020	0.86	0958	1.02	
	1720	3.74	1649	4.14	1618	4.46	1558	4.78	
			2329	0.75	2259	0.80	2230	0.96	
5 TU	0012	0.55	0515	3.74	0447	3.96	0425	4.33	5 TU
	0545	3.32	1139	0.90	1102	1.06	1041	1.23	
	1213	0.67	1735	3.98	1703	4.28	1644	4.60	
	1805	3.59			2344	0.93	2315	1.14	
6 WE	0057	0.61	0013	0.86	0539	3.85	0518	4.20	6 WE
	0635	3.22	0605	3.63	1152	1.26	1133	1.45	
	1301	0.81	1228	1.06	1758	4.08	1740	4.39	
	1856	3.43	1830	3.81					
7 TH	0152	0.66	0104	0.97	0041	1.04	0010	1.31	7 TH
	0735	3.19	0712	3.58	0652	3.80	0629	4.13	
	1403	0.93	1331	1.20	1259	1.41	1239	1.60	
	1959	3.32	1940	3.70	1915	3.95	1857	4.25	
8 FR	0300	0.67	0209	1.04	0153	1.08	0120	1.40	8 FR
	0856	3.28	0833	3.68	0812	3.93	0750	4.24	
	1535	0.94	1455	1.22	1435	1.37	1407	1.58	
	2120	3.34	2055	3.73	2031	3.98	2011	4.27	

06 | JUNE | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 SA	0412	0.60	0325	1.00	0303	1.00	0237	1.32	9 SA
	1011	3.52	0943	3.92	0917	4.19	0855	4.49	
	1652	0.79	1611	1.08	1542	1.18	1519	1.38	
	2229	3.47	2201	3.87	2133	4.10	2114	4.41	
10 SU	0514	0.50	0432	0.86	0402	0.87	0339	1.12	10 SU
	1108	3.78	1039	4.19	1010	4.48	0951	4.80	
	1754	0.64	1713	0.91	1641	0.97	1617	1.13	
	2325	3.63	2257	4.04	2228	4.27	2209	4.61	
11 MO	0609	0.42	0528	0.72	0455	0.72	0431	0.88	11 MO
	1157	4.00	1126	4.42	1057	4.75	1038	5.10	
	1849	0.55	1808	0.78	1735	0.79	1708	0.89	
			2346	4.21	2317	4.45	2257	4.84	
12 TU	0013	3.79	0618	0.60	0545	0.57	0519	0.66	12 TU
	0659	0.38	1208	4.60	1139	4.97	1119	5.36	
	1240	4.16	1858	0.70	1825	0.65	1756	0.69	
	1941	0.51					2340	5.05	
13 WE	0057	3.92	0030	4.35	0001	4.62	0605	0.47	13 WE
	0747	0.35	0706	0.51	0632	0.43	1200	5.56	
	1321	4.29	1248	4.73	1220	5.16	1843	0.54	
	2030	0.51	1947	0.66	1913	0.53			
14 TH	0140	4.03	0112	4.45	0045	4.75	0024	5.22	14 TH
	0833	0.35	0752	0.45	0718	0.33	0651	0.34	
	1403	4.39	1328	4.82	1302	5.28	1242	5.69	
	2119	0.52	2034	0.63	2000	0.46	1929	0.44	
15 FR	0225	4.08	0156	4.50	0129	4.83	0109	5.32	15 FR
	0920	0.35	0839	0.43	0804	0.29	0737	0.29	
	1448	4.43	1412	4.86	1347	5.31	1326	5.73	
	2206	0.52	2121	0.62	2048	0.42	2016	0.39	
16 SA	0313	4.08	0243	4.49	0215	4.82	0155	5.32	16 SA
	1007	0.39	0926	0.47	0851	0.33	0825	0.33	
	1537	4.42	1500	4.83	1433	5.27	1413	5.69	
	2254	0.51	2207	0.62	2135	0.41	2103	0.39	

06 | JUNE | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 SU	0405	4.03	0332	4.42	0304	4.76	0243	5.24	17 SU
	1055	0.45	1014	0.54	0939	0.43	0913	0.43	
	1627	4.36	1551	4.74	1523	5.16	1502	5.57	
	2342	0.48	2255	0.63	2224	0.43	2150	0.44	
18 MO	0458	3.94	0425	4.33	0356	4.65	0334	5.09	18 MO
	1145	0.53	1105	0.65	1029	0.58	1003	0.59	
	1720	4.23	1646	4.60	1617	4.99	1554	5.38	
			2344	0.65	2315	0.48	2240	0.55	
19 TU	0032	0.46	0524	4.21	0456	4.51	0432	4.89	19 TU
	0556	3.83	1200	0.78	1124	0.78	1058	0.82	
	1240	0.63	1749	4.41	1720	4.76	1654	5.12	
	1819	4.05					2335	0.72	
20 WE	0126	0.45	0038	0.71	0010	0.57	0541	4.71	20 WE
	0703	3.73	0633	4.09	0606	4.39	1202	1.06	
	1343	0.74	1303	0.92	1230	0.98	1805	4.82	
	1928	3.84	1900	4.21	1831	4.51			
21 TH	0225	0.48	0138	0.81	0110	0.71	0037	0.92	21 TH
	0818	3.67	0749	4.03	0720	4.31	0657	4.60	
	1453	0.81	1413	1.02	1340	1.13	1313	1.23	
	2040	3.66	2013	4.03	1941	4.28	1918	4.57	
22 FR	0328	0.54	0244	0.91	0213	0.85	0143	1.10	22 FR
	0931	3.68	0902	4.04	0833	4.31	0810	4.60	
	1605	0.84	1527	1.07	1451	1.19	1426	1.31	
	2148	3.53	2124	3.92	2052	4.12	2030	4.41	
23 SA	0433	0.60	0354	0.96	0320	0.94	0252	1.19	23 SA
	1038	3.73	1009	4.11	0939	4.39	0917	4.68	
	1720	0.81	1643	1.02	1612	1.13	1542	1.26	
	2255	3.49	2230	3.89	2200	4.09	2140	4.38	
24 SU	0535	0.63	0500	0.93	0427	0.94	0359	1.16	24 SU
	1134	3.82	1103	4.21	1032	4.50	1013	4.83	
	1823	0.73	1745	0.93	1713	0.99	1646	1.11	
	2351	3.53	2325	3.94	2256	4.15	2236	4.47	

06 | JUNE | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 MO	0628	0.63	0554	0.86	0519	0.87	0454	1.04	25 MO
	1218	3.91	1147	4.31	1115	4.64	1057	5.01	
	1913	0.67	1834	0.85	1759	0.86	1734	0.96	
					2340	4.26	2319	4.61	
26 TU	0035	3.61	0009	4.03	0602	0.77	0538	0.89	26 TU
	0711	0.60	0637	0.77	1152	4.78	1135	5.17	
	1255	4.01	1224	4.43	1840	0.78	1815	0.85	
	1955	0.65	1915	0.81			2356	4.76	
27 WE	0112	3.71	0046	4.14	0017	4.39	0615	0.76	27 WE
	0749	0.56	0715	0.70	0640	0.68	1209	5.29	
	1327	4.09	1258	4.52	1227	4.89	1850	0.78	
	2031	0.66	1952	0.80	1916	0.73			
28 TH	0145	3.79	0121	4.22	0052	4.48	0030	4.87	28 TH
	0824	0.55	0749	0.67	0714	0.63	0649	0.68	
	1359	4.15	1331	4.58	1301	4.94	1242	5.34	
	2104	0.70	2024	0.81	1950	0.72	1921	0.75	
29 FR	0215	3.84	0154	4.25	0125	4.52	0102	4.91	29 FR
	0857	0.56	0821	0.67	0747	0.61	0721	0.66	
	1429	4.19	1403	4.60	1333	4.96	1313	5.34	
	2135	0.73	2055	0.82	2022	0.72	1952	0.74	
30 SA	0246	3.87	0226	4.25	0156	4.53	0133	4.92	30 SA
	0929	0.59	0854	0.68	0819	0.63	0753	0.68	
	1501	4.21	1435	4.60	1405	4.96	1344	5.32	
	2206	0.74	2126	0.81	2054	0.71	2023	0.74	

07 | JULY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 SU	0319	3.88	0258	4.23	0228	4.52	0205	4.90	1 SU
	1003	0.63	0927	0.71	0852	0.67	0827	0.73	
	1537	4.20	1508	4.58	1438	4.93	1417	5.28	
	2240	0.73	2159	0.81	2127	0.70	2057	0.74	
2 MO	0357	3.84	0333	4.20	0301	4.48	0239	4.85	2 MO
	1039	0.68	1003	0.77	0927	0.74	0902	0.81	
	1614	4.15	1545	4.53	1514	4.86	1452	5.21	
	2315	0.72	2233	0.82	2201	0.72	2131	0.78	
3 TU	0436	3.77	0409	4.13	0338	4.41	0316	4.78	3 TU
	1116	0.74	1040	0.86	1003	0.85	0939	0.92	
	1653	4.04	1623	4.43	1551	4.75	1530	5.10	
	2350	0.72	2308	0.85	2236	0.77	2207	0.84	
4 WE	0516	3.69	0448	4.07	0417	4.34	0355	4.70	4 WE
	1154	0.81	1119	0.95	1042	0.97	1017	1.04	
	1733	3.93	1704	4.30	1632	4.62	1612	4.96	
			2344	0.89	2314	0.82	2244	0.93	
5 TH	0027	0.71	0531	4.02	0500	4.29	0439	4.62	5 TH
	0558	3.65	1200	1.05	1124	1.10	1100	1.18	
	1236	0.87	1751	4.17	1718	4.47	1659	4.80	
	1818	3.82			2356	0.88	2328	1.03	
6 FR	0110	0.71	0025	0.92	0552	4.26	0531	4.57	6 FR
	0646	3.66	0622	3.99	1215	1.22	1153	1.32	
	1325	0.94	1250	1.15	1814	4.31	1756	4.63	
	1910	3.71	1846	4.04					
7 SA	0202	0.72	0115	0.98	0049	0.96	0021	1.14	7 SA
	0746	3.68	0728	4.01	0704	4.27	0641	4.57	
	1432	1.00	1355	1.23	1328	1.31	1301	1.43	
	2015	3.62	1957	3.95	1931	4.19	1912	4.51	
8 SU	0308	0.74	0221	1.04	0200	1.01	0129	1.21	8 SU
	0908	3.76	0846	4.12	0823	4.40	0800	4.70	
	1601	0.98	1520	1.21	1454	1.24	1427	1.39	
	2136	3.61	2113	3.97	2047	4.19	2026	4.52	

07 | JULY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 MO	0424	0.70	0340	1.01	0314	0.97	0247	1.15	9 MO
	1024	3.94	0957	4.31	0929	4.61	0907	4.93	
	1716	0.86	1636	1.08	1603	1.08	1538	1.19	
	2246	3.70	2222	4.09	2153	4.29	2132	4.66	
10 TU	0532	0.63	0452	0.90	0419	0.85	0353	0.96	10 TU
	1126	4.14	1057	4.53	1027	4.86	1007	5.21	
	1823	0.75	1743	0.94	1708	0.91	1639	0.96	
	2347	3.84	2323	4.25	2253	4.47	2232	4.89	
11 WE	0633	0.56	0553	0.76	0520	0.70	0451	0.75	11 WE
	1219	4.31	1149	4.73	1118	5.10	1059	5.49	
	1924	0.68	1843	0.83	1809	0.74	1737	0.74	
					2345	4.68	2323	5.14	
12 TH	0039	3.99	0015	4.41	0616	0.55	0546	0.54	12 TH
	0728	0.51	0650	0.65	1204	5.30	1144	5.73	
	1305	4.45	1234	4.88	1902	0.59	1829	0.55	
	2018	0.65	1937	0.76					
13 FR	0126	4.12	0101	4.54	0031	4.87	0010	5.36	13 FR
	0821	0.50	0741	0.58	0707	0.41	0638	0.36	
	1348	4.55	1317	4.98	1248	5.45	1229	5.90	
	2109	0.64	2026	0.71	1951	0.47	1918	0.41	
14 SA	0211	4.21	0145	4.62	0116	4.99	0056	5.51	14 SA
	0911	0.51	0831	0.55	0756	0.34	0728	0.26	
	1432	4.60	1400	5.03	1332	5.50	1313	5.98	
	2156	0.63	2113	0.68	2038	0.39	2005	0.32	
15 SU	0258	4.25	0231	4.63	0200	5.03	0142	5.55	15 SU
	1000	0.54	0919	0.57	0844	0.35	0816	0.24	
	1519	4.59	1446	5.00	1417	5.46	1358	5.96	
	2243	0.61	2158	0.67	2124	0.36	2051	0.28	
16 MO	0346	4.23	0318	4.60	0247	5.00	0228	5.51	16 MO
	1048	0.60	1007	0.62	0930	0.42	0903	0.30	
	1606	4.53	1535	4.91	1505	5.35	1444	5.85	
	2328	0.58	2242	0.66	2209	0.36	2134	0.31	

07 | JULY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 TU	0435	4.18	0408	4.54	0335	4.92	0315	5.39	17 TU
	1136	0.66	1055	0.70	1017	0.54	0949	0.43	
	1655	4.41	1626	4.78	1555	5.18	1532	5.65	
			2326	0.68	2253	0.41	2218	0.39	
18 WE	0012	0.57	0500	4.46	0427	4.81	0405	5.23	18 WE
	0524	4.11	1143	0.80	1106	0.70	1036	0.62	
	1224	0.73	1721	4.60	1650	4.95	1624	5.38	
	1746	4.24			2340	0.52	2304	0.56	
19 TH	0058	0.58	0012	0.73	0527	4.68	0502	5.03	19 TH
	0619	4.00	0558	4.35	1159	0.90	1129	0.87	
	1316	0.83	1235	0.92	1752	4.67	1725	5.03	
	1844	4.00	1822	4.37			2355	0.81	
20 FR	0147	0.65	0101	0.84	0031	0.71	0608	4.83	20 FR
	0727	3.87	0703	4.23	0633	4.52	1231	1.14	
	1415	0.94	1334	1.07	1301	1.11	1833	4.67	
	1952	3.75	1929	4.11	1858	4.36			
21 SA	0243	0.76	0159	1.00	0129	0.95	0055	1.10	21 SA
	0838	3.76	0812	4.12	0742	4.39	0719	4.67	
	1519	1.04	1442	1.20	1407	1.28	1341	1.35	
	2101	3.53	2038	3.88	2007	4.08	1945	4.38	
22 SU	0344	0.86	0305	1.14	0233	1.14	0203	1.33	22 SU
	0947	3.71	0923	4.07	0853	4.33	0832	4.61	
	1634	1.06	1559	1.24	1527	1.33	1459	1.42	
	2210	3.40	2154	3.76	2123	3.94	2104	4.24	
23 MO	0452	0.90	0420	1.17	0347	1.21	0318	1.39	23 MO
	1054	3.76	1032	4.11	1000	4.38	0943	4.69	
	1758	0.95	1721	1.13	1651	1.19	1621	1.30	
	2325	3.42	2306	3.81	2238	3.99	2216	4.32	
24 TU	0559	0.84	0529	1.07	0457	1.11	0429	1.28	24 TU
	1152	3.87	1129	4.24	1057	4.53	1039	4.87	
	1856	0.78	1819	0.96	1745	1.00	1718	1.10	
			2359	3.94	2333	4.15	2306	4.49	

07 | JULY | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 WE	0022	3.54	0622	0.93	0547	0.95	0522	1.08	25 WE
	0653	0.74	1213	4.38	1140	4.70	1122	5.08	
	1237	4.00	1903	0.84	1827	0.85	1801	0.93	
	1940	0.69					2344	4.68	
26 TH	0102	3.67	0039	4.09	0010	4.32	0603	0.90	26 TH
	0737	0.67	0704	0.81	0628	0.81	1157	5.24	
	1312	4.11	1249	4.50	1215	4.84	1836	0.82	
	2018	0.68	1940	0.80	1904	0.76			
27 FR	0134	3.79	0112	4.20	0041	4.47	0017	4.85	27 FR
	0814	0.65	0740	0.75	0703	0.71	0638	0.76	
	1343	4.19	1320	4.60	1246	4.95	1228	5.35	
	2051	0.72	2013	0.79	1936	0.71	1907	0.73	
28 SA	0201	3.88	0141	4.29	0109	4.58	0047	4.97	28 SA
	0847	0.66	0812	0.73	0735	0.64	0709	0.66	
	1411	4.26	1348	4.67	1315	5.03	1257	5.43	
	2122	0.76	2043	0.80	2006	0.67	1936	0.67	
29 SU	0227	3.98	0210	4.35	0137	4.67	0116	5.06	29 SU
	0918	0.68	0842	0.72	0806	0.60	0740	0.60	
	1441	4.33	1417	4.72	1344	5.08	1325	5.47	
	2151	0.78	2113	0.79	2037	0.63	2006	0.61	
30 MO	0257	4.06	0239	4.38	0206	4.72	0145	5.10	30 MO
	0951	0.70	0914	0.72	0838	0.59	0812	0.58	
	1513	4.36	1448	4.73	1416	5.08	1355	5.48	
	2222	0.77	2143	0.78	2108	0.60	2038	0.57	
31 TU	0333	4.06	0312	4.37	0237	4.72	0216	5.09	31 TU
	1026	0.74	0948	0.76	0912	0.63	0845	0.60	
	1549	4.31	1522	4.68	1449	5.03	1427	5.43	
	2255	0.77	2214	0.79	2140	0.61	2110	0.57	

08 | AUGUST | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 WE	0409	4.01	0346	4.32	0311	4.68	0249	5.05	1 WE
	1101	0.79	1023	0.82	0946	0.70	0919	0.66	
	1626	4.20	1557	4.59	1525	4.93	1502	5.34	
	2327	0.76	2246	0.80	2211	0.63	2142	0.60	
2 TH	0445	3.94	0421	4.27	0347	4.64	0324	4.99	2 TH
	1136	0.83	1059	0.89	1020	0.78	0954	0.74	
	1703	4.09	1635	4.47	1603	4.82	1540	5.21	
	2359	0.72	2318	0.80	2244	0.63	2215	0.63	
3 FR	0523	3.92	0500	4.26	0426	4.61	0403	4.95	3 FR
	1213	0.85	1136	0.94	1057	0.85	1031	0.84	
	1743	3.99	1717	4.36	1645	4.69	1623	5.05	
			2353	0.78	2320	0.65	2253	0.70	
4 SA	0035	0.67	0544	4.25	0512	4.58	0449	4.90	4 SA
	0606	3.93	1219	1.00	1141	0.96	1116	0.99	
	1255	0.87	1807	4.21	1735	4.50	1714	4.84	
	1831	3.88					2340	0.84	
5 SU	0120	0.66	0038	0.82	0006	0.75	0546	4.81	5 SU
	0659	3.90	0640	4.21	0609	4.51	1216	1.19	
	1353	0.94	1316	1.10	1241	1.12	1823	4.59	
	1932	3.71	1913	4.03	1841	4.27			
6 MO	0221	0.73	0137	0.93	0109	0.93	0041	1.04	6 MO
	0814	3.84	0800	4.17	0736	4.44	0709	4.74	
	1519	1.00	1439	1.19	1414	1.20	1342	1.32	
	2059	3.58	2038	3.92	2011	4.13	1950	4.47	
7 TU	0343	0.79	0300	1.03	0236	1.03	0204	1.16	7 TU
	0954	3.91	0925	4.26	0859	4.55	0834	4.84	
	1645	0.94	1607	1.12	1534	1.12	1510	1.21	
	2224	3.62	2200	3.99	2130	4.19	2108	4.56	
8 WE	0504	0.74	0425	0.97	0355	0.95	0327	1.06	8 WE
	1108	4.09	1039	4.46	1008	4.77	0947	5.09	
	1808	0.81	1728	0.96	1655	0.94	1623	0.97	
	2336	3.78	2311	4.18	2242	4.40	2219	4.81	

08 | AUGUST | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 TH	0618 1209 1916	0.64 4.29 0.67	0540 1138 1837	0.82 4.68 0.78	0508 1106 1803 2338	0.77 5.03 0.69 4.67	0437 1047 1728 2314	0.83 5.41 0.70 5.13	9 TH
10 FR	0035 0721 1257 2011	3.97 0.55 4.45 0.58	0008 0644 1226 1930	4.39 0.66 4.86 0.65	0610 1154 1855	0.55 5.27 0.47	0539 1135 1822	0.55 5.70 0.45	10 FR
11 SA	0121 0815 1338 2058	4.14 0.50 4.55 0.55	0054 0737 1308 2017	4.55 0.54 4.98 0.57	0023 0702 1236 1941	4.91 0.37 5.45 0.31	0001 0633 1218 1908	5.40 0.30 5.92 0.26	11 SA
12 SU	0201 0904 1417 2142	4.26 0.50 4.61 0.55	0135 0825 1349 2100	4.66 0.49 5.04 0.54	0104 0749 1318 2024	5.08 0.25 5.53 0.22	0044 0720 1300 1952	5.60 0.14 6.03 0.15	12 SU
13 MO	0241 0951 1459 2225	4.33 0.53 4.60 0.55	0217 0910 1432 2142	4.70 0.48 5.03 0.54	0144 0833 1400 2106	5.16 0.23 5.50 0.20	0127 0805 1342 2033	5.68 0.08 6.03 0.12	13 MO
14 TU	0324 1036 1543 2306	4.34 0.57 4.53 0.56	0301 0954 1517 2222	4.69 0.53 4.94 0.55	0227 0917 1444 2146	5.16 0.29 5.38 0.24	0209 0848 1425 2113	5.66 0.12 5.91 0.15	14 TU
15 WE	0407 1119 1628 2345	4.31 0.62 4.42 0.57	0346 1037 1603 2301	4.64 0.60 4.81 0.58	0310 0959 1530 2225	5.09 0.40 5.20 0.32	0252 0929 1508 2152	5.56 0.23 5.70 0.24	15 WE
16 TH	0450 1201 1713	4.24 0.68 4.25	0432 1119 1651 2340	4.57 0.69 4.62 0.64	0355 1041 1618 2304	4.98 0.55 4.97 0.46	0336 1010 1555 2231	5.41 0.41 5.41 0.42	16 TH

08 | AUGUST | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 FR	0024	0.60	0520	4.46	0443	4.82	0424	5.19	17 FR
	0535	4.13	1203	0.81	1124	0.74	1054	0.66	
	1244	0.77	1742	4.37	1710	4.66	1646	5.05	
	1802	4.01			2346	0.69	2313	0.71	
18 SA	0104	0.69	0021	0.76	0540	4.59	0518	4.91	18 SA
	0627	3.95	0614	4.28	1217	1.01	1146	1.00	
	1332	0.89	1252	0.98	1812	4.29	1746	4.61	
	1902	3.70	1841	4.05					
19 SU	0152	0.84	0111	0.96	0039	1.01	0005	1.09	19 SU
	0739	3.72	0718	4.06	0650	4.31	0624	4.59	
	1431	1.03	1353	1.17	1322	1.27	1253	1.35	
	2015	3.39	1950	3.72	1922	3.91	1858	4.20	
20 MO	0256	1.00	0216	1.18	0148	1.31	0114	1.46	20 MO
	0858	3.56	0832	3.88	0806	4.10	0742	4.35	
	1541	1.11	1507	1.29	1436	1.43	1414	1.55	
	2132	3.20	2113	3.52	2045	3.68	2025	3.96	
21 TU	0410	1.06	0335	1.29	0308	1.44	0238	1.63	21 TU
	1014	3.54	0956	3.85	0926	4.07	0909	4.33	
	1725	1.03	1648	1.22	1628	1.34	1555	1.47	
	2300	3.23	2245	3.58	2224	3.74	2159	4.05	
22 WE	0532	0.95	0504	1.18	0438	1.31	0409	1.51	22 WE
	1125	3.68	1109	4.00	1040	4.25	1023	4.55	
	1837	0.75	1800	0.95	1730	1.05	1702	1.19	
			2346	3.80	2327	4.00	2256	4.31	
23 TH	0008	3.44	0607	0.95	0535	1.04	0510	1.22	23 TH
	0637	0.74	1200	4.21	1130	4.49	1110	4.83	
	1217	3.88	1846	0.74	1812	0.81	1746	0.93	
	1921	0.57					2334	4.58	
24 FR	0049	3.65	0027	4.01	0002	4.25	0552	0.95	24 FR
	0723	0.59	0651	0.76	0616	0.81	1144	5.06	
	1256	4.03	1237	4.38	1204	4.70	1820	0.74	
	1958	0.51	1922	0.64	1846	0.66			

08 | AUGUST | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 SA	0120 0801 1327 2031	3.81 0.54 4.14 0.55	0059 0727 1306 1954	4.18 0.66 4.51 0.62	0029 0650 1231 1917	4.46 0.65 4.86 0.56	0004 0626 1214 1849	4.82 0.73 5.24 0.61	25 SA
26 SU	0146 0834 1354 2101	3.93 0.56 4.23 0.60	0126 0758 1332 2024	4.30 0.62 4.61 0.62	0053 0721 1257 1945	4.62 0.54 4.99 0.50	0032 0656 1242 1918	5.01 0.56 5.37 0.49	26 SU
27 MO	0210 0905 1421 2130	4.05 0.58 4.32 0.63	0151 0828 1358 2052	4.39 0.60 4.69 0.62	0117 0751 1324 2014	4.76 0.46 5.07 0.44	0059 0725 1308 1947	5.14 0.43 5.47 0.39	27 MO
28 TU	0236 0937 1450 2200	4.16 0.60 4.37 0.63	0218 0858 1426 2121	4.44 0.59 4.73 0.61	0143 0822 1353 2044	4.85 0.42 5.10 0.41	0126 0756 1334 2016	5.23 0.36 5.51 0.33	28 TU
29 WE	0308 1010 1525 2230	4.20 0.63 4.33 0.63	0248 0931 1457 2151	4.45 0.60 4.70 0.61	0212 0854 1425 2114	4.88 0.43 5.06 0.40	0154 0828 1404 2047	5.25 0.34 5.48 0.32	29 WE
30 TH	0343 1045 1600 2301	4.16 0.66 4.23 0.61	0321 1005 1531 2221	4.42 0.65 4.61 0.61	0245 0927 1459 2144	4.87 0.47 4.97 0.40	0224 0900 1437 2117	5.22 0.39 5.39 0.34	30 TH
31 FR	0418 1119 1637 2332	4.10 0.69 4.10 0.56	0355 1039 1608 2253	4.39 0.69 4.50 0.58	0320 1000 1536 2216	4.84 0.53 4.86 0.40	0258 0933 1514 2149	5.17 0.45 5.25 0.37	31 FR

09 | SEPTEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 SA	0454	4.06	0433	4.37	0358	4.81	0335	5.12	1 SA
	1154	0.68	1114	0.72	1034	0.58	1008	0.55	
	1717	3.98	1650	4.37	1618	4.71	1556	5.06	
			2328	0.56	2251	0.44	2226	0.46	
2 SU	0007	0.50	0516	4.34	0443	4.73	0420	5.03	2 SU
	0536	4.02	1156	0.77	1115	0.69	1051	0.72	
	1234	0.68	1740	4.18	1707	4.48	1648	4.80	
	1805	3.82			2336	0.59	2311	0.66	
3 MO	0052	0.51	0012	0.62	0538	4.55	0515	4.85	3 MO
	0629	3.91	0611	4.23	1213	0.92	1149	0.99	
	1331	0.76	1252	0.91	1813	4.16	1756	4.47	
	1907	3.58	1845	3.92					
4 TU	0152	0.64	0112	0.80	0038	0.88	0013	0.98	4 TU
	0747	3.73	0730	4.07	0703	4.33	0634	4.62	
	1455	0.84	1414	1.05	1347	1.11	1316	1.22	
	2045	3.40	2018	3.74	1951	3.95	1929	4.28	
5 WE	0317	0.75	0238	0.97	0213	1.08	0140	1.21	5 WE
	0940	3.74	0906	4.07	0839	4.33	0814	4.60	
	1624	0.81	1550	1.01	1518	1.06	1455	1.17	
	2218	3.47	2152	3.82	2123	4.02	2100	4.37	
6 TH	0447	0.72	0411	0.94	0344	1.00	0316	1.14	6 TH
	1058	3.93	1029	4.26	0958	4.54	0938	4.84	
	1802	0.65	1722	0.81	1653	0.82	1619	0.90	
	2337	3.70	2307	4.07	2241	4.31	2216	4.69	
7 FR	0614	0.57	0537	0.74	0508	0.75	0436	0.85	7 FR
	1200	4.14	1131	4.49	1059	4.82	1041	5.18	
	1908	0.45	1828	0.56	1755	0.51	1724	0.57	
					2335	4.62	2310	5.05	
8 SA	0033	3.93	0002	4.31	0607	0.47	0538	0.50	8 SA
	0718	0.43	0640	0.53	1146	5.07	1128	5.49	
	1247	4.29	1219	4.67	1842	0.27	1813	0.29	
	1958	0.35	1918	0.42			2353	5.35	

09 | SEPTEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 SU	0114 0808 1325 2041	4.11 0.36 4.39 0.34	0045 0729 1258 2001	4.48 0.39 4.79 0.36	0015 0654 1225 1924	4.87 0.26 5.25 0.13	0626 1208 1855	0.20 5.71 0.10	9 SU
10 MO	0149 0853 1401 2122	4.24 0.35 4.45 0.36	0122 0813 1335 2040	4.60 0.33 4.86 0.35	0050 0737 1303 2004	5.06 0.14 5.34 0.06	0032 0710 1247 1934	5.56 0.02 5.83 0.00	10 MO
11 TU	0224 0936 1440 2200	4.33 0.37 4.45 0.39	0200 0855 1415 2118	4.66 0.33 4.86 0.36	0127 0818 1343 2042	5.17 0.10 5.33 0.06	0111 0750 1327 2012	5.67 -0.05 5.83 -0.02	11 TU
12 WE	0301 1017 1521 2237	4.35 0.41 4.39 0.41	0240 0935 1456 2155	4.66 0.37 4.78 0.39	0206 0858 1425 2119	5.18 0.15 5.21 0.13	0151 0830 1407 2049	5.66 -0.01 5.71 0.04	12 WE
13 TH	0340 1057 1603 2313	4.31 0.46 4.26 0.45	0322 1014 1539 2231	4.61 0.44 4.64 0.43	0246 0936 1507 2154	5.11 0.26 5.03 0.24	0231 0908 1448 2124	5.56 0.09 5.51 0.16	13 TH
14 FR	0420 1135 1645 2347	4.23 0.52 4.08 0.50	0404 1051 1622 2307	4.51 0.53 4.44 0.50	0326 1013 1549 2228	4.98 0.40 4.79 0.40	0311 0945 1530 2159	5.39 0.26 5.23 0.35	14 FR
15 SA	0501 1212 1729	4.10 0.58 3.84	0446 1130 1706 2343	4.39 0.63 4.19 0.62	0408 1051 1635 2303	4.80 0.58 4.49 0.64	0352 1022 1615 2237	5.16 0.50 4.88 0.65	15 SA
16 SU	0020 0546 1251 1819	0.59 3.89 0.68 3.52	0532 1212 1757	4.20 0.78 3.87	0454 1133 1727 2345	4.53 0.84 4.11 0.99	0438 1106 1707 2321	4.85 0.84 4.45 1.05	16 SU

09 | SEPTEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 MO	0057	0.75	0026	0.83	0553	4.17	0535	4.46	17 MO
	0642	3.60	0627	3.93	1232	1.16	1205	1.24	
	1343	0.82	1306	0.99	1837	3.69	1814	4.00	
	1927	3.16	1901	3.50					
18 TU	0153	0.98	0125	1.10	0053	1.39	0023	1.50	18 TU
	0806	3.31	0739	3.64	0716	3.83	0650	4.10	
	1454	0.94	1418	1.17	1351	1.40	1328	1.54	
	2056	2.92	2026	3.24	2004	3.41	1940	3.70	
19 WE	0329	1.10	0249	1.27	0229	1.59	0157	1.77	19 WE
	0935	3.22	0906	3.50	0843	3.70	0822	3.97	
	1616	0.92	1546	1.18	1525	1.40	1505	1.54	
	2229	2.98	2211	3.30	2154	3.48	2131	3.79	
20 TH	0457	0.97	0422	1.21	0407	1.45	0337	1.66	20 TH
	1051	3.35	1036	3.64	1010	3.87	0955	4.17	
	1759	0.68	1725	0.93	1703	1.09	1634	1.24	
	2342	3.28	2319	3.59	2305	3.83	2237	4.14	
21 FR	0611	0.68	0540	0.93	0515	1.10	0449	1.29	21 FR
	1150	3.59	1135	3.90	1109	4.18	1050	4.51	
	1849	0.43	1816	0.66	1746	0.77	1720	0.91	
					2342	4.16	2316	4.50	
22 SA	0025	3.57	0002	3.89	0556	0.79	0532	0.94	22 SA
	0700	0.46	0627	0.68	1144	4.45	1127	4.80	
	1232	3.80	1214	4.13	1819	0.56	1755	0.66	
	1927	0.32	1853	0.49			2346	4.78	
23 SU	0057	3.77	0035	4.10	0008	4.42	0606	0.66	23 SU
	0738	0.37	0703	0.53	0629	0.57	1157	5.02	
	1305	3.93	1244	4.29	1211	4.65	1825	0.48	
	2000	0.33	1925	0.43	1848	0.43			
24 MO	0124	3.91	0102	4.25	0030	4.61	0014	4.99	24 MO
	0812	0.38	0735	0.47	0659	0.43	0637	0.45	
	1332	4.03	1310	4.41	1236	4.79	1224	5.17	
	2031	0.38	1954	0.42	1917	0.34	1854	0.34	

09 | SEPTEMBER | 2018

		KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
		Time	m	Time	m	Time	m	Time	m	
25		0147	4.03	0127	4.35	0053	4.77	0040	5.14	25
		0844	0.41	0805	0.44	0730	0.33	0706	0.30	
TU	○	1357	4.12	1334	4.50	1302	4.90	1249	5.27	○ TU
		2100	0.41	2023	0.42	1945	0.27	1922	0.23	
26		0213	4.14	0153	4.41	0118	4.88	0105	5.23	26
		0917	0.42	0837	0.41	0801	0.27	0737	0.21	
WE		1426	4.18	1401	4.55	1330	4.94	1314	5.33	WE
		2130	0.41	2052	0.40	2015	0.22	1952	0.16	
27		0243	4.20	0222	4.43	0148	4.93	0132	5.26	27
		0952	0.43	0910	0.41	0834	0.25	0809	0.18	
TH		1501	4.17	1433	4.53	1402	4.91	1343	5.32	TH
		2201	0.39	2124	0.38	2046	0.19	2023	0.13	
28		0318	4.18	0255	4.42	0221	4.94	0202	5.25	28
		1027	0.45	0945	0.43	0908	0.27	0842	0.20	
FR		1538	4.08	1508	4.46	1438	4.83	1417	5.23	FR
		2234	0.37	2156	0.36	2119	0.19	2054	0.16	
29		0355	4.12	0332	4.38	0258	4.90	0237	5.20	29
		1102	0.45	1021	0.45	0942	0.31	0916	0.26	
SA		1617	3.94	1547	4.34	1517	4.70	1456	5.08	SA
		2308	0.33	2231	0.35	2152	0.22	2128	0.23	
30		0434	4.05	0412	4.34	0338	4.82	0316	5.12	30
		1139	0.44	1058	0.49	1018	0.38	0952	0.37	
SU		1659	3.78	1631	4.18	1600	4.52	1540	4.87	SU
		2345	0.31	2309	0.37	2230	0.32	2207	0.37	

10 | OCTOBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 MO	0518	3.93	0458	4.25	0424	4.67	0402	4.96	1 MO
	1221	0.46	1142	0.56	1101	0.52	1036	0.56	
	1749	3.56	1723	3.95	1652	4.26	1634	4.58	
			2357	0.48	2317	0.55	2254	0.64	
2 TU	0032	0.38	0555	4.08	0520	4.41	0459	4.70	2 TU
	0614	3.73	1241	0.71	1202	0.78	1136	0.86	
	1321	0.54	1833	3.67	1803	3.92	1744	4.25	
	1858	3.30					2359	1.01	
3 WE	0136	0.55	0101	0.69	0023	0.90	0620	4.41	3 WE
	0741	3.50	0716	3.86	0649	4.12	1307	1.10	
	1442	0.60	1404	0.84	1336	0.97	1923	4.06	
	2044	3.17	2013	3.52	1948	3.75			
4 TH	0304	0.67	0229	0.85	0203	1.09	0133	1.25	4 TH
	0928	3.49	0855	3.82	0828	4.08	0803	4.34	
	1613	0.55	1539	0.78	1513	0.90	1446	1.05	
	2218	3.33	2149	3.67	2125	3.91	2058	4.21	
5 FR	0443	0.60	0405	0.79	0344	0.97	0313	1.14	5 FR
	1045	3.65	1018	3.98	0949	4.26	0929	4.54	
	1748	0.36	1708	0.56	1642	0.62	1611	0.78	
	2331	3.60	2300	3.95	2238	4.23	2212	4.55	
6 SA	0609	0.40	0529	0.57	0503	0.67	0433	0.81	6 SA
	1147	3.82	1120	4.17	1051	4.50	1033	4.84	
	1850	0.19	1810	0.35	1738	0.35	1711	0.47	
			2352	4.17	2327	4.51	2303	4.90	
7 SU	0023	3.83	0628	0.37	0556	0.40	0530	0.46	7 SU
	0707	0.25	1207	4.32	1136	4.69	1119	5.09	
	1233	3.93	1857	0.24	1823	0.17	1756	0.24	
	1937	0.15					2343	5.17	
8 MO	0102	3.98	0032	4.32	0003	4.73	0615	0.20	8 MO
	0754	0.20	0715	0.26	0641	0.22	1157	5.28	
	1311	4.02	1245	4.42	1213	4.84	1836	0.08	
	2018	0.17	1937	0.21	1902	0.07			

10 | OCTOBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 TU	0134 0836 1345 2055	4.10 0.20 4.09 0.20	0106 0756 1319 2014	4.43 0.22 4.49 0.20	0035 0721 1249 1939	4.90 0.11 4.93 0.02	0018 0655 1233 1912	5.36 0.04 5.39 0.00	9 TU
10 WE	0205 0916 1422 2130	4.18 0.22 4.12 0.21	0140 0835 1356 2050	4.50 0.21 4.51 0.21	0109 0800 1327 2014	5.02 0.07 4.94 0.03	0054 0733 1310 1948	5.46 -0.02 5.40 0.00	10 WE
11 TH	0239 0954 1501 2204	4.20 0.25 4.06 0.24	0218 0912 1436 2125	4.50 0.25 4.44 0.24	0146 0837 1406 2049	5.03 0.11 4.84 0.10	0131 0809 1349 2022	5.45 0.01 5.30 0.07	11 TH
12 FR	0317 1032 1541 2238	4.14 0.29 3.92 0.29	0258 0948 1516 2200	4.43 0.31 4.30 0.30	0223 0912 1446 2121	4.94 0.21 4.67 0.23	0209 0845 1427 2056	5.34 0.11 5.12 0.20	12 FR
13 SA	0355 1107 1620 2309	4.03 0.34 3.73 0.35	0338 1023 1556 2233	4.31 0.39 4.10 0.39	0301 0946 1525 2153	4.79 0.34 4.44 0.39	0246 0919 1506 2129	5.16 0.26 4.87 0.39	13 SA
14 SU	0433 1140 1700 2339	3.89 0.38 3.51 0.44	0417 1058 1635 2308	4.17 0.47 3.88 0.50	0339 1020 1604 2225	4.61 0.48 4.18 0.60	0324 0954 1547 2204	4.94 0.45 4.58 0.65	14 SU
15 MO	0513 1215 1743	3.70 0.44 3.23	0458 1136 1719 2346	4.00 0.58 3.61 0.67	0419 1056 1649 2301	4.36 0.68 3.86 0.91	0405 1033 1633 2243	4.66 0.72 4.23 1.00	15 MO
16 TU	0012 0600 1258 1839	0.57 3.43 0.54 2.91	0545 1223 1815	3.75 0.75 3.29	0506 1144 1750 2348	4.04 0.95 3.50 1.29	0453 1123 1732 2335	4.33 1.06 3.85 1.41	16 TU

10 | OCTOBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 WE	0054	0.78	0035	0.91	0615	3.66	0600	3.96	17 WE
	0702	3.10	0646	3.45	1304	1.22	1238	1.37	
	1405	0.67	1329	0.94	1921	3.23	1854	3.57	
	2011	2.67	1937	3.05					
18 TH	0209	1.01	0155	1.13	0143	1.60	0104	1.73	18 TH
	0846	2.89	0810	3.23	0751	3.44	0727	3.74	
	1528	0.68	1453	1.00	1429	1.27	1409	1.46	
	2149	2.74	2116	3.07	2100	3.29	2033	3.60	
19 FR	0413	0.91	0328	1.12	0313	1.50	0245	1.68	19 FR
	1009	2.97	0941	3.27	0917	3.52	0858	3.81	
	1645	0.53	1614	0.86	1551	1.10	1532	1.28	
	2300	3.05	2234	3.36	2219	3.63	2155	3.92	
20 SA	0525	0.64	0447	0.91	0430	1.18	0404	1.37	20 SA
	1112	3.19	1052	3.51	1026	3.79	1012	4.10	
	1752	0.32	1722	0.62	1657	0.80	1635	0.98	
	2349	3.39	2323	3.69	2304	4.00	2243	4.31	
21 SU	0621	0.38	0545	0.64	0521	0.84	0457	1.00	21 SU
	1200	3.42	1138	3.76	1110	4.08	1057	4.40	
	1840	0.18	1808	0.42	1737	0.56	1717	0.72	
					2335	4.29	2318	4.61	
22 MO	0026	3.63	0000	3.95	0558	0.58	0536	0.70	22 MO
	0704	0.25	0627	0.46	1142	4.30	1131	4.63	
	1236	3.57	1212	3.95	1811	0.39	1751	0.51	
	1919	0.15	1844	0.32			2347	4.82	
23 TU	0055	3.78	0030	4.12	0001	4.50	0609	0.49	23 TU
	0741	0.22	0702	0.36	0631	0.41	1159	4.78	
	1305	3.67	1241	4.07	1210	4.45	1822	0.36	
	1952	0.17	1916	0.28	1841	0.28			
24 WE	0121	3.90	0058	4.22	0026	4.66	0015	4.96	24 WE
	0817	0.23	0736	0.31	0703	0.29	0641	0.33	
	1333	3.77	1308	4.16	1238	4.56	1225	4.88	
	2025	0.18	1947	0.25	1912	0.19	1853	0.23	

10 | OCTOBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 TH	0149	3.99	0126	4.28	0053	4.78	0041	5.06	25 TH
	0853	0.23	0811	0.27	0737	0.21	0714	0.23	
	1404	3.84	1337	4.22	1308	4.61	1252	4.96	
	2058	0.16	2021	0.21	1945	0.11	1924	0.14	
26 FR	0221	4.05	0157	4.31	0125	4.85	0110	5.11	26 FR
	0931	0.22	0848	0.25	0813	0.17	0749	0.18	
	1440	3.85	1411	4.22	1343	4.60	1324	4.97	
	2133	0.14	2056	0.18	2020	0.07	1958	0.11	
27 SA	0258	4.05	0233	4.31	0201	4.85	0143	5.11	27 SA
	1010	0.22	0926	0.25	0850	0.16	0825	0.18	
	1520	3.78	1449	4.17	1421	4.53	1401	4.91	
	2210	0.12	2133	0.17	2056	0.08	2034	0.14	
28 SU	0338	3.99	0313	4.27	0241	4.80	0221	5.05	28 SU
	1049	0.23	1006	0.26	0929	0.20	0902	0.23	
	1603	3.64	1532	4.05	1503	4.40	1443	4.77	
	2248	0.13	2213	0.19	2134	0.15	2112	0.25	
29 MO	0421	3.88	0357	4.20	0324	4.68	0303	4.93	29 MO
	1129	0.23	1047	0.30	1009	0.28	0943	0.34	
	1650	3.46	1620	3.89	1550	4.22	1531	4.56	
	2330	0.17	2257	0.26	2216	0.31	2154	0.43	
30 TU	0510	3.71	0447	4.07	0413	4.49	0351	4.74	30 TU
	1217	0.26	1136	0.38	1057	0.43	1031	0.53	
	1746	3.24	1716	3.67	1646	3.97	1627	4.29	
			2350	0.39	2307	0.58	2246	0.72	
31 WE	0021	0.29	0547	3.87	0513	4.20	0451	4.46	31 WE
	0610	3.48	1237	0.49	1203	0.64	1135	0.78	
	1319	0.31	1832	3.45	1808	3.71	1742	4.01	
	1905	3.03					2356	1.04	

11 | NOVEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 TH	0129	0.46	0058	0.57	0019	0.90	0615	4.18	1 TH
	0741	3.26	0708	3.66	0644	3.93	1302	0.95	
	1435	0.31	1355	0.56	1328	0.74	1921	3.91	
	2043	3.02	2011	3.39	1947	3.65			
2 FR	0259	0.53	0224	0.65	0158	1.02	0130	1.20	2 FR
	0913	3.23	0840	3.59	0814	3.86	0751	4.09	
	1600	0.23	1520	0.51	1457	0.67	1430	0.91	
	2209	3.22	2138	3.57	2117	3.84	2050	4.07	
3 SA	0435	0.41	0352	0.58	0333	0.88	0302	1.08	3 SA
	1027	3.31	1001	3.66	0934	3.95	0914	4.20	
	1721	0.09	1640	0.36	1617	0.49	1550	0.72	
	2315	3.47	2244	3.81	2223	4.12	2200	4.36	
4 SU	0552	0.22	0510	0.41	0447	0.62	0419	0.81	4 SU
	1129	3.40	1104	3.78	1037	4.09	1020	4.38	
	1822	0.00	1742	0.23	1713	0.31	1649	0.52	
			2334	3.98	2311	4.34	2250	4.63	
5 MO	0006	3.65	0608	0.26	0539	0.41	0514	0.55	5 MO
	0649	0.10	1152	3.87	1124	4.21	1106	4.54	
	1217	3.47	1829	0.16	1758	0.20	1734	0.37	
	1909	0.01			2347	4.49	2327	4.83	
6 TU	0045	3.75	0014	4.09	0623	0.27	0558	0.35	6 TU
	0736	0.07	0655	0.19	1200	4.31	1143	4.67	
	1256	3.53	1230	3.95	1836	0.14	1813	0.26	
	1949	0.05	1909	0.14					
7 WE	0118	3.83	0047	4.17	0018	4.62	0001	4.98	7 WE
	0817	0.08	0735	0.16	0703	0.18	0637	0.23	
	1330	3.61	1304	4.02	1235	4.40	1218	4.76	
	2024	0.06	1945	0.12	1912	0.10	1848	0.19	
8 TH	0148	3.90	0121	4.23	0051	4.71	0035	5.05	8 TH
	0855	0.10	0813	0.17	0740	0.15	0714	0.18	
	1406	3.65	1339	4.05	1312	4.42	1254	4.79	
	2057	0.05	2020	0.12	1946	0.10	1923	0.18	

11 | NOVEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 FR	0221	3.91	0157	4.23	0127	4.71	0111	5.03	9 FR
	0931	0.12	0849	0.20	0815	0.19	0749	0.21	
	1443	3.61	1417	4.00	1349	4.35	1331	4.73	
	2130	0.07	2054	0.15	2018	0.15	1957	0.24	
10 SA	0256	3.84	0235	4.16	0203	4.62	0147	4.92	10 SA
	1006	0.16	0923	0.25	0849	0.27	0823	0.30	
	1521	3.49	1455	3.87	1427	4.20	1407	4.58	
	2203	0.12	2128	0.23	2050	0.26	2030	0.37	
11 SU	0332	3.74	0313	4.04	0239	4.48	0223	4.76	11 SU
	1039	0.20	0956	0.31	0921	0.37	0856	0.41	
	1557	3.33	1531	3.70	1502	4.02	1444	4.40	
	2234	0.19	2201	0.31	2121	0.40	2102	0.53	
12 MO	0409	3.61	0351	3.91	0313	4.33	0259	4.59	12 MO
	1110	0.22	1029	0.35	0953	0.46	0929	0.54	
	1634	3.16	1608	3.53	1538	3.83	1521	4.20	
	2305	0.26	2235	0.40	2153	0.56	2136	0.72	
13 TU	0446	3.47	0429	3.77	0350	4.15	0337	4.40	13 TU
	1143	0.22	1105	0.41	1027	0.56	1006	0.70	
	1714	2.98	1647	3.36	1618	3.62	1603	3.97	
	2339	0.35	2312	0.51	2229	0.78	2213	0.96	
14 WE	0528	3.27	0510	3.59	0431	3.91	0419	4.16	14 WE
	1222	0.25	1147	0.50	1108	0.72	1049	0.91	
	1802	2.77	1735	3.16	1708	3.38	1654	3.72	
			2357	0.67	2311	1.06	2259	1.25	
15 TH	0019	0.49	0559	3.36	0521	3.62	0512	3.89	15 TH
	0617	3.01	1238	0.64	1202	0.92	1146	1.15	
	1312	0.33	1841	2.98	1829	3.19	1805	3.52	
	1904	2.58							
16 FR	0112	0.68	0054	0.85	0008	1.36	0001	1.52	16 FR
	0720	2.75	0708	3.12	0646	3.36	0631	3.64	
	1425	0.40	1350	0.75	1333	1.05	1309	1.31	
	2053	2.57	2013	2.96	1958	3.20	1930	3.49	

11 | NOVEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 SA	0256	0.79	0222	0.94	0218	1.43	0144	1.61	17 SA
	0908	2.65	0832	3.03	0812	3.30	0753	3.58	
	1546	0.33	1510	0.72	1447	0.97	1430	1.27	
	2208	2.82	2132	3.16	2115	3.43	2049	3.68	
18 SU	0429	0.59	0343	0.82	0327	1.21	0303	1.42	18 SU
	1021	2.78	0947	3.13	0923	3.43	0908	3.70	
	1650	0.19	1615	0.57	1549	0.80	1535	1.09	
	2302	3.13	2231	3.45	2212	3.75	2153	3.99	
19 MO	0528	0.35	0446	0.61	0426	0.92	0405	1.13	19 MO
	1115	2.97	1046	3.34	1020	3.65	1011	3.92	
	1744	0.05	1709	0.39	1641	0.60	1627	0.87	
	2345	3.39	2316	3.72	2253	4.05	2239	4.28	
20 TU	0619	0.17	0538	0.42	0514	0.66	0454	0.86	20 TU
	1158	3.14	1131	3.52	1104	3.84	1055	4.12	
	1829	-0.02	1753	0.26	1723	0.43	1709	0.66	
			2353	3.91	2326	4.27	2314	4.50	
21 WE	0021	3.58	0623	0.29	0556	0.46	0535	0.64	21 WE
	0704	0.07	1208	3.67	1140	4.00	1128	4.27	
	1234	3.27	1833	0.18	1801	0.29	1745	0.49	
	1910	-0.05			2357	4.44	2345	4.66	
22 TH	0054	3.70	0027	4.02	0634	0.33	0613	0.49	22 TH
	0747	0.04	0705	0.22	1213	4.11	1159	4.40	
	1308	3.37	1241	3.77	1838	0.17	1821	0.35	
	1949	-0.06	1911	0.12					
23 FR	0127	3.79	0059	4.09	0029	4.56	0016	4.77	23 FR
	0829	0.03	0746	0.18	0714	0.24	0651	0.37	
	1344	3.46	1315	3.84	1248	4.19	1231	4.50	
	2028	-0.08	1951	0.08	1916	0.08	1858	0.25	
24 SA	0202	3.85	0135	4.13	0105	4.64	0049	4.84	24 SA
	0911	0.03	0828	0.15	0754	0.18	0730	0.30	
	1423	3.49	1353	3.87	1326	4.22	1308	4.54	
	2108	-0.09	2032	0.05	1956	0.03	1937	0.21	

11 | NOVEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 SU	0242	3.86	0214	4.14	0144	4.65	0127	4.84	25 SU
	0954	0.04	0910	0.14	0836	0.16	0811	0.28	
	1507	3.46	1435	3.83	1408	4.18	1350	4.51	
	2150	-0.08	2114	0.06	2038	0.06	2018	0.25	
26 MO	0325	3.80	0258	4.10	0227	4.59	0209	4.79	26 MO
	1038	0.05	0954	0.15	0920	0.18	0855	0.31	
	1554	3.36	1521	3.75	1454	4.08	1435	4.41	
	2233	-0.03	2200	0.10	2122	0.16	2102	0.36	
27 TU	0413	3.69	0345	4.03	0313	4.47	0254	4.67	27 TU
	1124	0.05	1040	0.18	1006	0.24	0940	0.39	
	1646	3.22	1611	3.62	1544	3.93	1525	4.24	
	2320	0.06	2249	0.19	2209	0.32	2150	0.52	
28 WE	0505	3.53	0437	3.90	0404	4.28	0345	4.49	28 WE
	1214	0.05	1130	0.22	1058	0.34	1031	0.51	
	1744	3.06	1709	3.46	1644	3.74	1623	4.04	
			2345	0.30	2303	0.56	2245	0.74	
29 TH	0014	0.18	0537	3.72	0507	4.03	0446	4.26	29 TH
	0605	3.33	1229	0.28	1159	0.44	1133	0.66	
	1312	0.05	1825	3.33	1808	3.60	1740	3.86	
	1900	2.94					2354	0.95	
30 FR	0123	0.31	0051	0.41	0015	0.80	0606	4.02	30 FR
	0724	3.12	0652	3.51	0631	3.80	1245	0.76	
	1420	0.02	1337	0.32	1311	0.50	1908	3.82	
	2025	2.96	1954	3.33	1932	3.60			

12 | DECEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
1 SA	0247	0.34	0208	0.46	0141	0.89	0115	1.06	1 SA
	0846	3.00	0814	3.38	0750	3.66	0730	3.89	
	1532	-0.03	1450	0.31	1424	0.50	1400	0.79	
	2143	3.11	2112	3.46	2051	3.74	2027	3.93	
2 SU	0410	0.25	0326	0.42	0304	0.81	0236	1.01	2 SU
	0959	2.97	0932	3.34	0906	3.62	0848	3.86	
	1643	-0.07	1602	0.27	1539	0.46	1515	0.74	
	2248	3.27	2217	3.61	2156	3.92	2135	4.12	
3 MO	0525	0.12	0441	0.33	0422	0.64	0354	0.86	3 MO
	1104	2.97	1039	3.37	1014	3.65	0959	3.91	
	1746	-0.08	1706	0.21	1641	0.38	1619	0.65	
	2341	3.39	2310	3.73	2248	4.06	2229	4.29	
4 TU	0626	0.02	0544	0.23	0518	0.47	0454	0.67	4 TU
	1158	3.00	1133	3.41	1107	3.70	1052	3.99	
	1836	-0.06	1757	0.16	1729	0.32	1709	0.56	
			2353	3.80	2328	4.17	2311	4.43	
5 WE	0025	3.46	0634	0.18	0604	0.36	0542	0.53	5 WE
	0715	-0.02	1215	3.46	1149	3.77	1132	4.08	
	1241	3.05	1840	0.13	1809	0.27	1751	0.47	
	1918	-0.04					2346	4.53	
6 TH	0101	3.52	0030	3.86	0002	4.26	0622	0.44	6 TH
	0758	-0.02	0716	0.16	0645	0.29	1207	4.16	
	1318	3.12	1251	3.53	1224	3.84	1828	0.40	
	1954	-0.05	1918	0.11	1846	0.23			
7 FR	0133	3.57	0104	3.90	0036	4.32	0021	4.60	7 FR
	0836	0.00	0754	0.17	0722	0.28	0659	0.41	
	1353	3.18	1326	3.57	1300	3.88	1242	4.21	
	2027	-0.07	1953	0.10	1920	0.21	1903	0.38	
8 SA	0205	3.58	0140	3.91	0111	4.33	0056	4.59	8 SA
	0911	0.03	0828	0.19	0757	0.31	0734	0.43	
	1428	3.17	1401	3.55	1336	3.86	1317	4.19	
	2058	-0.07	2027	0.12	1952	0.23	1936	0.42	

12 | DECEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
9 SU	0238	3.54	0216	3.86	0145	4.26	0130	4.52	9 SU
	0942	0.07	0900	0.22	0829	0.36	0807	0.49	
	1501	3.12	1436	3.48	1410	3.77	1351	4.11	
	2130	-0.03	2100	0.18	2023	0.29	2008	0.51	
10 MO	0311	3.48	0252	3.78	0219	4.17	0204	4.41	10 MO
	1012	0.09	0932	0.25	0859	0.40	0838	0.55	
	1535	3.04	1510	3.38	1442	3.67	1424	4.00	
	2203	0.02	2133	0.23	2055	0.38	2040	0.62	
11 TU	0346	3.40	0327	3.70	0251	4.07	0237	4.30	11 TU
	1043	0.07	1004	0.25	0930	0.42	0910	0.60	
	1610	2.95	1544	3.29	1515	3.57	1458	3.89	
	2237	0.07	2207	0.28	2129	0.48	2113	0.74	
12 WE	0422	3.30	0404	3.62	0326	3.96	0312	4.18	12 WE
	1116	0.04	1038	0.25	1004	0.44	0945	0.67	
	1649	2.85	1621	3.21	1552	3.47	1537	3.77	
	2313	0.13	2245	0.33	2205	0.61	2150	0.87	
13 TH	0502	3.16	0442	3.50	0403	3.82	0351	4.04	13 TH
	1152	0.02	1116	0.28	1041	0.50	1023	0.76	
	1731	2.73	1702	3.12	1634	3.35	1620	3.65	
	2352	0.21	2326	0.42	2245	0.78	2231	1.03	
14 FR	0544	2.98	0523	3.34	0446	3.63	0434	3.86	14 FR
	1232	0.04	1157	0.35	1122	0.59	1106	0.90	
	1819	2.63	1751	3.02	1726	3.24	1713	3.53	
					2332	0.98	2318	1.20	
15 SA	0037	0.33	0013	0.53	0537	3.41	0527	3.66	15 SA
	0632	2.78	0611	3.15	1212	0.71	1157	1.05	
	1319	0.08	1244	0.45	1846	3.19	1825	3.46	
	1917	2.57	1855	2.96					
16 SU	0132	0.45	0109	0.64	0031	1.14	0018	1.35	16 SU
	0729	2.60	0712	2.97	0655	3.23	0644	3.49	
	1419	0.12	1343	0.53	1320	0.79	1306	1.16	
	2045	2.63	2016	3.02	2002	3.28	1940	3.52	

12 | DECEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
17 MO	0257	0.49	0225	0.68	0218	1.14	0149	1.37	17 MO
	0851	2.51	0829	2.90	0812	3.19	0758	3.45	
	1535	0.09	1501	0.51	1439	0.74	1426	1.12	
	2159	2.85	2126	3.20	2107	3.49	2046	3.70	
18 TU	0430	0.33	0345	0.57	0326	0.95	0306	1.21	18 TU
	1010	2.58	0941	2.96	0918	3.26	0904	3.52	
	1644	-0.01	1608	0.39	1540	0.62	1528	0.97	
	2256	3.10	2224	3.43	2202	3.74	2146	3.93	
19 WE	0532	0.13	0448	0.41	0425	0.73	0405	0.99	19 WE
	1110	2.72	1043	3.10	1017	3.39	1005	3.65	
	1740	-0.12	1704	0.24	1634	0.47	1620	0.79	
	2344	3.31	2314	3.63	2249	3.96	2235	4.16	
20 TH	0627	-0.01	0544	0.27	0519	0.54	0457	0.79	20 TH
	1201	2.87	1135	3.26	1108	3.54	1054	3.82	
	1831	-0.19	1754	0.13	1723	0.33	1707	0.62	
			2358	3.78	2330	4.15	2316	4.35	
21 FR	0027	3.46	0636	0.18	0608	0.39	0545	0.62	21 FR
	0719	-0.08	1219	3.40	1152	3.68	1135	3.97	
	1245	3.00	1841	0.05	1809	0.20	1752	0.48	
	1918	-0.23					2354	4.49	
22 SA	0107	3.56	0038	3.87	0009	4.29	0631	0.49	22 SA
	0808	-0.10	0725	0.13	0655	0.28	1214	4.11	
	1327	3.11	1259	3.50	1232	3.80	1836	0.36	
	2003	-0.24	1927	0.01	1854	0.10			
23 SU	0146	3.64	0118	3.94	0048	4.38	0033	4.59	23 SU
	0855	-0.09	0812	0.10	0741	0.21	0717	0.39	
	1409	3.19	1340	3.56	1313	3.88	1256	4.21	
	2049	-0.23	2014	-0.01	1940	0.05	1922	0.30	
24 MO	0227	3.67	0159	3.97	0130	4.42	0115	4.63	24 MO
	0942	-0.08	0858	0.08	0827	0.17	0803	0.34	
	1454	3.22	1423	3.58	1357	3.89	1340	4.23	
	2135	-0.19	2102	0.01	2027	0.07	2009	0.30	

12 | DECEMBER | 2018

	KALURGHAT		SADARGHAT		KHAL-10		KHAL-18		
	Time	m	Time	m	Time	m	Time	m	
25 TU	0313	3.64	0245	3.96	0214	4.38	0159	4.62	25 TU
	1029	-0.08	0944	0.07	0914	0.16	0849	0.32	
	1543	3.19	1510	3.54	1444	3.84	1427	4.19	
	2223	-0.12	2151	0.06	2115	0.15	2057	0.36	
26 WE	0401	3.56	0333	3.89	0301	4.27	0245	4.54	26 WE
	1116	-0.09	1031	0.08	1001	0.16	0935	0.33	
	1634	3.12	1600	3.46	1534	3.76	1516	4.09	
	2313	-0.03	2241	0.12	2204	0.28	2146	0.45	
27 TH	0451	3.43	0424	3.78	0353	4.12	0334	4.40	27 TH
	1203	-0.11	1118	0.09	1049	0.19	1023	0.37	
	1728	3.03	1656	3.38	1633	3.66	1612	3.97	
			2335	0.19	2256	0.44	2237	0.59	
28 FR	0006	0.07	0520	3.62	0452	3.92	0431	4.21	28 FR
	0544	3.25	1209	0.12	1141	0.24	1115	0.45	
	1254	-0.13	1804	3.31	1746	3.58	1719	3.85	
	1832	2.94			2358	0.62	2336	0.75	
29 SA	0107	0.16	0034	0.26	0604	3.70	0539	3.97	29 SA
	0649	3.02	0625	3.42	1240	0.33	1214	0.57	
	1350	-0.13	1306	0.17	1859	3.56	1835	3.80	
	1948	2.90	1920	3.28					
30 SU	0218	0.22	0140	0.33	0111	0.74	0044	0.89	30 SU
	0806	2.81	0738	3.21	0715	3.48	0654	3.74	
	1452	-0.10	1411	0.24	1344	0.43	1320	0.69	
	2103	2.93	2033	3.31	2010	3.58	1948	3.80	
31 MO	0333	0.21	0252	0.36	0226	0.78	0159	0.96	31 MO
	0919	2.65	0852	3.04	0826	3.30	0810	3.57	
	1558	-0.06	1519	0.28	1452	0.51	1431	0.78	
	2211	2.99	2140	3.35	2118	3.64	2058	3.85	

CONVERSION TABLE, FEET TO METRES

Feet	Metres	Feet	Metres	Feet	Metres	Feet	Metres
0'0"	0.00	8'0"	2.44	16'0"	4.88	24'0"	7.32
3"	0.08	3"	2.51	3"	4.95	3"	7.39
6"	0.15	6"	2.59	6"	5.03	6"	7.47
9"	0.23	9"	2.67	9"	5.11	9"	7.54
1'0"	0.30	9'0"	2.74	17'0"	5.18	25'0"	7.62
3"	0.40	3"	2.82	3"	5.26	3"	7.70
6"	0.49	6"	2.90	6"	5.33	6"	7.77
9"	0.58	9"	2.97	9"	5.41	9"	7.85
2'0"	0.61	10'0"	3.05	18'0"	5.49	26'0"	7.92
3"	0.70	3"	3.12	3"	5.56	3"	8.00
6"	0.79	6"	3.20	6"	5.64	6"	8.08
9"	0.88	9"	3.28	9"	5.71	9"	8.15
3'0"	0.91	11'0"	3.35	19'0"	5.79	27'0"	8.23
3"	1.01	3"	3.43	3"	5.87	3"	8.31
6"	1.10	6"	3.51	6"	5.94	6"	8.38
9"	1.19	9"	3.58	9"	6.02	9"	8.46
4'0"	1.22	12'0"	3.66	20'0"	6.10	28'0"	8.53
3"	1.31	3"	3.73	3"	6.17	3"	8.61
6"	1.40	6"	3.81	6"	6.25	6"	8.69
9"	1.49	9"	3.89	9"	6.32	9"	8.76
5'0"	1.52	13'0"	3.96	21'0"	6.40	29'0"	8.84
3"	1.60	3"	4.04	3"	6.48	3"	8.92
6"	1.68	6"	4.11	6"	6.55	6"	8.99
9"	1.75	9"	4.19	9"	6.63	9"	9.07
6'0"	1.83	14'0"	4.27	22'0"	6.71	30'0"	9.14
3"	1.91	3"	4.34	3"	6.78	3"	9.22
6"	1.98	6"	4.42	6"	6.86	6"	9.30
9"	2.06	9"	4.50	9"	6.93	9"	9.37
7'0"	2.13	15'0"	4.57	23'0"	7.01	31'0"	9.45
3"	2.21	3"	4.65	3"	7.09	3"	9.52
6"	2.29	6"	4.72	6"	7.16	6"	9.60
9"	2.36	9"	4.80	9"	7.24	9"	9.68

LIST OF WRECKS IN KARNAPHULI RIVER AND OUTER ANCHORAGE AREA

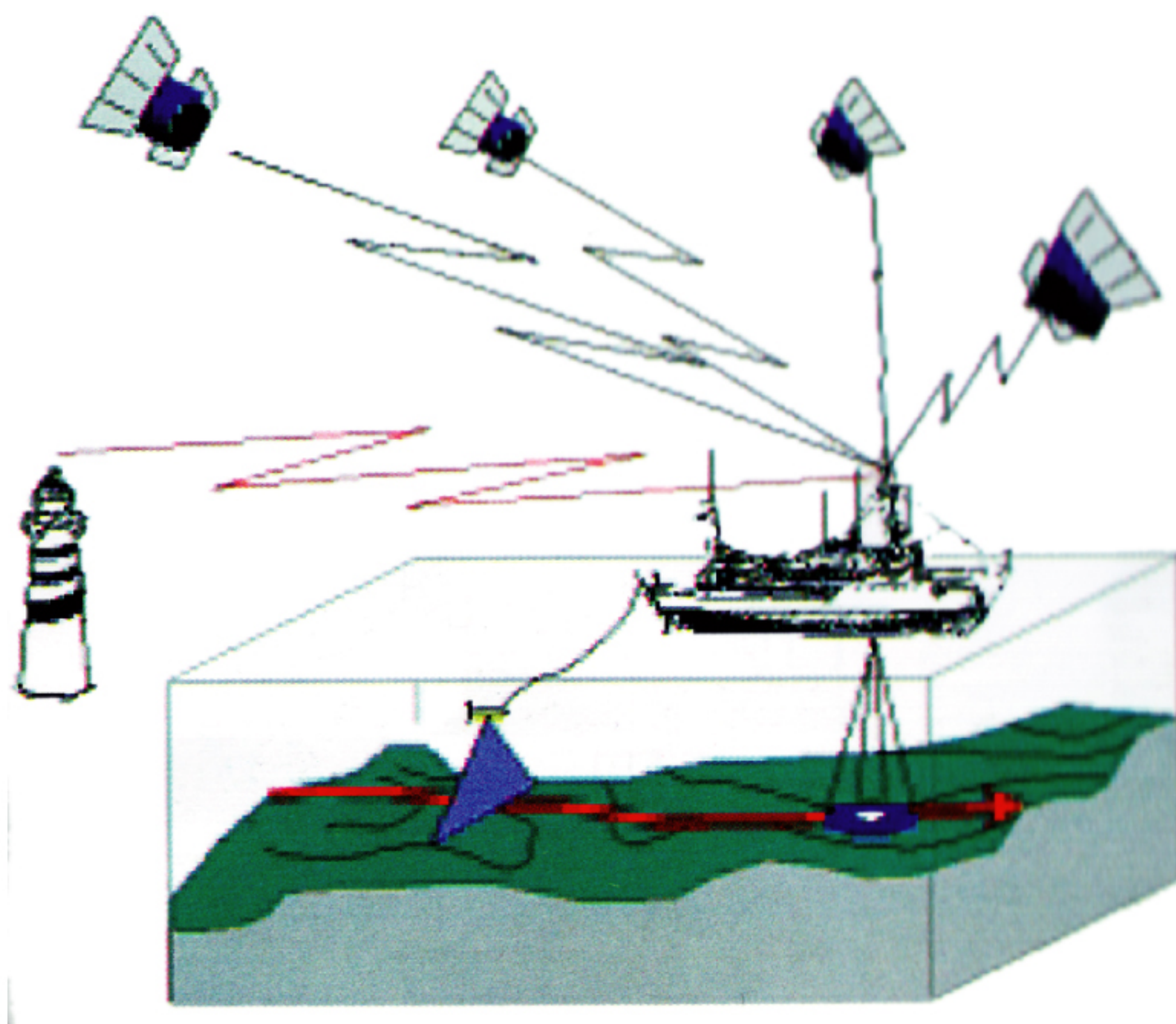
(Based on Hydrographic Survey Charts: 2012-13)

Co-ordinate system: BUTM

Ellipsoid: WGS 84

Sl.	Name of Wrecks	Geo-Position		Location
		Latitude	Longitude	
1	S. S. Thetic	22° 08' 00.600"	091° 45' 45.000"	Anchorage Area "C"
2	MV Kawana	22° 12' 37.469"	091° 47' 59.915"	Outer Bar Area
3	MV United Star	22° 12' 35.213"	091° 48' 03.784"	Outer Bar Area
4	MV Tina	22° 14' 23.346"	091° 46' 21.674"	Out side of Anchorage "A"
5	MV Sea Master-1	22° 15' 25.642"	091° 45' 43.008"	Out side of Anchorage "A"
6	MV Bangal Bridge	22° 18' 13.920"	091° 43' 03.598"	Anchorage Area "A"
7	MV Firoz Farjana	22° 14' 09.048"	091° 45' 58.779"	Anchorage Area "A"
8	MV Lita	22° 15' 29.936"	091° 45' 47.514"	Outside Anchorage Area "A"
9	MV Hang Gang-3	22° 15' 23.592"	091° 43' 49.198"	Anchorage Area "A"
10	MV Vishva Kusum	22° 15' 33.901"	091° 44' 18.058"	Anchorage Area "A"
11	MV Fortune	22° 17' 14.730"	091° 44' 02.598"	Anchorage Area "A"
12	MV BIWTC-1063	22° 17' 37.453"	091° 42' 46.430"	Anchorage Area "A"
13	MV Sea Horse	22° 18' 46.745"	091° 49' 01.063"	Near National Cement Factory
14	MV Ocan Pearl	22° 14' 49.954"	091° 46' 41.182"	Near Patenga Seabeach
15	MV Hyang Ro Bow	22° 12' 24.174"	091° 43' 45.426"	Anchorage Area "B"
16	MV Chattagram	22° 14' 13.860"	091° 45' 35.999"	Anchorage Area "A"
17	MV Sea Samrat	22° 15' 27.834"	091° 45' 41.500"	Outside of Anchorage "A"
18	MV Kader	22° 17' 13.736"	091° 43' 28.125"	Anchorage Area "A"
19	MV Mayur pankhi	22° 10' 26.134"	091° 48' 22.755"	Near Gohira
20	MV Sristy Sohan	22° 17' 58.290"	091° 43' 42.733"	Anchorage Area "A"
21	Unknown Wreck	22° 14' 09.600"	091° 46' 31.199"	Outside of Anchorage "A"

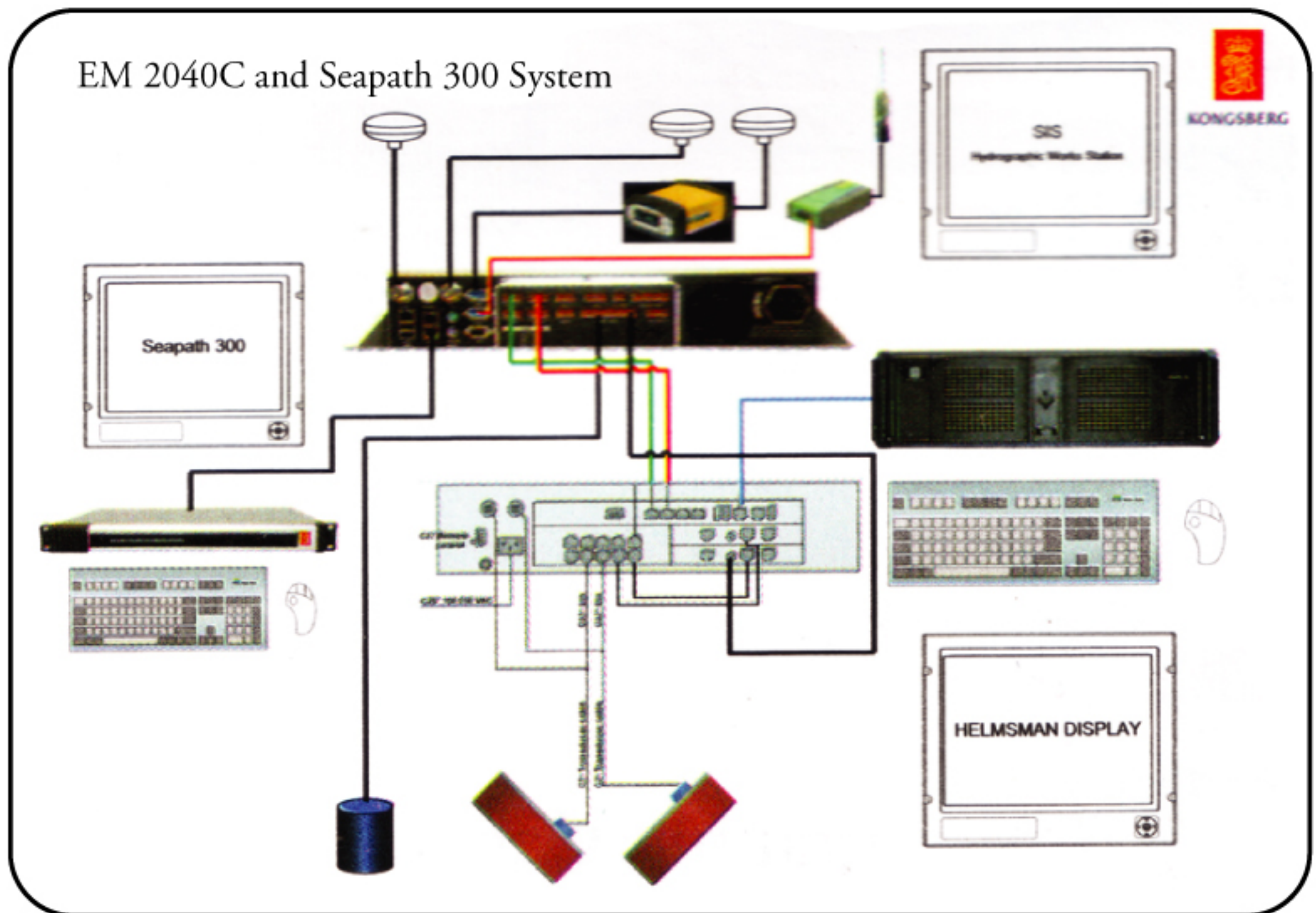
*Auto Tide Gauge Station
&
Hydrographic Survey Equipment*



**Hydrographic Department
CHITTAGONG PORT AUTHORITY**



Water Density Measuring Meter



Multi-Beam Echo-Sounder: **Kongsberg- EM 2040C**



Multi-Parameter Water quality measuring meter



Differential Global Positioning System (DGPS)- **JAVAD GNSS**



Acoustic Doppler Current Profiler- **SonTek ADP**



Digital Level - **Sokkia SDL-30**



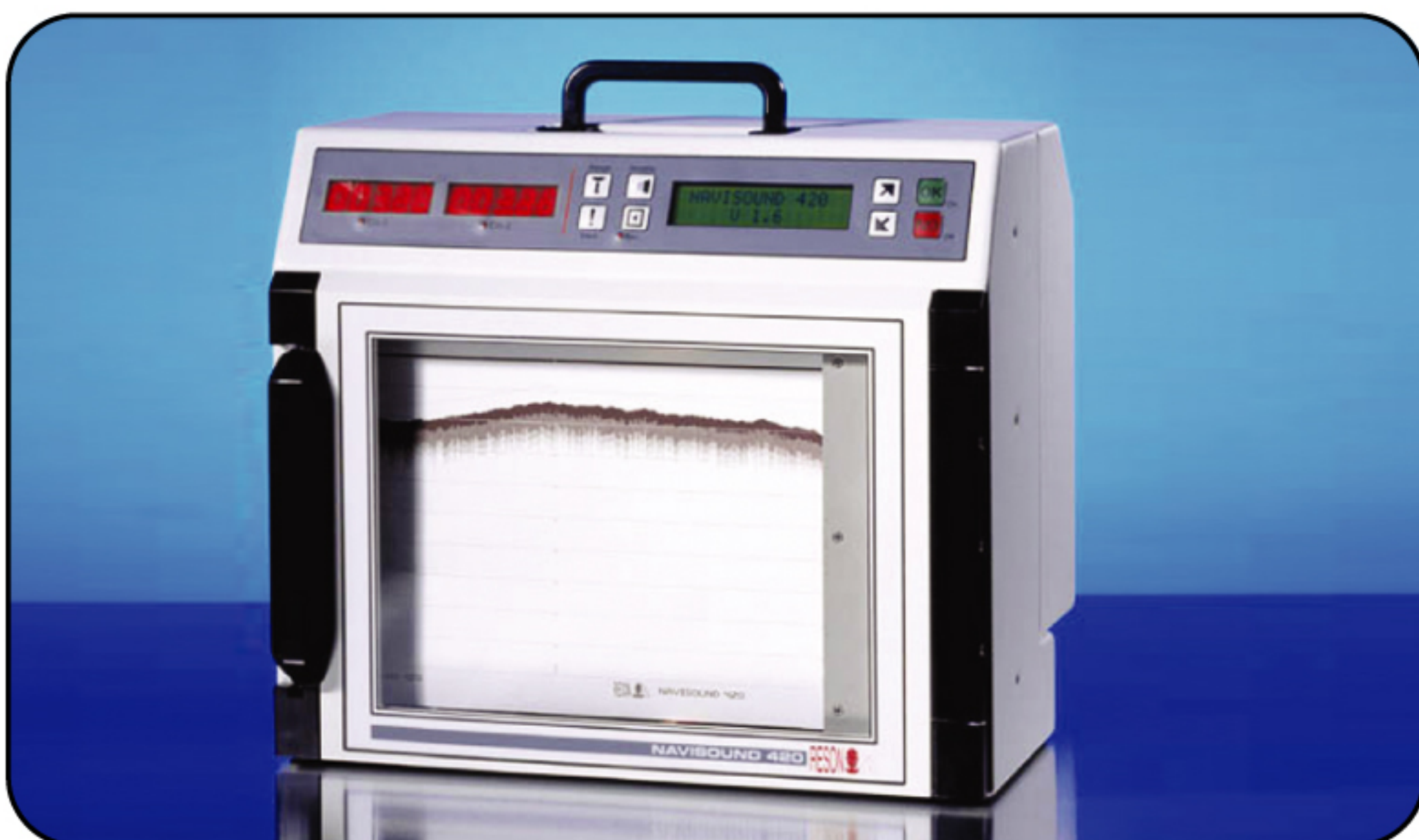
Side Scan Sonar - **Edgetech 4125**



Sound Velocity Profiler- **AML Minos.X**



Sub Bottom Profiler- **Edgetech 3100P**



Echo Sounder- **Navisound 420**



Auto Tide Gauge Station at **Kalurghat**



Auto Tide Gauge Station at **Khal No-10**



Auto Tide Gauge Station at **Khal 18**



Auto Tide Gauge Station at **Kaptai**





CHITTAGONG PORT LIMIT AREA

KARNAPHULI & OUTER ANCHORAGE

