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## Fluvial responses to orbital-forced climate changes in the North American Western Interior early Paleocene

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# Acknowledgements

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### *Pre-PhD*

Prior to my PhD research, when I was a geology student, my bachelor and master thesis supervisor Luc Lourens encouraged my curiosity and enthusiasm for academic research that later translated in this PhD. He also kindly welcomed me as a guest researcher at the Utrecht University during and after my PhD project. Thank you for that, Luc.

The first time I got inspired for the factors driving the formation of clastic fluvial and deltaic stratigraphy, was during the passionate guidance of Dr. Wim Westerhoff, at the time I was a student intern at the Geological Survey of the Netherlands – TNO.

### *PhD project*

My co-promotor Klaudia Kuiper hired me as the PhD student in her NWO VIDI grant. I always appreciated the freedom she gave me in shaping my PhD project. Her statement in the first week of my PhD project, “I just want to know the truth”, was on my mind for the next years. I think we can now say that we have found many interesting answers towards finding this ‘truth’, and I foresee more to come in the future, especially some new interesting lights shed from  $40\text{Ar}/39\text{Ar}$  radioisotope dating.

With kind patience, my co-promotor Hemmo Abels learned me the ins and outs of field sedimentology. As an excellent start-up, he invited me to join his research team in the Bighorn Basin (Wyoming) where his team is hosted by Phil Gingerich, in Powell. In Wyoming, I fruitfully worked with Bas van der Meulen who was working on his MSc thesis project logging the lower Eocene part of the Willwood Formation at Polecat Bench. Hemmo handed me his well-documented data he already collected in Montana before the start of my PhD project. This was for me an excellent example of the working standard as well as guiding pre-knowledge to build on. Our common interest in understanding how the fluvial system builds the rock record, tended in multiple interesting discussions and insights. I want to thank Hemmo, in particular, for emphasizing the importance of the word channel, from the beginning. It indeed turned out that identifying and understanding the channel-forms, in the field (such as we viewed from the Bug Creek Anthill), was the prerequisite for better understanding the whole system and its internal and external drivers.

I am privileged to have worked with colleague and experienced field geologist Frits Hilgen during different field campaigns. He firstly guided me through the outcrops in Montana of which a better field introduction I could not have wished. His eye for stratigraphic key levels is unequalled; for example his discovered “Sugar Ash” turned out to be a golden regional tie-point. I have also learned a lot from Frits regarding efficiently planning and prioritizing during fieldwork to achieve the research goals. We had (and still have) an interesting disagreement regarding the order of geological approaches when analyzing fluvial successions, on which I think we have agreed to disagree.

In the second half of my PhD project Antonio Turtù joined the VIDI-team as a postdoctoral researcher, field colleague, and daily roommate. I very much enjoyed the plenty scientific and non-scientific conversations we had. We have much common interests such as for rock music, football, and good beers. We found some comfort with each other when both the Italian and Dutch national football teams disqualified for the FIFA World Cup 2018 in Russia. During the 2017 fieldwork along

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Edwin de Jong delivered significant contributions to section logging and sampling for my PhD project as he was a companion during my second, fourth and sixth fieldwork. In 2014, Edwin did an excellent job on digging significantly deep and wide trenches which made my life as a sedimentological logger much more easier. In 2015, Edwin and I were really an efficient couple by stratigraphically logging one single section per day in McCone County, which were later all included in the published Chapter 2. In 2016, Edwin helped me again significantly with section logging and sampling as well as co-supervising Robin and Astrid with their master research projects. I will never forget some moments we shared in Montana such as: replacing the flat tire of our SUV on Brusett Road while being eaten alive by mosquitos, the snowstorm at the Hauso Flats section during summer fieldwork, and the electricity shutdown in Jordan because of severe storm damage.

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