

بِسْمِ اللَّهِ الرَّحْمَنِ
الرَّحِيمِ

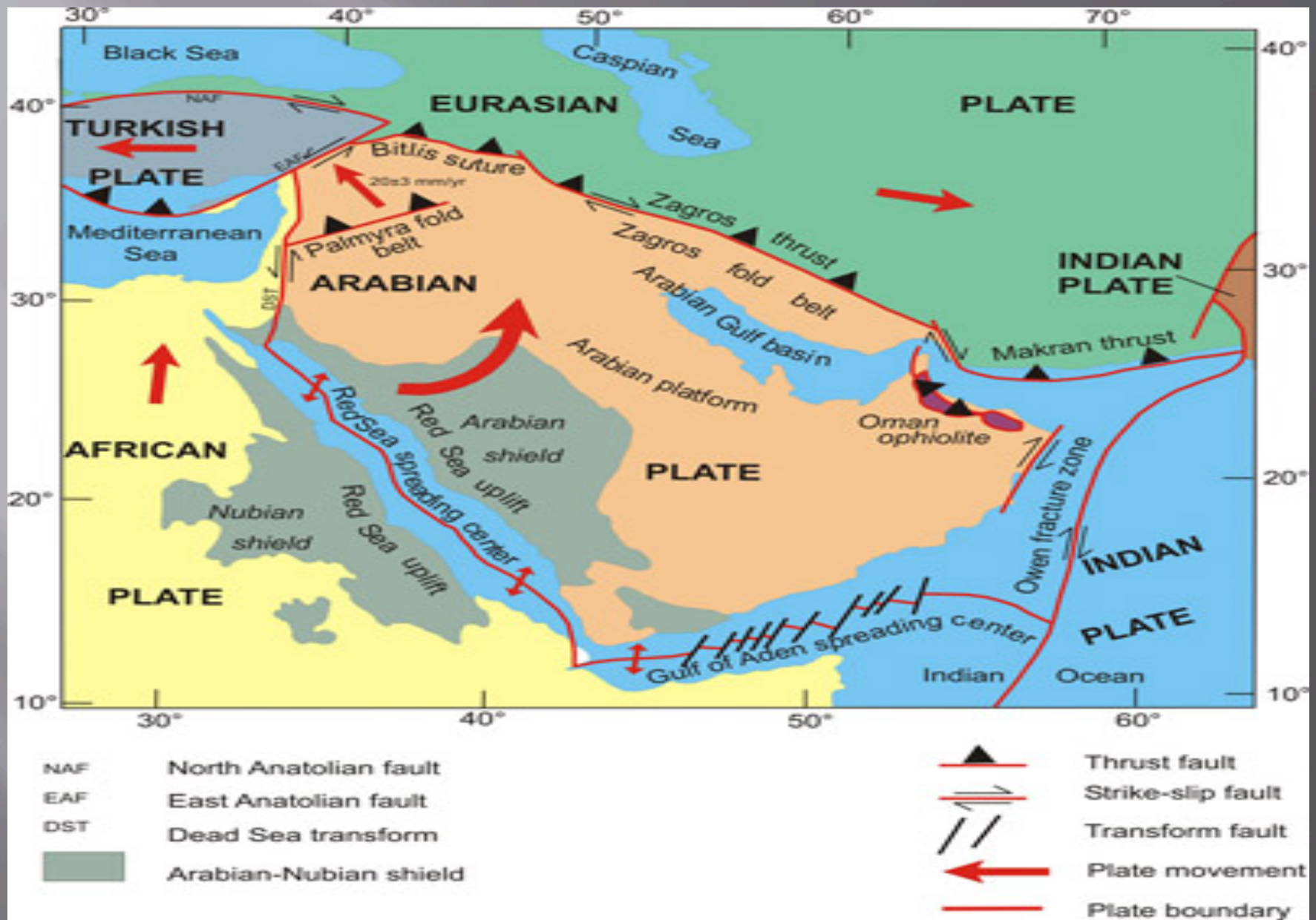
**Country Report
ON
Jordan Seismological
Observatory (JSO) Networks and
Seismic Hazards
In Jordan.**

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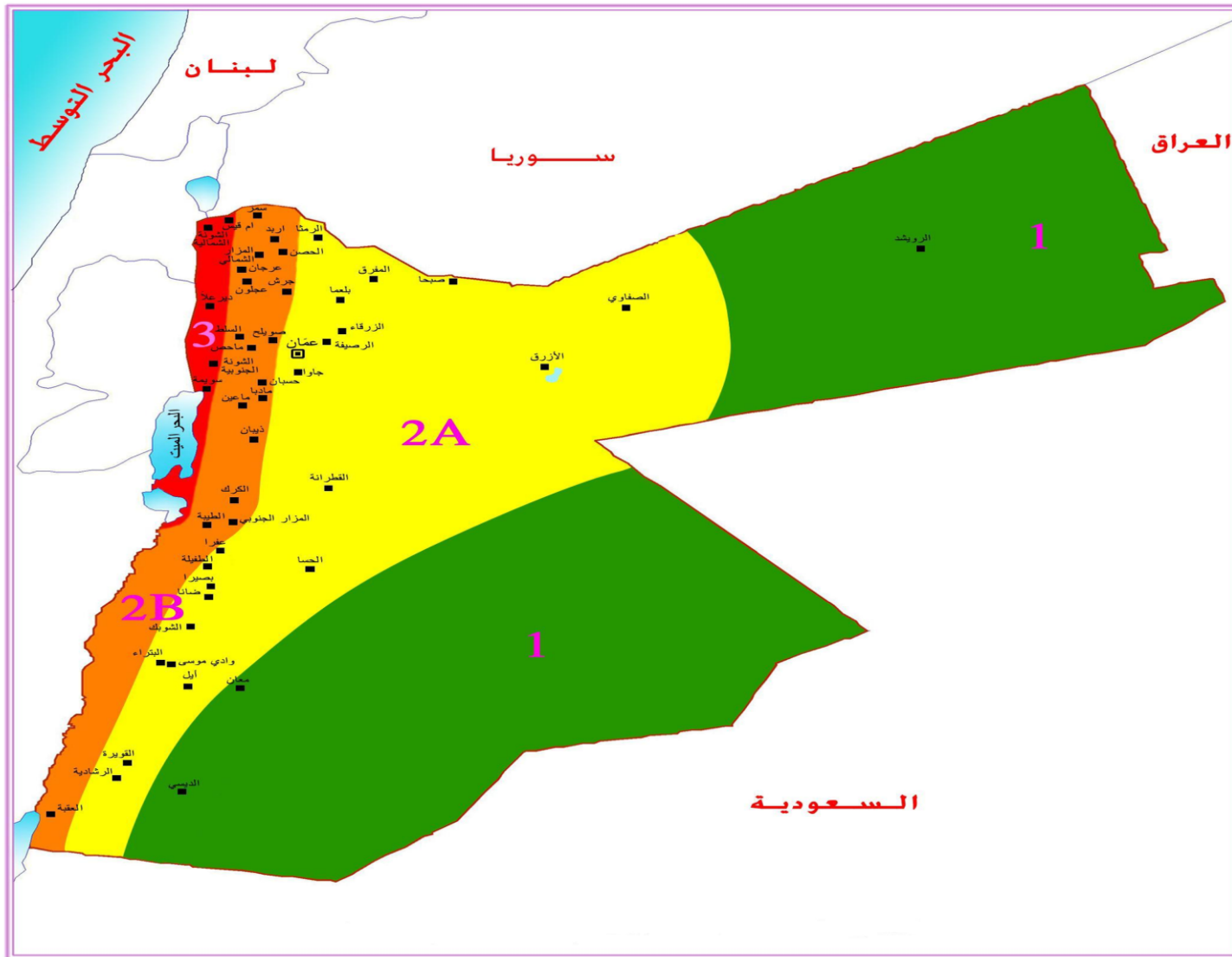


Jordan Seismological Observatory (JSO) Objectives:

- 1- Observing seismic events around the hour, doing the analysis, assessment and archiving
- 2- Preparing seismic maps and seismic hazard maps.
- 3- Data exchanging with universal observatories periodically and when needed in order to achieve complete set of data for better results
- 4- Providing seismic data to local Authorities.
- 5- Coordinating with local Authorities for the aim of minimizing seismic hazards, and participating in studies and programs aiming for public awareness of seismic hazards.
- .6- Identifying active faults and their types
- 7- Issuing monthly and annual bulletins of local and regional seismic events.
- 8- Maintaining the networks (Broad Band and short period stations, Strong Motion stations, Portable stations).



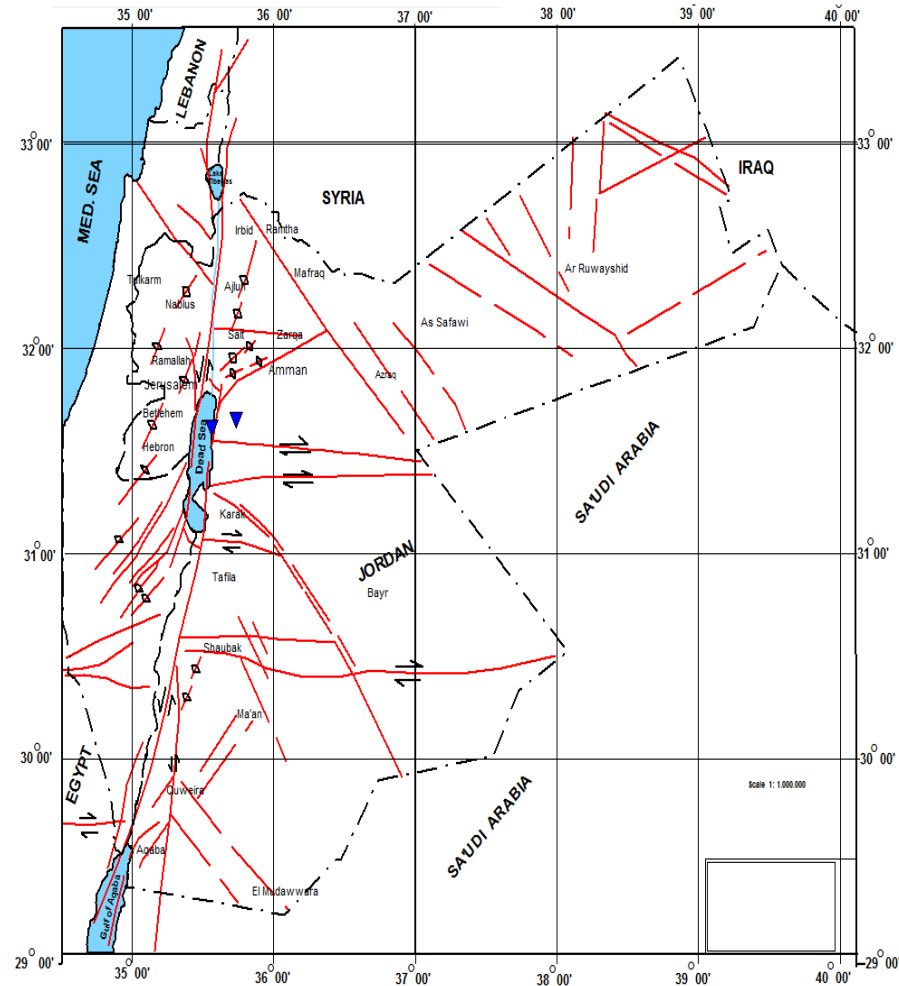
Tectonic Map of The Arabian Plate.



Hazard Map for Building Code

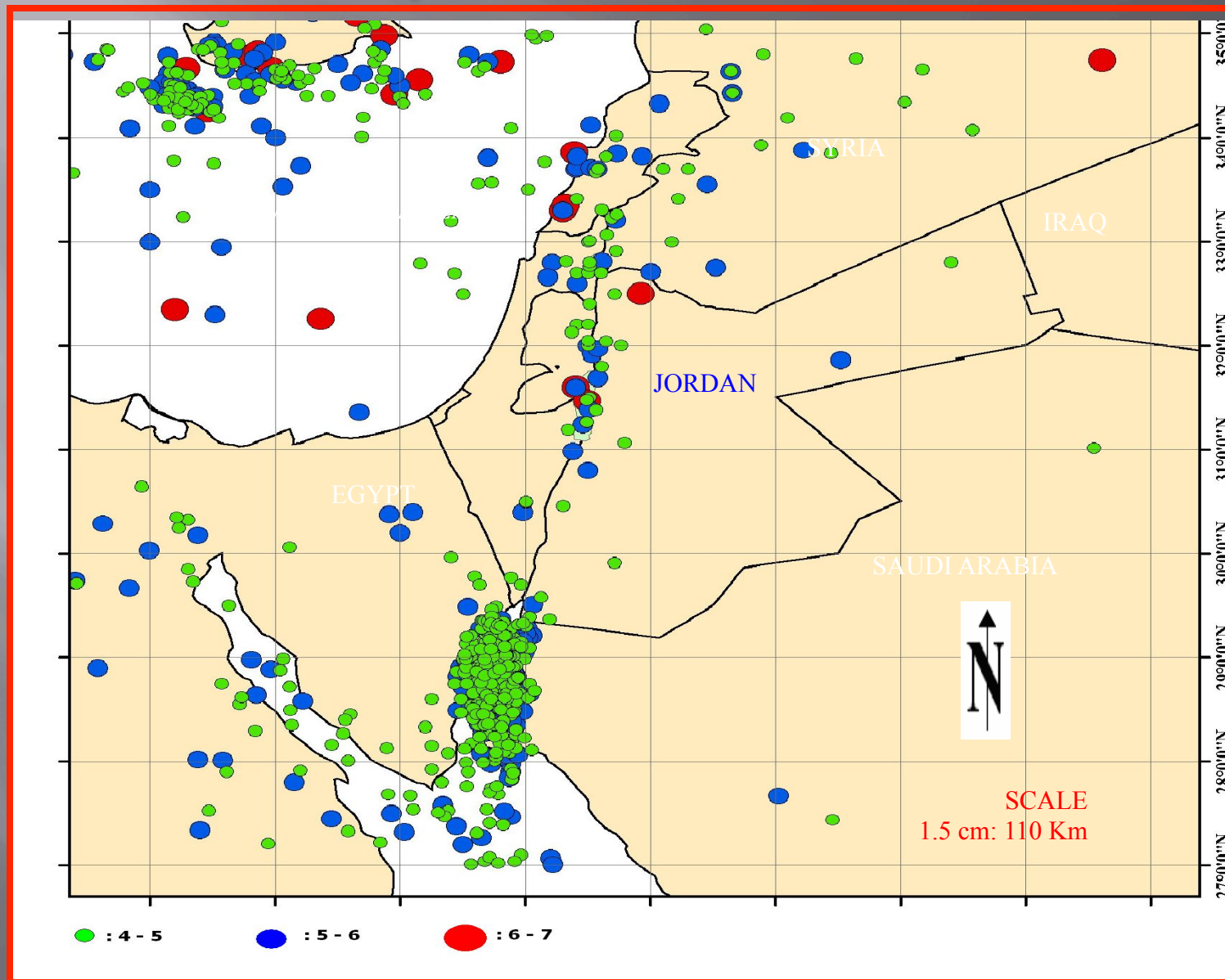
Draft copy for MERC Joint Project (NRA,GII,ESSE)
Workshop, Barcelona - (19-21/12/2006)

Faults in Jordan

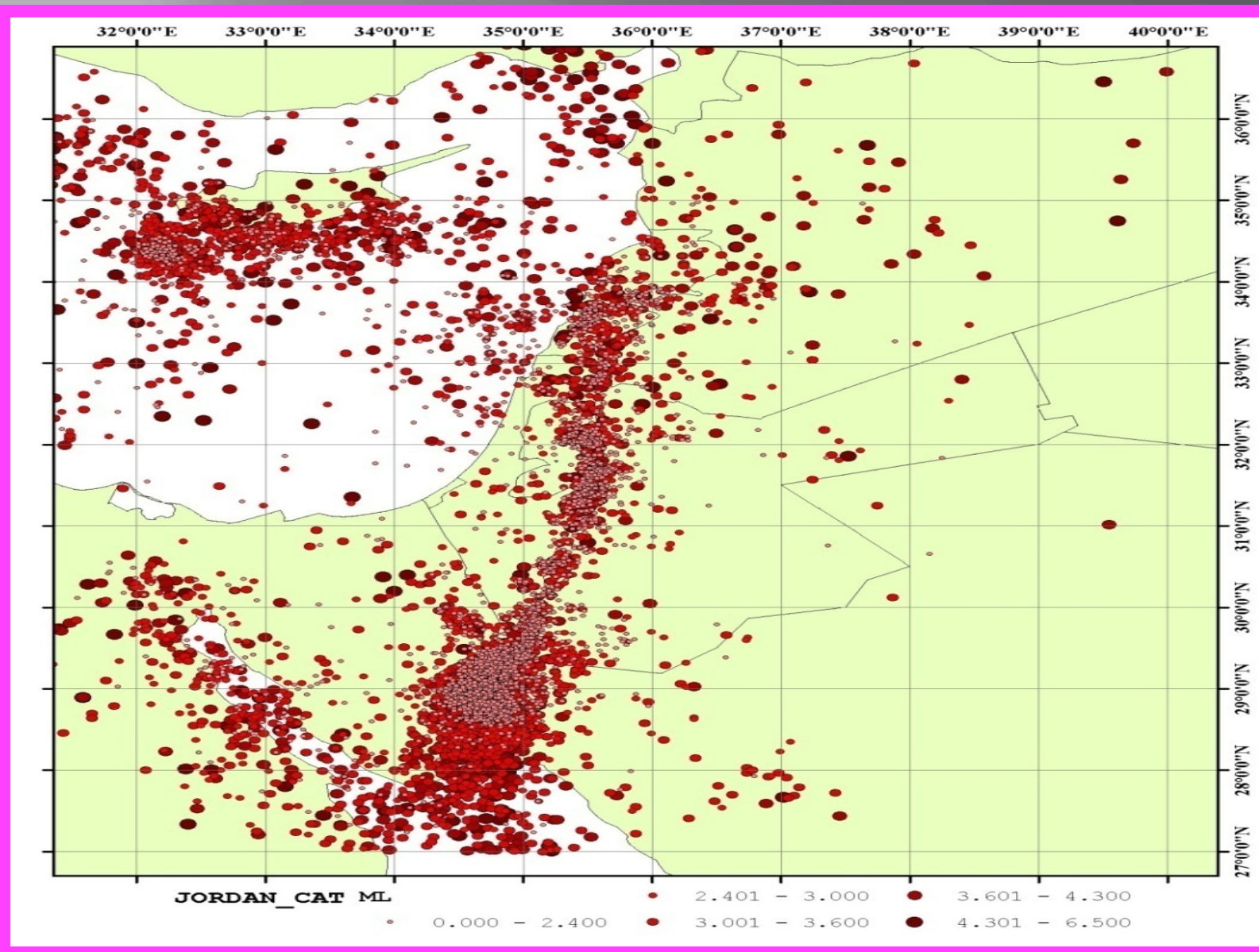


Jordan Structural Map

Seismicity map of the Dead Sea transform region for the period 1900-2012 ($M < 4$)



Seismicity map of the Dead Sea transform region for the period 1900-2012

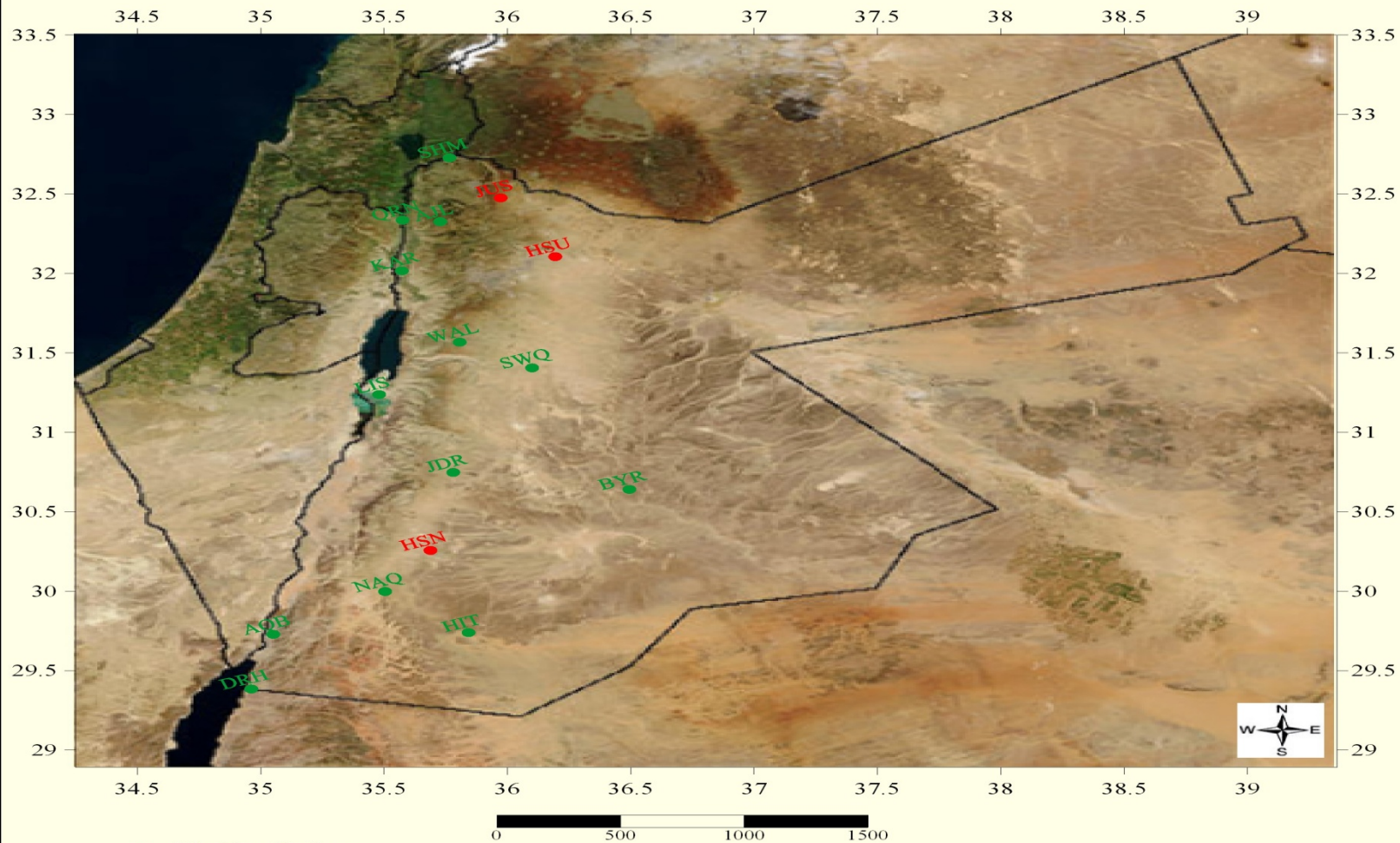


JSO SEISMIC STATIONS

No	Location (city)	Stn. Name	Lat	Lon	Elevation (m)
1	Swaqa	SWQJ	31.24.29N	36.05.96 E	866
2	Jurf Al Darawish	JDRJ	30.43.68N	35.45.96 E	1365
3	Ras Al Naqab	NAQJ	29.59.89N	35.30.18 E	1640
4	Aqaba	AQBJ	29.43.65N	35.03.00 E	170
5	Al Qaren	QRNJ	32.20.08N	35.34.47 E	95
6	Al Dirreh	DRHJ	29.21.49N	34.57.72 E	10
7	Ajloun	AJLJ	32.19.59N	35.43.61 E	1175
8	Lisan	LISJ	31.14.40N	35.28.86 E	-327
9	Bayer	BYRJ	30.38.44N	36.29.53 E	1008
10	Batn Al Ghoul	HITJ	29.44.55N	35.50.45 E	1235
11	Al Karameh	KARJ	32.00.12N	35.34.50 E	-124
12	Saham	SHMJ	3243.62N	35.45.84 E	363
13	Wala Dam	WALA	31.56.69N	35.80.65 E	519
14	Al Hussein Univ.	HSN	30.15.21N	35.41.14E	1176
15	Jordan Technology Univ.	JUS	32.28.30N	35.58.21 E	550
16	Hashemite Univ.	HSU	32.06.18N	36.11.35 E	613

Natural Resources Authority Jordan Seismological Observatory

Seismic Network Stations on Landsat Image of Jordan



- Working Stations
- Under Construction Stations



JSO strong motion stations

Seismic station components

1-Data Acquisition System (DAS):

A -Reftek 130-01 broad band seismic recorder

B- Gurlap CMG-24DM broad band seismic recorder



Reftek 130-01



Gurlap CMG-24DM

2-Sensors (seismometers):

A-Reftek 151-120 Three components ,broadband

B-L-4-3D sercel INC (1 HZ) Three components, short period

C-Gurlap - CMG-3T (50 HZ) Three components, broadband



Reftek 151



L-4-3D sercel INC



Gurlap - CMG-3T

3-communication types

We use Vsat system to transmit our seismic data form stations to the main center ,via iDirect Router .

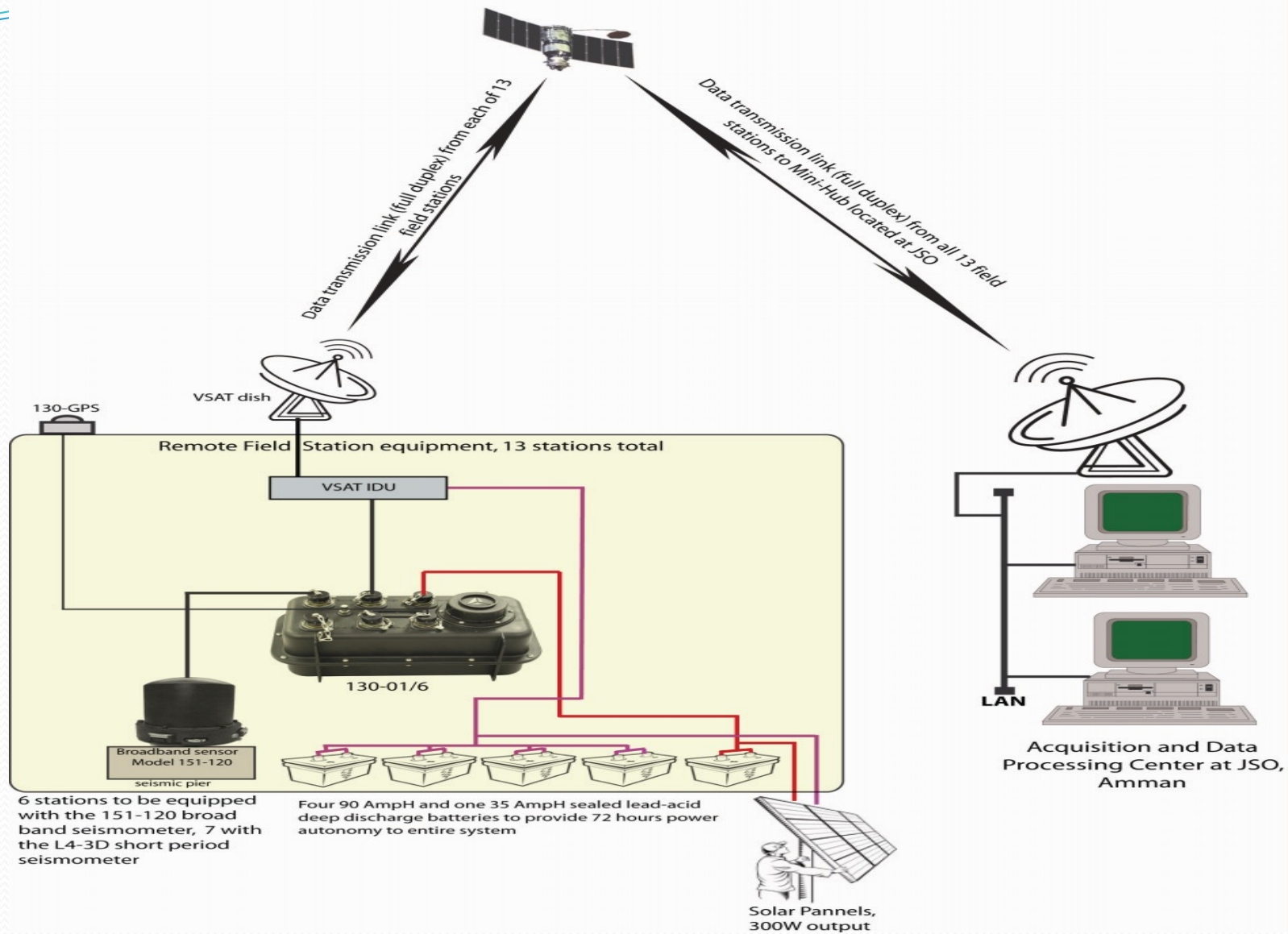


Front View of the iDirect 3000 series™ Satellite Router

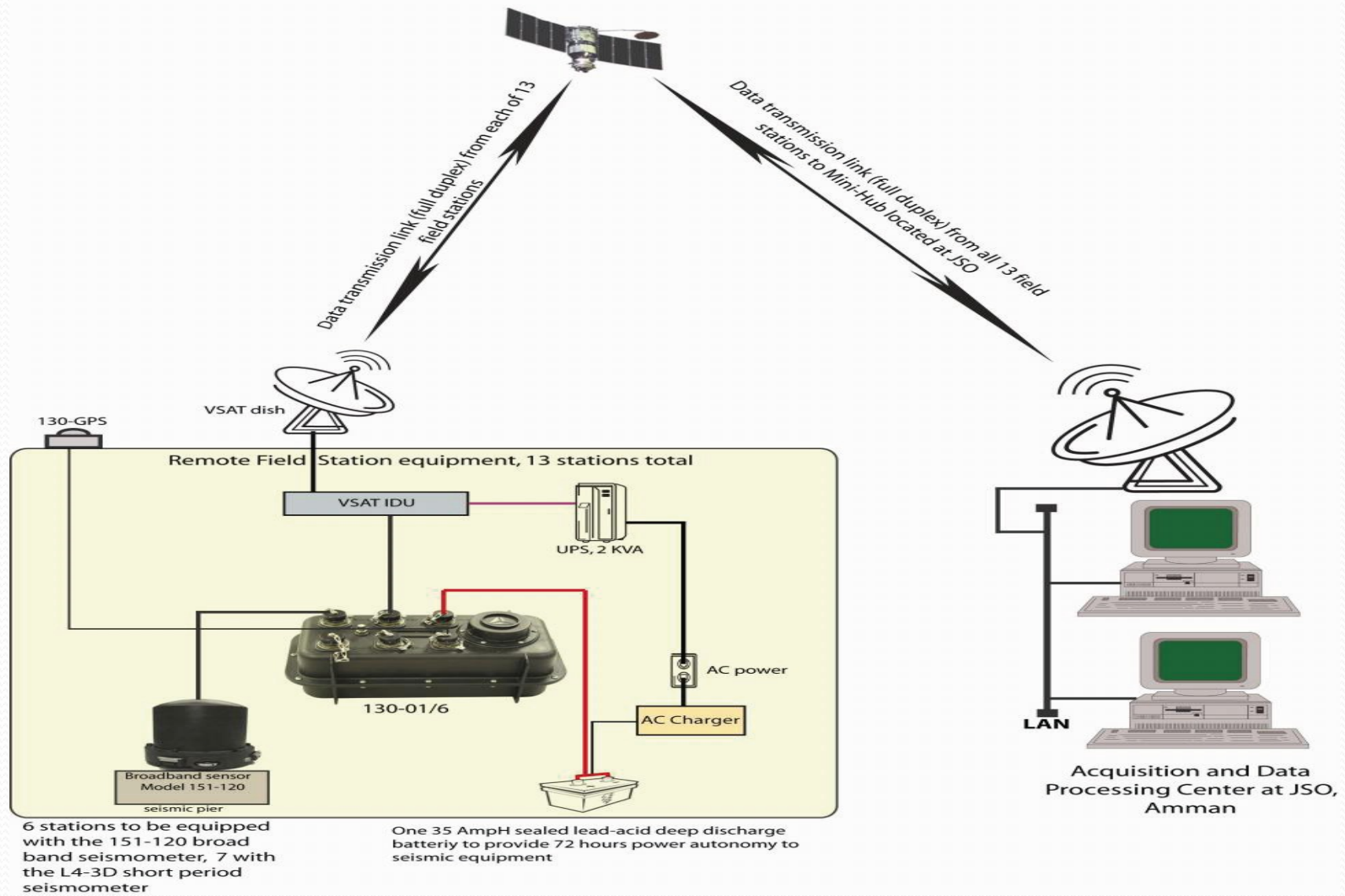
Power source

- A) cells and batteries
- B) AC(Alternating current)





Seismic station works on solar energy



Seismic station works on Electricity



Thank all for your
attention