



MINUTES OF THE INDIAN OCEAN PANEL MEETING

12-14 December, 1985, San Francisco

Members present :

- Dr Joseph Curray
- Dr Robert Duncan, secretary
- Dr David Falvey
- Dr Felix Gradstein
- Dr Warren Prell
- Dr Roland Schlich, chairman
- Dr John Sclater
- Dr Jiro Segawa
- Dr Lisa Tauxe
- Dr Ulrich Von Rad

Attending Guests :

- Dr Richard Buffler
- Dr Louis Garrison, ODP
- Dr Roger Larson, PCOM
- Dr John Peirce, SSP
- Dr Jeffrey Weissel, TECP

Absent :

- Dr James Cochran

The agenda for this 3-day meeting comprised :

- 1) Comments from PCOM (R. Larson) ;
- 2) Reports from Southern Ocean Panel, from thematic panels (LITHP, SOHP, TECP), from Site Survey Panel and from Red Sea Working Group ;
- 3) Detailed program for drilling in the Western and Eastern Indian Ocean ;
- 4) ODP panel structure and Indian Ocean Panel membership ;
- 5) Next meeting.

Dr Jiro Segawa, from the Ocean Research Institute, University of Tokyo, has been nominated member of the Indian Ocean Panel.

Dr Robert Duncan has accepted to serve as secretary for the Indian Ocean Panel.

1) Comments from PCOM

Roger Larson informed the IOP that the U.K. is likely to join the ODP, retroactive to October, 1985. The ESF is possibly increasing their share from 60 % to 80 % of full membership and are talking with the Australians about joining that consortium. A formal invitation has been extended to Russia to join. This positive activity would free U.S. science money for necessary site surveys, including the Indian Ocean.

R. Larson informed us that the PCOM needed a specific, site-by-site response to the current schedule (19 Oct. 1985 newsletter). Drilling on the first Indian Ocean leg (115) would begin early May, 1987. Financial considerations perhaps require a Reunion port call between the two Kerguelen legs, rather than the proposed resupply with the R/V *Marion Dufresne*.

2) Reports from SOP, thematic panels, SSP and Red Sea W.G.

2.1) *Southern Ocean Panel (R. Schlich)* : The SOP recommended, at their September 1985 meeting at Woods Hole, Kerguelen drilling sites KHP1, KHP3A, KHP4, KHP5 on the northern plateau and K11, K5, K12, K7 on the southern plateau. The final selection of sites for the central and southern sectors of the plateau should be made from the Australian BMR (1985) and French IPGS (1986) site surveys. SOP recommends that J. Falvey (Australia) and R. Schlich (France) be strongly encouraged to collaborate on this task.

2.2) *Lithosphere Panel (J. SCLATER)* : The LITHP continues to support the Atlantic and Pacific "natural laboratory" ridge crest drilling and has not expressed great interest in any of the Indian Ocean lithosphere objectives.

2.3) *Sediment Ocean History Panel (U. von Rad)* : The SOHP recommended the N-S Kerguelen Plateau transect, the Neogene package, Ninetyeast Ridge transect below 10°S and the Tethys Ocean (Argo Basin) objective off N.W. Australia.

2.4) *Tectonic Panel (J. Weissel)* : The TECP rated the SWIR fracture zone objectives high and marginally voted down the Makran proposal. At Kerguelen, basement should be sampled on the north, central, and south regions. The Mascarene Plateau objectives look interesting, while the Ninetyeast Ridge offered more to lithosphere studies, they concluded. The Exmouth Plateau, Broken Ridge, and Intraplate deformation objectives were endorsed.

2.5) *Site Survey Panel (J. Peirce)* : The SSP requested more piston cores be taken for sediment physical properties for prospective re-entry sites. Consult p. 65 of the JOIDES Journal, v. 11, Special Issue 4 for additional requirements for site surveys.

2.6) *Red Sea Working Group (R. Schlich)* : The Red Sea Working Group forwarded their report of specific objectives, site priorities and locations.

3) Detailed program for drilling in the Western and Eastern Indian Ocean.

After brief summaries and discussions panel members shared the task of writing executive summaries for recommended drilling objectives to be forwarded to PCOM. These are grouped into coherent programs rather than legs, although some constitute entire legs (or two legs in the case of the Kerguelen region). These summaries appear as appendices to these minutes and include objectives for each program, specific sites to meet those objectives, details of each site and site survey requirements, and an index map.

Our unanimous recommended set of program is :

Leg	Dates	Drilling program	No.Sites	Drilling Days
115	1987 May-June	SWIR Fracture Zone	4	25
		Mascarene Fossil Ridge	3	20
116	1987 July-Aug	Red Sea	10	50
117	1987 Sept-Oct	Neogene Package	9	53
118	1987 Nov-Dec	Kerguelen North	9 or 10	85
119	1988 Jan-Feb	Kerguelen South		
120	1988 Mar-Apr	Mascarene Plateau	3	15
		Intraplate Deformation	5	42
121	1988 May-June	Ninetyeast Ridge	5	25
		Broken Ridge	5	15
122	1988 July-Aug	Exmouth Pl+Argo Basin	4 or 5	53
123	1988 Sept-Oct	Otway Basin	4	49

The dates are given to show weather windows. The drilling days correspond to rough estimation which should be refined (see executive program summaries).

Site survey deficiencies were noted for some programs in the executive summaries. R. Buffler reported the status of NSF site survey requests. Weissel (Intraplate Deformation), Prell (Neogene Package) and Mutter (Exmouth Plateau) proposals have received funding while Weissel (Broken Ridge) proposal has been reviewed and is pending. Dick (SWIR), Bonatti/Mc Kenzie (Broken Ridge) and Sclater and Curray (Ninetyeast Ridge) proposals have been or will be submitted.

The panel included the Mascarene Plateau program because of previous strong support (from other panels as well) and the likelihood of site surveys to be undertaken by *RSS Darwin* in mid-1986. The Otway Basin Program was included because it addresses a principal COSOD objective of documenting the evolution of passive margin rifting.

4. ODP Panel structure and Indian Ocean Panel membership.

The ODP panel structure consisting of both regional and thematic panels is considerably more complicated than the original DSDP or IPOD structure. Is the increased complication in the panel structure justified? The matter has been largely discussed by the panel members: no consensus was reached on advice to PCOM.

In view of the large number of basement objectives recommended for drilling we request an additional member with petrology/geochemistry expertise. We nominate Brian Upton and Fred Frey as choices. John Sclater will resign as liason with the Lithosphere Panel but we recommend that he remains as a full member of this panel. Jeff Weissel will resign as liason with Tectonic Panel. He must be replaced. Lisa Tauxe may resign and would need replacement.

5. Next meeting

The next meeting of the Indian Ocean Panel will be July 4-8, 1986, at IPGS in Strasbourg, France.