

M. Radhakrishna, Department of Earth Sciences, IIT Powai, Mumbai, replies

We feel that the revised figure (Fig 1, p 595) given in Sheena et al (2007) above, would suffice to clear the confusion/misconception, expressed by Dr Biswas, with regard to KCR and KCD structures in the paper by Kharak Singh et al

The revised Fig 1 will take care of the points raised by Dr Biswas with regard to Figs 3, 4 and 7, and we feel that

there is no need to change these figures

We humbly state that ONGC has been playing a vital role in acquisition and archiving of offshore seismic data since many decades and all the earth scientists of this country largely depend on this great organization for offshore seismic data for their research activities. It is again by oversight the acknowledgement of ONGC is missing in the paper by Kharak Singh et al. We gratefully acknowledge the ONGC for their continued help in various ways.

References

- BISWAS S K and SINGH, N K (1988) Western Continental Margin off India and hydrocarbon potential of deep-sea basins. Proc 7th Offshore South East Asia Conference, Singapore, pp 170-181
- SINGH, N K and LAL, N K (1993) Geology and petroleum prospects of Konkan-Kerala basin. In Proc 2nd seminar on petroliferous basins of India. KDMIPE ONGC, India. Petroleum Publishers, Dehradun, v 2 pp 461-469

PLUME RELATED (?) ACID VOLCANIC ACTIVITY IN St. MARY'S ISLAND, SOUTH KANARA DISTRICT, KARNATAKA by V.S Hegde and D. Kanchanagouri Gosavi. Jour Geol Soc. India, v.70, July 2007, pp 43-52.

K.T. Vidyadharan, Flat No 310, Maharaja Residency Balmatta Rd, Mangalore - 575 001. Email: vidyathayal@yahoo.com, comments

I compliment the authors for their recent contribution on Plume related (?) acid volcanic activity in St Mary's Islands with details of petrography, mineral and REE chemistry, petrogenesis and tectonic setting. I would like to inform the authors that they have left out the references of some important contributions by T.H. Torsvik et al (2000), on Late Cretaceous India-Madagascar fit and timing of break-up related magmatism [U-Pb zircon age of 91 ± 0.2 Myr and Palaeomagnetic data].

It is mentioned in the paper that samples were collected from Coconut Island and other Islands. Have you collected samples from Middle rock, North Island, Darya Bahaddurgarh Island and South Island? If so, any variation is recorded in petrography, mineralogy from different island outcrops?

Another important information I would like to share with the authors and other researchers is the recent contribution from Geological Survey of India, Marine Wing, Mangalore about the first report of felsic volcanic rocks in 'Black Rocks and Outer Rocks' in the inner continental shelf off Udyavara, Karnataka (Nambiar et al 2006). The

'Black Rocks' comprise two isolated outcrops as projections in the inner shelf, 2.5 km from the shore, due west of Udyavara.

They have reported the extension of St Mary's volcanics to further south in 'Black Rocks' and 'Outer Rocks', 5.5 km and 7 km respectively from South Island, the southernmost Island of St Mary's Group of Islands. The massive outcrops here trend in N-S direction with 275 m and 250 m strike lengths with 95 m and 125 m widths respectively with maximum relief of 12 m from sea level. The 'Outer Rocks' are very small outcrops with an elevation of about 10 m. These felsic volcanics are reported to be hard fine grained, porphyritic with no vesicles and are well jointed. Plagioclase, clinopyroxene, [with embayed margins], rare orthopyroxene and amphibole form the major minerals. Zoned plagioclase occurs as mega and micro-phenocrysts. The groundmass is fine grained with quartz and alkali feldspar and shows characteristic granophyric texture. Opaques like magnetite, ilmenite and other accessories like sphene, zircon, apatite are reported. Texture and mineralogy indicate that these rocks form part of the Cretaceous volcanism hitherto known to occur only in St Mary's Island. This finding by Nambiar and his co-workers is of immense value and warrants critical examination of "Mulki Rocks", 7.5 km offshore from the mainland exposed at about 10 km further south of the

'Black Rocks' I have added these two references for an updatation of research work on St Mary's Group of Islands

V.S. Hegde, SDM College, Dharwad - 580 002 replies

We thank K T Vidyadharan, for his careful reading, and useful suggestions on our paper. We feel sorry that we have missed the important paper which Dr Vidyadharan has mentioned in his comments. We thank him for providing us the details of the paper. It will be useful for our future

work. We have sampled from Coconut Island, St Mary's Island, Dariya Bahadurgarh Island and North Island. However, we have not collected any samples from the South Island. We have observed similar petrographic features which Dr Nambiar and his coworkers have observed from the islands further south of the study area. We believe that our findings are strengthened with these additional information.

We thank Dr Vidyadharan for this valuable additional information.

References

- NAMBIAR, A R, DINESH, A C, UNNIKRISHNAN, E and JAYAPRAKASH, C (2006) Occurrence of felsic volcanic rocks in 'Black Rocks' and 'Outer Rocks' in the inner continental shelf off Udiyavara, Karnataka. *Geol. Surv. India, Marine Wing News Letter*, v XX, No-1&2, pp 27-28.
- TORSVIK, T H, TUCKER, R D, ASHWAL, L D, CARTER, L M, JAMTVEIT, B, VIDYADHARAN, K T and VENKATARAMANA, P (2000) Late Cretaceous India-Madagascar fit and timing of break-up related magmatism. *Terra Nova*, v 12, pp 220-224.

GRAIN SIZE DISTRIBUTION OF SILICA SANDS IN AND AROUND MARAKKANAM COAST OF TAMIL NADU by E. Rajesh, K. Anbarasu and G.V. Rajamanickam. *Jour. Geol. Soc. India*, v.69(6), 2007, pp 1361-1368.

S. Kanjilal, Formerly of Department of Geology, Banaras Hindu University, Varanasi – 221 005 comments

- 1 The authors have tried to demonstrate the nature of the Marakkanam coast sands in their totality through grain-size analyses, bivariate plots, Visher diagrams, and CM pattern. Thus, ab initio, this is indeed an attempt towards detailed sedimentological examination of the silica sands of the area. However, in order to enhance the 'worth' of the paper, the authors have covertly attempted to impress the readers by highlighting the fiscal value of such sands through a series of references on the 'economics of white beach sands' from different parts of India, which does not fall in line with the claimed purpose of writing this paper. Their apparent use of the terms 'silica sands' (title, and elsewhere) and 'white sand' (p 1362, c 1, para 1, line 15 etc) interchangeably, apparently serving as a tool towards this implicit attempt.
- 2 The authors have analysed samples from these segments. These cluster of samples were named respectively as Mudaliyarkuppam Group, Kakapallam Group and Agaram Group. The authors are probably not aware that the term 'Group' bears a specific lithostratigraphic

connotation, and cannot be used in the manner they have put here.

- 3 The collected sand samples were from locations in and around the "Marakkanam Coast", but in fact these are not so. Can the authors vouch that they have actually collected samples from the two lagoons and the interconnecting channel, and that the bottom sediments are truly 'sandy', particularly when the authors have recorded (p 1364, Mean, c 2, para 3 lines 2-3) that 'Kakapallam is situated in an elevated zone'?
- 4 In spite of the above mentioned declarations about the sites of the three groups of samples, one may find an incongruity again by interpolating the location sites in Fig 1, on Fig 2 on p 1363. Anyone can see that three Agaram sample sites fall almost on a line (slightly subparallel to the coastline) which is proximal to the Kakapallam site. Further, not only the two "groups" of samples do not belong to the claimed locations (i.e. the two lagoons, and the interconnecting channel, respectively), most have come from western fringe of the southern 'palaeo-barrier', while the Pallampakkam site is situated actually on the "Mud Flat" to the western fringe of the northern lagoon (Fig 2)!
- 5 In the absence of a mineralogical study of the analysed