Release B Requirements

HUGHES AIRCRAFT
HUGHES INFORMATION TECHNOLOGY

Within a granule

Subset	based on	Geographic location
Subsample		Spectral band/parameter
Average		Time

Subset, Subsample, Average Explained

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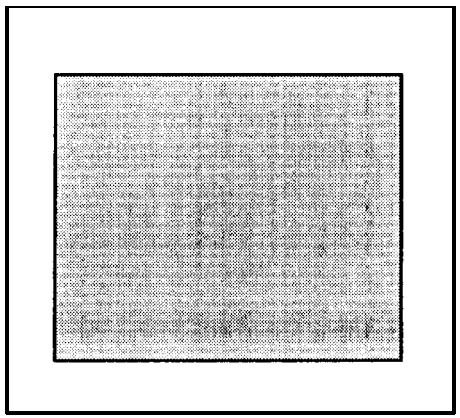
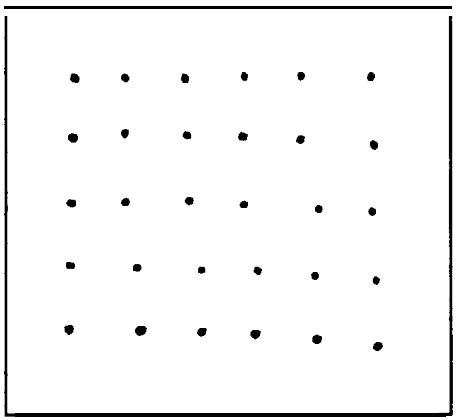
Subset



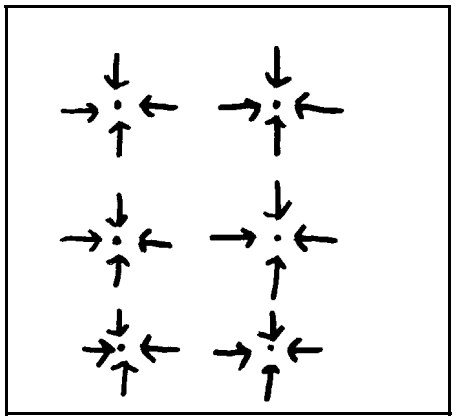
Take all contiguous data points in region

Subsample



Take every Nth data point in area (every N^{th} row, every N^{th} column)

Average



Algorithmically combine neighboring points to get single value for sub region, e.g. weighted average based on distance

Geographic Location Subset Results

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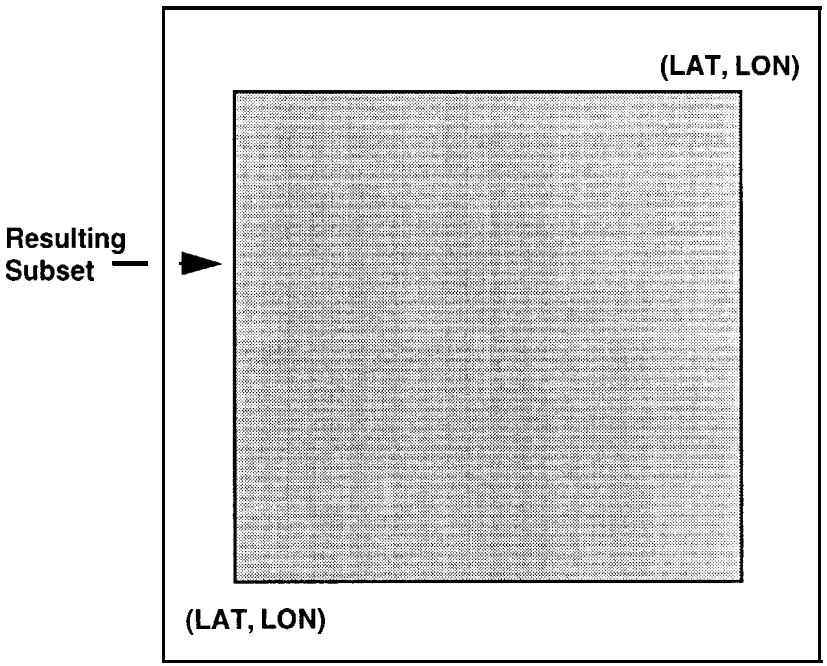
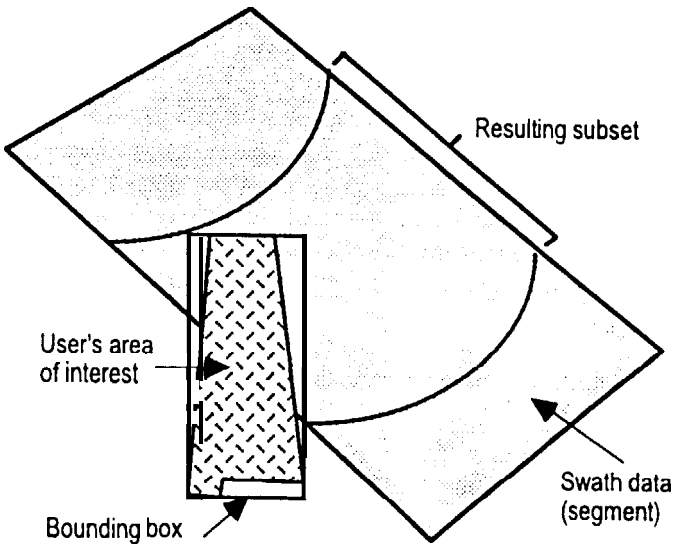
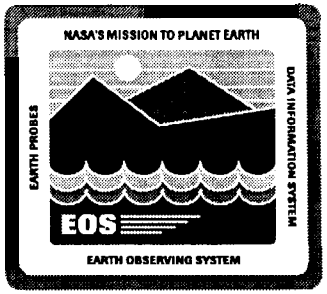
Latitude and Longitude



Grid



Swath



Two Ways To Subset By Data Plane

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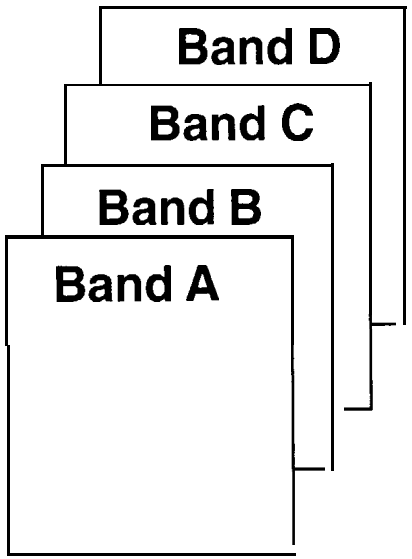
Parameter	Z Dimension (Altitude)
Selects one plane only, e.g. Band C	Selects range of planes, e.g. Bands B through D



1

~~Compute Time .....~~
~~Volume .....~~

ONLINE HELP

x longitude

1. Reference Map

(Suggested scale : x 10 of working map. Scale factor may change if granule is on land or on ocean)

Map Projection Mercator

Features	or	off
Coastlines Major Rivers Bathymetry State borders Geolog. Boundaries		

View places name

Yes

No

Metadata

Functions

Subsetting	Other Data Services	Map Options
File	Order	Reset

2. Working Map

First choice:

Load the degraded version of the selected granule (i.e., browse image). But , according to the quality of the browse image, load with a default background map for reference or mask.

Second choice:

Load the coverage map of the selected granule and footprint. (see IMS 0690 Requirement)

More specifically :

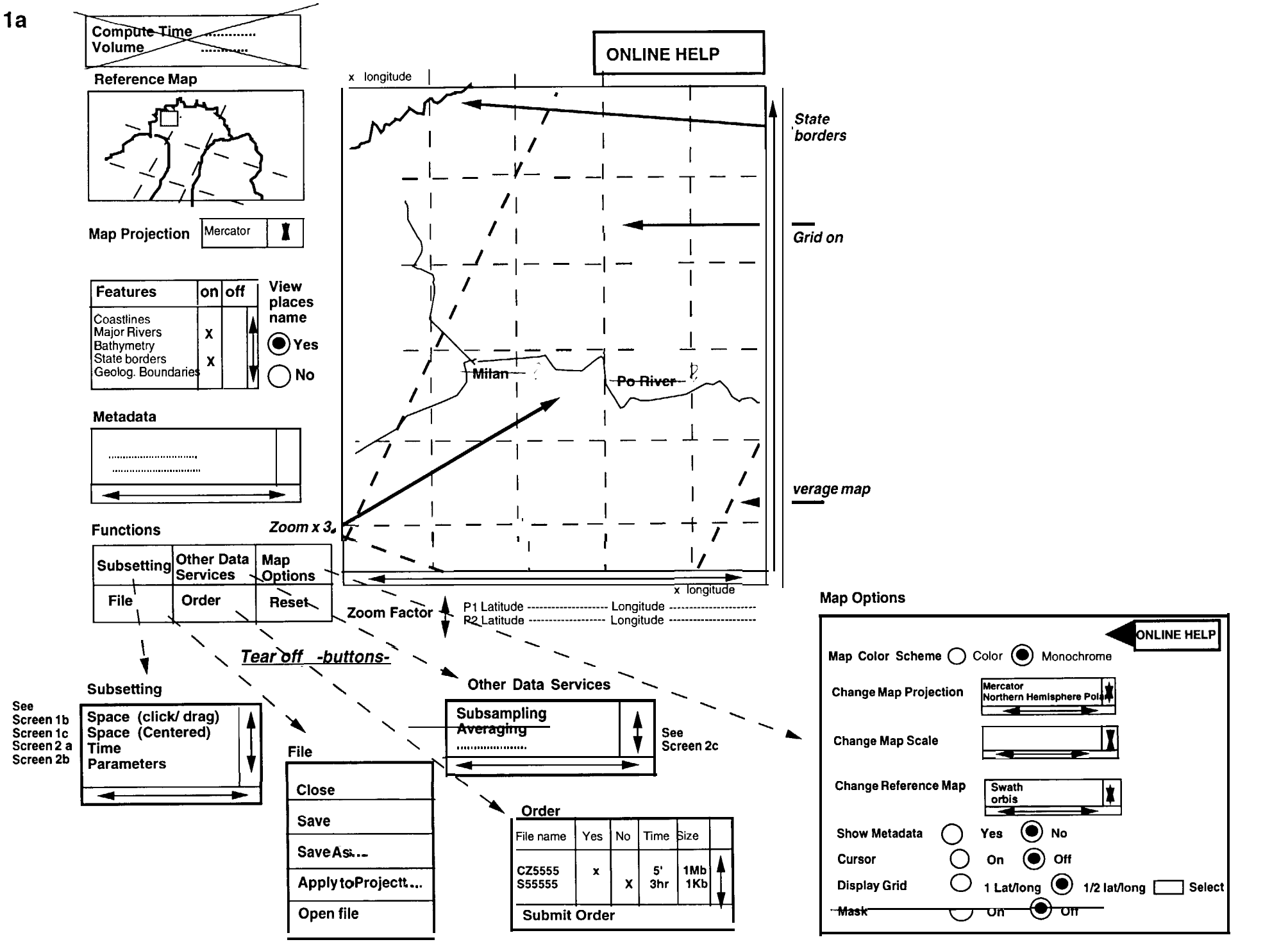
Minimum requirement:
Bounding rectangle of the granule
Prefered requirement:
Polygon or polygon with swath out line

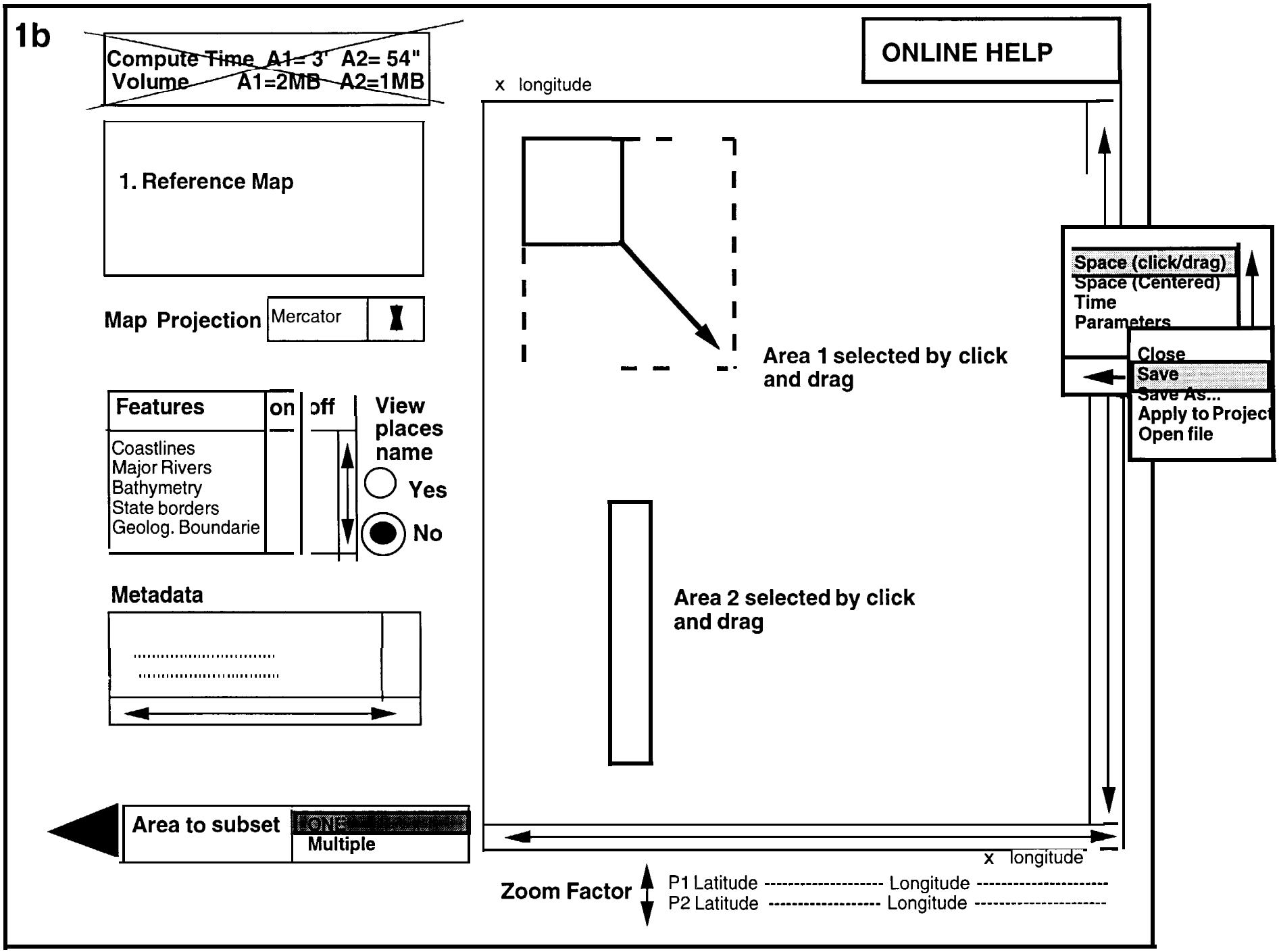
x longitude

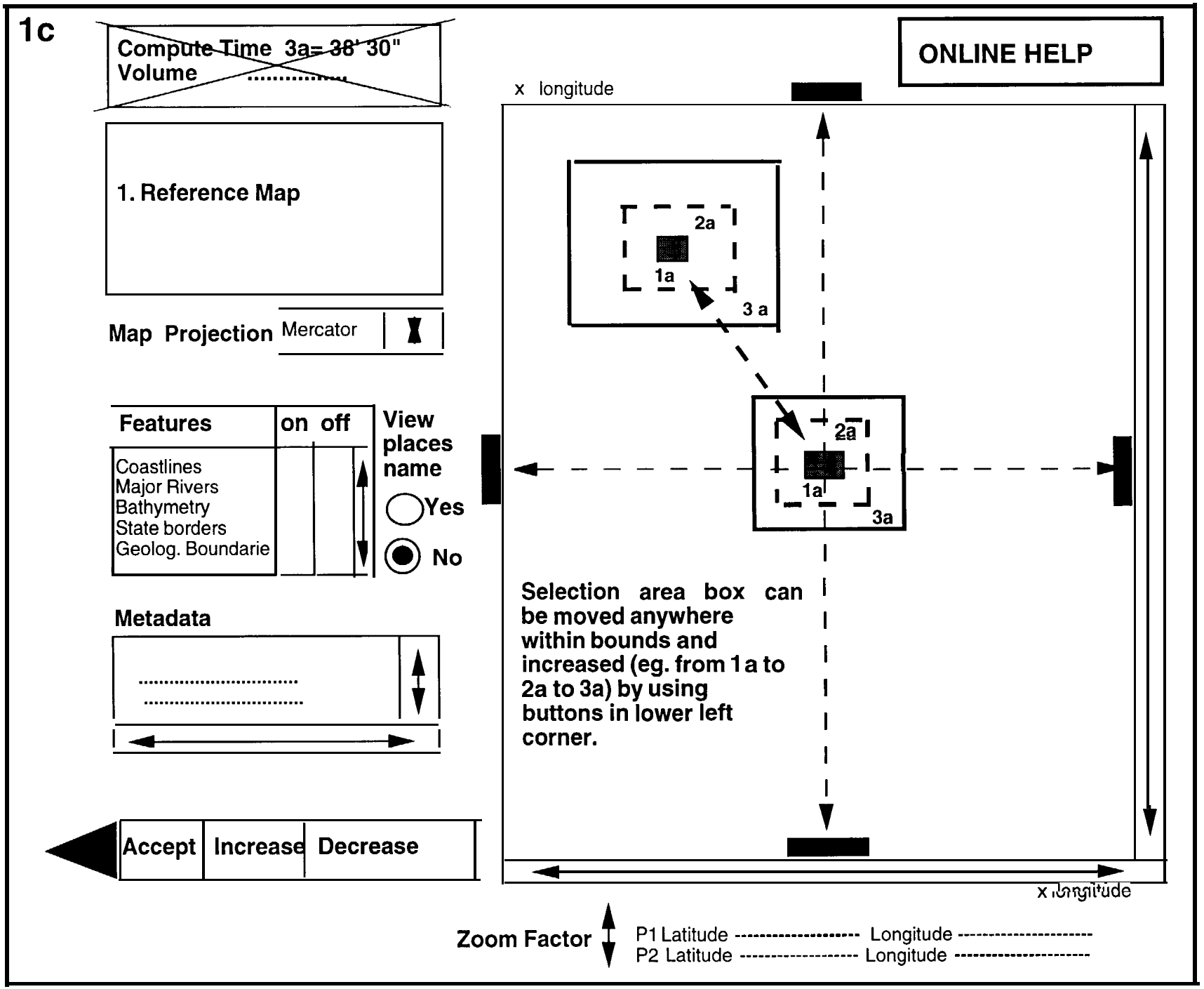
Zoom Factor

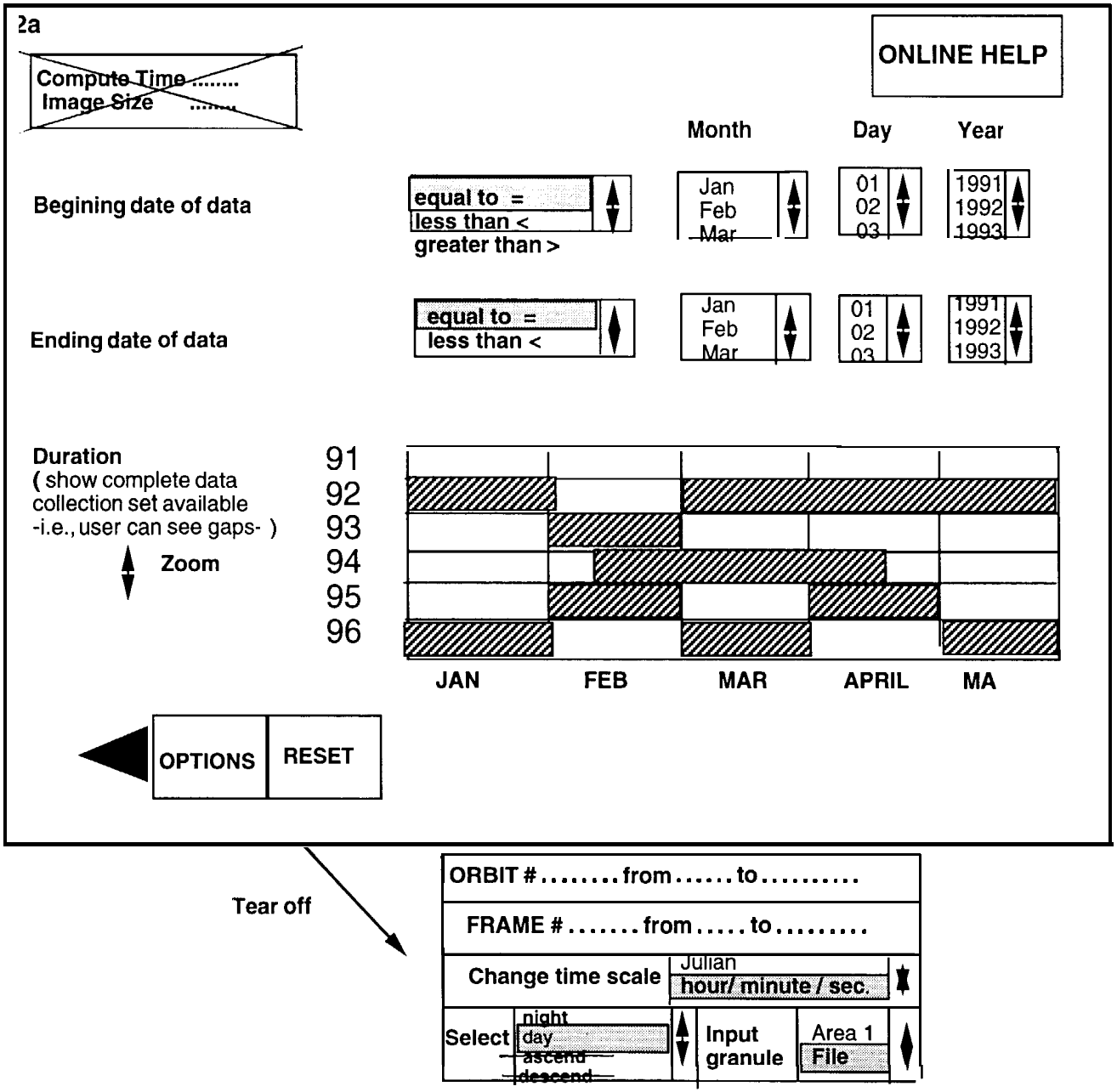
P1 Latitude ---------- Longitude ----------
P2 Latitude ---------- Longitude ----------

1a


Compute Time .....
Volume .....
Reference Map
Map Projection
Mercator
ONLINE HELP
x longitude
State borders
Grid on
verage map
Features
on
off
Coastlines
Major Rivers
Bathymetry
State borders
Geolog. Boundaries
X
X
View places name
Yes
No
Milan
Po River
Metadata
Functions
Zoom x 3
Subsetting
Other Data Services
Map Options
File
Order
Reset
x longitude
Zoom Factor
P1 Latitude ---------- Longitude ----------
R2 Latitude ---------- Longitude ----------
Tear off -buttons-
Subsetting
See Screen 1b
Screen 1c
Screen 2 a
Screen 2b
Space (click/ drag)
Space (Centered)
Time
Parameters
Other Data Services
Subsampling
Averaging
.....
See Screen 2c
File
Close
Save
SaveAs...
ApplytoProject...
Open file
Order
File name
Yes
No
Time
Size
CZ5555
S55555
x
X
5' 3hr
1Mb 1Kb
Submit Order
Map Options
ONLINE HELP
Map Color Scheme
Color
Monochrome
Change Map Projection
Mercator
Northern Hemisphere Polar
Change Map Scale
Change Reference Map
Swath
orbis
Show Metadata
Yes
No
Cursor
On
Off
Display Grid
1 Lat/long
1/2 lat/long
Select
Mask
On
Off


1b
Compute Time A1= 3' A2= 54"
Volume A1=2MB A2=1MB
1. Reference Map
Map Projection
Mercator
Features
on
off
Coastlines
Major Rivers
Bathymetry
State borders
Geolog. Boundarie
View places name
Yes
No
Metadata
Area to subset
ONE
Multiple
ONLINE HELP
x longitude
Area 1 selected by click and drag
Area 2 selected by click and drag
Space (click/drag)
Space (Centered)
Time
Parameters
Close
Save
Save As...
Apply to Project
Open file
x longitude
Zoom Factor
P1 Latitude ---------- Longitude ----------
P2 Latitude ---------- Longitude ----------


1c
Compute Time 3a= 38' 30"
Volume .....
ONLINE HELP
1. Reference Map
Map Projection
Mercator
Features
on off
View places name
Coastlines
Major Rivers
Bathymetry
State borders
Geolog. Boundarie
Yes
No
Metadata
.....
.....
Accept
Increase
Decrease
x longitude
2a
1a
3 a
2a
1a
3a
Selection area box can be moved anywhere within bounds and increased (eg. from 1a to 2a to 3a) by using buttons in lower left corner.
x longitude
Zoom Factor
P1 Latitude ---------- Longitude ----------
P2 Latitude ---------- Longitude ----------



TIME GAPS WITHIN GRANULE NOT EASILY ACCESSABLE

2c

ONLINE HELP

Compute Time .....

Input granule

N1872333
C126 6665

Image Size 1024 x 1024
Volume ..... MB

Output granule

Test 2

Image Size 512 x 512
Volume ..... MB

Method chosen

subsampling method
averaging method
.....

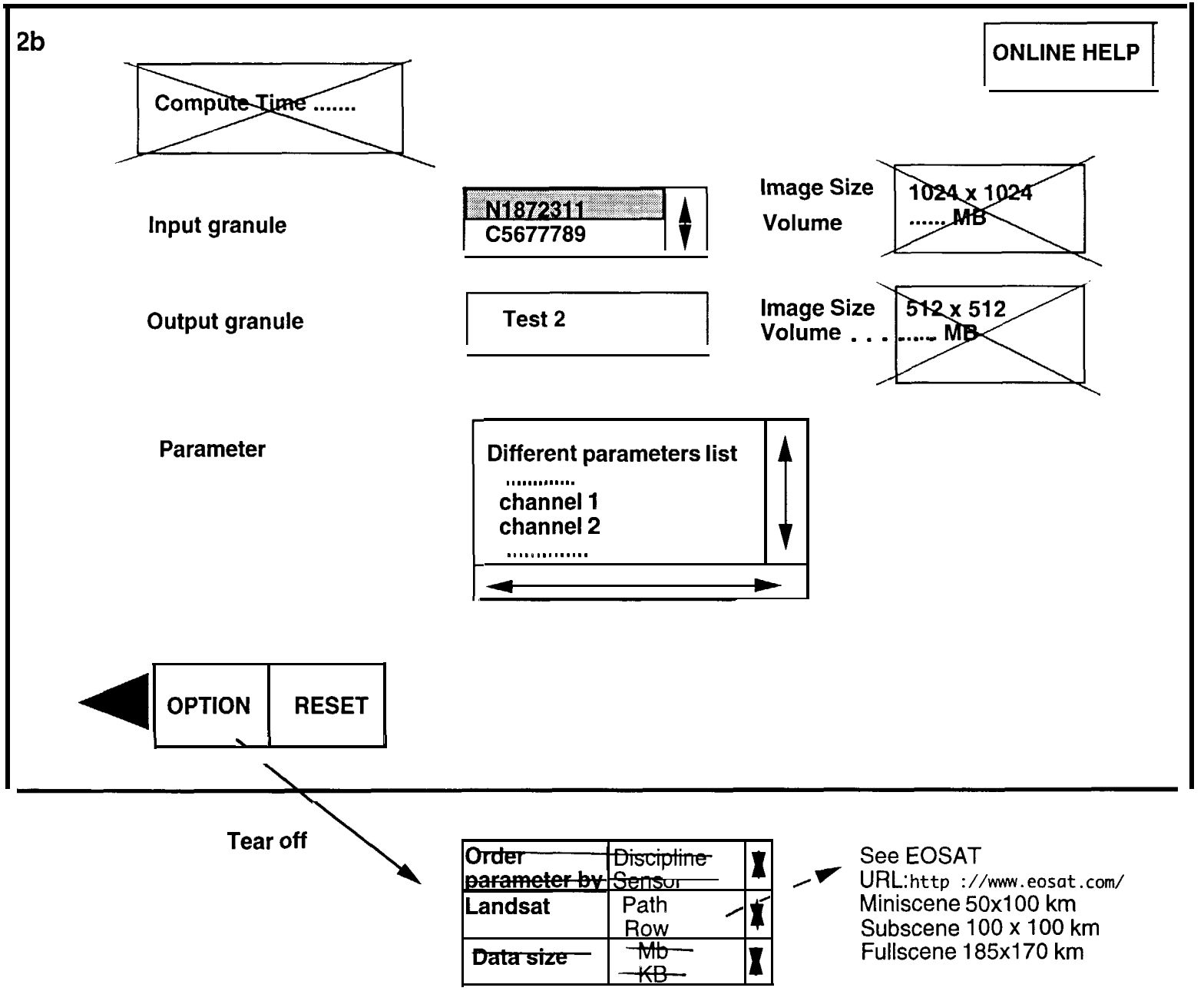
OPTION | RESET

Tear off

Depending on how we do subsampling method etc.

Data Size | MB KB

Change pixels ....


2b
ONLINE HELP
Compute Time .....
Input granule
N1872311
C5677789
Image Size
Volume
1024 x 1024
..... MB
Output granule
Test 2
Image Size
Volume . . . . . MB
512 x 512
Parameter
Different parameters list
.....
channel 1
channel 2
.....
OPTION
RESET
Tear off
Order parameter by
Discipline
Sensor
Landsat
Path
Row
Data size
Mb
KB
See EOSAT
URL:http ://www.eosat.com/
Miniscene 50x100 km
Subscene 100 x 100 km
Fullscene 185x170 km