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Climate of the Past Discussions

Interactive comment on "Fire, vegetation and Holocene climate in the south-eastern Tibetan Plateau: a multi-biomarker reconstruction from Paru Co" *by* Alice Callegaro et al.

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Please find below the captions and the figures from 2 to 5 for the new version of the paper.

Captions:

Figure 2: (a) Sum of PAHs concentrations; (b) Sum of 3rings PAHs concentrations (Phe, Ant, FluA); (c) Sum of 4rings PAHs concentrations (Pyr, BaAnt, Chr, Ret, BbFl, Bkfl); (d) Sum of 5-6rings PAHs concentrations (BaPyr, BePyr, Bghi, IP, DBahAnt). Data points (black) with absolute error range (grey), LOWESS smoothing with

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SPAN parameter 0.2 (red), b-spline interpolation (cyano). (e) Levoglucosan concentration; (f) Mannosan concentration. Data points (black) with absolute error range (grey), LOWESS smoothing with SPAN parameter 0.2 (purple), b-spline interpolation (dark blue). Pink bar indicates the early Holocene period where levoglucosan and 5rings PAHs show high concentrations. (g) Ant/(Ant+Phe); (h) IP/(IP+Bghi); (i) FluA/(FluA+Pyr). Ratios values (black points) with absolute error bars (grey) and diagnostic thresholds (red dashed lines).

Figure 3: (a) L/M ratio values (black points) with absolute error bars (grey); LOWESS smoothing with SPAN parameter 0.2 (light sea gree), b-spline interpolation (blue). (b) CPI ratio values (black points); b-spline interpolation (dark red). (c) Tree pollen (%) from Zhao et al., 2011 - http://apps.neotomadb.org/Explorer/?datasetid=14619. (d) Sum of PAHs concentrations, data points (black) with absolute error range (grey), LOWESS smoothing with SPAN parameter 0.2 (orange), b-spline interpolation (red). Grey bars evidence periods of more intense fire.

Figure 4: (a) δD wax for C27 and C29 n-alkanes referenced to Vienna Standard Mean Ocean Water scale, data from Bird et al., 2014 - https://www.ncdc.noaa.gov/paleo/study/16399. (b) ACL ratio values (purple points), adjacent-average smoothing with 5 points (black), b-spline interpolation (purple line). (c) Paq ratio values (brown points), adjacent-average smoothing with 5 points (black), b-spline interpolation (brown line). (d) Principal component 1 values (blue) as indicative of lake level changes, adjacent-average smoothing with 40 points (red), data from Bird et al., 2014 - https://www.ncdc.noaa.gov/paleo/study/16399. (e) Summer insolation, data from Berger and Loutre (1991). Pink bars evidence more intense ISM events and/or lake level changes.

Figure 5: (a) Sum of PAHs concentrations, data points (black) with absolute error range (grey), LOWESS smoothing with SPAN parameter 0.2 (red), b-spline interpolation (cyano). (b) lithics (%), data from Bird et al. (2014) - https://www.ncdc.noaa.gov/paleo/study/16399. (c) MAs concentrations, data points

(black) with absolute error range (grey), LOWESS smoothing with SPAN parameter 0.2 (red), b-spline interpolation (cyano). Grey bars indicate less lithics abundances (less ISM) compared to the fire signals.

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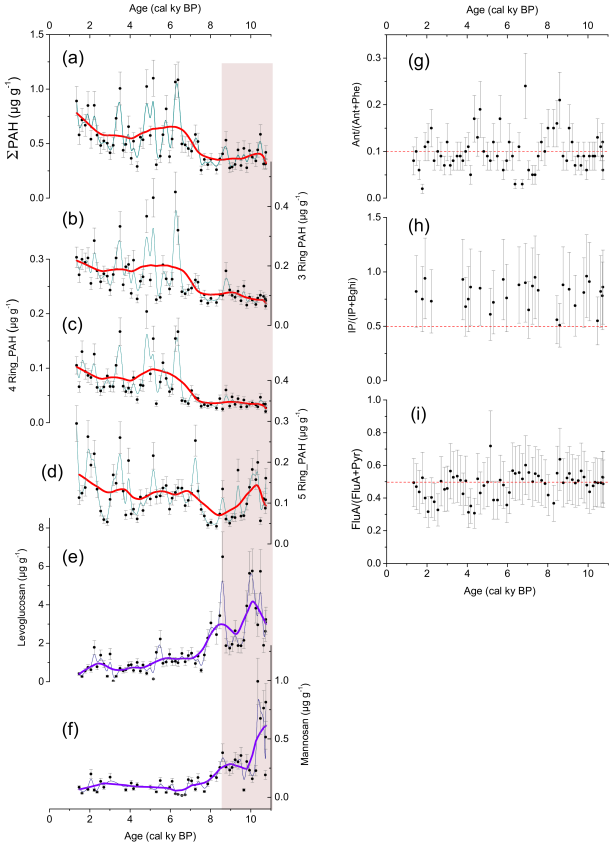

Fig. 1. FIGURE 2

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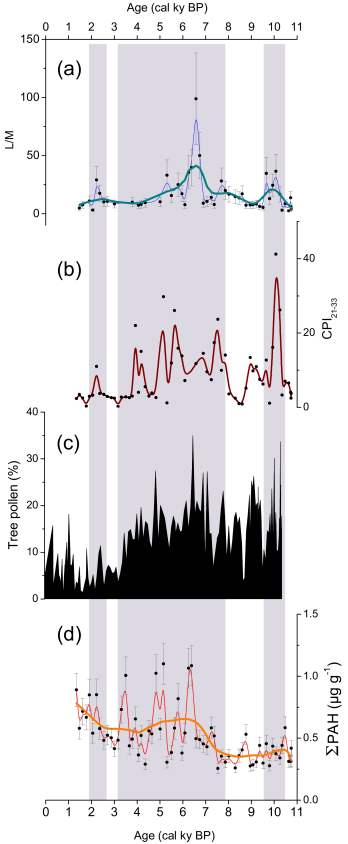

Fig. 2. FIGURE 3

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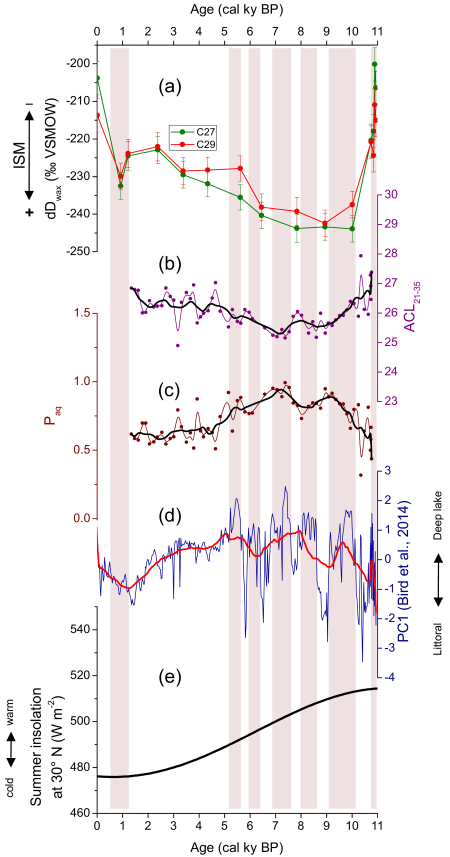

Fig. 3. FIGURE 4

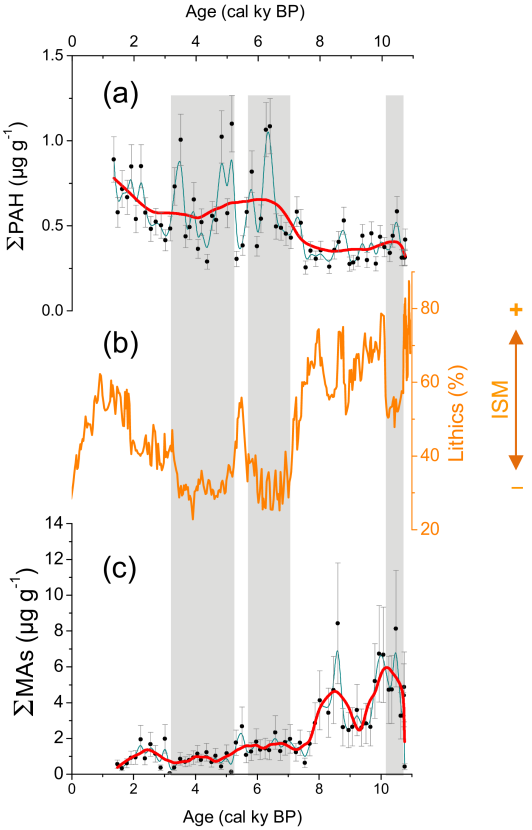

Fig. 4. FIGURE 5

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