

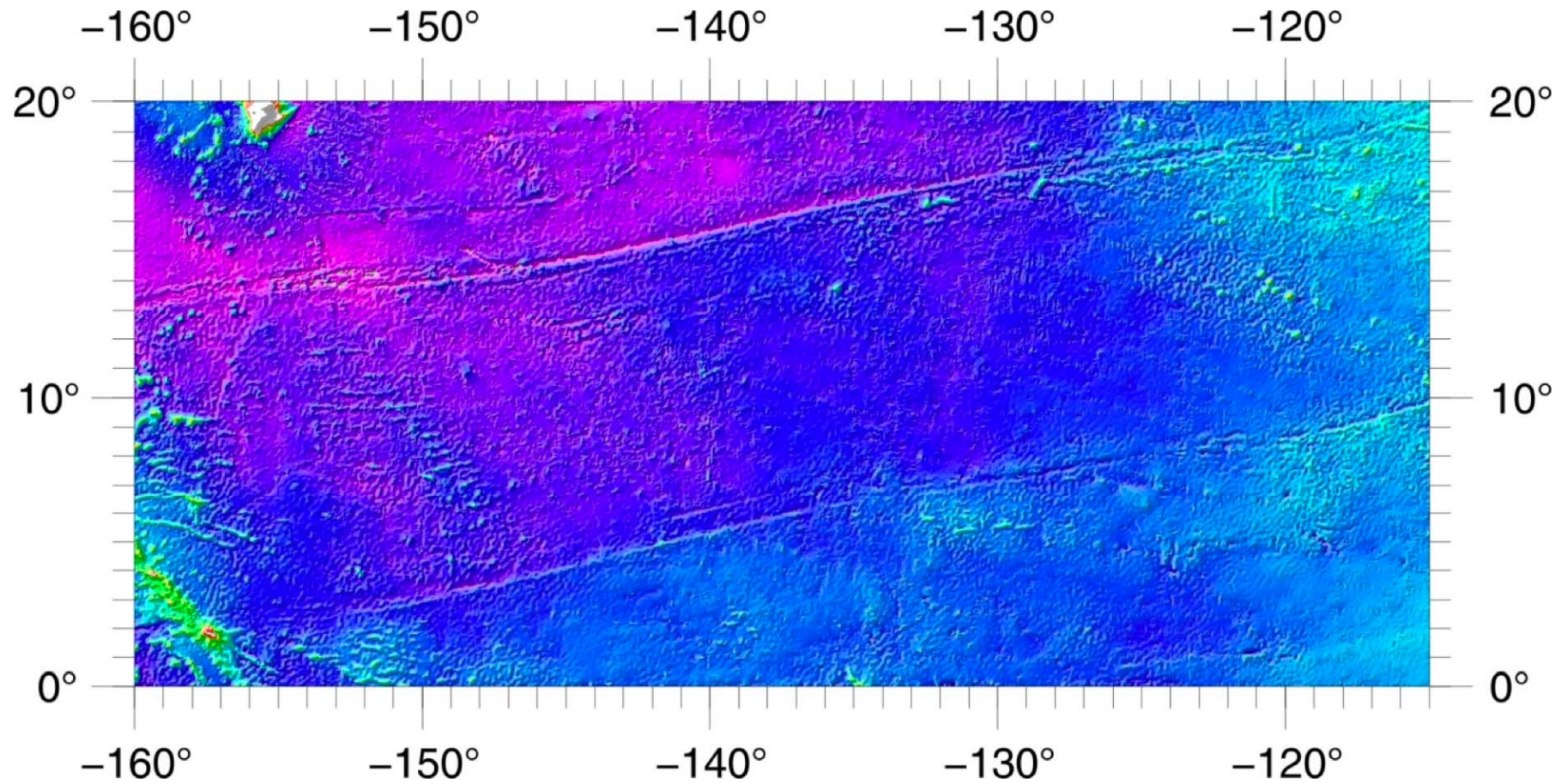
**CCZ MODEL:
BATHYMETRY BASE MAP**

-

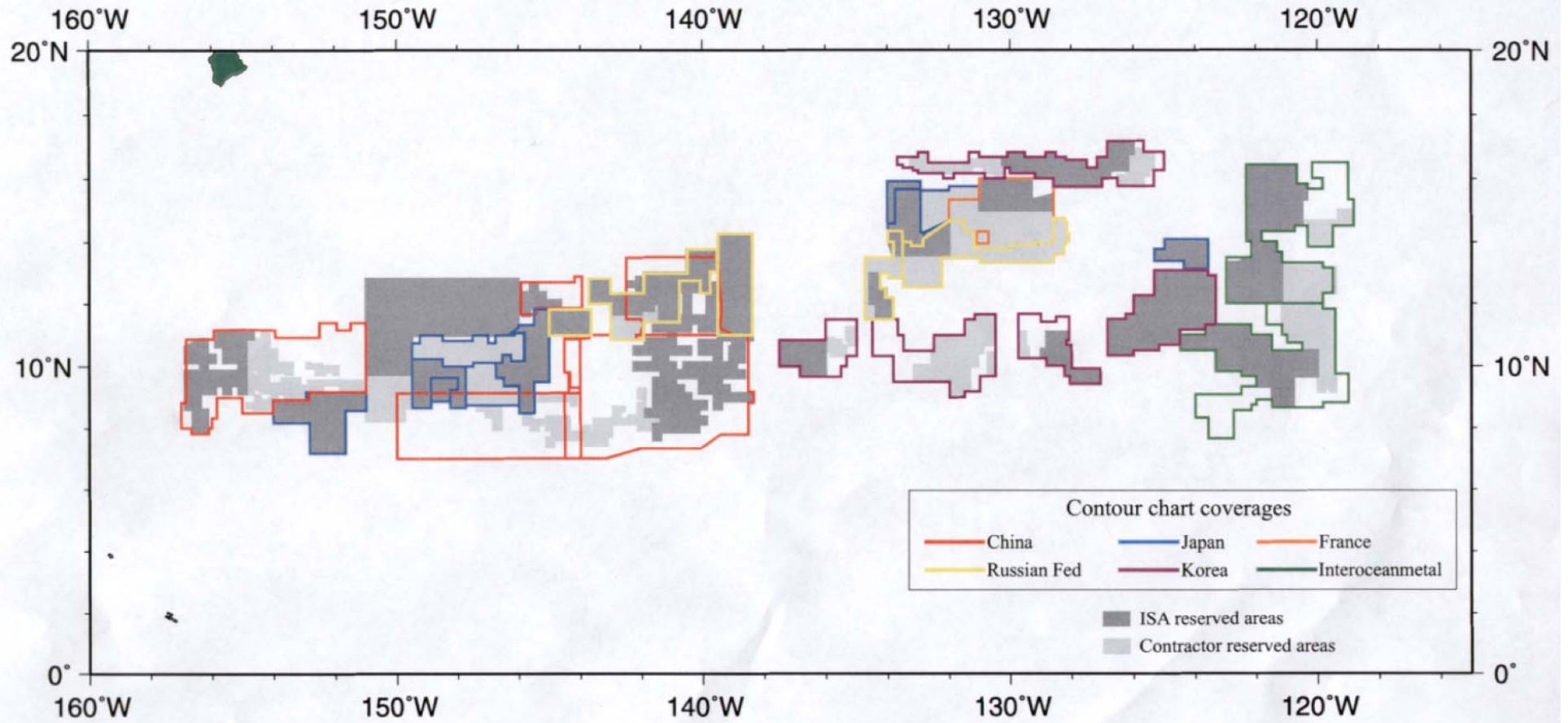
Peter Hunter and Lindsay Parson

**National Oceanography Centre,
Southampton UK**

Base map area of interest



ISA exploration areas

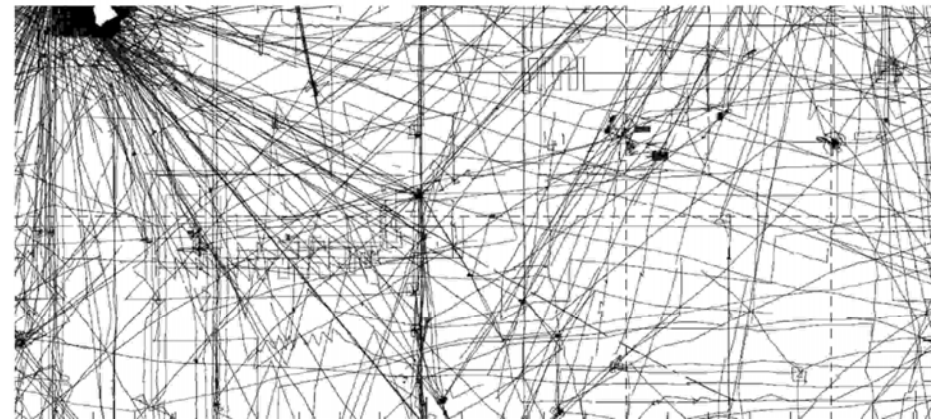
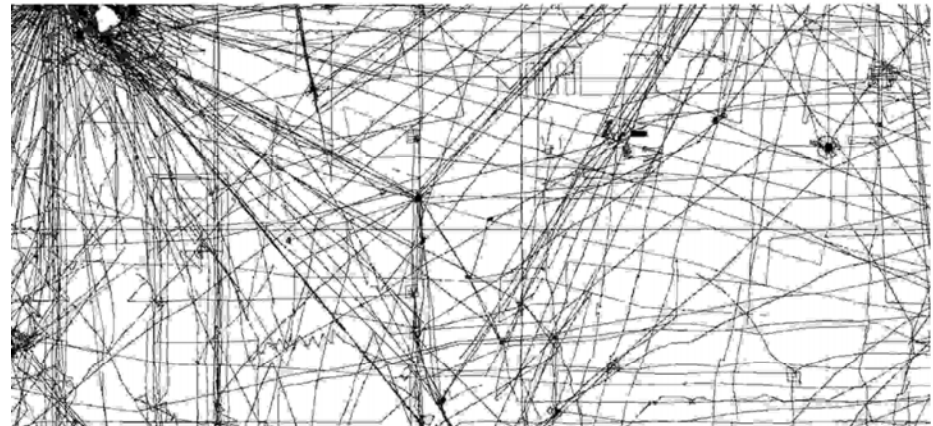
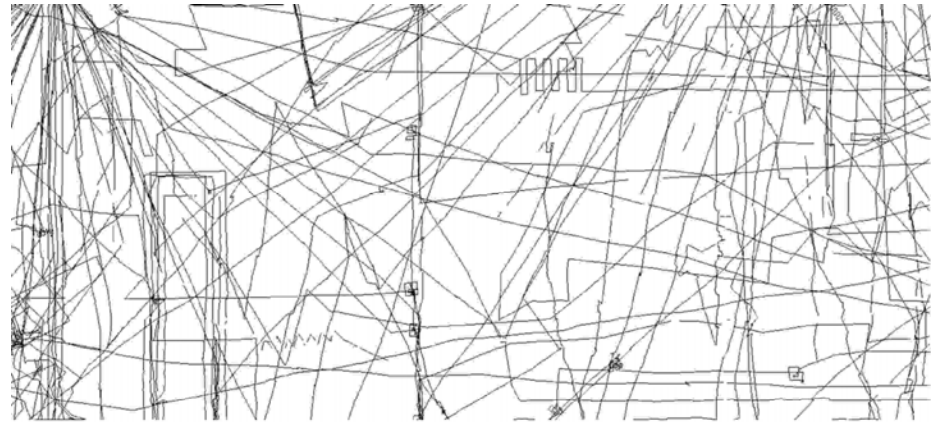


Map basis

GEBCO

GEODAS

Sandwell & Smith



Data sources

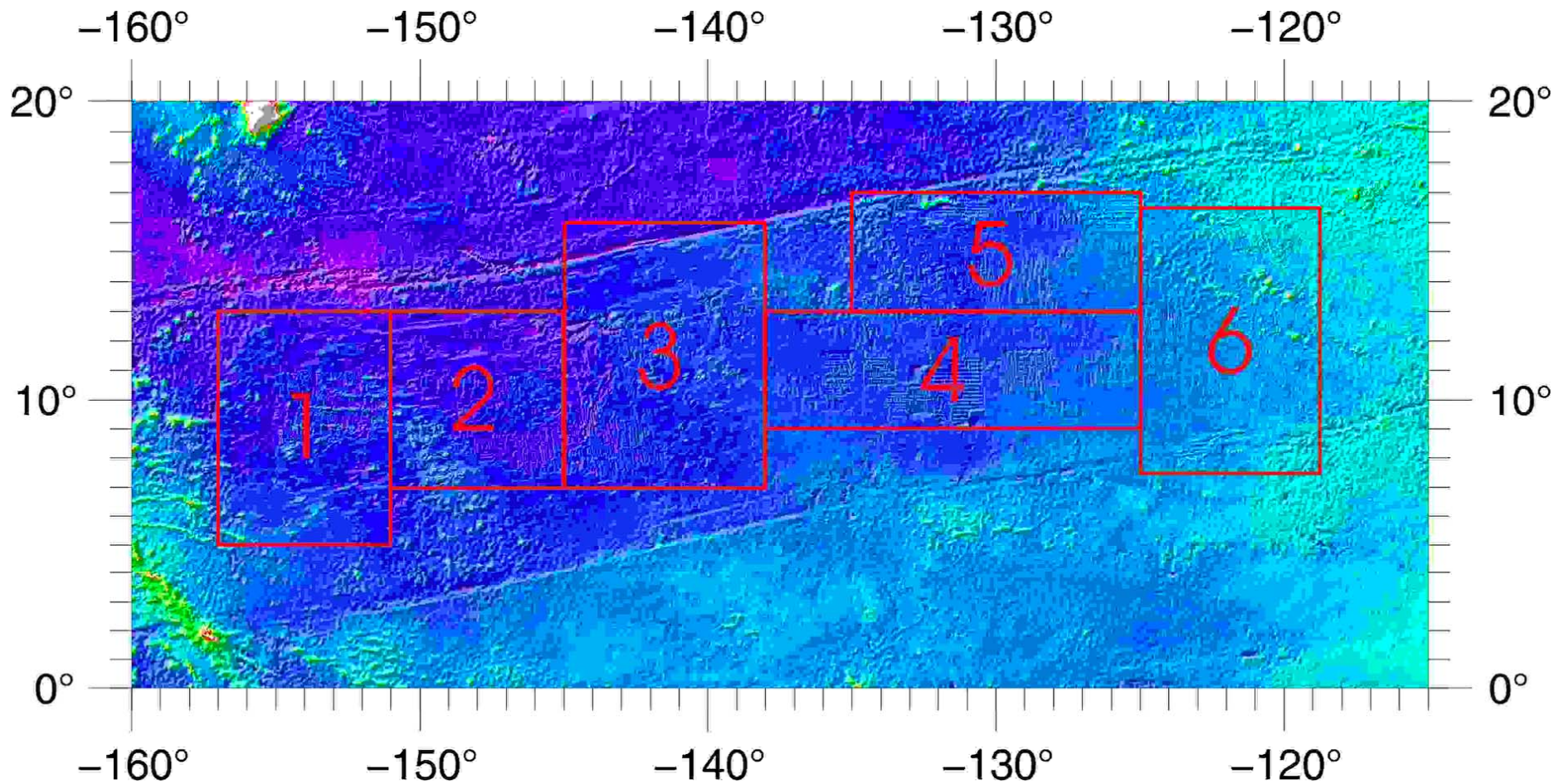
- GEBCO
- Sandwell and Smith
- ISA data base
 - Paper charts
 - Digital grids
 - xyz files

Contractors contributions

International Seabed Authority Clarion Clipperton Fracture Zone Area

Source	Resolution	Datasets (scans & ASCII)	MinLon	MaxLon	MinLat	MaxLat	Geo Ref	Digitize	Grid
CHINA (COMRA)	100m + Ds	CHI_fig31.tif	-157	-151	8	11.5	Yes	Yes	Yes
	100m + Ds	CHI_fig32.tif	-146	-144	11.5	13	Yes	Yes	Yes
	100m + Ds	CHI_fig33.tif	-142.5	-139	11	13.5	Yes	Yes	Yes
	100m + Ds	CHI_fig34.tif	-150	-144	7	11	Yes	Yes	Yes
	100m + Ds	CHI_fig35.tif	-145.5	-137.5	7	11	Yes	Yes	Yes
	0.5 min	Comra-east-multibeam.grd	-149	-141	7.4	10	n/a	n/a	Yes
	0.5 min	comra-east-sb-dep.xyz	-149	-141.3	7.3	10	n/a	n/a	n/a
	0.5 min	Comra-west-multibeam.grd	-155	-151	8.3	11	n/a	n/a	Yes
	0.5 min	comra-west-sb-dep.xyz	-155	-151	8.5	11	n/a	n/a	n/a
	JAPAN (DORD)	100m + Ds	JAP_Additional1.tif	-154	-151	7.2	9.2	Yes	Yes
100m + Ds		JAP_Additional2-3.tif	-149.5	-145	8.5	12	Yes	Yes	Yes
100m + Ds		JAP_Additional4.tif	-134	-133	14.5	16	Yes	Yes	Yes
100m + Ds		JAP_Res4Comm.tif	-134	-132.75	14	15.6	Yes	Yes	Yes
100m + Ds		JAP_SelectedA.tif	-147.75	-146	8.75	10.1	Yes	Yes	Yes
100m + Ds		JAP_SelectedByCommB1.tif	-149	-148	8.75	9.5	Yes	Yes	Yes
100m + Ds		JAP_SelectedByCommB2.tif	-125.5	-123.5	13.1	14.1	Yes	Yes	Yes
100m + Ds		JAP_SelfAllocate1.tif	-149.5	-145.75	10	11	Yes	Yes	Yes
100m + Ds		JAP_SelfAllocate2.tif	-133	-131	14.25	15.75	Yes	Yes	Yes
~2 min ??		Data for Geologic Model.xls	-149	-131	8.75	15.77	n/a	n/a	Yes
FRANCE (IFREMER)	100m (mb)	FRA_Carte6.tif	-132	-128.5	13.75	16	Yes	Yes	Yes
	10m (mb)	FRA_Carte7.tif	-131.1	-130.7	13.95	14.3	Yes	n/a	n/a
RUSSIA	100m	RUS_sheet1.tif	-145	-139.5	11	13.75	Yes	Yes	Yes
	100m	RUS_sheet2.tif	-139.5	-133.5	11	14.25	Yes	Yes	Yes
	100m	RUS_sheet3.tif	-133.5	-128	12.5	14.75	Yes	Yes	Yes
KOREA	~500m	00_a2_noNaN.xyz	-136.1	-134.9	10.7	11.2	n/a	n/a	Yes
	~500m	01_C1_noNaN.xyz	-130.3	-128.1	10.2	11.7	n/a	n/a	Yes
	~500m	04_KR5_noNaNposs.xyz	-132.8	-131.5	9	10	n/a	n/a	Yes
	~500m	95a2acinoNaNposs.xyz	-134.5	-133.5	10.5	11.5	n/a	n/a	Yes
	~500m	95b2acinoNaNposs.xyz	-136	-135.25	9.85	10	n/a	n/a	Yes
	~500m	95_B1noNaN.xyz	-133.8	-132	9.55	10	n/a	n/a	Yes
	~500m	96_N1noNaN.xyz	-133.5	-130.25	16	16.9	n/a	n/a	Yes
	~500m	96_N3noNaN.xyz	-126.75	-125	15.75	17.2	n/a	n/a	Yes
	~500m	97_C1noNaN.xyz	-129.75	-128	10.5	11.7	n/a	n/a	Yes
	~500m	98_99_00_B2noNaN.xyz	-134.84	-131.9	9.8	10.6	n/a	n/a	Yes
	~500m	b2areanoNaNposs.xyz	-133	-130.5	9.1	10	n/a	n/a	Yes
	50m	KOR_fig41a.tif	-133.75	-125	15.75	17	Yes	Yes	Yes
	50m	KOR_fig42a.tif	-137.5	-130.5	9	11.75	Yes	Yes	Yes
	50m	KOR_fig43a.tif	-129.75	-123.25	9.5	13	Yes	Yes	Yes
	200m	Bathymap 1.jpg	-156	-151	5	7	Yes	Yes	Yes
200m	Bathymap 2.jpg	-155	-143.5	7	13	Yes	Yes	Yes	
200m	Bathymap 3.jpg	-145	-139	13	16	Yes	Yes	Yes	
IOM	100m	IOM_sheet1.tif	-123	-118.75	12	16.5	Yes	Yes	Yes
	100m	IOM_sheet2.tif	-124.5	-119	7.75	12	Yes	Yes	Yes
	200m	iom_b1_bathy_grid.ascii	-120.5	-118.8	13.8	15.7	n/a	n/a	Yes
	200m	iom_b2_bathy_grid.ascii	-121.7	-118.9	8.6	13.4	n/a	n/a	Yes

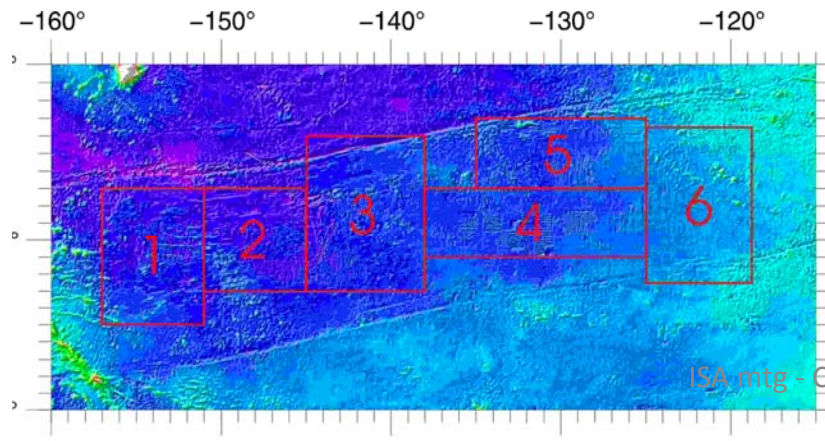
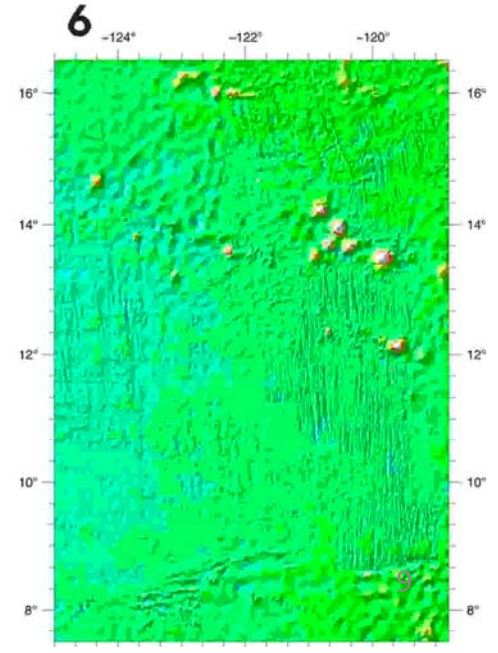
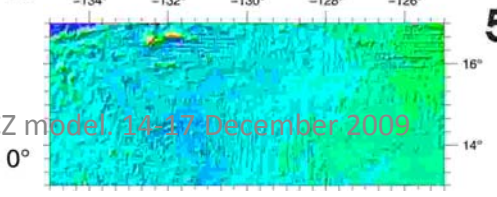
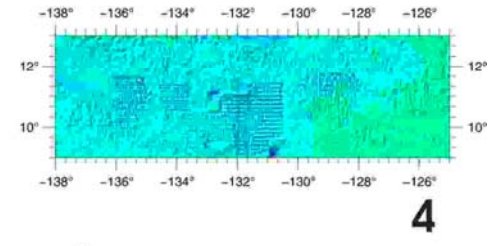
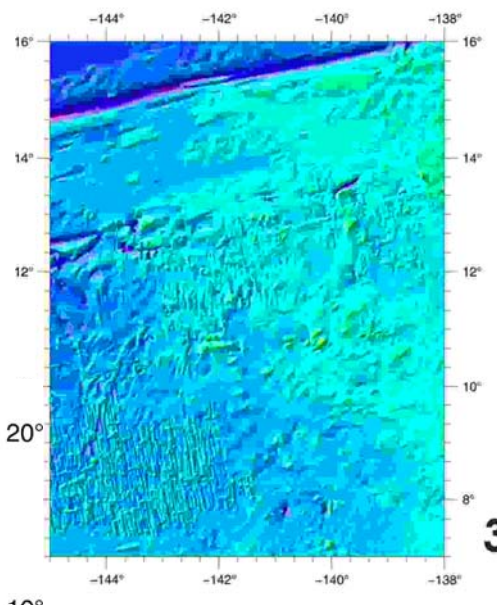
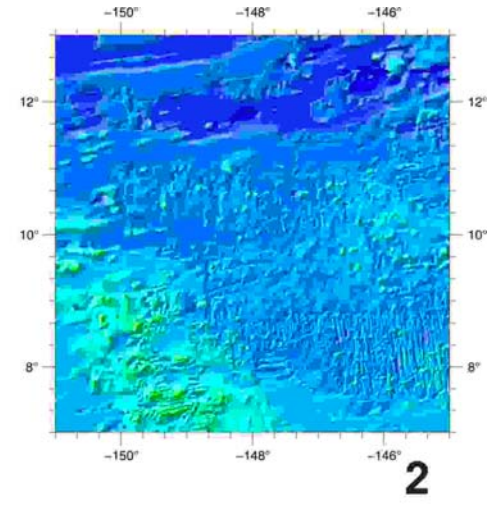
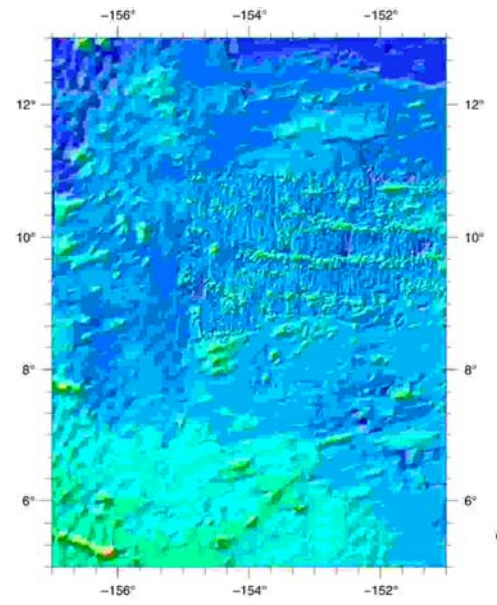
Focus areas



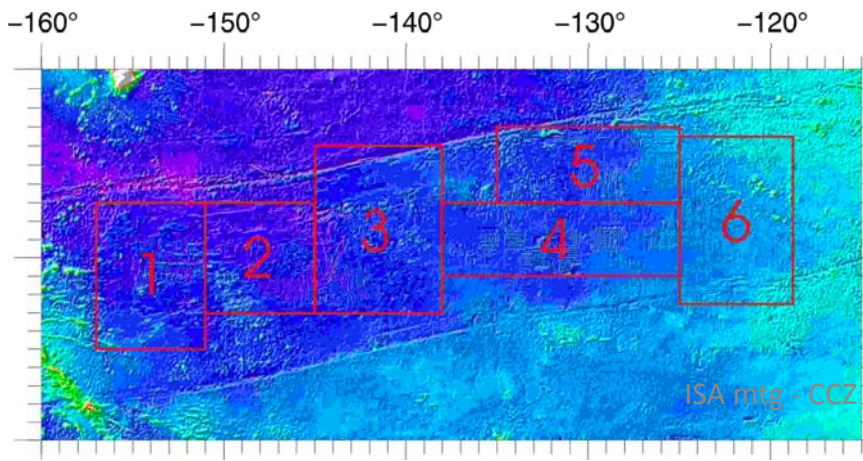
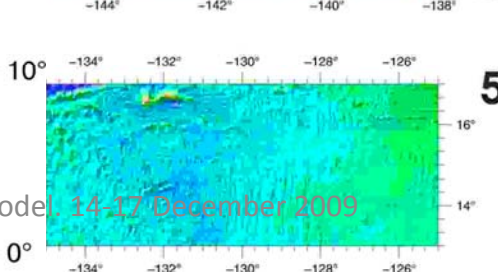
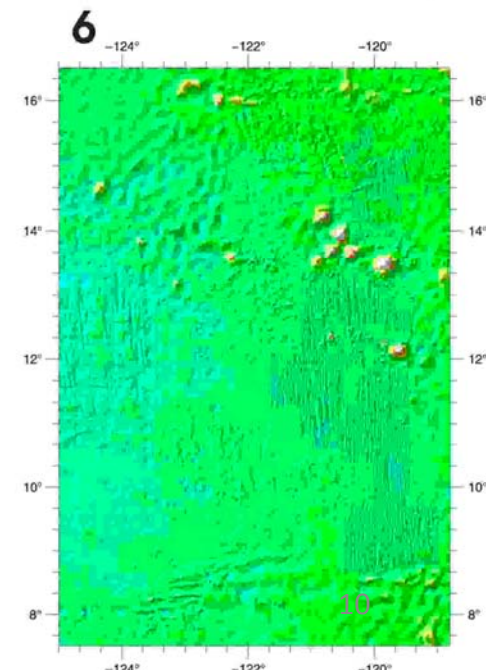
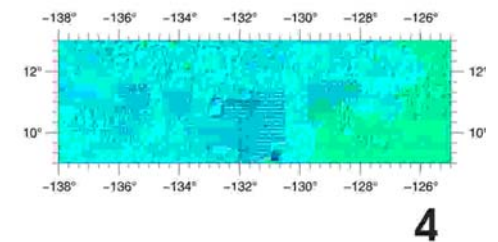
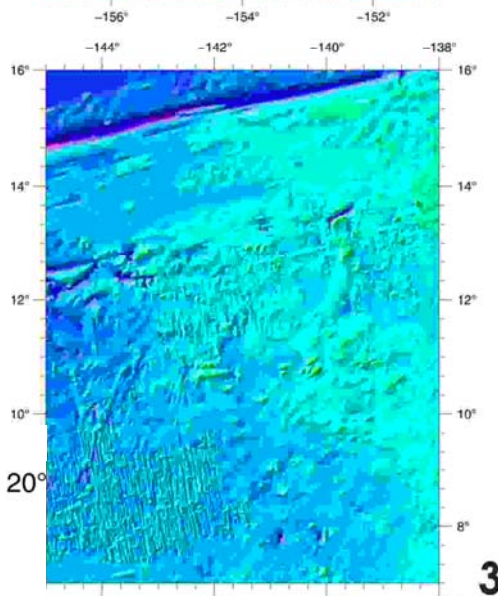
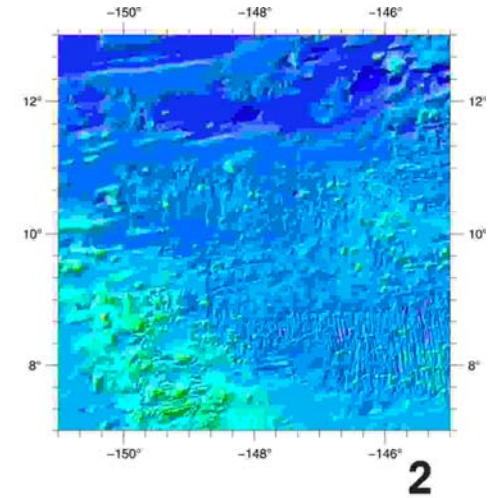
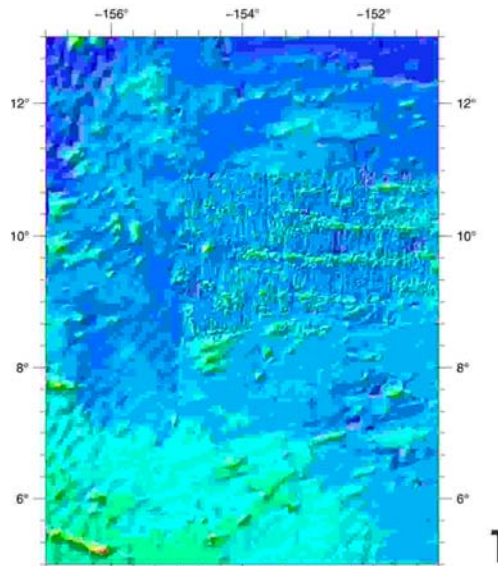
Methodology

- Scanned charts
- Digitising/vectorising
- Gridding to 1 minute
- 0.5 and 0.1 minute key areas

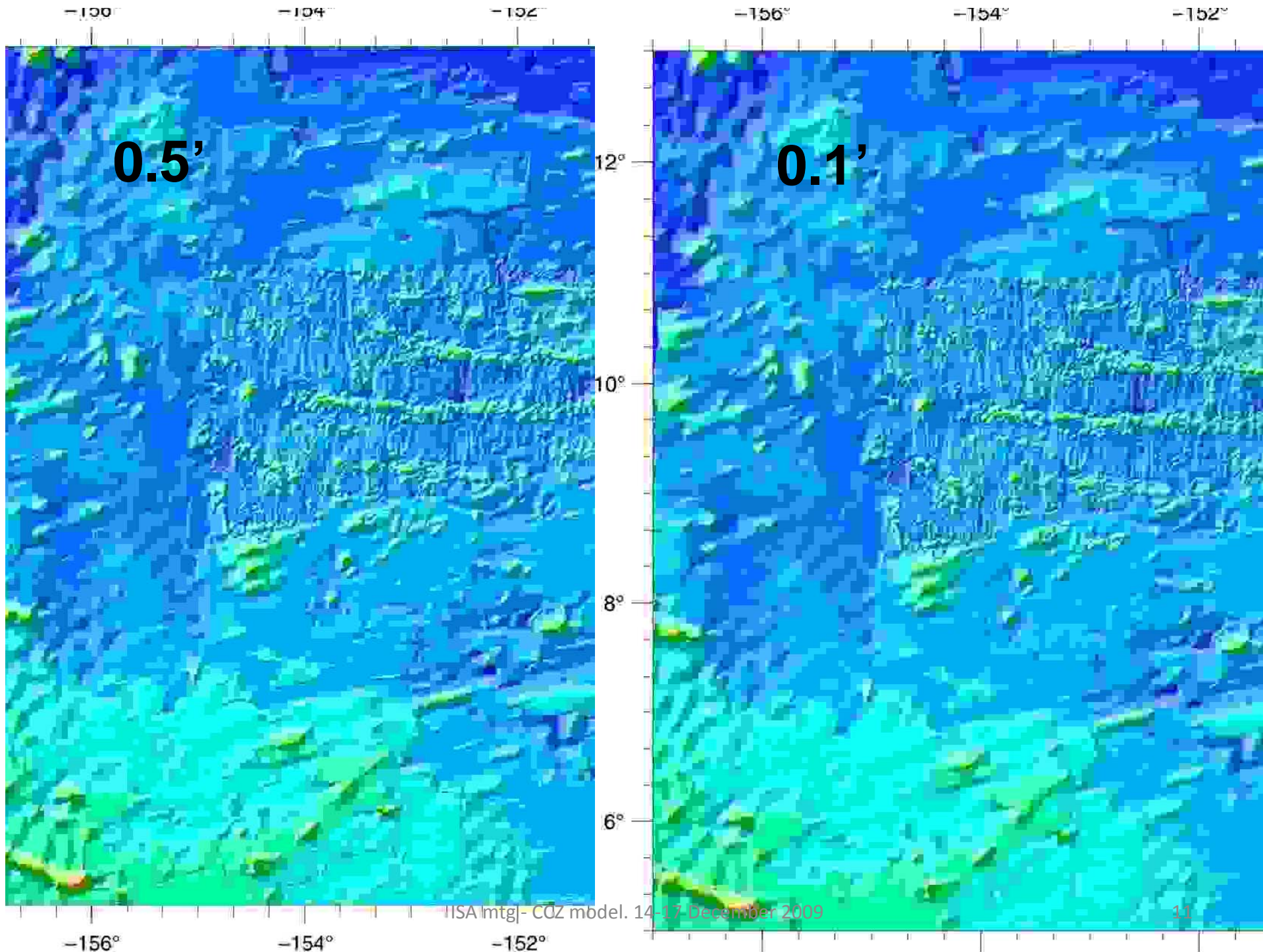
0.5 minute grid



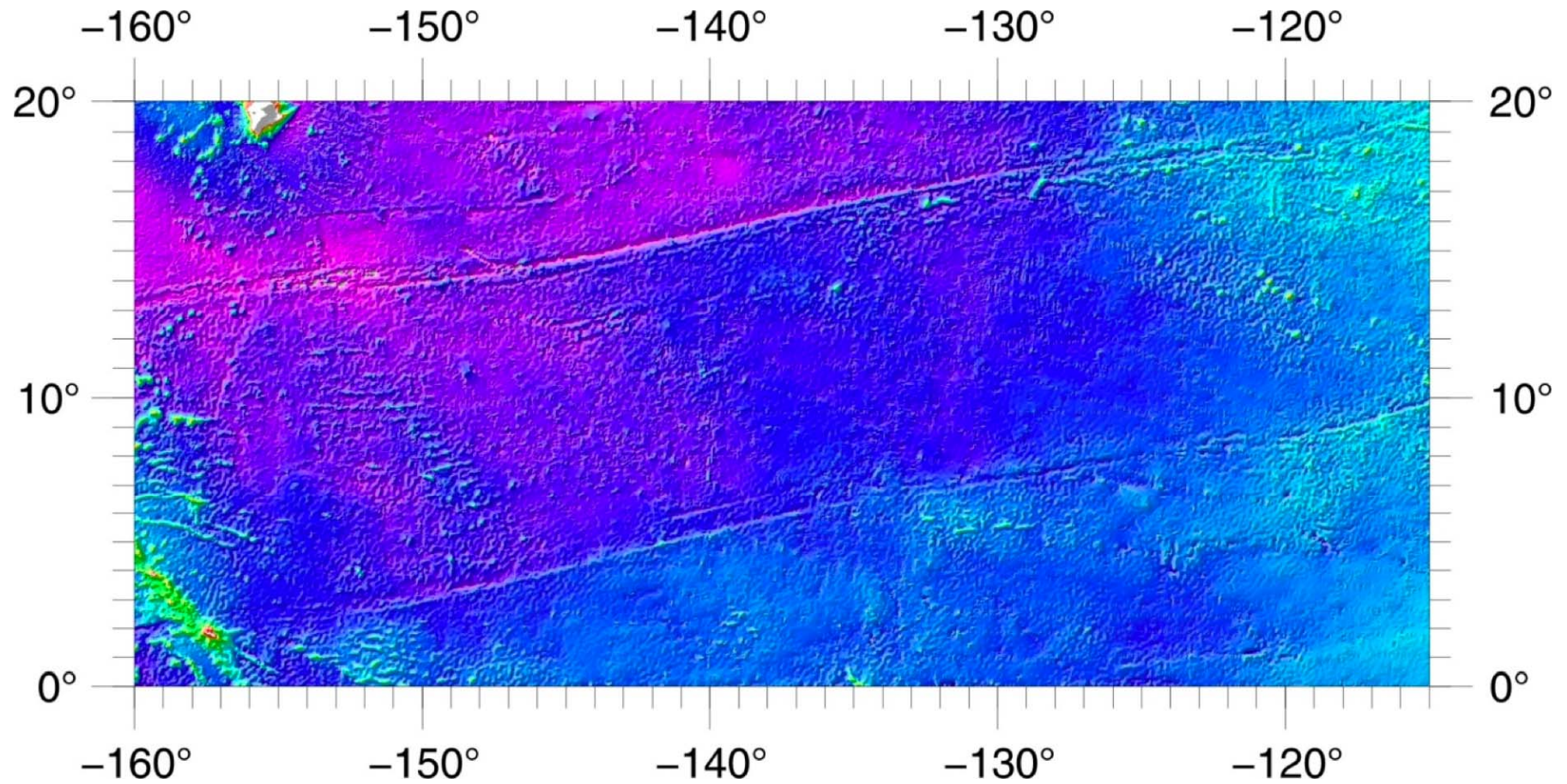
0.1 minute grid



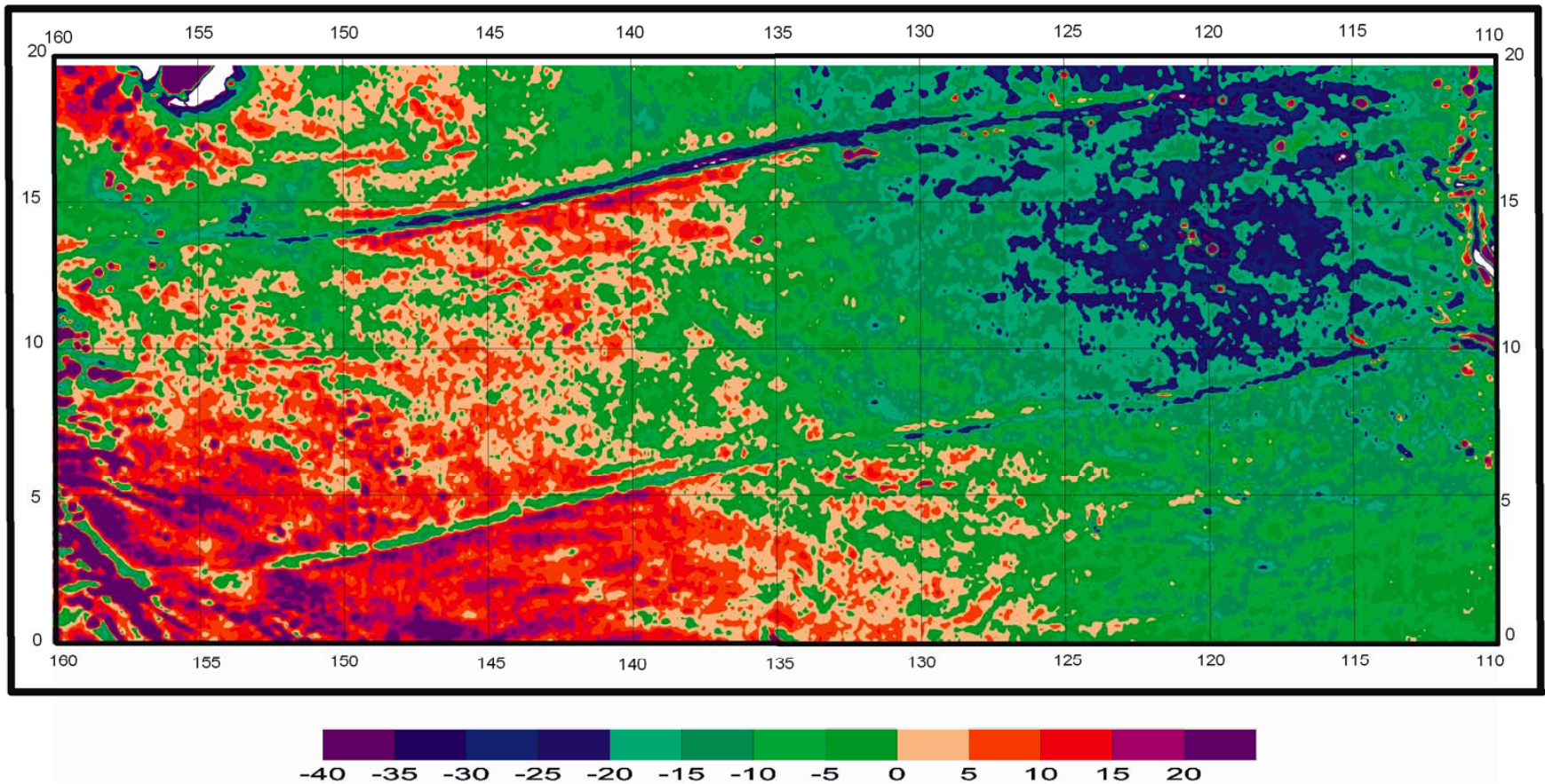
ISA mtg - CCZ model, 14-17 December 2009



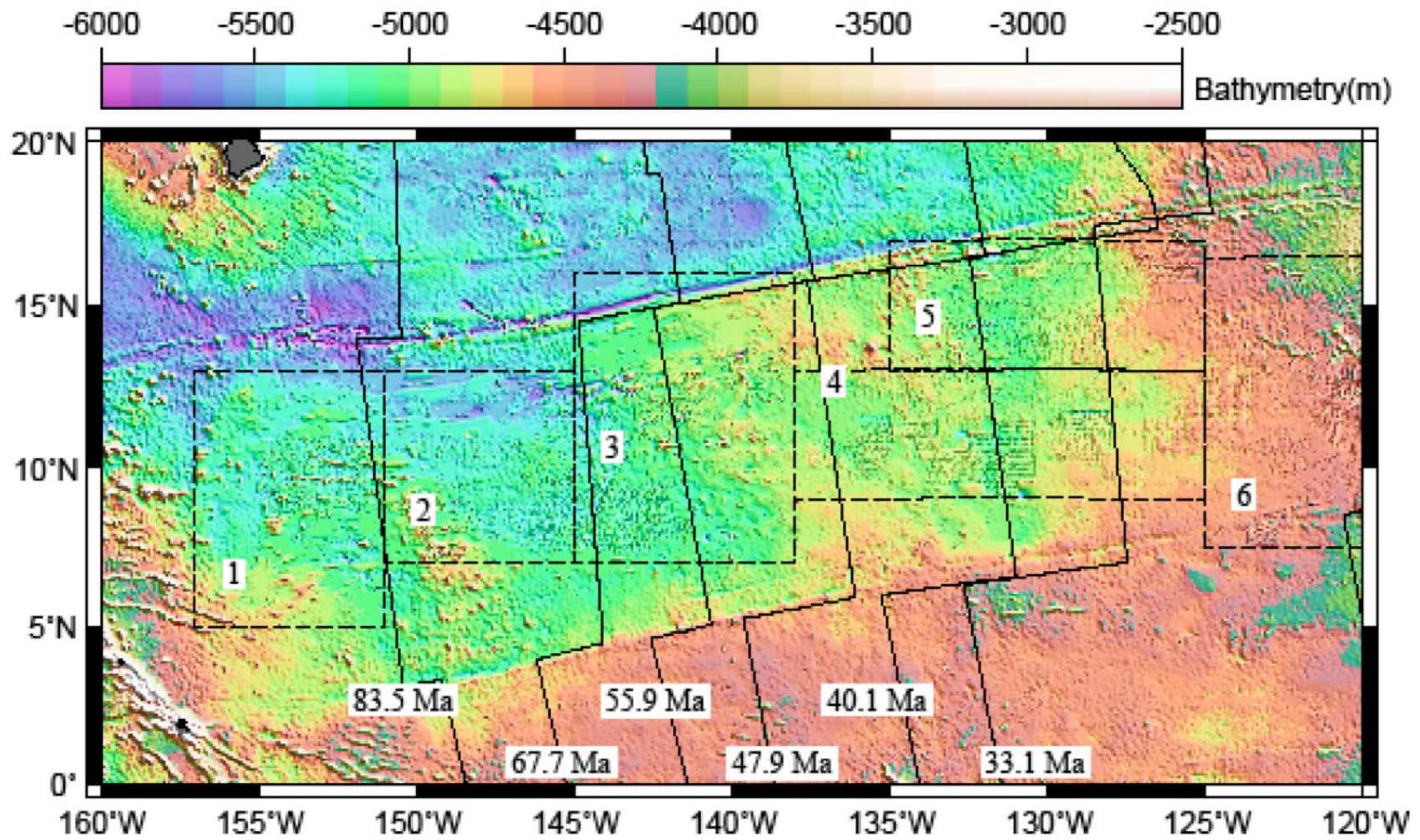
Morphotectonics of the region

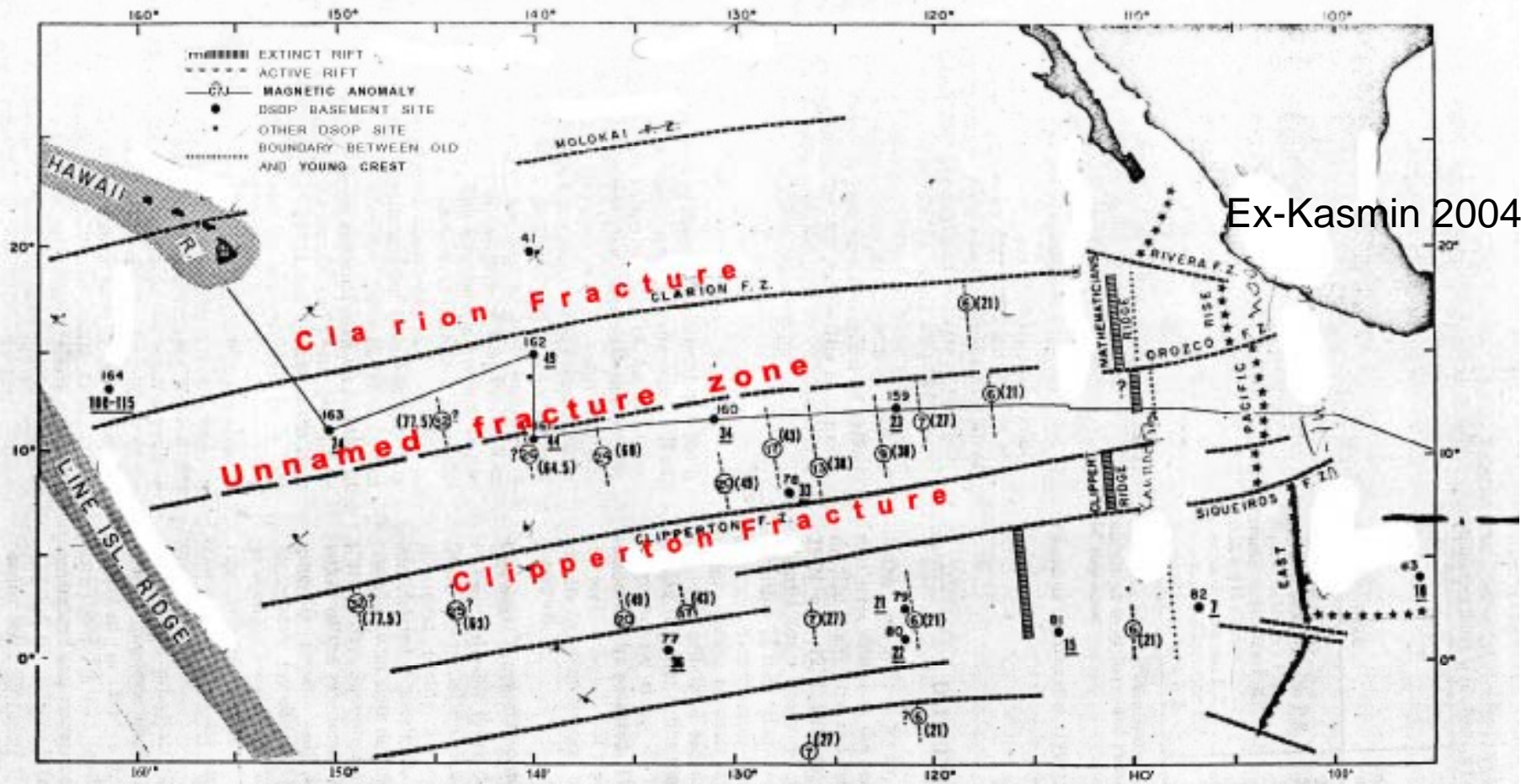


Sandwell and Smith gravity



Predicted bathymetry, age, focus areas



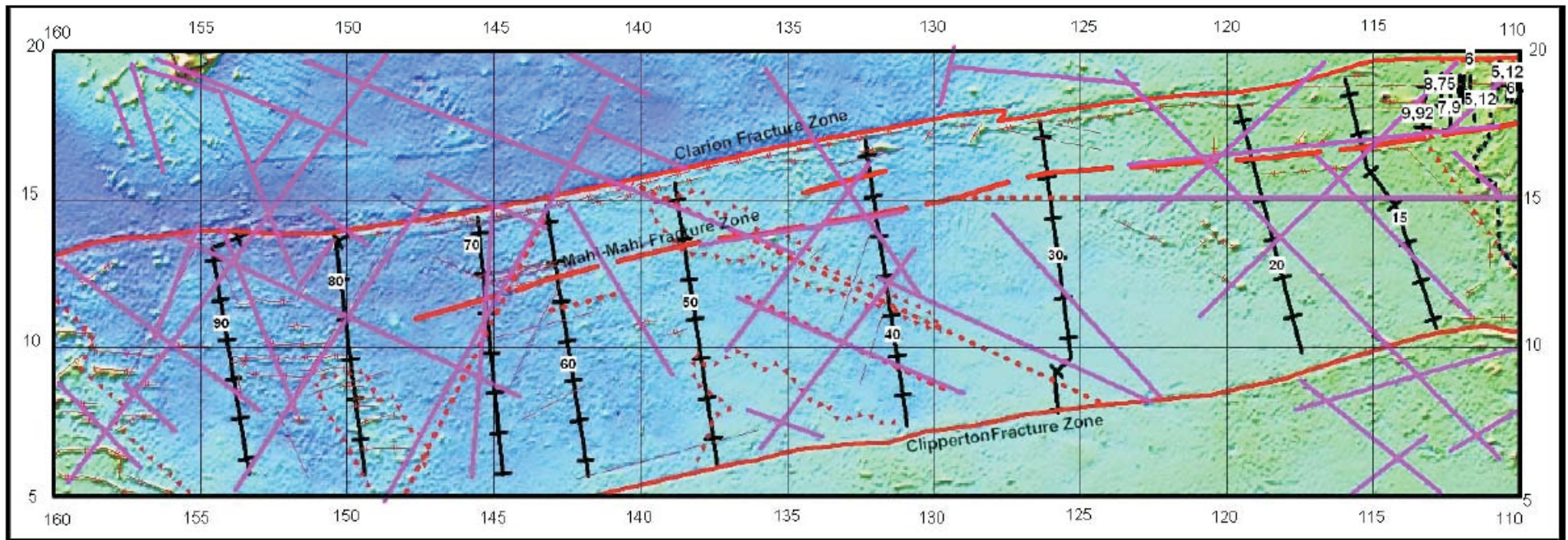


Ex-Kasmin 2004

Figure 53.. Tectonic sketch of the Eastern Central Equatorial Pacific (from Tjeerd H. van Andel and G.Ross Heath " Geological results of Leg 16...",Initial Reports of DSDP, vol.16,1973)

*es identified
c Rise (stars)
eirtzler et al.
indicate the
V. Glomar*

Prospectors Guide



Further work....

- New data
- New models
- Release of data