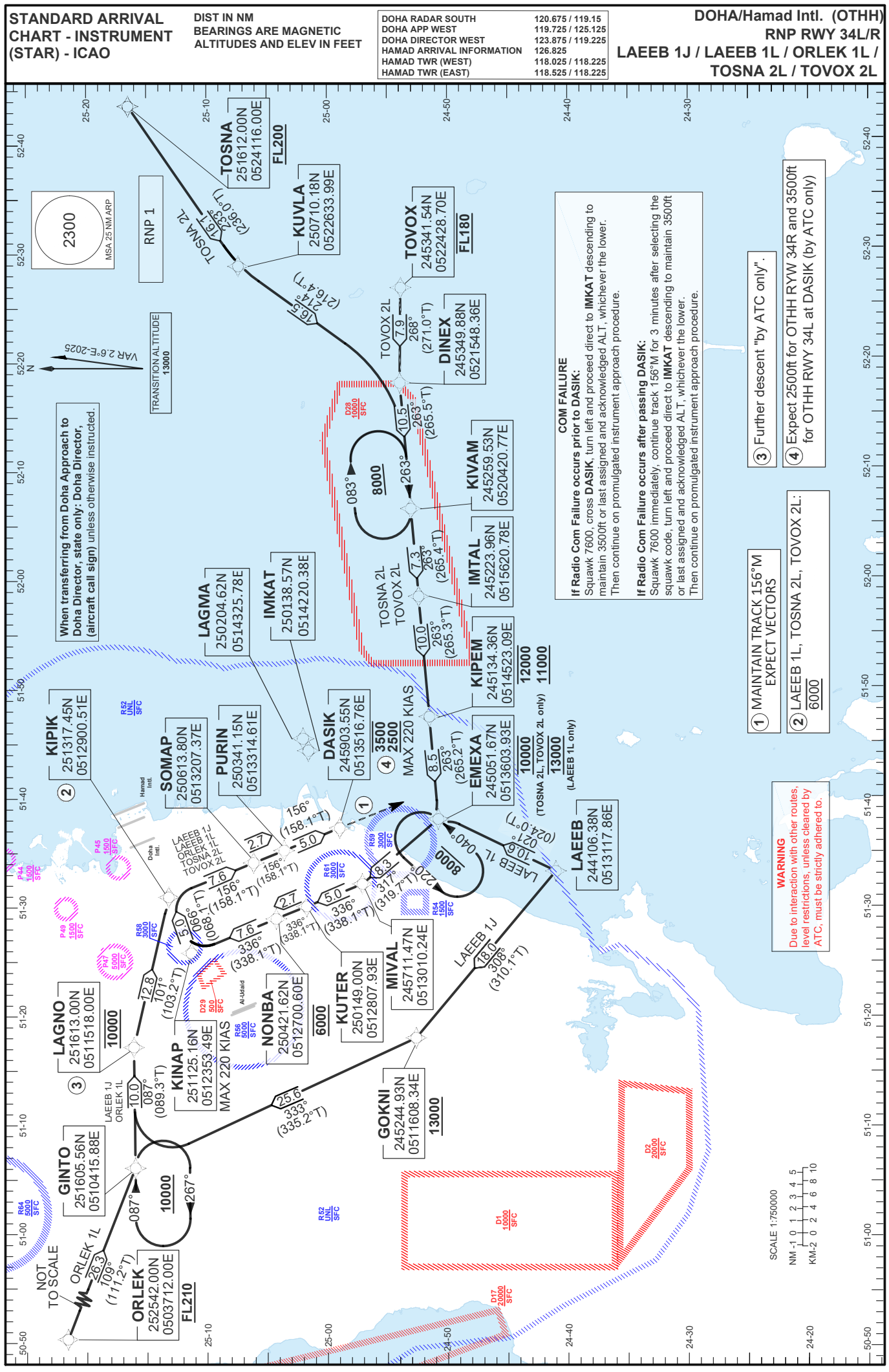

STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO
DIST IN NM
BEARINGS ARE MAGNETIC
ALTITUDES AND ELEV IN FEET
DOHA RADAR SOUTH 120.675 / 119.15
DOHA APP WEST 119.725 / 125.125
DOHA DIRECTOR WEST 123.875 / 119.225
HAMAD ARRIVAL INFORMATION 126.825
HAMAD TWR (WEST) 118.025 / 118.225
HAMAD TWR (EAST) 118.525 / 118.225
DOHA/Hamad Intl. (OTHH)
RNP RWY 34L/R
LAEEB 1J / LAEEB 1L / ORLEK 1L /
TOSNA 2L / TOVOX 2L
RNP 1
2300
MSA 25 NM ARP
TRANSITION ALTITUDE 13000
VAR 2.6°E-2025
When transferring from Doha Approach to Doha Director, state only: Doha Director, (aircraft call sign) unless otherwise instructed.
COM FAILURE
If Radio Com Failure occurs prior to DASIK:
Squawk 7600, cross DASIK, turn left and proceed direct to IMKAT descending to maintain 3500ft or last assigned and acknowledged ALT, whichever the lower. Then continue on promulgated instrument approach procedure.
If Radio Com Failure occurs after passing DASIK:
Squawk 7600 immediately, continue track 156°M for 3 minutes after selecting the squawk code, turn left and proceed direct to IMKAT descending to maintain 3500ft or last assigned and acknowledged ALT, whichever the lower. Then continue on promulgated instrument approach procedure.
1 MAINTAIN TRACK 156°M EXPECT VECTORS
2 LAEEB 1L, TOSNA 2L, TOVOX 2L: 6000
3 Further descent "by ATC only".
4 Expect 2500ft for OTHH RYW 34R and 3500ft for OTHH RWY 34L at DASIK (by ATC only)
WARNING
Due to interaction with other routes, level restrictions, unless cleared by ATC, must be strictly adhered to.
NOT TO SCALE
SCALE 1:750000
NM -1 0 1 2 3 4 5
KM-2 0 2 4 6 8 10
TOSNA
251612.00N
0524116.00E
FL200
KUVLA
250710.18N
0522633.99E
TOVOX
245341.54N
0522428.70E
FL180
DINEX
245349.88N
0521548.36E
KIVAM
245259.53N
0520420.77E
IMTAL
245223.96N
0515620.78E
KIPEM
245134.36N
0514523.09E
12000
11000
EMEXA
245051.67N
0513603.93E
10000
13000
(TOSNA 2L, TOVOX 2L only)
(LAEEB 1L only)
LAEEB
244106.38N
0513117.86E
DASIK
245903.55N
0513516.76E
3500
2500
MAX 220 KIAS
IMKAT
250138.57N
0514220.38E
LAGMA
250204.62N
0514325.78E
KIPIK
251317.45N
0512900.51E
SOMAP
250613.80N
0513207.37E
PURIN
250341.15N
0513314.61E
LAGNO
251613.00N
0511518.00E
10000
KINAP
251125.16N
0512353.49E
MAX 220 KIAS
NONBA
250421.62N
0512700.60E
6000
KUTER
250149.00N
0512807.93E
MIVAL
245711.47N
0513010.24E
GOKNI
245244.93N
0511608.34E
13000
GINTO
251605.56N
0510415.88E
10000
ORLEK
252542.00N
0503712.00E
FL210
8000
LAEEB 1L
LAEEB 1J
ORLEK 1L
TOSNA 2L
TOVOX 2L
Hamad Intl.
Doha Intl.
Al-Udaid
D1 10000 SFC
D2 20000 SFC
D17 23000 SFC
D28 10000 SFC
D29 500 SFC
P44 1500 SFC
P45 1500 SFC
P47 5000 SFC
P49 1500 SFC
R52 UNL SFC
R54 1500 SFC
R56 500 SFC
R59 3000 SFC
R61 3000 SFC
R64 6000 SFC

**STANDARD ARRIVAL CHART - INSTRUMENT (STAR) - ICAO**

**DOHA/Hamad Intl.(OTHH)**
**RNP RWY 34L/R**
**LAEEB 1J / LAEEB 1L / ORLEK 1L / TOSNA 2L / TOVOX 2L**

## TABULAR DESCRIPTION

**RNP STAR LAEEB 1J**

| Serial Num | Path Descriptor | Waypoint Identifier | Fly-over | Course °M(°T) | Magnetic Variation(°) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | VPA(°)/ TCH(ft) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IF | LAEEB | - | - | -2.6 | - | - | - | - | - | RNP 1 |
| 2 | TF | GOKNI | - | 308 (310.1) | -2.6 | 18.0 | - | +13000 | - | - | RNP 1 |
| 3 | TF | GINTO | - | 333 (335.2) | -2.6 | 25.6 | - | - | - | - | RNP 1 |
| 4 | TF | LAGNO | - | 087 (089.3) | -2.6 | 10.0 | - | @10000 | - | - | RNP 1 |
| 5 | TF | KIPIK | - | 101 (103.2) | -2.6 | 12.8 | - | - | - | - | RNP 1 |
| 6 | TF | SOMAP | - | 156 (158.1) | -2.6 | 7.6 | - | - | - | - | RNP 1 |
| 7 | TF | PURIN | - | 156 (158.1) | -2.6 | 2.7 | - | - | - | - | RNP 1 |
| 8 | TF | DASIK | - | 156 (158.1) | -2.6 | 5.0 | - | +2500/-3500 | -220 | - | RNP 1 |
| 9 | FM | DASIK | - | 156 (158.1) | -2.6 | - | - | - | -220 | - | RNP 1 |
| Remarks | Further descent after LAGNO by ATC only.<br>Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at DASIK (by ATC only). | | | | | | | | | | |

**RNP STAR LAEEB 1L**

| Serial Num | Path Descriptor | Waypoint Identifier | Fly-over | Course °M(°T) | Magnetic Variation(°) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | VPA(°)/ TCH(ft) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IF | LAEEB | - | - | -2.6 | - | - | - | - | - | RNP 1 |
| 2 | TF | EMEXA | - | 021 (024.0) | -2.6 | 10.6 | - | @13000 | - | - | RNP 1 |
| 3 | TF | MIVAL | - | 317 (319.7) | -2.6 | 8.3 | - | - | - | - | RNP 1 |
| 4 | TF | KUTER | - | 336 (338.1) | -2.6 | 5.0 | - | - | - | - | RNP 1 |
| 5 | TF | NONBA | - | 336 (338.1) | -2.6 | 2.7 | - | @6000 | - | - | RNP 1 |
| 6 | TF | KINAP | - | 336 (338.1) | -2.6 | 7.6 | - | - | -220 | - | RNP 1 |
| 7 | TF | KIPIK | - | 066 (068.1) | -2.6 | 5.0 | - | @6000 | - | - | RNP 1 |
| 8 | TF | SOMAP | - | 156 (158.1) | -2.6 | 7.6 | - | - | - | - | RNP 1 |
| 9 | TF | PURIN | - | 156 (158.1) | -2.6 | 2.7 | - | - | - | - | RNP 1 |
| 10 | TF | DASIK | - | 156 (158.1) | -2.6 | 5.0 | - | +2500/-3500 | -220 | - | RNP 1 |
| 11 | FM | DASIK | - | 156 (158.1) | -2.6 | - | - | - | -220 | - | RNP 1 |
| Remarks | Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at DASIK (by ATC only). | | | | | | | | | | |

**RNP STAR ORLEK 1L**

| Serial Num | Path Descriptor | Waypoint Identifier | Fly-over | Course °M(°T) | Magnetic Variation(°) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | VPA(°)/ TCH(ft) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IF | ORLEK | - | - | -2.6 | - | - | +FL210 | - | - | RNP 1 |
| 2 | TF | GINTO | - | 109 (111.2) | -2.6 | 26.3 | - | - | - | - | RNP 1 |
| 3 | TF | LAGNO | - | 087 (089.3) | -2.6 | 10.0 | - | @10000 | - | - | RNP 1 |
| 4 | TF | KIPIK | - | 101 (103.2) | -2.6 | 12.8 | - | - | - | - | RNP 1 |
| 5 | TF | SOMAP | - | 156 (158.1) | -2.6 | 7.6 | - | - | - | - | RNP 1 |
| 6 | TF | PURIN | - | 156 (158.1) | -2.6 | 2.7 | - | - | - | - | RNP 1 |
| 7 | TF | DASIK | - | 156 (158.1) | -2.6 | 5.0 | - | +2500/-3500 | -220 | - | RNP 1 |
| 8 | FM | DASIK | - | 156 (158.1) | -2.6 | - | - | - | -220 | - | RNP 1 |
| Remarks | Further descent after LAGNO by ATC only.<br>Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at DASIK (by ATC only). | | | | | | | | | | |


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**RNP STAR TOSNA 2L**

| Serial Num | Path Descriptor | Waypoint Identifier | Fly-over | Course °M(°T) | Magnetic Variation(°) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | VPA(°)/ TCH(ft) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IF | TOSNA | - | - | -2.6 | - | - | +FL200 | - | - | RNP 1 |
| 2 | TF | KUVLA | - | 233 (236.0) | -2.6 | 16.1 | - | - | - | - | RNP 1 |
| 3 | TF | DINEX | - | 214 (216.4) | -2.6 | 16.5 | - | - | - | - | RNP 1 |
| 4 | TF | KIVAM | - | 263 (265.5) | -2.6 | 10.5 | - | - | - | - | RNP 1 |
| 5 | TF | IMTAL | - | 263 (265.4) | -2.6 | 7.3 | - | - | - | - | RNP 1 |
| 6 | TF | KIPEM | - | 263 (265.3) | -2.6 | 10.0 | - | +11000/-12000 | - | - | RNP 1 |
| 7 | TF | EMEXA | - | 263 (265.2) | -2.6 | 8.5 | - | @10000 | - | - | RNP 1 |
| 8 | TF | MIVAL | - | 317 (319.7) | -2.6 | 8.3 | - | - | - | - | RNP 1 |
| 9 | TF | KUTER | - | 336 (338.1) | -2.6 | 5.0 | - | - | - | - | RNP 1 |
| 10 | TF | NONBA | - | 336 (338.1) | -2.6 | 2.7 | - | @6000 | - | - | RNP 1 |
| 11 | TF | KINAP | - | 336 (338.1) | -2.6 | 7.6 | - | - | -220 | - | RNP 1 |
| 12 | TF | KIPIK | - | 066 (068.1) | -2.6 | 5.0 | - | @6000 | - | - | RNP 1 |
| 13 | TF | SOMAP | - | 156 (158.1) | -2.6 | 7.6 | - | - | - | - | RNP 1 |
| 14 | TF | PURIN | - | 156 (158.1) | -2.6 | 2.7 | - | - | - | - | RNP 1 |
| 15 | TF | DASIK | - | 156 (158.1) | -2.6 | 5.0 | - | +2500/-3500 | -220 | - | RNP 1 |
| 16 | FM | DASIK | - | 156 (158.1) | -2.6 | - | - | - | -220 | - | RNP 1 |
| Remarks | Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at DASIK (by ATC only). | | | | | | | | | | |

**RNP STAR TOVOX 2L**

| Serial Num | Path Descriptor | Waypoint Identifier | Fly-over | Course °M(°T) | Magnetic Variation(°) | Distance (NM) | Turn Direction | Altitude (ft) | Speed (kt) | VPA(°)/ TCH(ft) | Navigation Specification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IF | TOVOX | - | - | -2.6 | - | - | @FL180 | - | - | RNP 1 |
| 2 | TF | DINEX | - | 268 (271.0) | -2.6 | 7.9 | - | - | - | - | RNP 1 |
| 3 | TF | KIVAM | - | 263 (265.5) | -2.6 | 10.5 | - | - | - | - | RNP 1 |
| 4 | TF | IMTAL | - | 263 (265.4) | -2.6 | 7.3 | - | - | - | - | RNP 1 |
| 5 | TF | KIPEM | - | 263 (265.3) | -2.6 | 10.0 | - | +11000/-12000 | - | - | RNP 1 |
| 6 | TF | EMEXA | - | 263 (265.2) | -2.6 | 8.5 | - | @10000 | - | - | RNP 1 |
| 7 | TF | MIVAL | - | 317 (319.7) | -2.6 | 8.3 | - | - | - | - | RNP 1 |
| 8 | TF | KUTER | - | 336 (338.1) | -2.6 | 5.0 | - | - | - | - | RNP 1 |
| 9 | TF | NONBA | - | 336 (338.1) | -2.6 | 2.7 | - | @6000 | - | - | RNP 1 |
| 10 | TF | KINAP | - | 336 (338.1) | -2.6 | 7.6 | - | - | -220 | - | RNP 1 |
| 11 | TF | KIPIK | - | 066 (068.1) | -2.6 | 5.0 | - | @6000 | - | - | RNP 1 |
| 12 | TF | SOMAP | - | 156 (158.1) | -2.6 | 7.6 | - | - | - | - | RNP 1 |
| 13 | TF | PURIN | - | 156 (158.1) | -2.6 | 2.7 | - | - | - | - | RNP 1 |
| 14 | TF | DASIK | - | 156 (158.1) | -2.6 | 5.0 | - | +2500/-3500 | -220 | - | RNP 1 |
| 15 | FM | DASIK | - | 156 (158.1) | -2.6 | - | - | - | -220 | - | RNP 1 |
| Remarks | Expect 2500ft for OTHH RWY 34R and 3500ft for OTHH RWY 34L at DASIK (by ATC only). | | | | | | | | | | |

## WAYPOINT LIST

**RNP STAR LAEEB 1L / LAEEB 1J / ORLEK 1L / TOSNA 2L / TOVOX 2L**

| Waypoint Identifier | Coordinates |
|---|---|
| LAEEB | 244106.38N 0513117.86E |
| GOKNI | 245244.93N 0511608.34E |
| EMEXA | 245051.67N 0513603.93E |
| MIVAL | 245711.47N 0513010.24E |
| KUTER | 250149.00N 0512807.93E |
| NONBA | 250421.62N 0512700.60E |
| KINAP | 251125.16N 0512353.49E |
| KIPIK | 251317.45N 0512900.51E |
| SOMAP | 250613.80N 0513207.37E |
| PURIN | 250341.15N 0513314.61E |
| DASIK | 245903.55N 0513516.76E |

**RNP STAR LAEEB 1L / LAEEB 1J / ORLEK 1L / TOSNA 2L / TOVOX 2L**

| Waypoint Identifier | Coordinates |
|---|---|
| ORLEK | 252542.00N 0503712.00E |
| GINTO | 251605.56N 0510415.88E |
| LAGNO | 251613.00N 0511518.00E |
| TOSNA | 251612.00N 0524116.00E |
| KUVLA | 250710.18N 0522633.99E |
| DINEX | 245349.88N 0521548.36E |
| KIVAM | 245259.53N 0520420.77E |
| IMTAL | 245223.96N 0515620.78E |
| KIPEM | 245134.36N 0514523.09E |
| TOVOX | 245341.54N 0522428.70E |

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