Figure 1: Nineteenth-century climate chronologies for southern Africa, including tree-ring based rainfall reconstructions for Zimbabwe (orange; bold line is a 10-year running mean, Therrell et al. 2006) and Karkloof (South Africa) (green; Hall, 1976), the speleothem record of regional hydrology from Cold Air Cave (South Africa) (blue; Holmgren et al., 1999) and document-derived rainfall reconstructions from the southern Kalahari Desert (Nash and Endfield, 2002a, 2008), Namaqualand (Kelso and Vogel, 2007), the Eastern and Southern Cape (Vogel, 1989) and Lesotho (Nash and Grab, 2010). Gaps in the documentary records are unclassified years. Widespread drought (green shading) occurred in 1820–21, 1825–27, 1834, 1860–62, 1874–75, 1880–83 and 1894–1896 (Kelso and Vogel, 2007), with an additional dry period from the early- to mid-1840s affecting the Kalahari and Zimbabwe, and Lesotho (Nash and Grab, 2010).
ACCORDING TO all of PAGES activities. And demonstrating that in Japan there were represented in this workshop, each Focus or CCT. All fields of paleoscience to the PAGES SSC and enhance the collaboration between the Japanese and international paleoscience communities.

84 scientists and students, including the international scientists from the PAGES SSC, attended this workshop with 21 oral and 47 poster presentations. Oral sessions consisted of keynotes by SSC members to introduce PAGES 4 scientific Foci and Cross-Cutting Themes (CCTs), followed by presentations by Japanese paleoscientists on recent research activities relating to each Focus or CCT. All fields of paleosciences were represented in this workshop, demonstrating that in Japan there is a full lineup of paleoscience research, corresponding to all of PAGES activities. After a brief introduction to PAGES science (T. Kiefer), two topics relating to Focus 4 (Human-Climate-Ecosystem Interactions: J. Dearing) were presented, highlighting the impact of preindustrial cultivation upon Asian monsoon climate (T. Yasunari) and the historical human-nature interactions in Japanese Archipelago (T. Yumoto). After lunch, several topics within Focus 2 (Regional Climate Dynamics: H. Wanner) and CCT 2 (Proxy Development, Calibration and Validation: F. Abrantes) were presented, including IMAGES research around Japan (H. Kawahata), Himalayan glaciers and ice cores (K. Fujita), NW Pacific coral records in the early 20th century (A. Suzuki), tree-ring oxygen isotopic network in Japan (T. Nakatsuka; Fig. 1 shown just as an example of ongoing research in Japan), and Japanese documentary based paleoclimate studies (M. Zaiki). The next morning followed on from lively discussions between Japanese scientists and SSC members at an evening reception, with two sessions, relating to Focus 1 (Climate Forcings: B. Otto-Bliesner, C. Whitlock) and CCT 3 (Modeling: B. Otto-Bliesner). Presentations included topics of Holocene sea level changes (Y. Yokoyama), impacts of historical solar activity on climate change (H. Miyahara), and perspectives on glacial-interglacial modeling in Japan (A. Abe-Ouchi). Finally, in the afternoon, Focus 3 (Global Earth-System Dynamics: T. Kiefer) and CCT1 (Chronology: P. Francus, S. Colman, C. Turney) were covered with presentations on Dome Fuji ice core analyses (K. Kawamura), millennia-scale Asian monsoon dynamics (R. Tada), North Pacific overturning at the last glacial termination (Y. Okazaki), and *Emiliania huxleyi* blooming and global geochemical cycles (N. Harada).

Oral and poster presentations by Japanese paleoscientists not only demonstrated the high level of their academic findings but also suggested the potential for international contributions in the near future. As a result of this workshop, it was shown that Japanese paleoscience is of a high international level and efforts should be made for better integration of Japanese paleoscientists, and for Japanese young paleoscientists to enhance their international contributions, even though isolated circumstances, such as the “Galamagos Island” effect, may continue produce some unique creatures or some unique science...

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**PAGES Calendar 2010/2011**

- **3rd Past Interglacials (PIGS) Workshop**
  20 - 22 Oct 2010 - New York, USA
  http://www.pages-igbp.org/calendar/

- **PAGES Arctic 2k Workshop**
  11 - 12 Dec 2010 - San Francisco, USA
  http://www.pages-igbp.org/calendar/

- **Land-cover reconstructions in the monsoon affected tropical world - pollen modeling approach and data synthesis**
  27 - 29 Jan 2011 - Puducherry, India
  http://www.pages-igbp.org/calendar/

- **3rd EAQUA Workshop**
  8 - 13 Feb 2011 - Zanzibar, Tanzania
  http://www.pages-igbp.org/calendar/

- **18th INQUA Congress**
  20 - 27 Jul 2011 - Bern, Switzerland
  http://www.inqua2011.ch/

- **2nd Workshop of PAGES Regional 2k Initiative**
  28 July 2011 - Bern, Switzerland
  http://www.pages-igbp.org/calendar/

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**Figure 1:** A new network of tree-ring cellulose oxygen isotopic ratios from Japan (Nakatsuka et al., unpublished). Correlation coefficients between the tree-ring cellulose δ^18O and monthly mean relative humidity observed at meteorological stations (stars) close to the sample sites during recent 50 years show that tree-ring cellulose δ^18O has a clear negative correlation with relative humidity during its growing season. This indicates that tree-ring δ^18O can be a useful proxy of summer monsoon activity in Japan. Due to reduced sensitivity of tree-ring width to moisture, it is difficult to reconstruct Japanese summer hydroclimate based on traditional dendrochronological methods. Thus tree-ring cellulose δ^18O provides a new option, and will be important in contributing to Japanese records for the PAGES Asia 2k reconstruction Working Group.

**Figure 2:** Map of Japan showing δ^18O of tree-ring cellulose from 9 different sites (Green lines). Stars show the location of meteorological stations where mean monthly relative humidity was observed for recent 50 years.