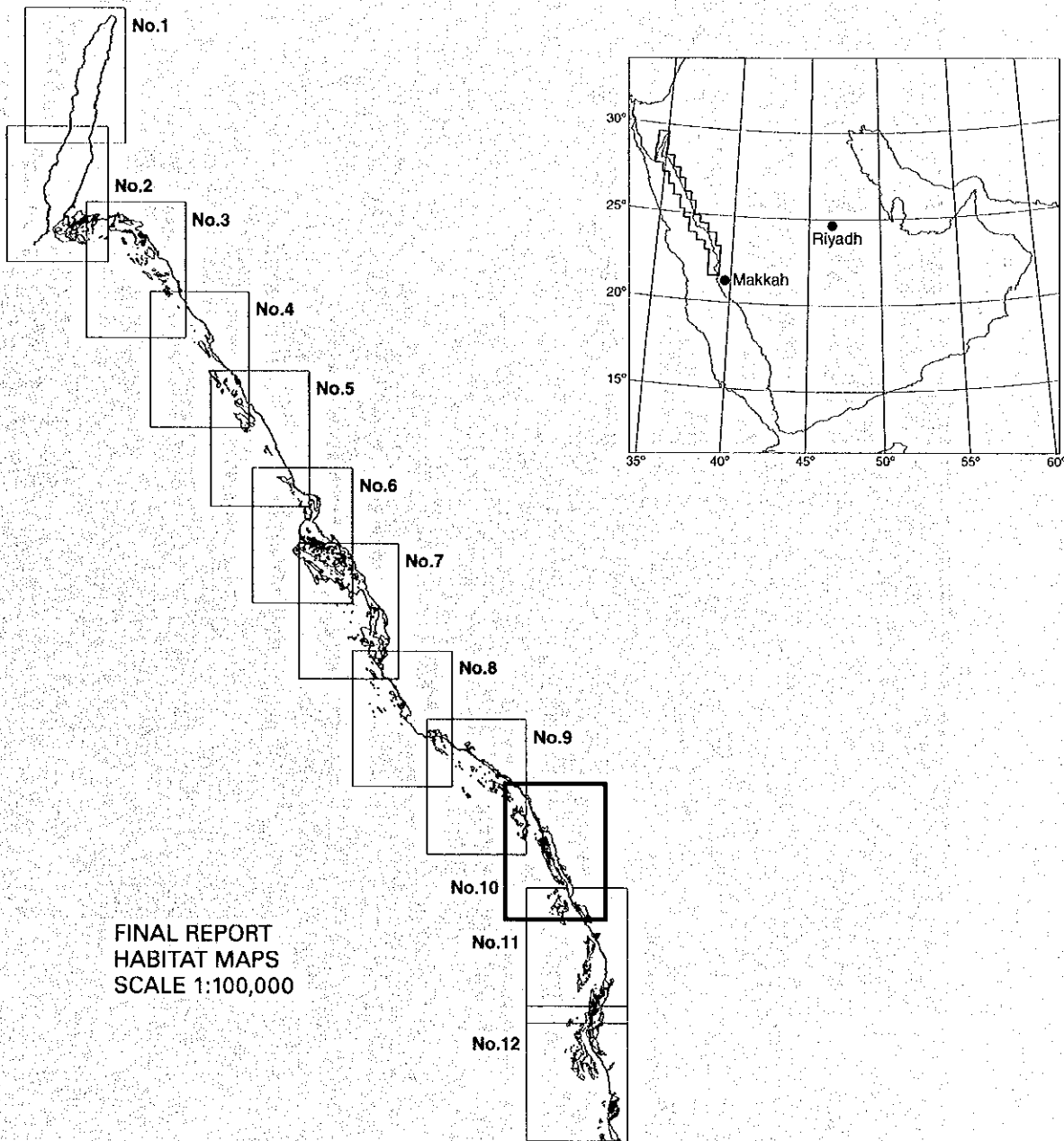


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**NATIONAL COMMISSION FOR WILDLIFE CONSERVATION AND
DEVELOPMENT (NCWCD), KINGDOM OF SAUDI ARABIA**

**THE STUDY ON
COASTAL / MARINE HABITAT AND BIOLOGICAL INVENTORIES
IN THE NORTHERN PART OF THE RED SEA COAST
IN THE KINGDOM OF SAUDI ARABIA**



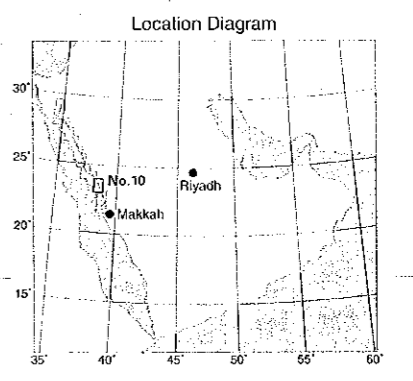
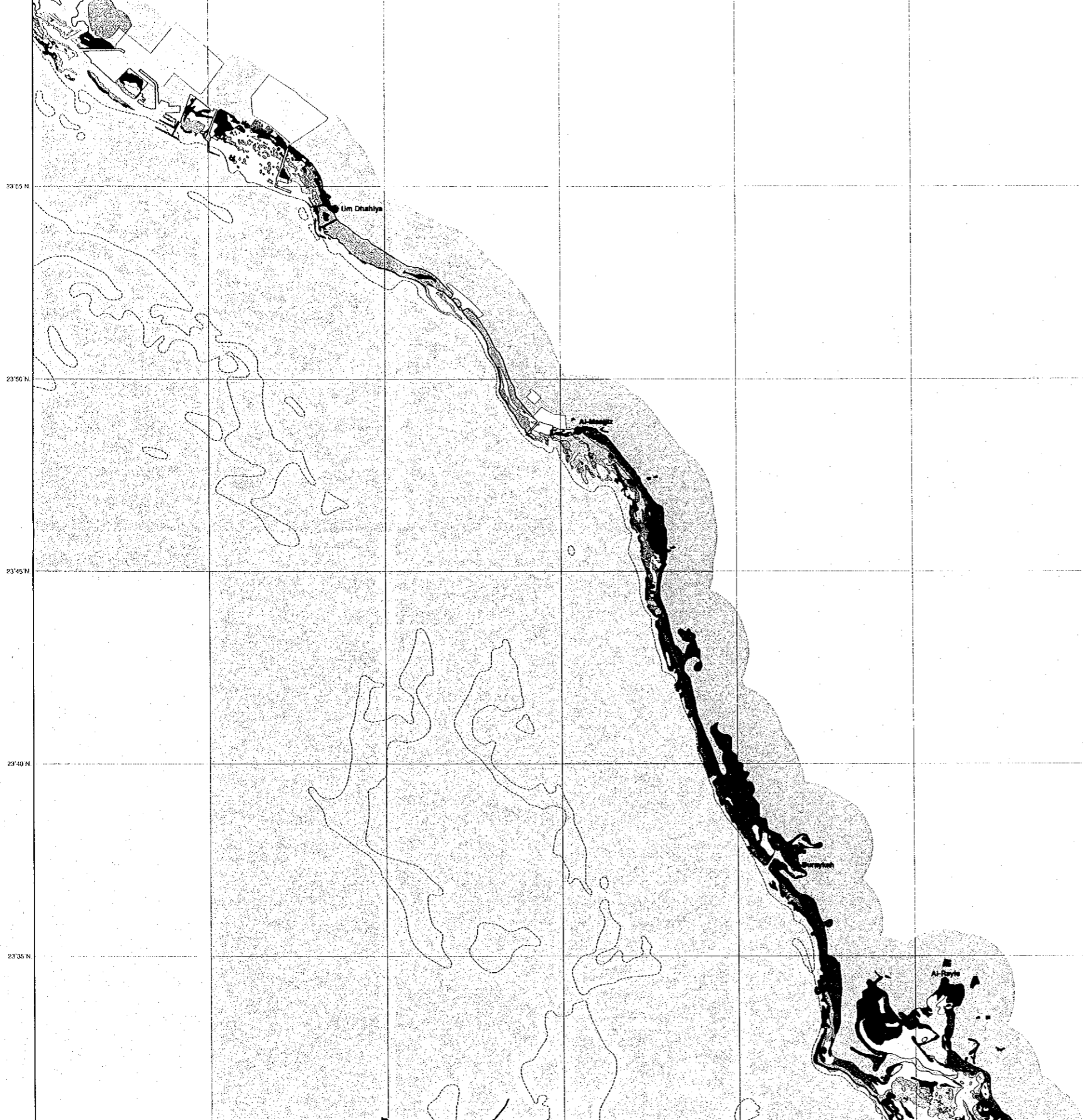
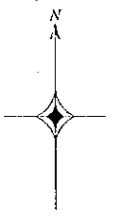
FINAL REPORT
HABITAT MAPS
SCALE 1:100,000

**JAPAN WILDLIFE RESEARCH CENTER
SHIN-NIPPON METEOROLOGICAL & OCEANOGRAPHICAL CONSULTANT CO.,LTD.**

38 10' E 38 15' E 38 20' E 38 25' E 38 30' E 38 35' E 38 40' E 38 45' E 38 50' E 38 55' E
24 00' N 23 55' N 23 50' N 23 45' N 23 40' N 23 35' N

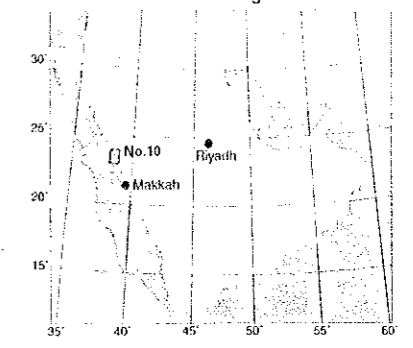
HABITAT MAP

1:100,000
Sheet No.10 YANBU' INDUSTRIAL COMPLEX TO BI'R GHAYLAN

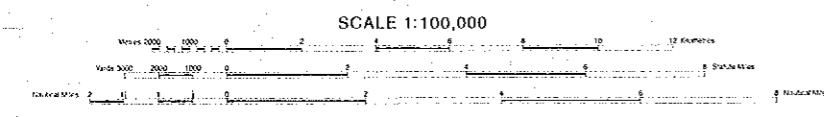
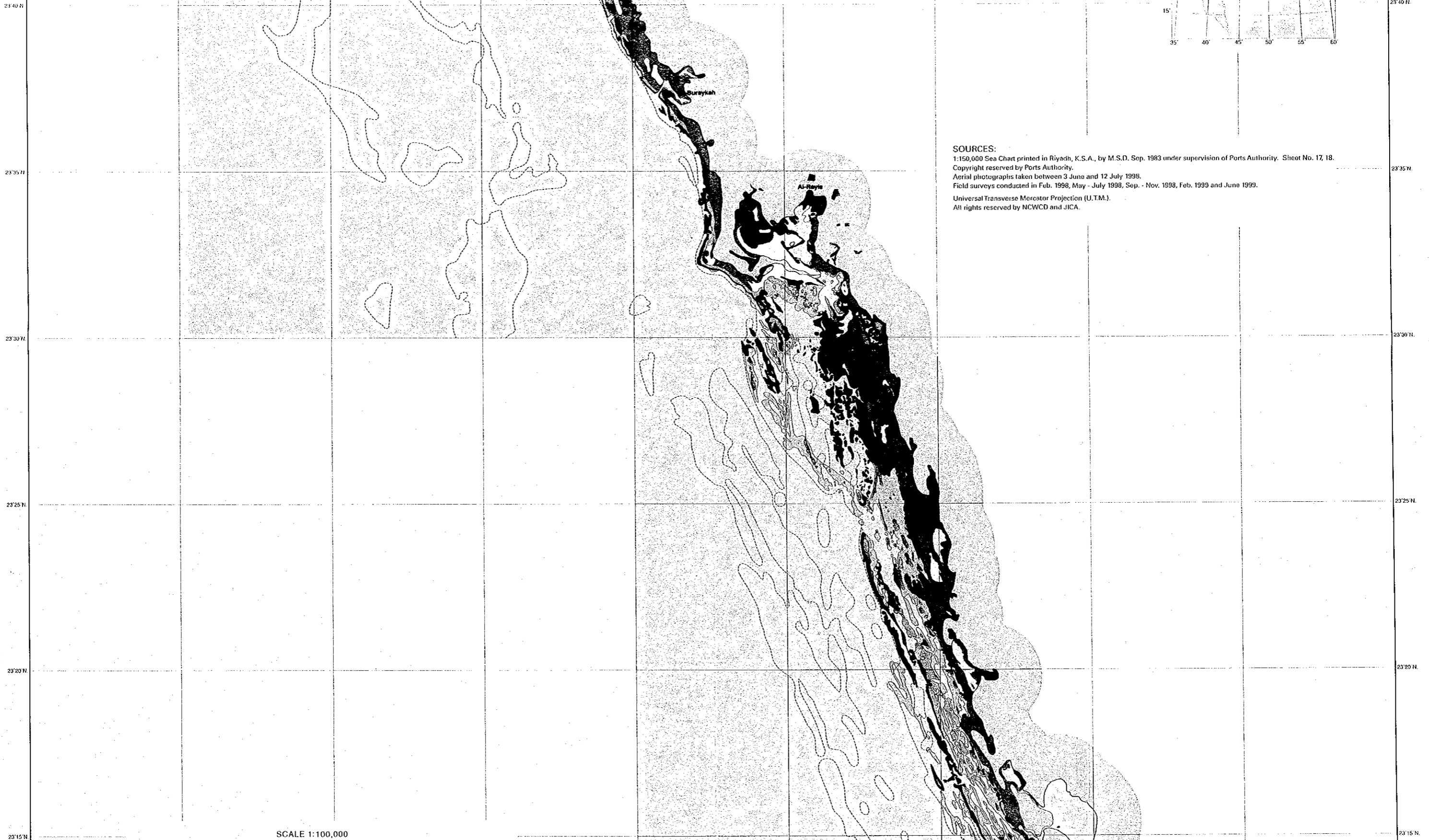


SOURCES:
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Field surveys conducted in Feb. 1998, May - July 1998, Sep. - Nov. 1998, Feb. 1999 and June 1999.
Universal Transverse Mercator Projection (U.T.M.).
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Location Diagram



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 Universal Transverse Mercator Projection (U.T.M.).
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LEGEND

Desert	Sand with Reef Patches (Coral less than 10%)	Sea
--------	--	-----

23°25' N

23°25' N

23°20' N

23°20' N

23°15' N

23°15' N

23°10' N

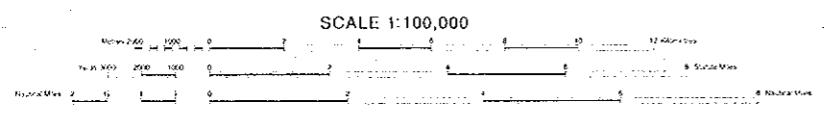
23°10' N

23°05' N

23°05' N

23°00' N

23°00' N



LEGEND

- | | | |
|--|--|--------------------|
| Desert | Sand with Reef Patches (Coral less than 10%) | Sea |
| Tidal flat | Coral (coverage 11-30%) | Island |
| Emerged rock | Coral (coverage 31-50%) | Farm |
| Mangrove | A Coral (coverage 51-75%) | Fence of livestock |
| Coastal vegetation | Coral (coverage 76-100%) | Town area |
| Sabkhal (with Cyanophyceae and Salt marsh) | B Coral (coverage 11-100%) | Factory |
| Salt marsh | Turf / Small algae | Fishing port |
| Sand | Macro algae | Coast line |
| Mud | Seagrass | -20m (Depth) |
| | Cyanophyceae (Blue-green algae) | |

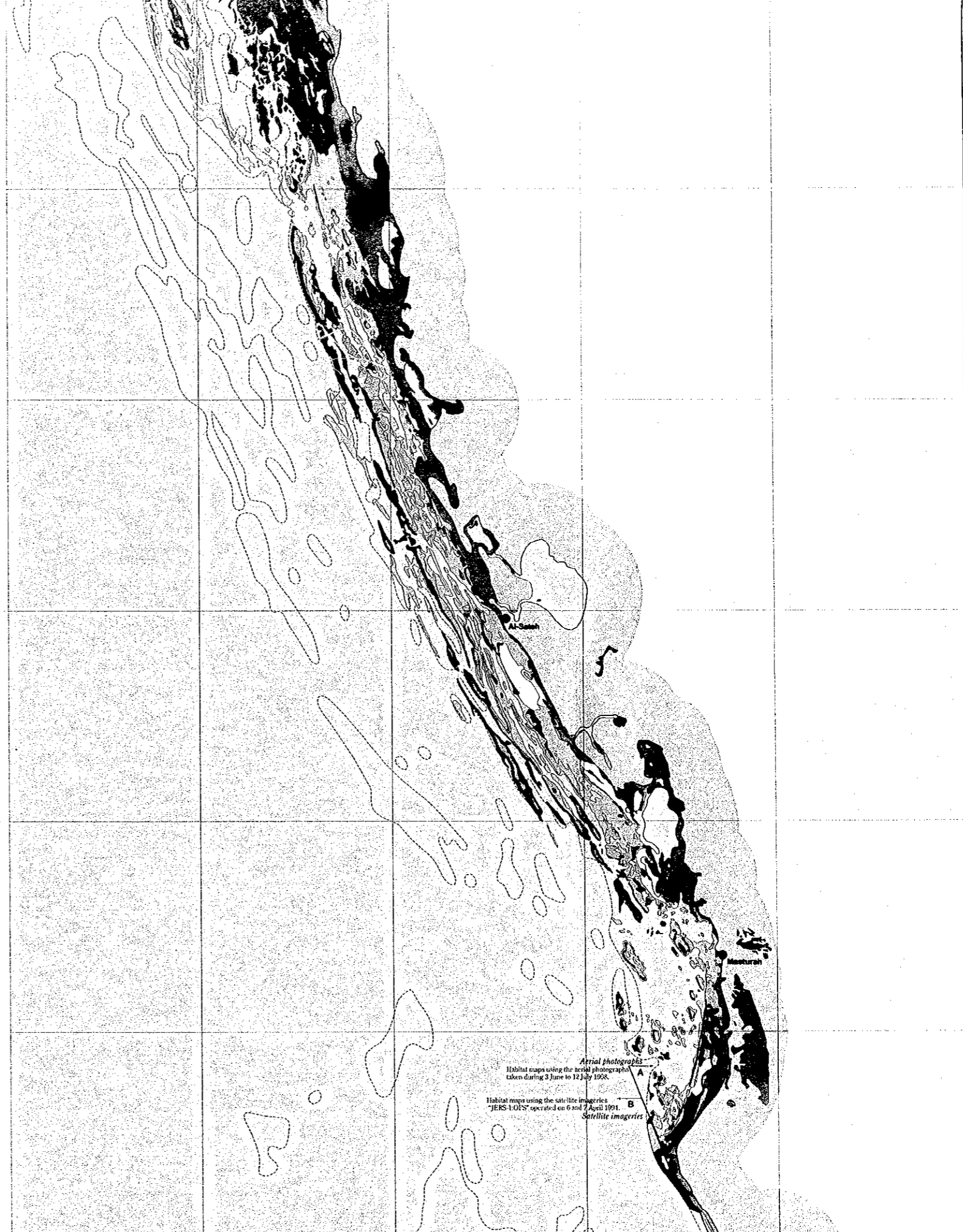
A *Aerial photographs*
Habitat maps using the aerial photographs taken during 3 June to 12 July 1998.

B *Satellite imagery*
Habitat maps using the satellite imagery: "JERS-1-01S" operated on 6 and 7 April 1991.



Aerial photographs
Habitat maps using the aerial photographs taken during 3 June to 12 July 1998.

Satellite imagery
Habitat maps using the satellite imagery: "JERS-1-01S" operated on 6 and 7 April 1991.



38°15' E

38°20' E

38°25' E

38°30' E

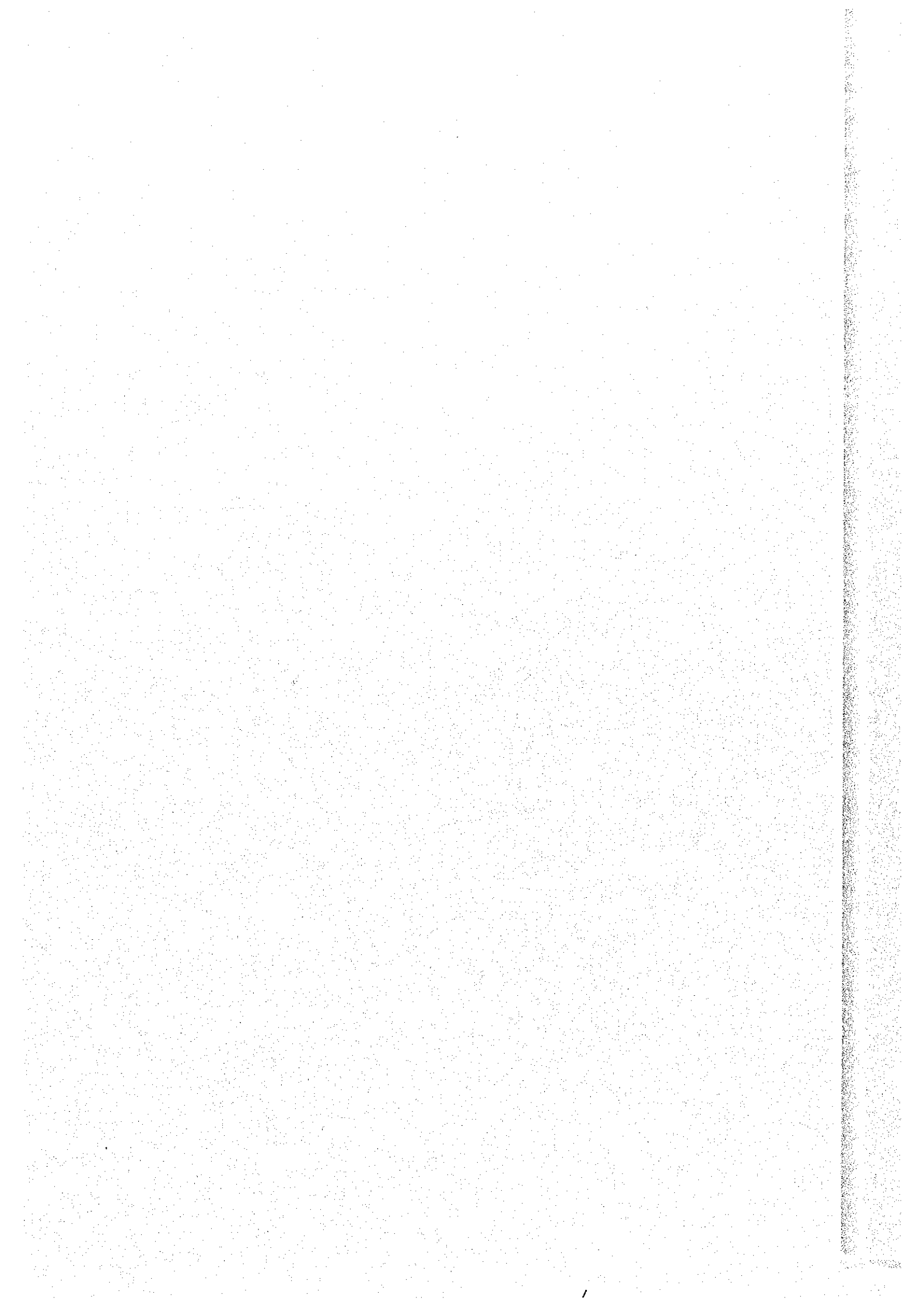
38°35' E

38°40' E

38°45' E

38°50' E

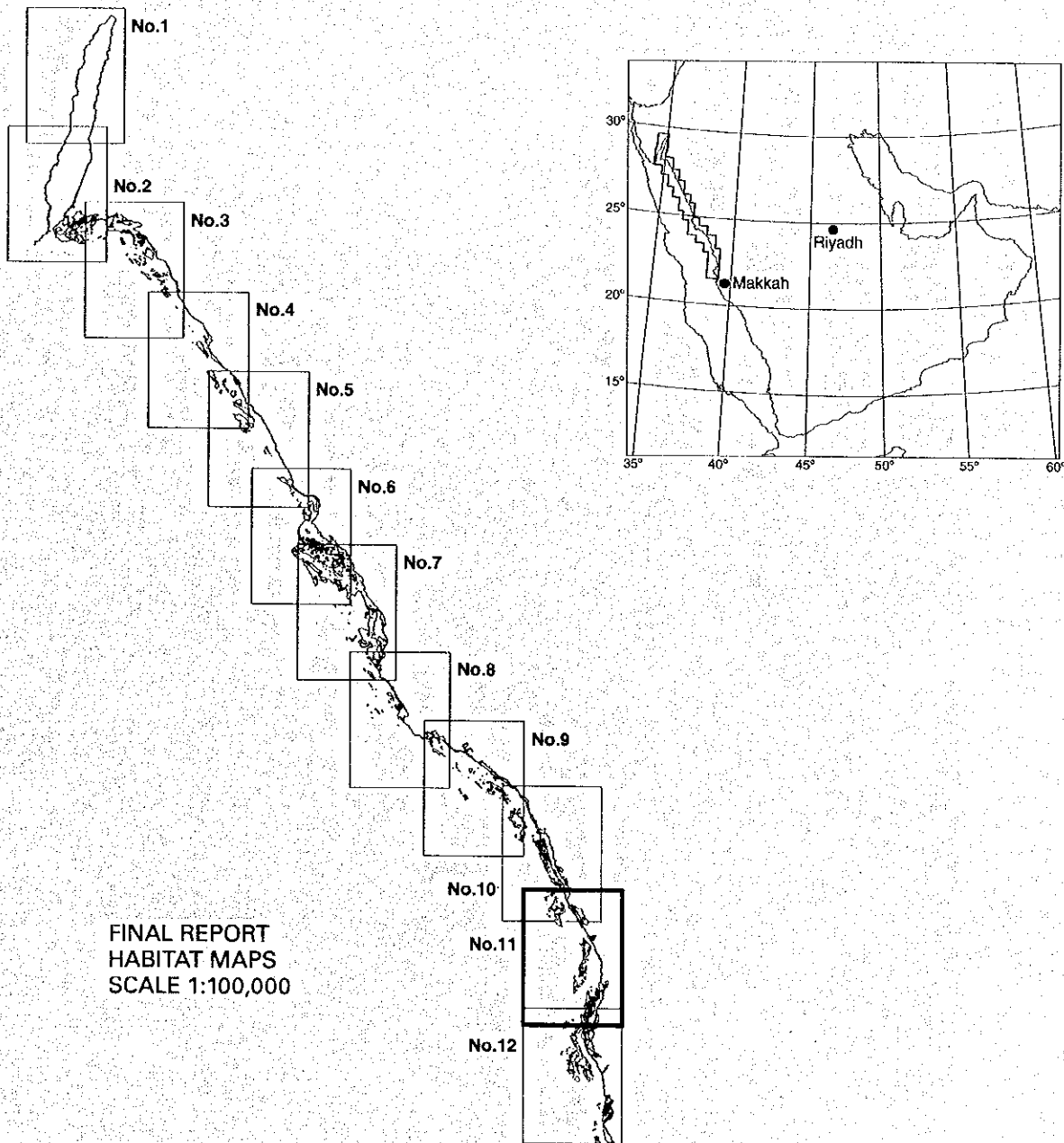
38°55' E



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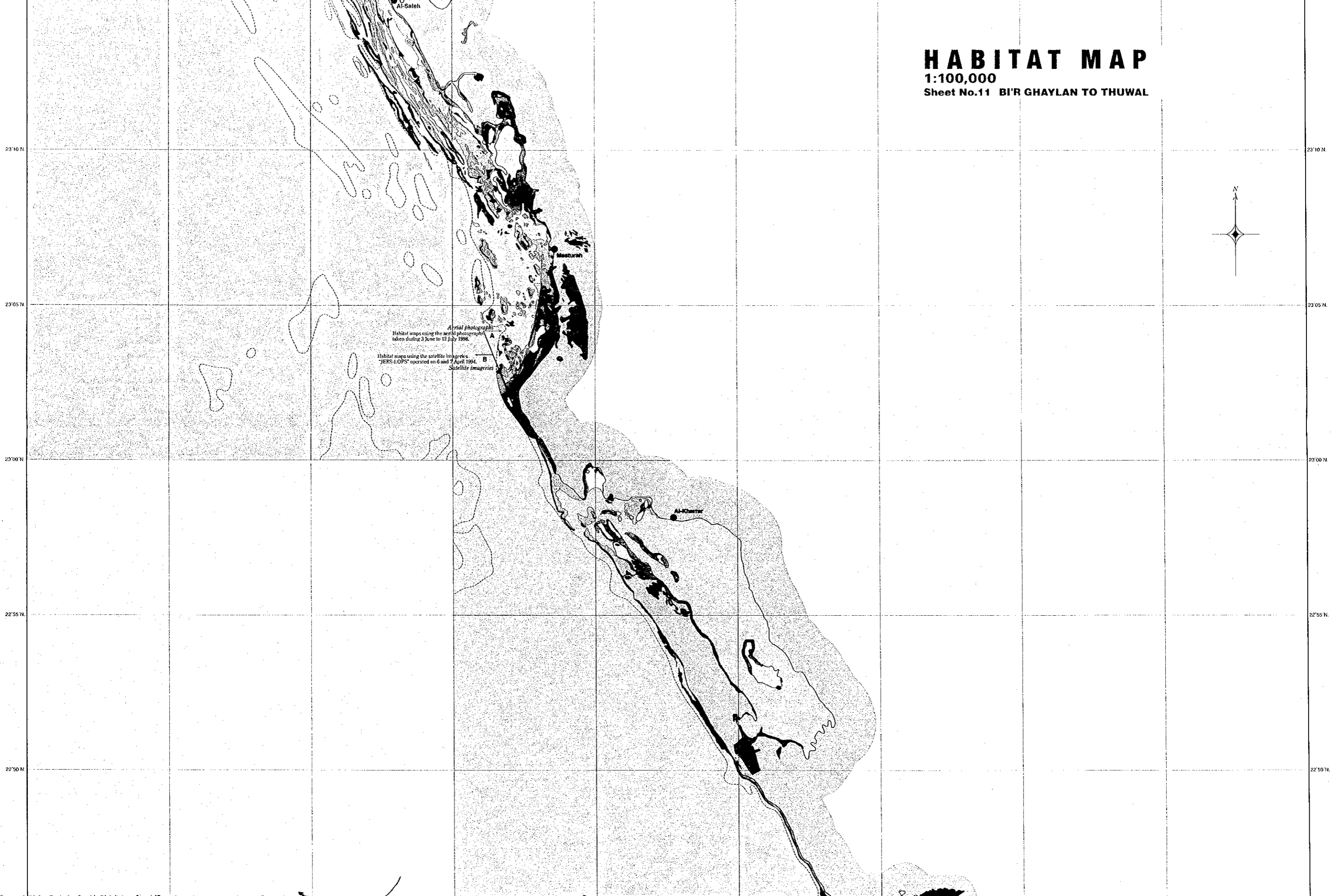
**THE STUDY ON
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**FINAL REPORT
HABITAT MAPS
SCALE 1:100,000**

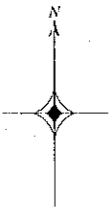
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38 39 E 38 35 E 38 30 E 38 25 E 38 20 E 38 15 E 38 10 E 38 05 E 38 00 E 37 55 E 37 50 E 37 45 E 37 40 E 37 35 E 37 30 E 37 25 E 37 20 E 37 15 E 37 10 E 37 05 E 37 00 E



HABITAT MAP

1:100,000
Sheet No.11 BI'R GHAYLAN TO THUWAL



A
Aerial photographs
Habitat maps using the aerial photographs
taken during 3 June to 12 July 1990.

B
Satellite imagery
Habitat maps using the satellite imagery
'JERS-1 OPS' operated on 6 and 7 April 1994.

23 10 N

23 05 N

23 00 N

22 55 N

22 50 N

23 10 N

23 05 N

23 00 N

22 55 N

22 50 N

22°55' N

22°55' N

22°50' N

22°50' N

22°45' N

22°45' N

22°40' N

22°40' N

22°35' N

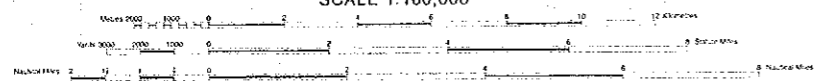
22°35' N

22°30' N



22°30' N



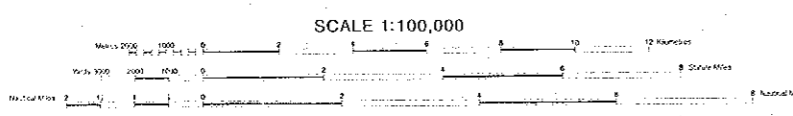
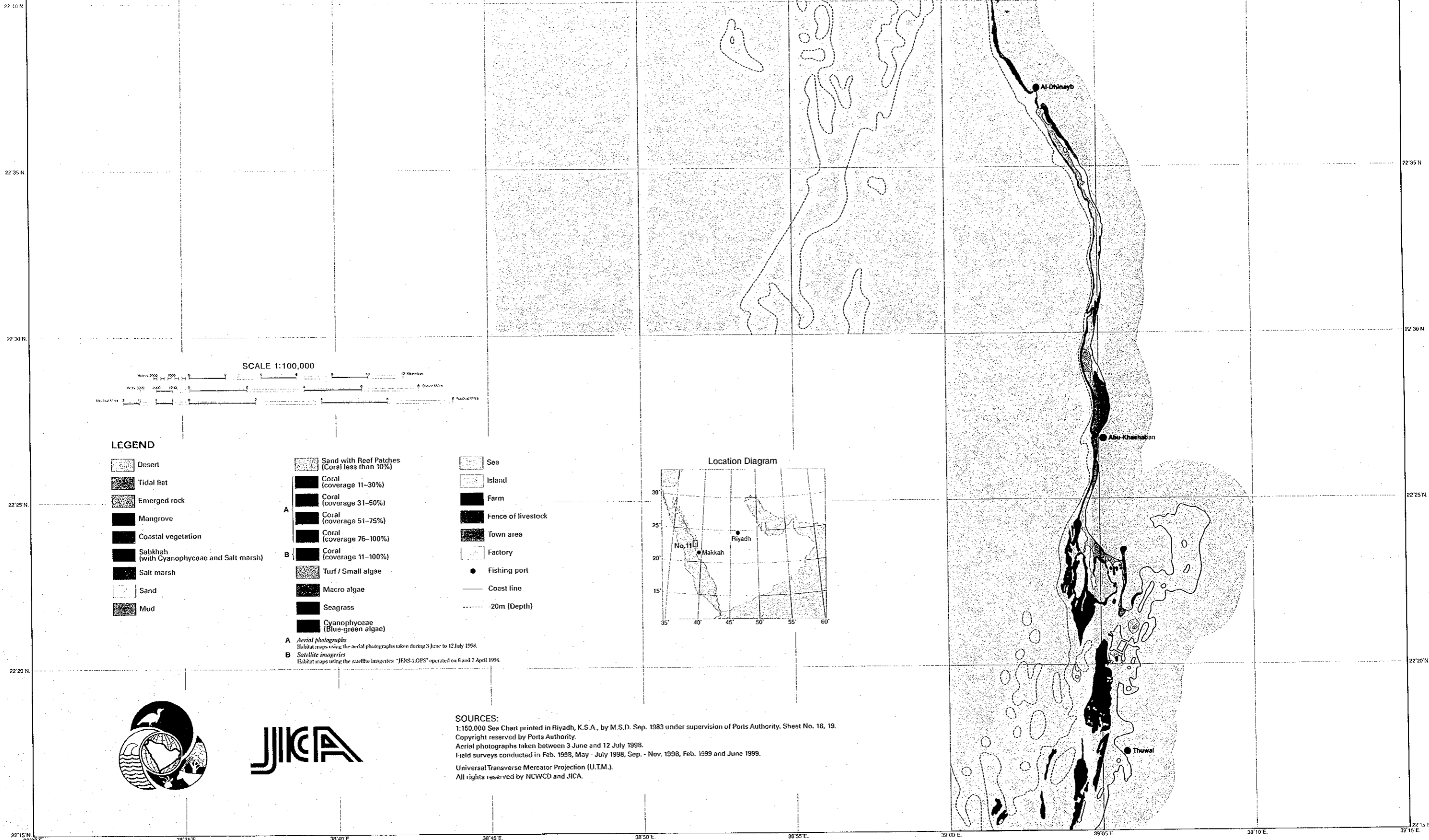
SCALE 1:100,000



LEGEND

-  Desert
-  Sand with Reef Patches
-  Sea

Location Diagram

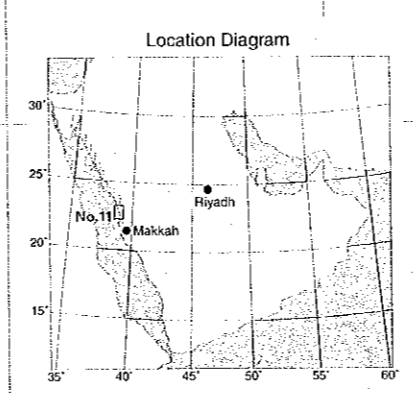


LEGEND

Desert	Sand with Reef Patches (Coral less than 10%)	Sea
Tidal flat	Coral (coverage 11-30%)	Island
Emerged rock	Coral (coverage 31-50%)	Farm
Mangrove	Coral (coverage 51-75%)	Fence of livestock
Coastal vegetation	Coral (coverage 76-100%)	Town area
Sabkhhah (with Cyanophyceae and Salt marsh)	Coral (coverage 11-100%)	Factory
Salt marsh	Turf / Small algae	Fishing port
Sand	Macro algae	Coast line
Mud	Seagrass	-20m (Depth)
	Cyanophyceae (Blue-green algae)	

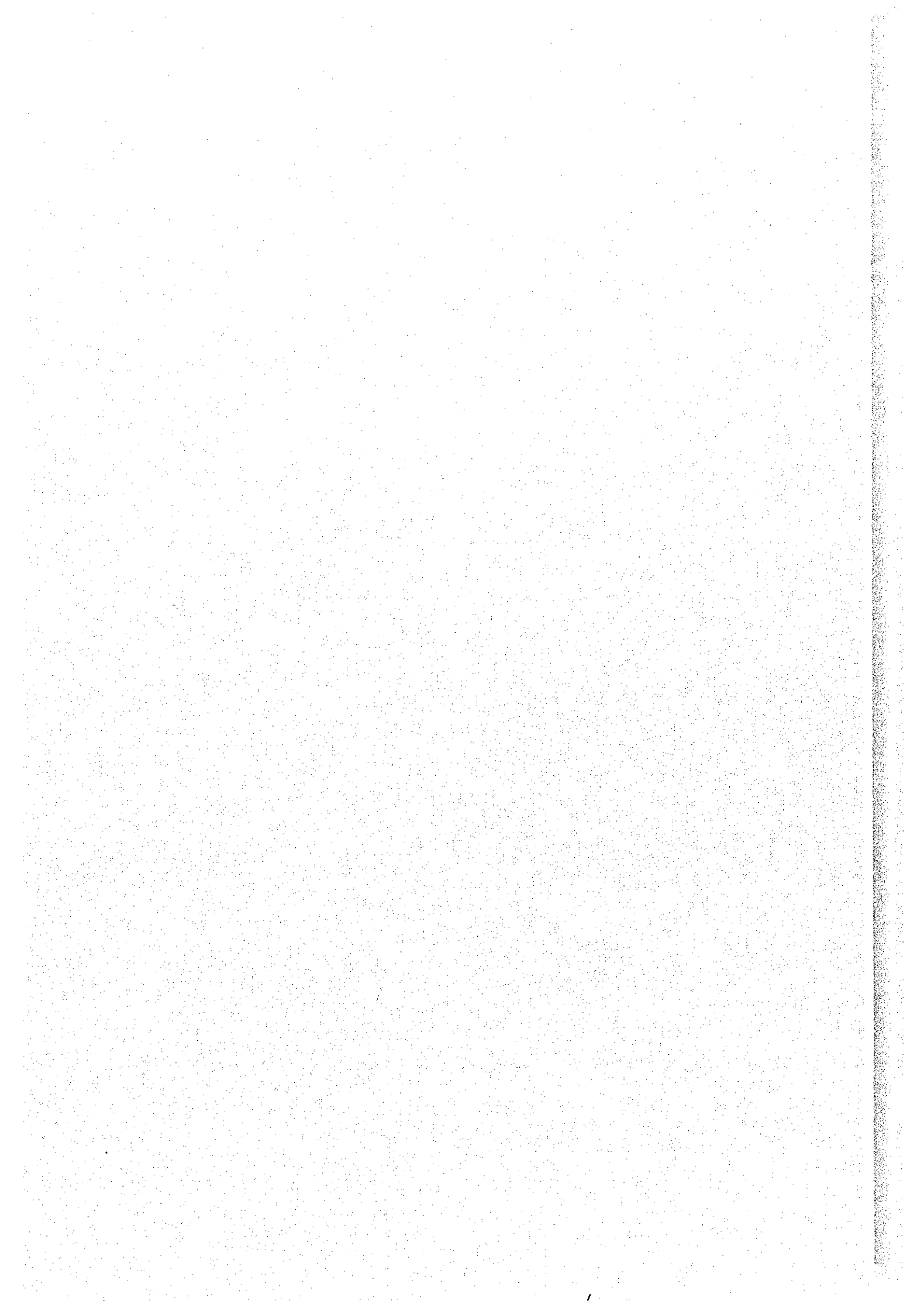
A Aerial photographs
Habitat maps using the aerial photographs taken during 3 June to 12 July 1998.

B Satellite images
Habitat maps using the satellite images "JERS-1.OPS" operated on 6 and 7 April 1994.



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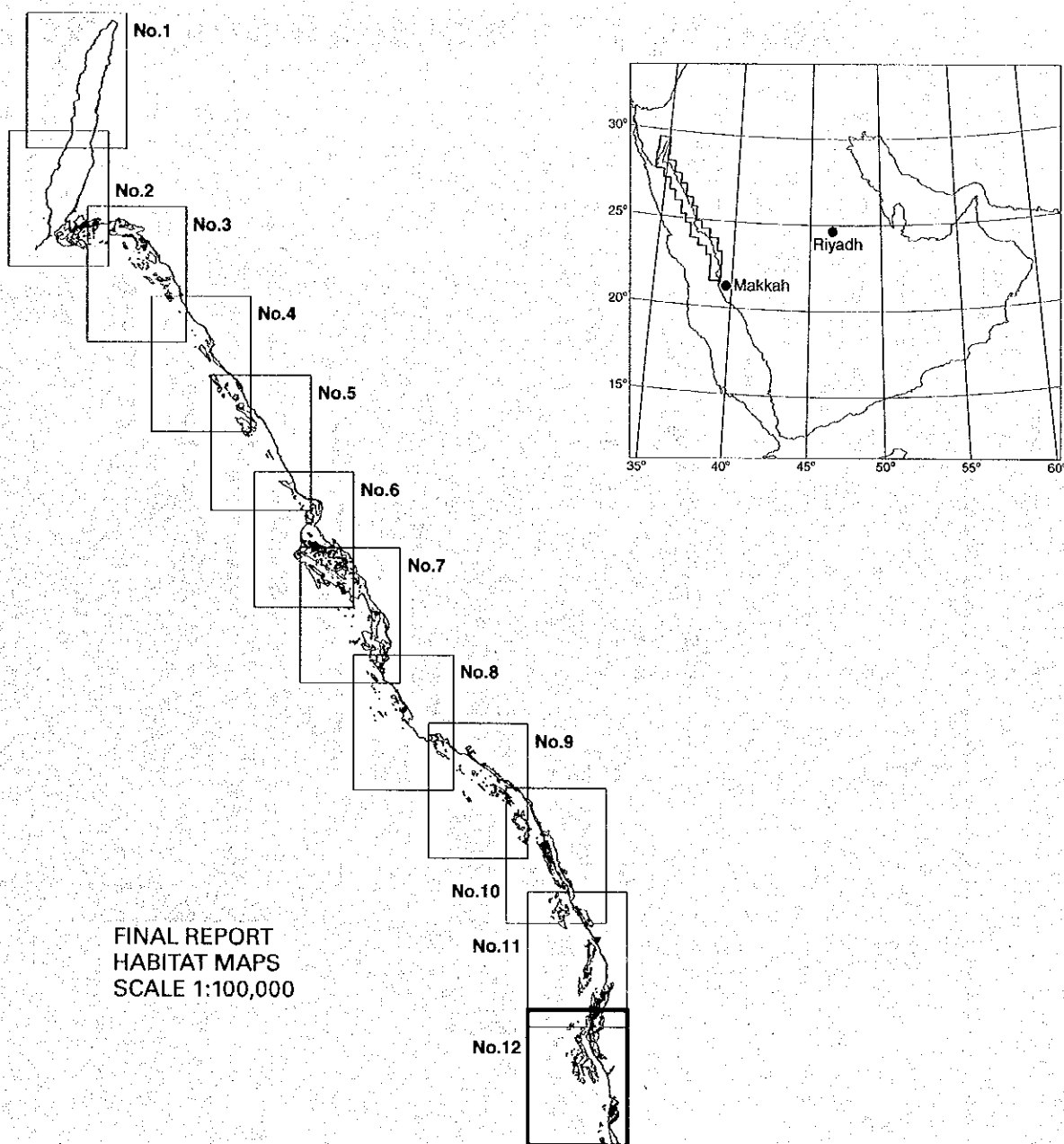
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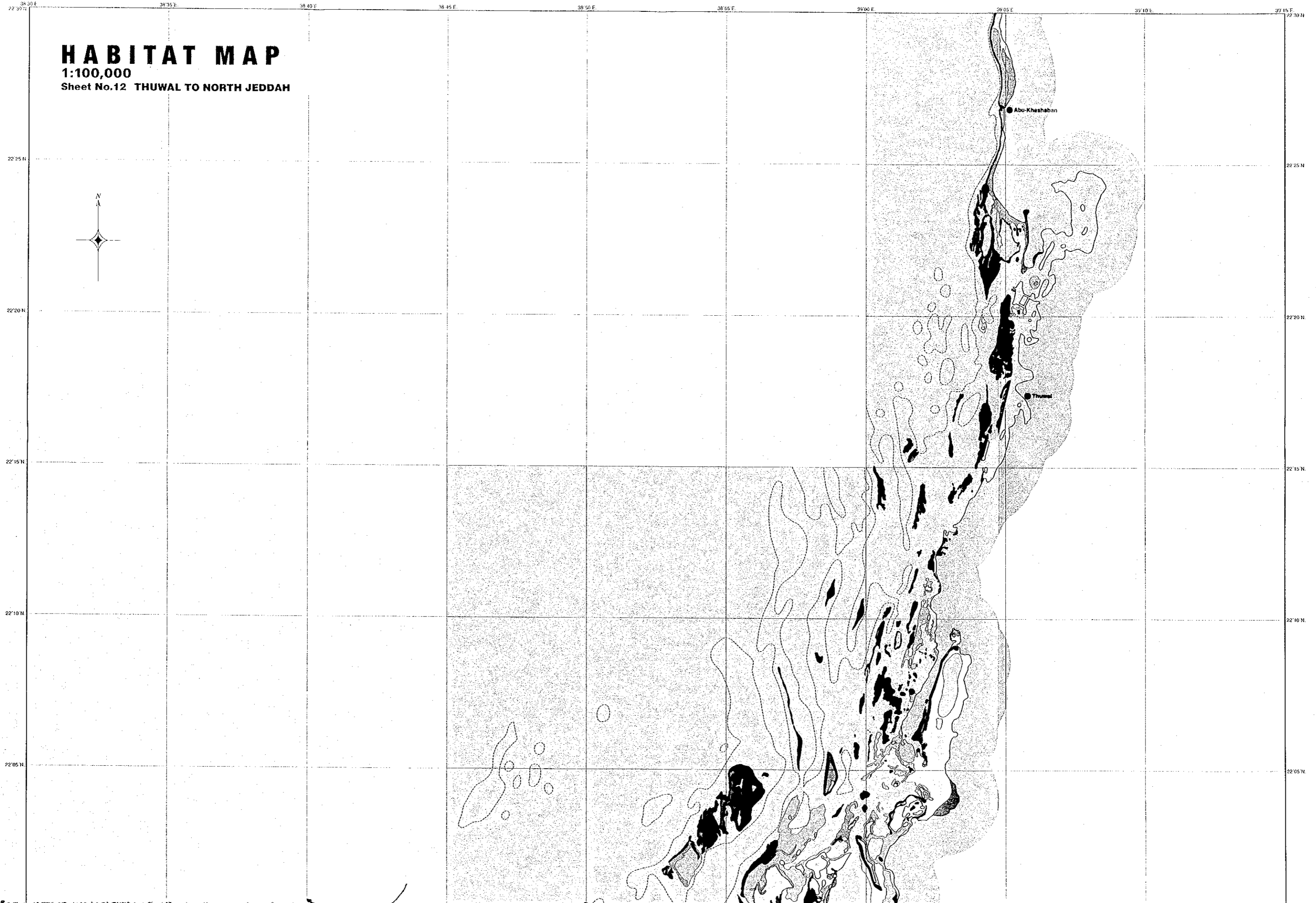
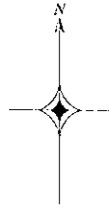
FINAL REPORT
HABITAT MAPS
SCALE 1:100,000

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HABITAT MAP

1:100,000

Sheet No.12 THUWAL TO NORTH JEDDAH



22°10' N

22°10' N

22°05' N

22°05' N

22°00' N

22°00' N

21°55' N

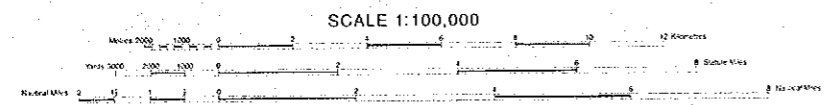
21°55' N

21°50' N

21°50' N

21°45' N

21°45' N

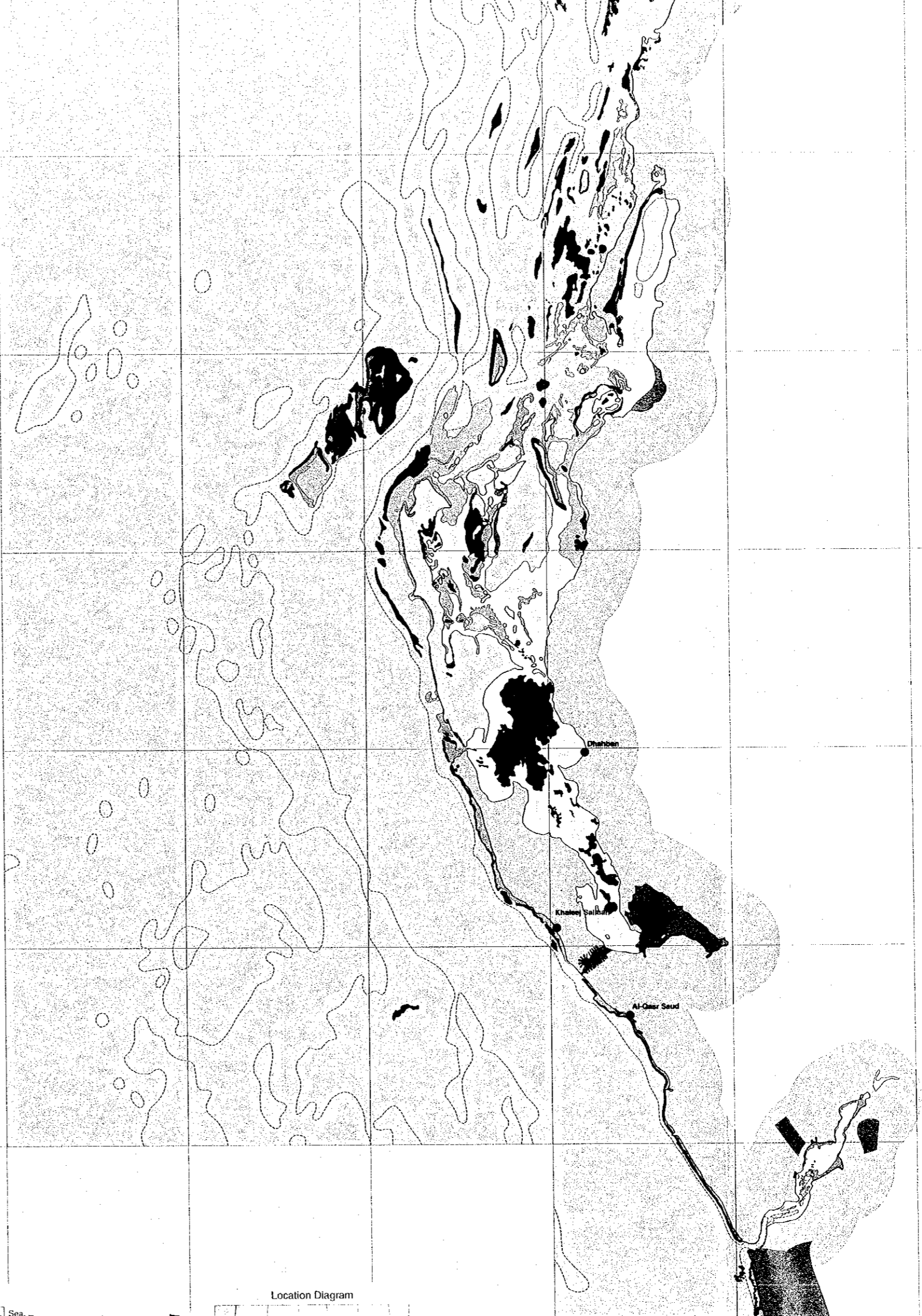


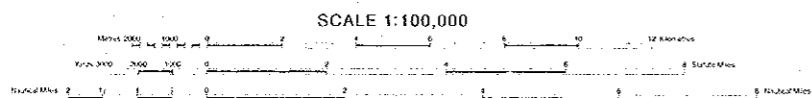
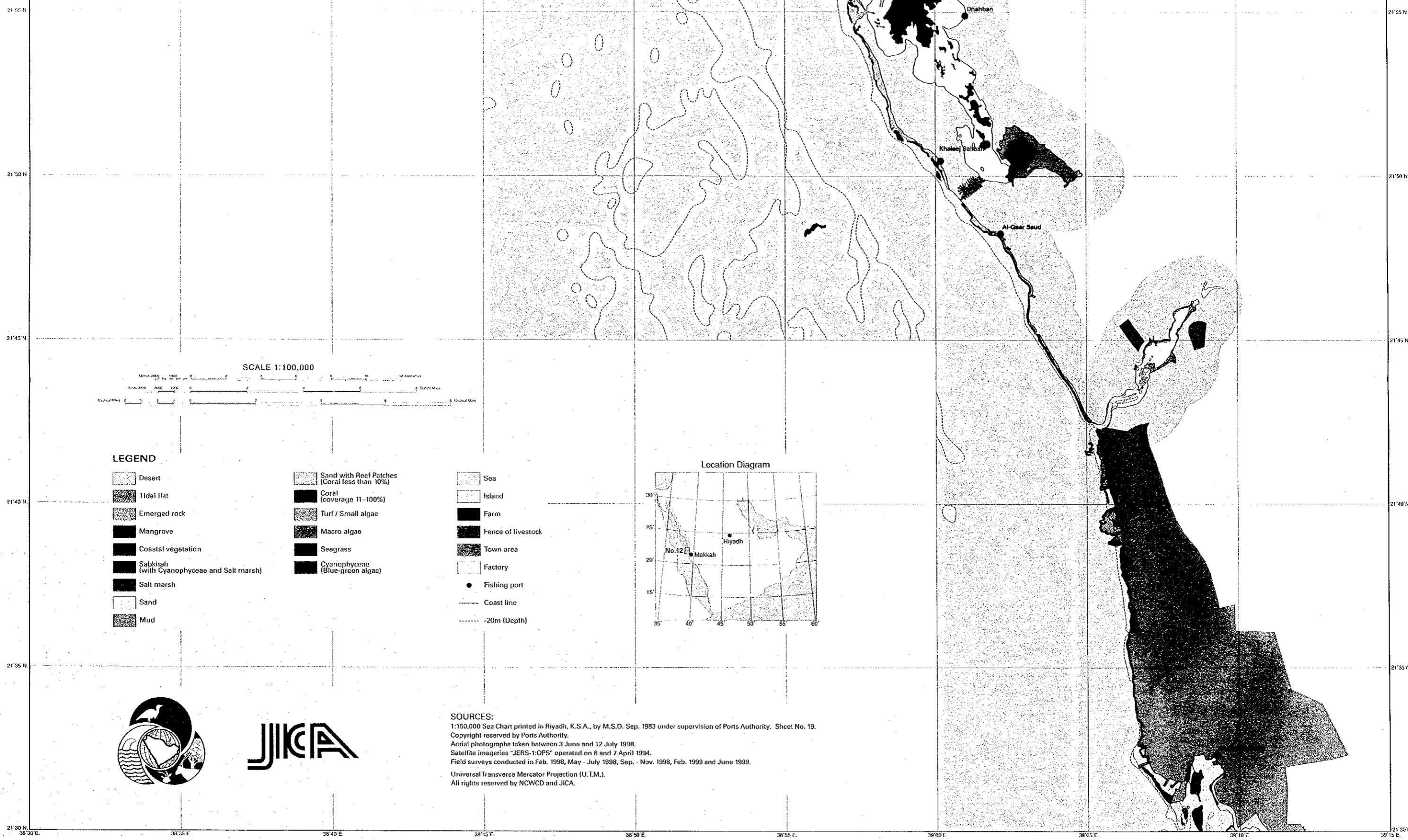
LEGEND

Sand with Reef Patches

Sea

Location Diagram

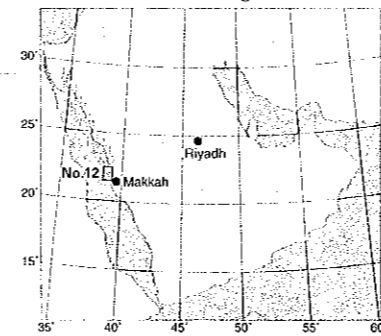




LEGEND

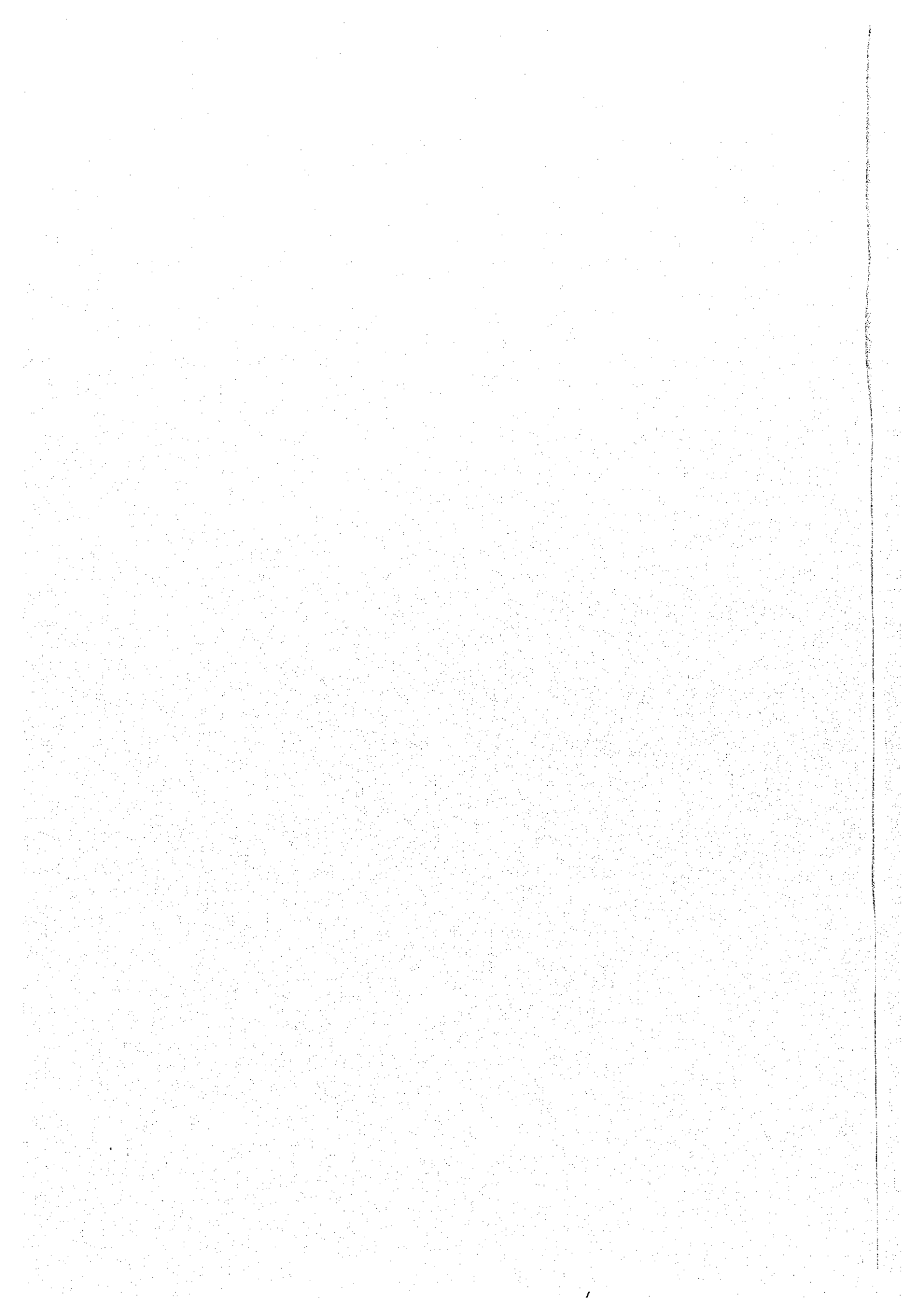
- | | | |
|---|--|--------------------|
| Desert | Sand with Reef Patches (Coral less than 10%) | Sea |
| Tidal flat | Coral (coverage 11-100%) | Island |
| Emerged rock | Turf / Small algae | Farm |
| Mangrove | Macro algae | Fence of livestock |
| Coastal vegetation | Seagrass | Town area |
| Sabkhhah (with Cyanophyceae and Salt marsh) | Cyanophyceae (Blue-green algae) | Factory |
| Salt marsh | | Fishing port |
| Sand | | Coast line |
| Mud | | -20m (Depth) |

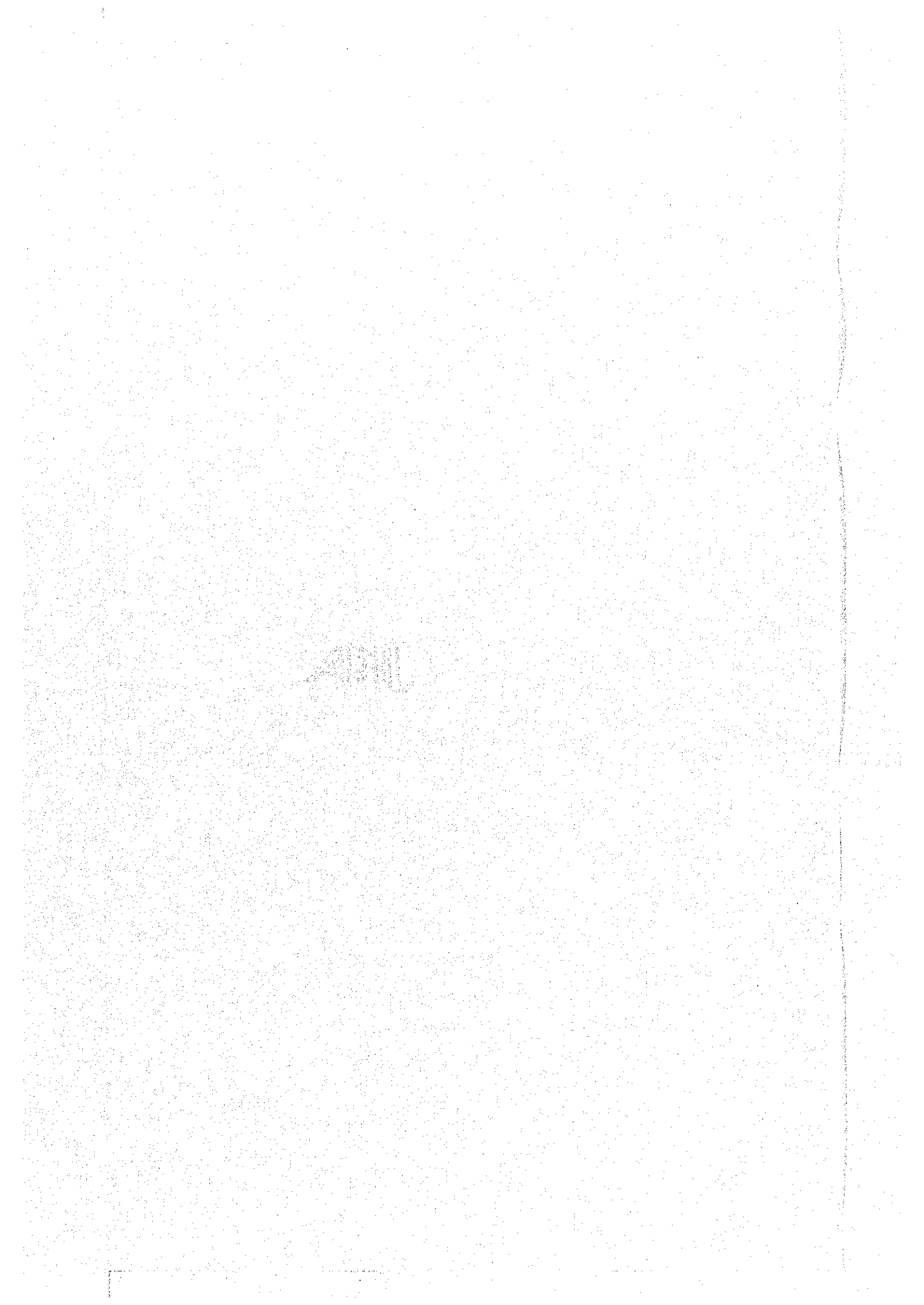
Location Diagram



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21°30' N 38°30' E 38°35' E 38°40' E 38°45' E 38°50' E 38°55' E 39°00' E 39°05' E 39°10' E 39°15' E





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