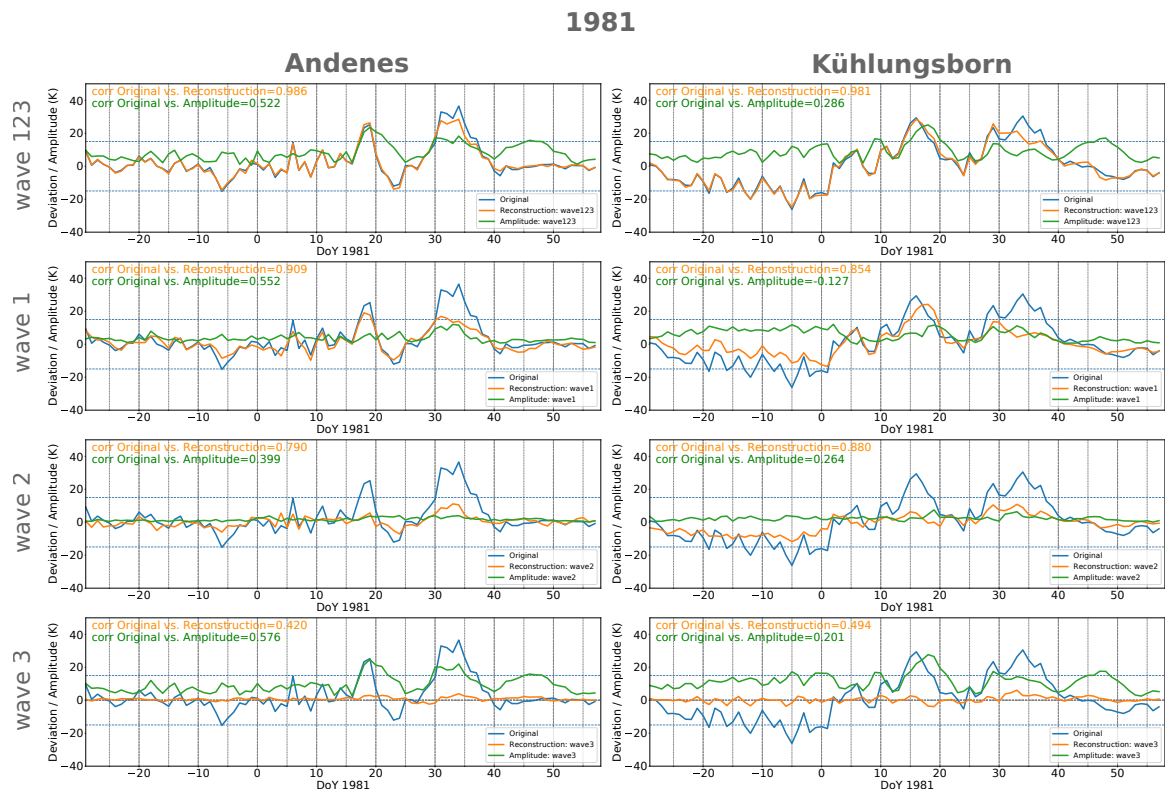


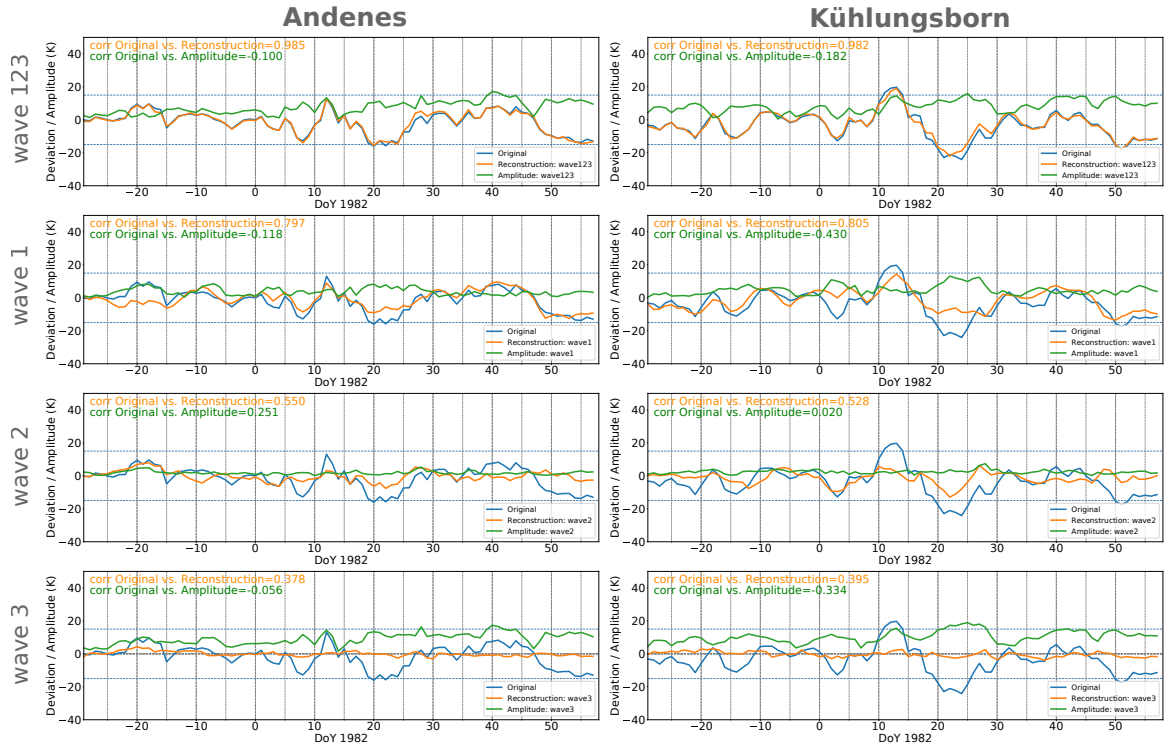
# Local Stratopause Temperature Variabilities and their Embedding in the Global Context: Supplementary Material

Ronald Eixmann, Vivien Matthias, Gerd Baumgarten, Michael Gerding and Josef Höffner

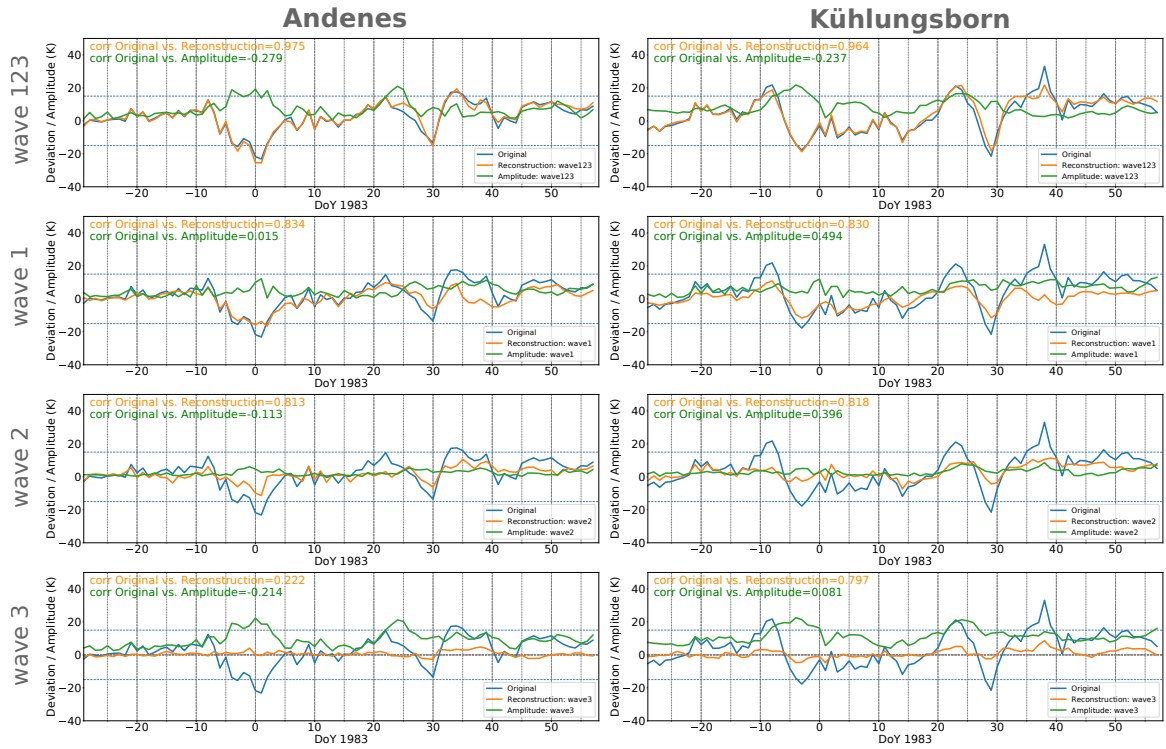
The following figures are similar to Figure 4 in the paper but for all available winter between 1981 and 2019.



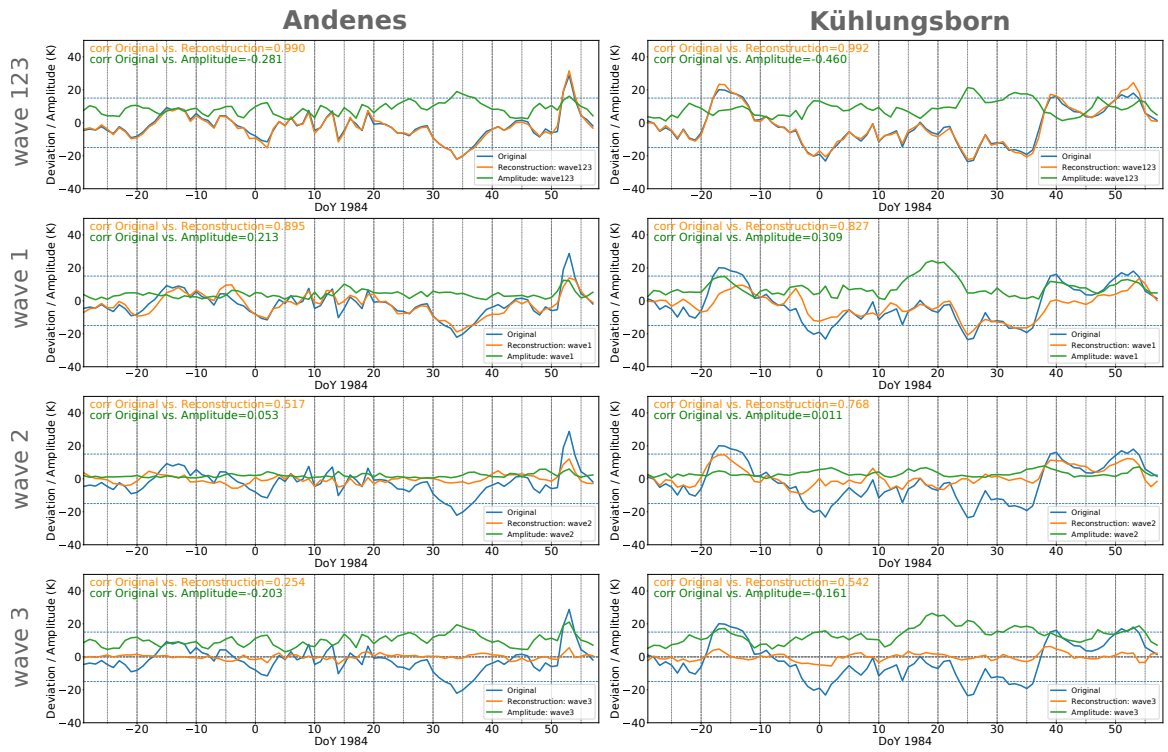
## 1982



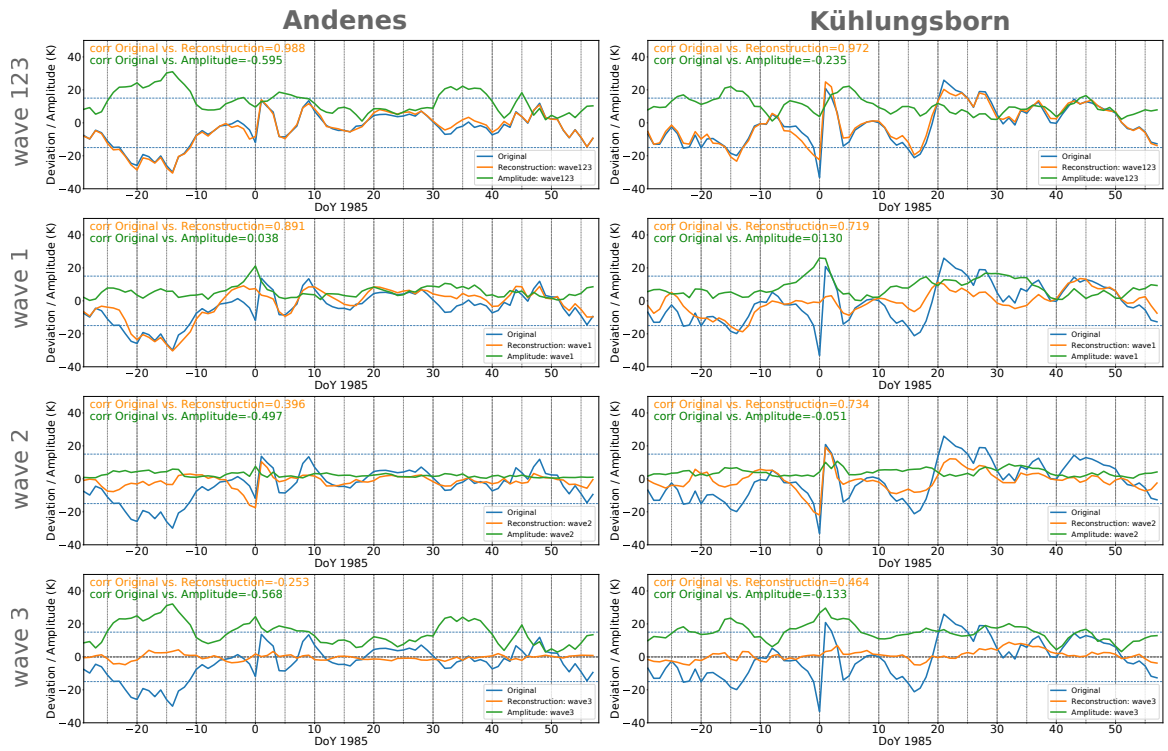
## 1983



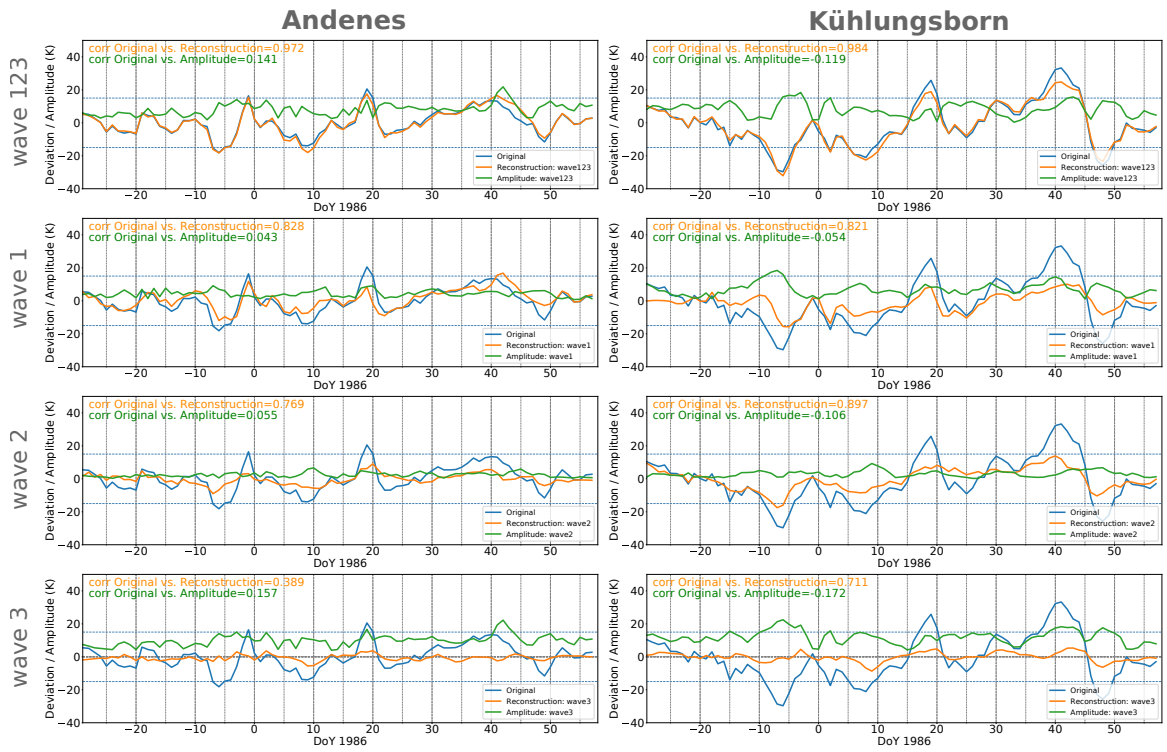
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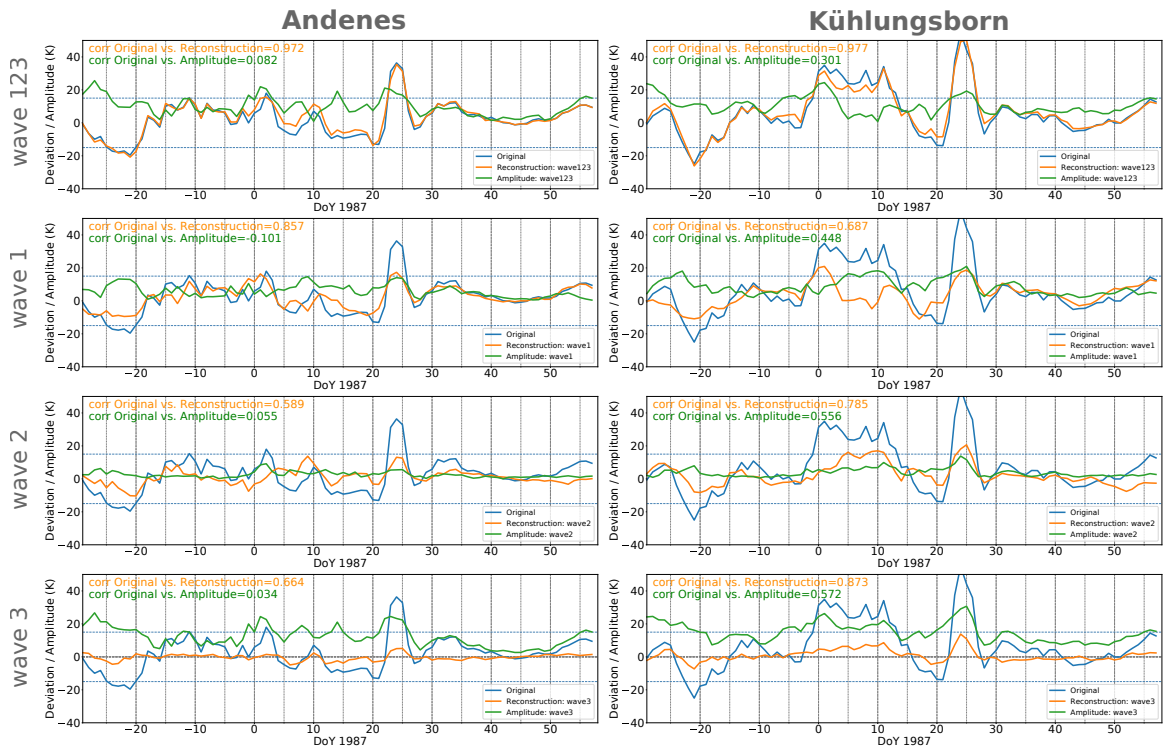
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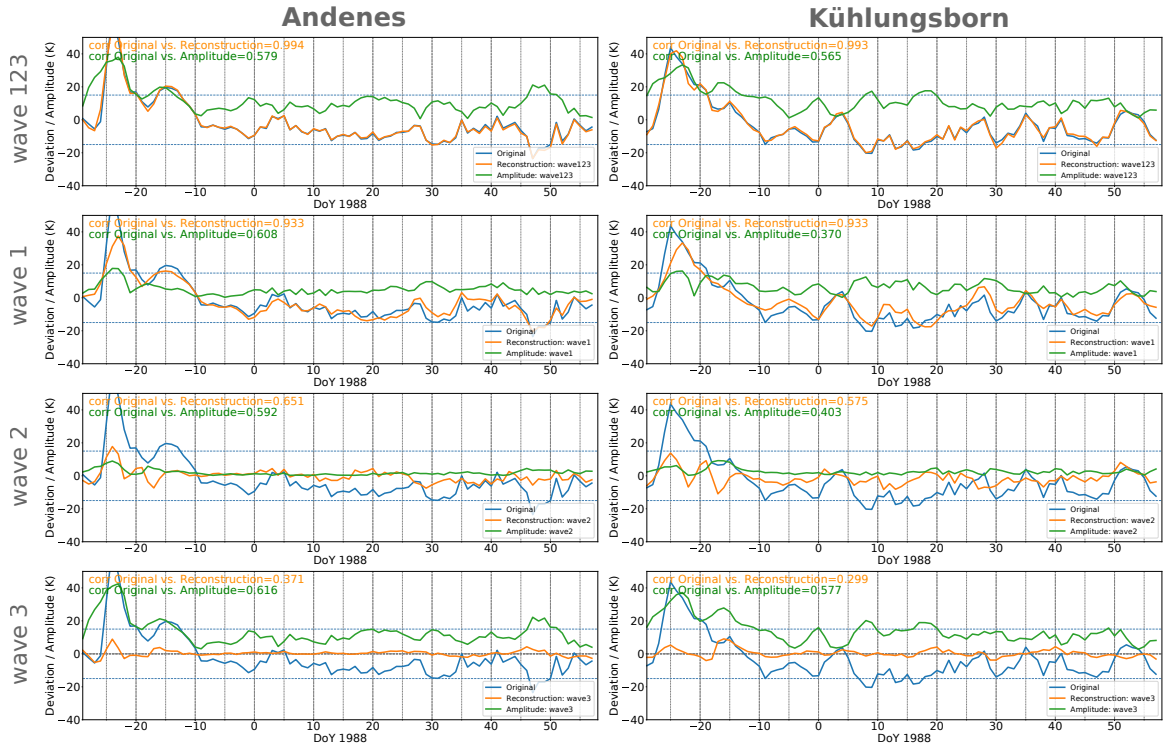
1986



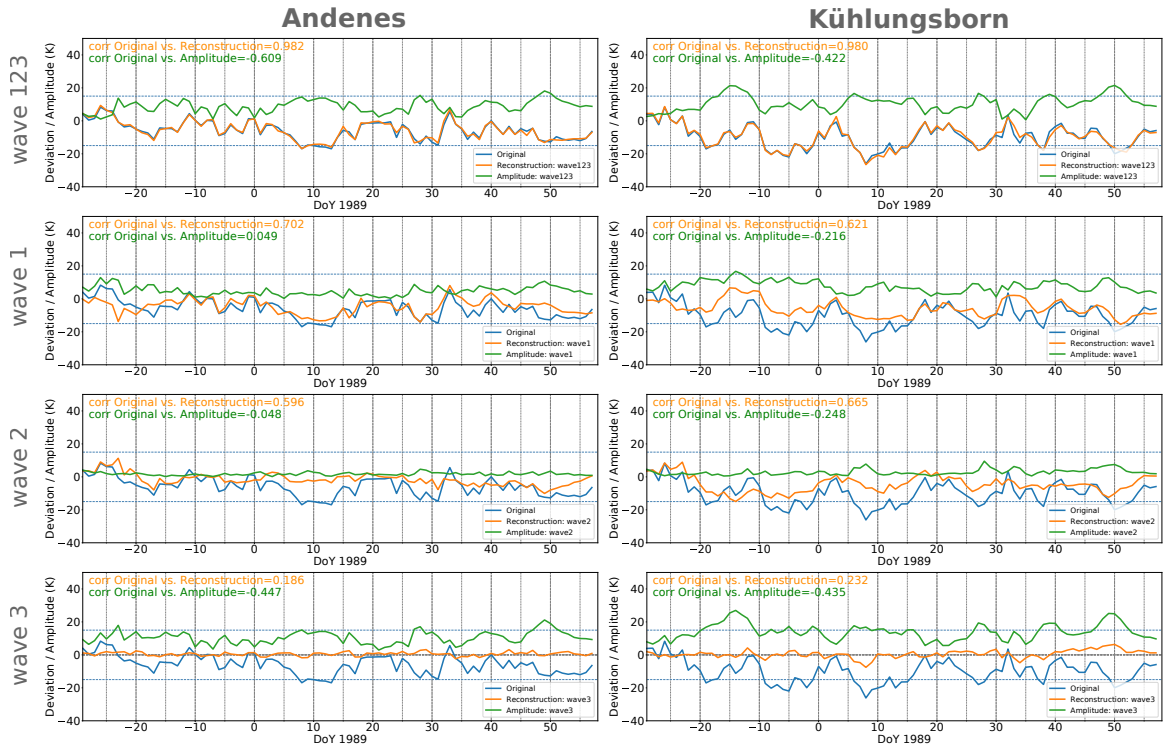
1987



1988

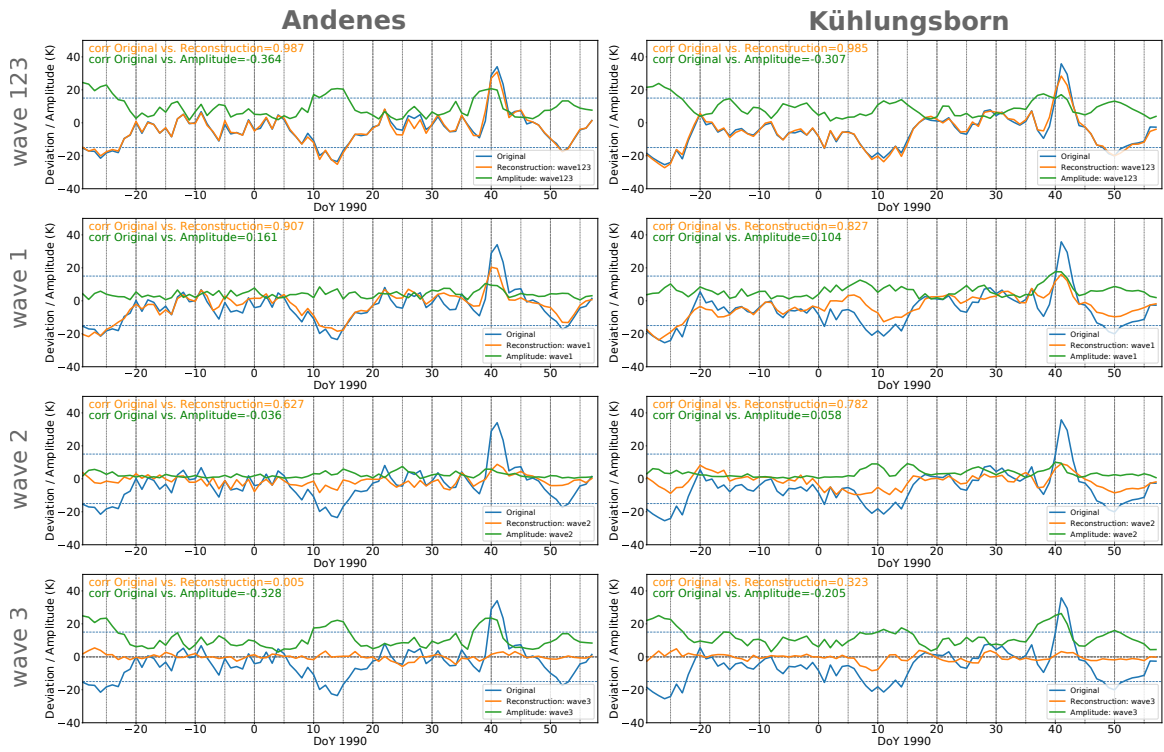


1989

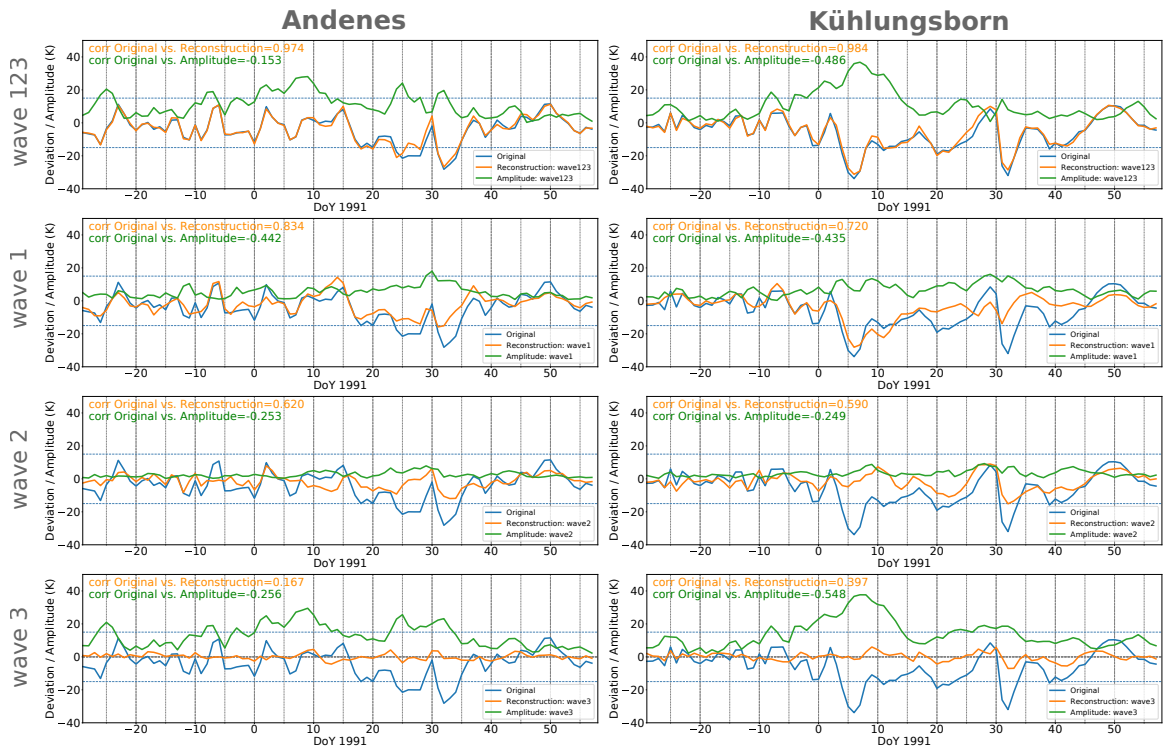




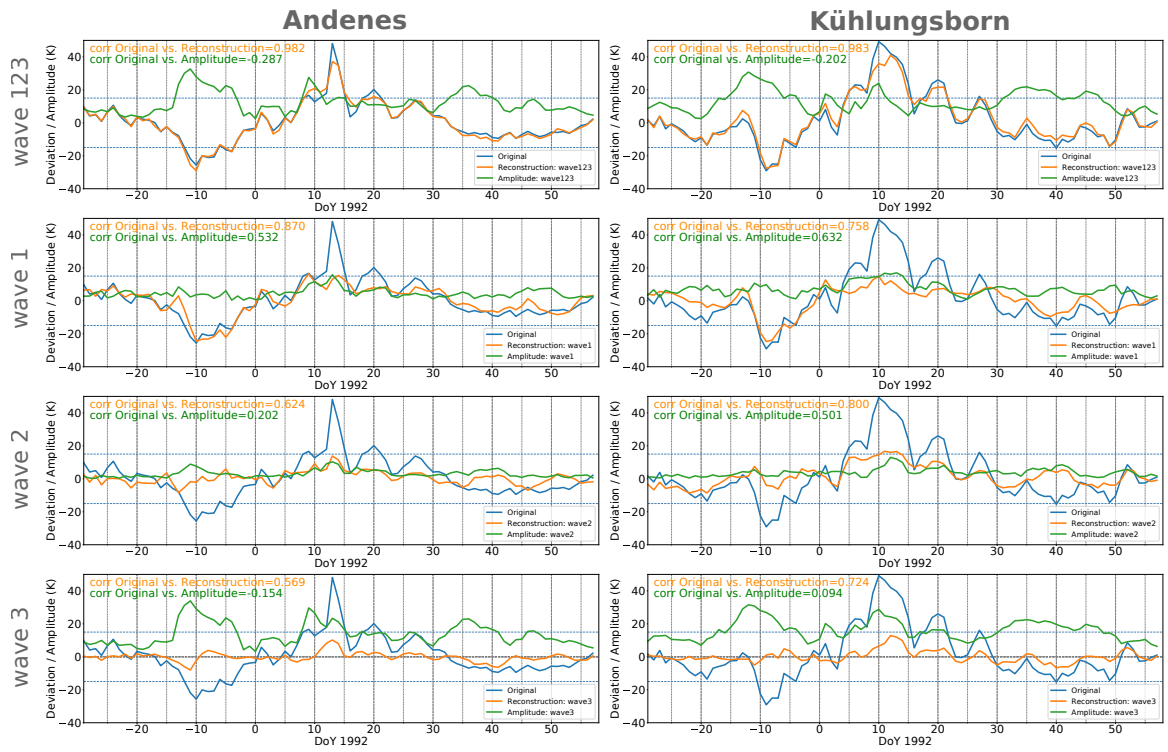
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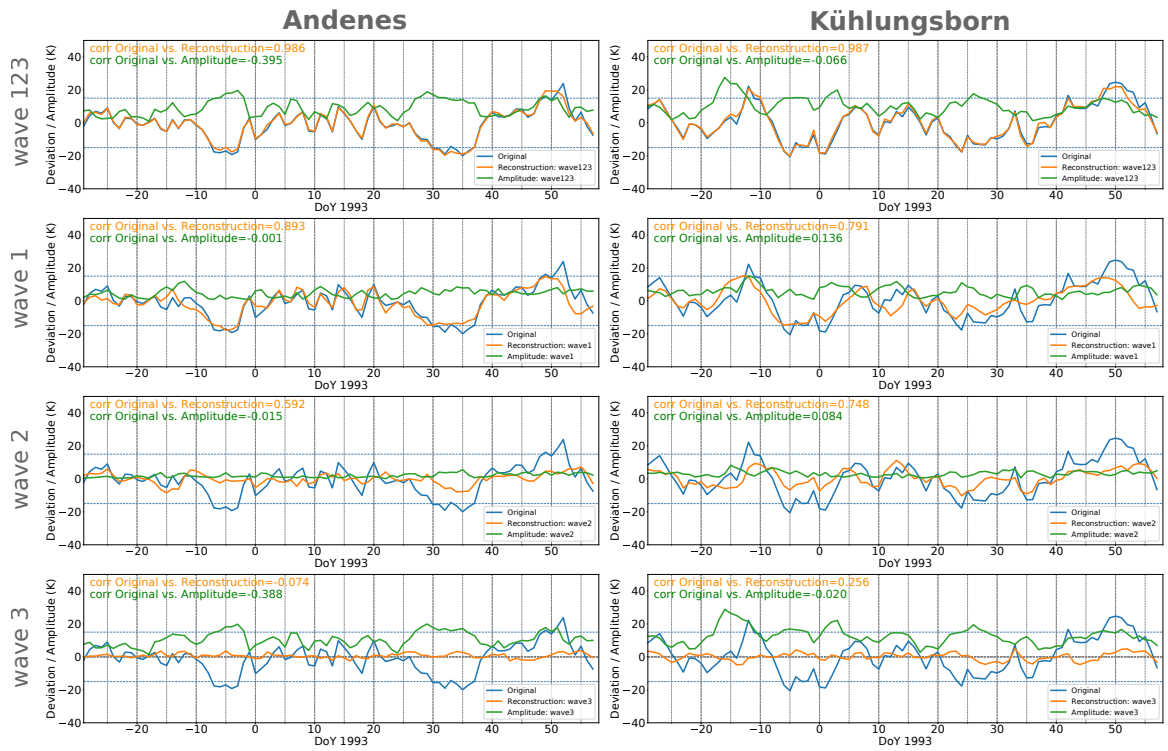
# 1991



1992

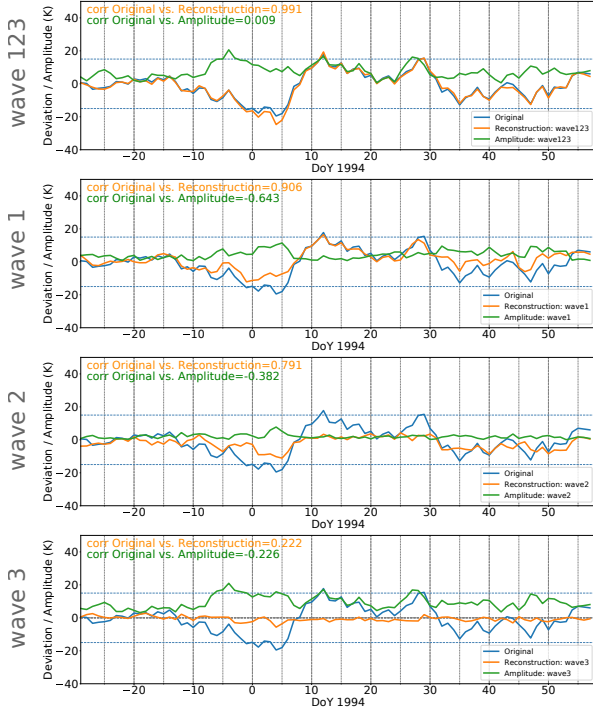


1993

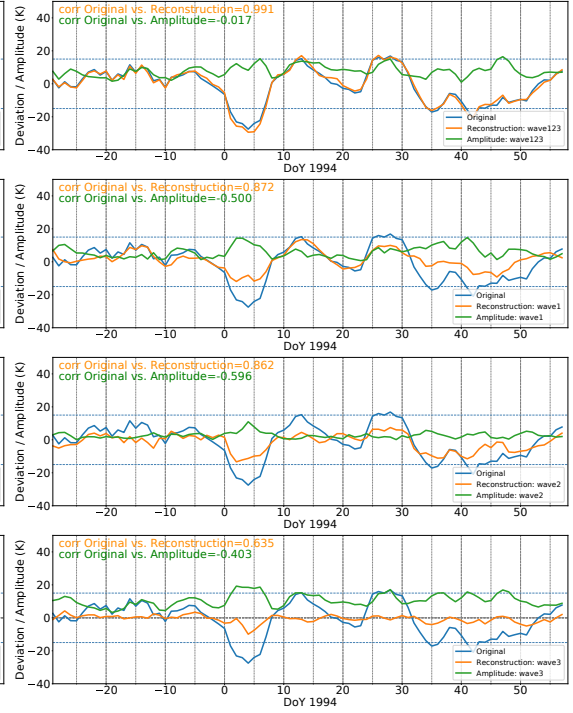


# 1994

## Andenes

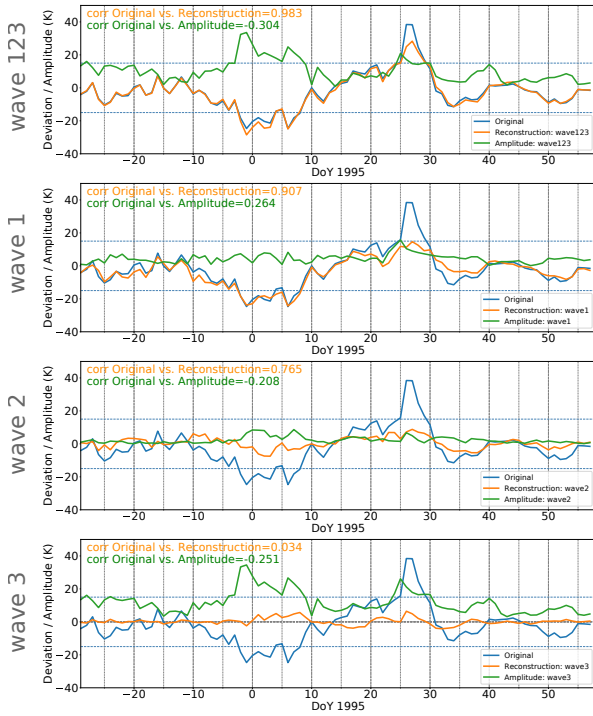


## Kühlungsborn

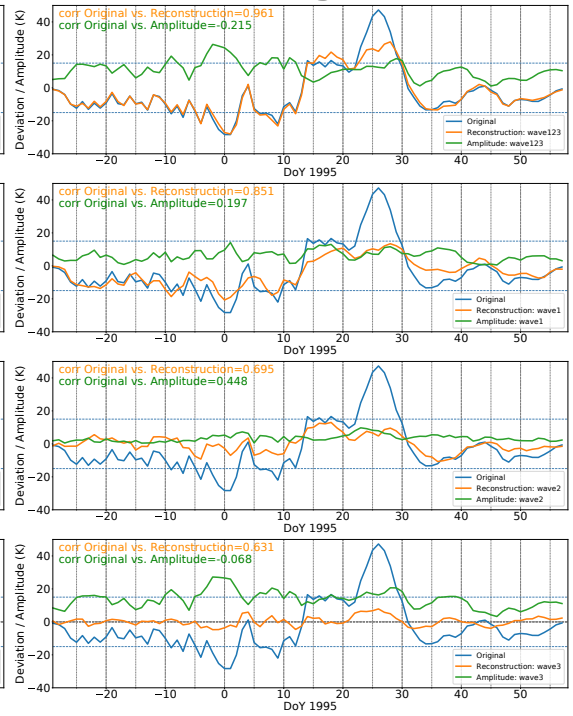


# 1995

## Andenes

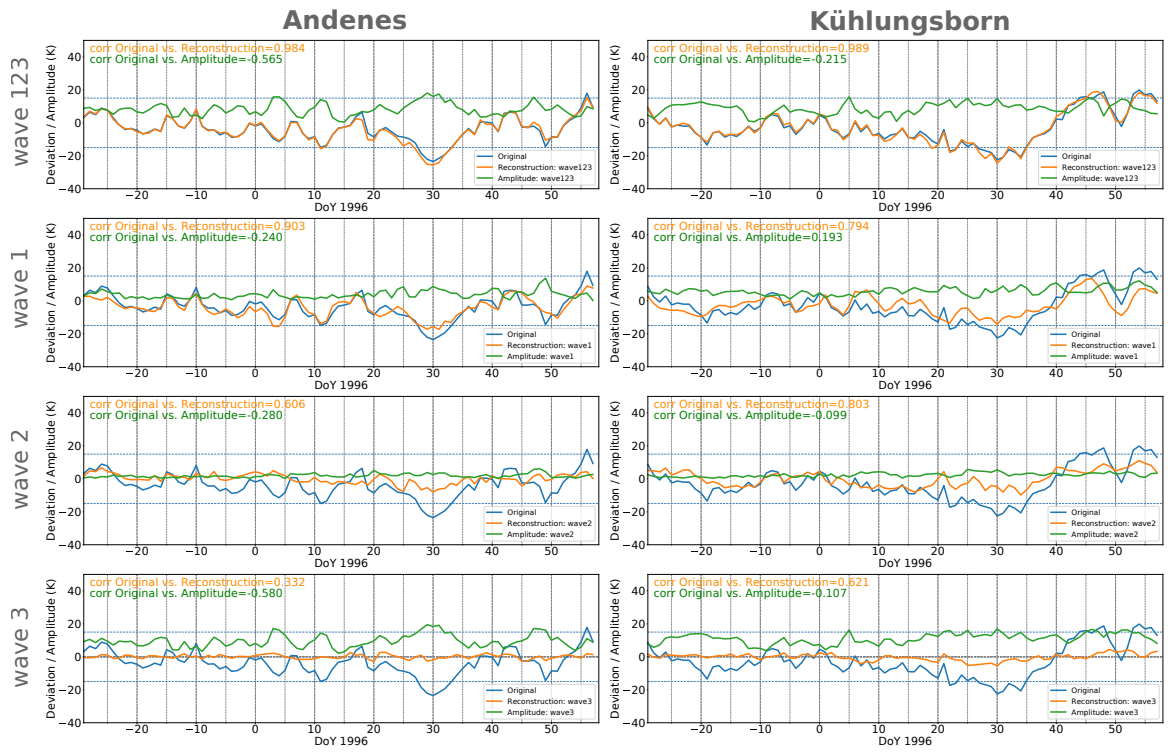


## Kühlungsborn

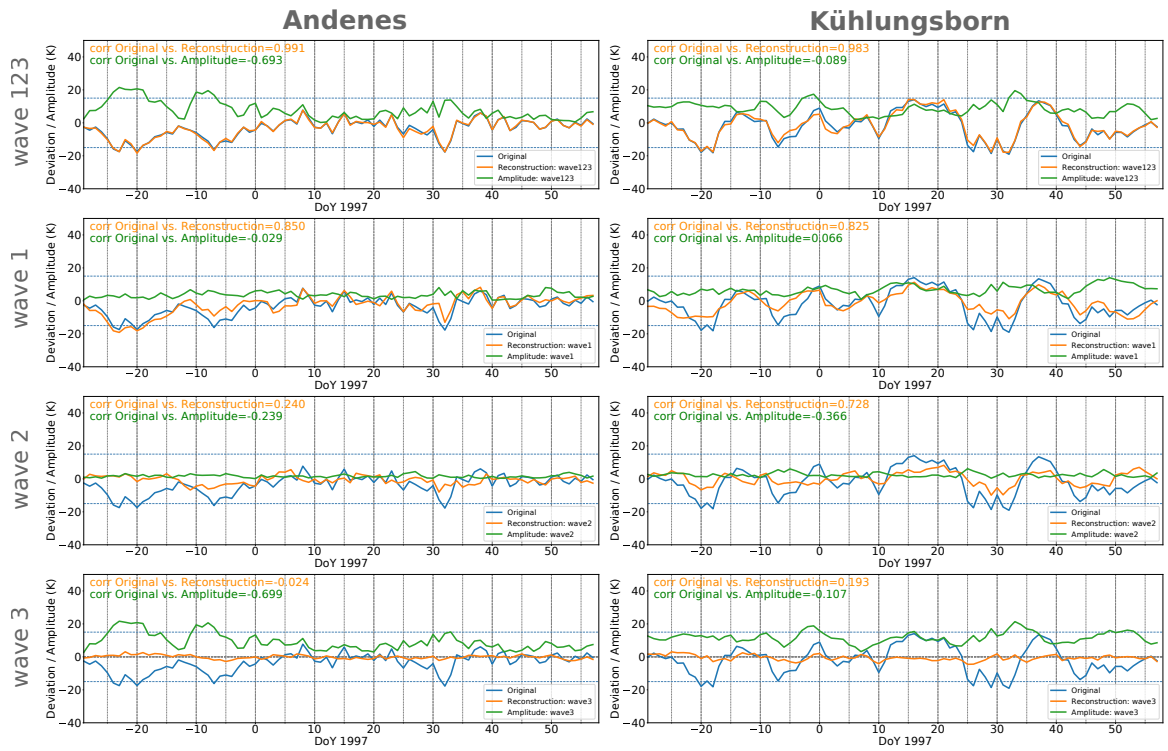




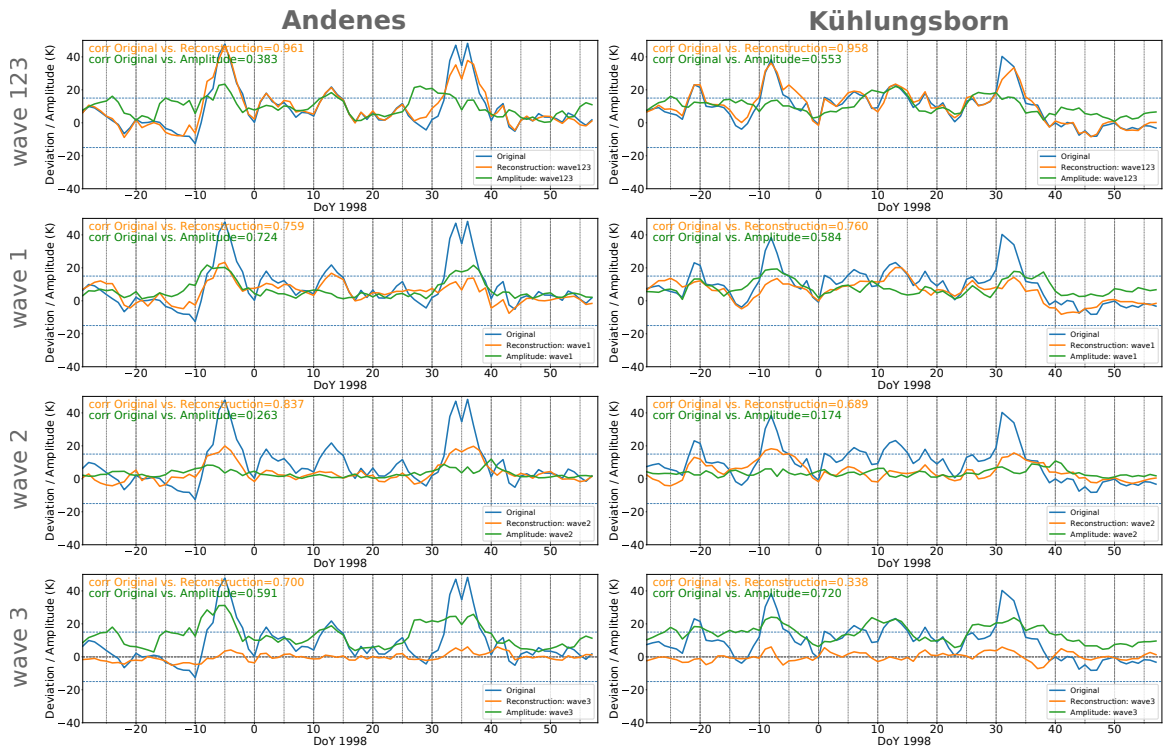
1996



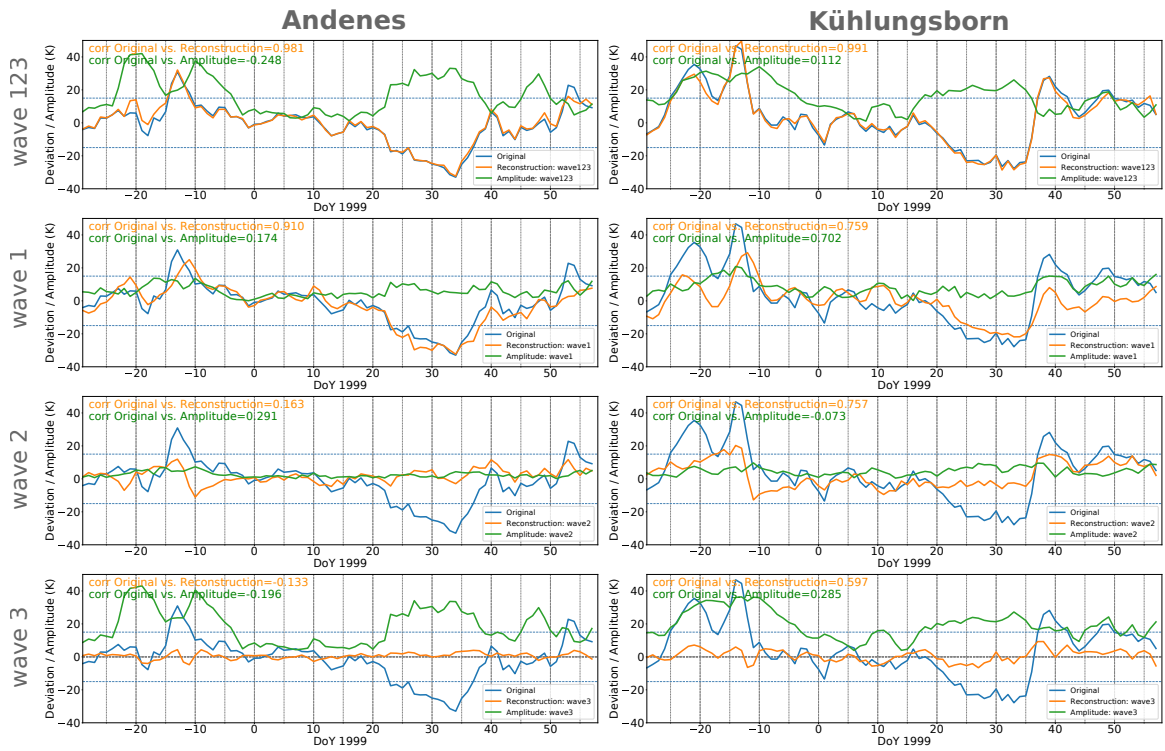
1997



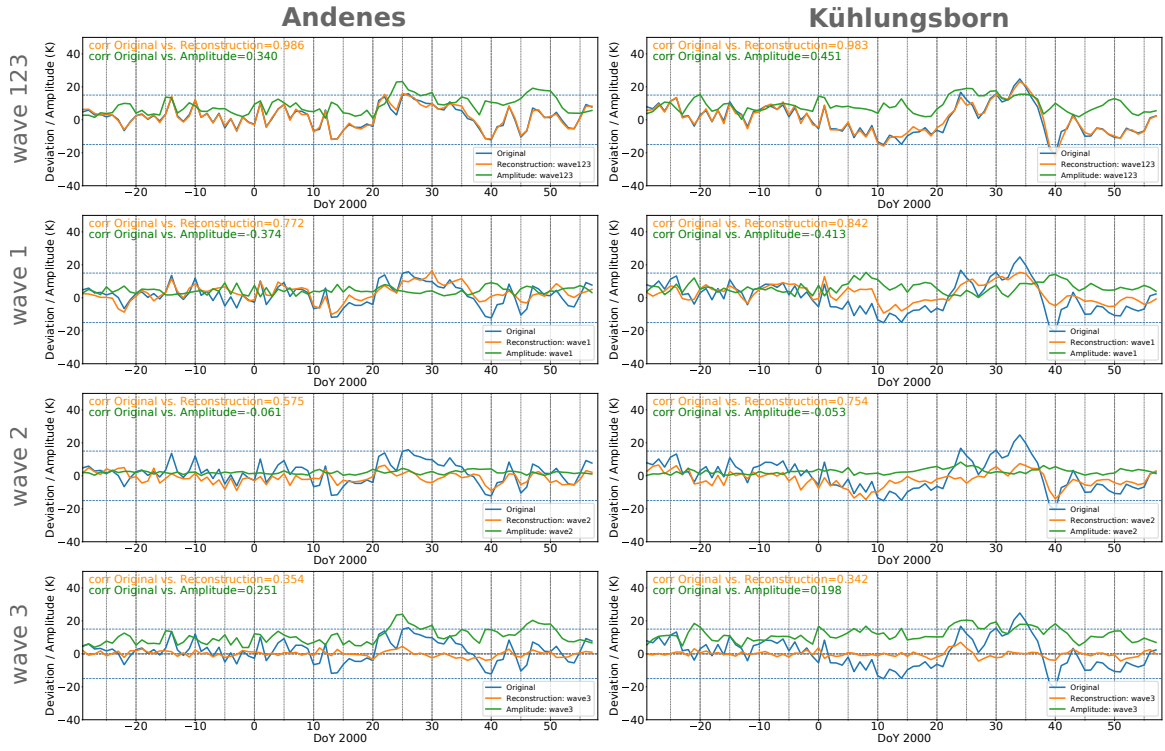
## 1998



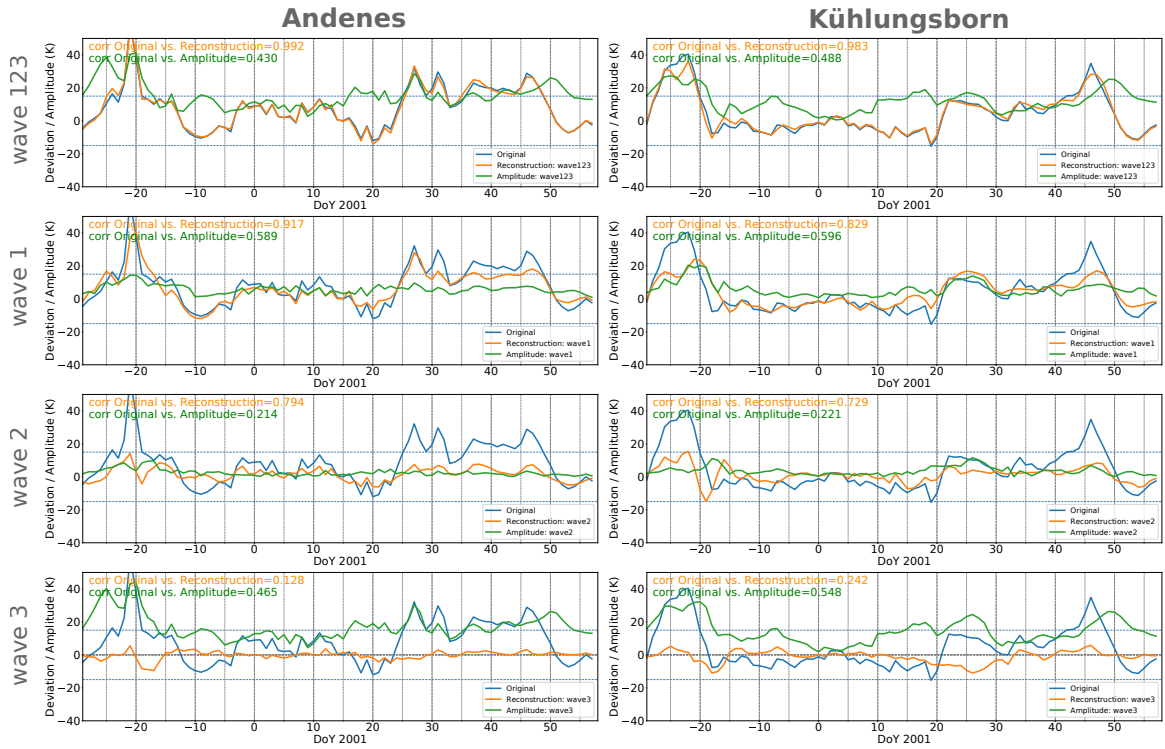
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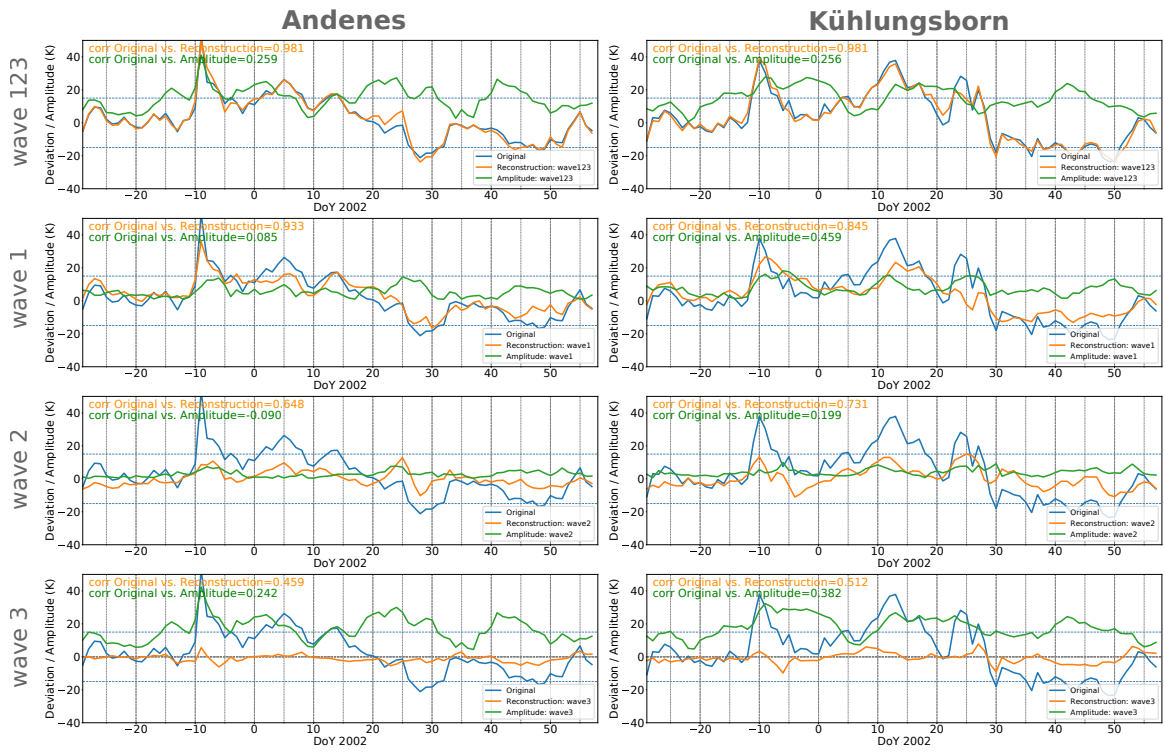
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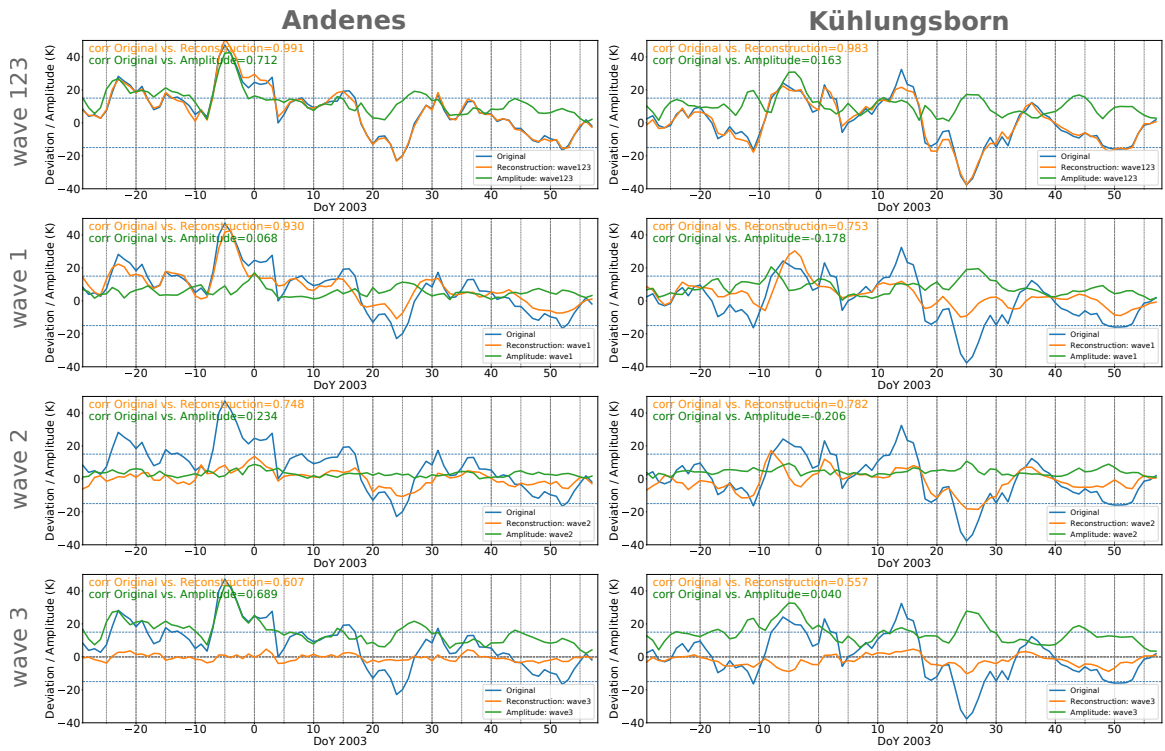
## 2001



## 2002

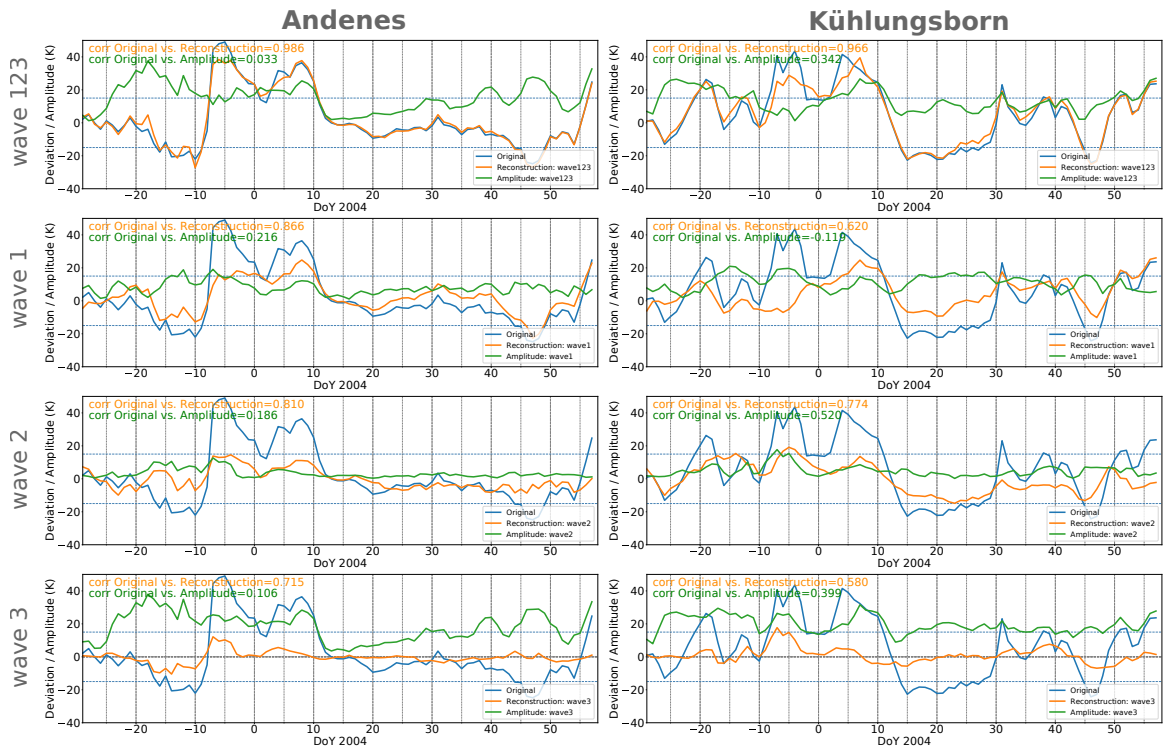


## 2003

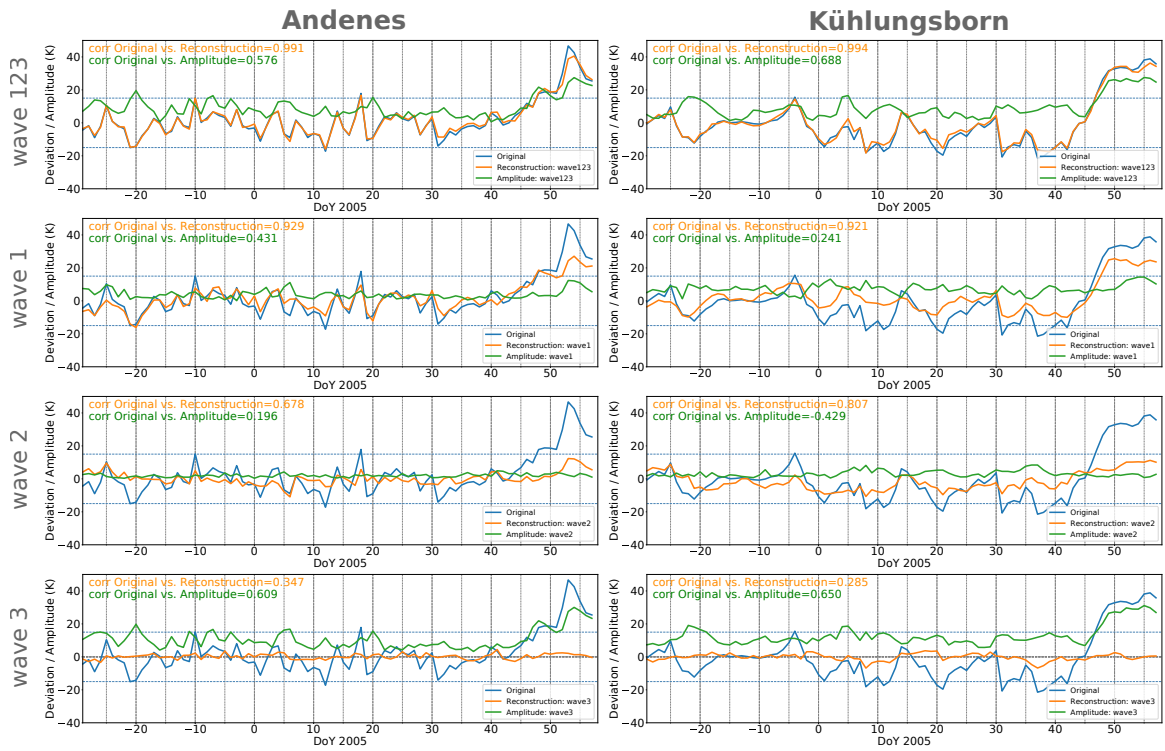




## 2004

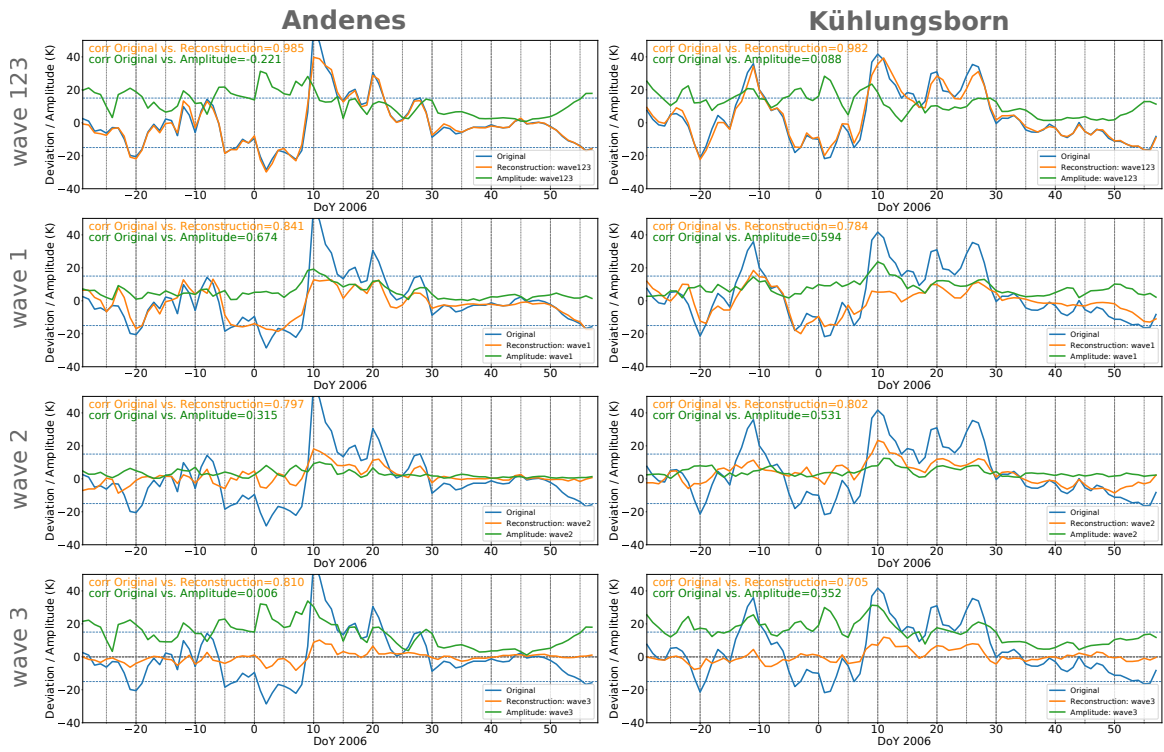


## 2005

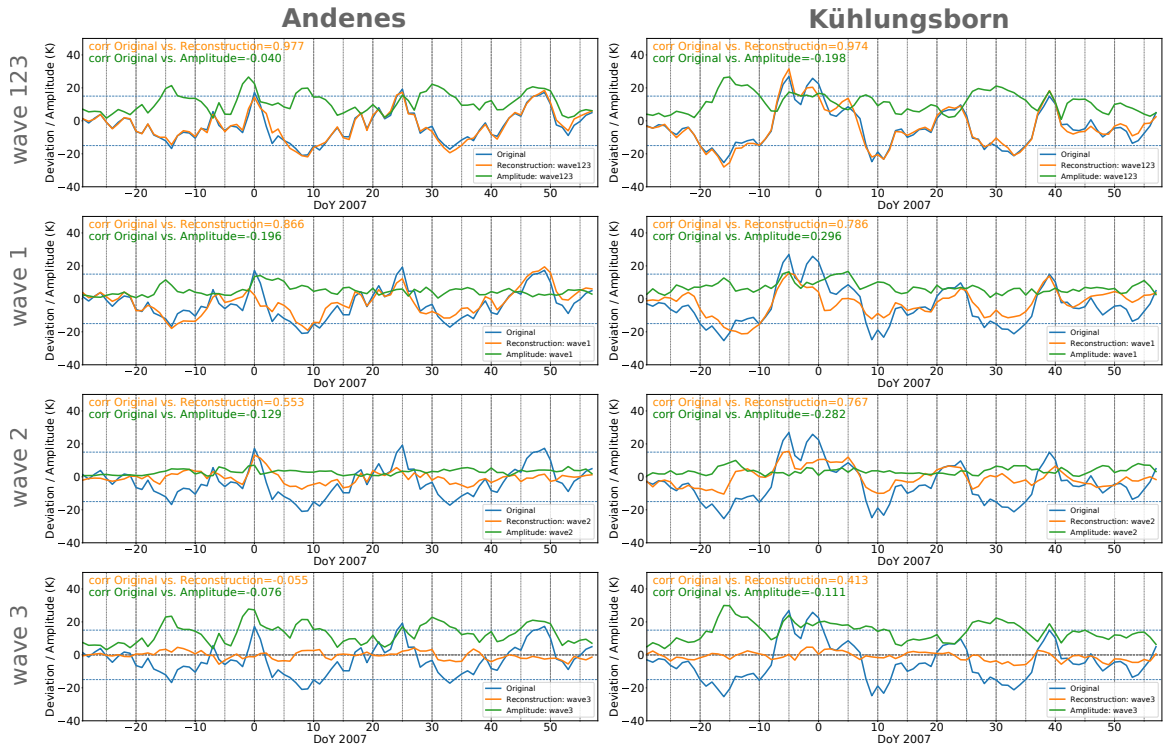




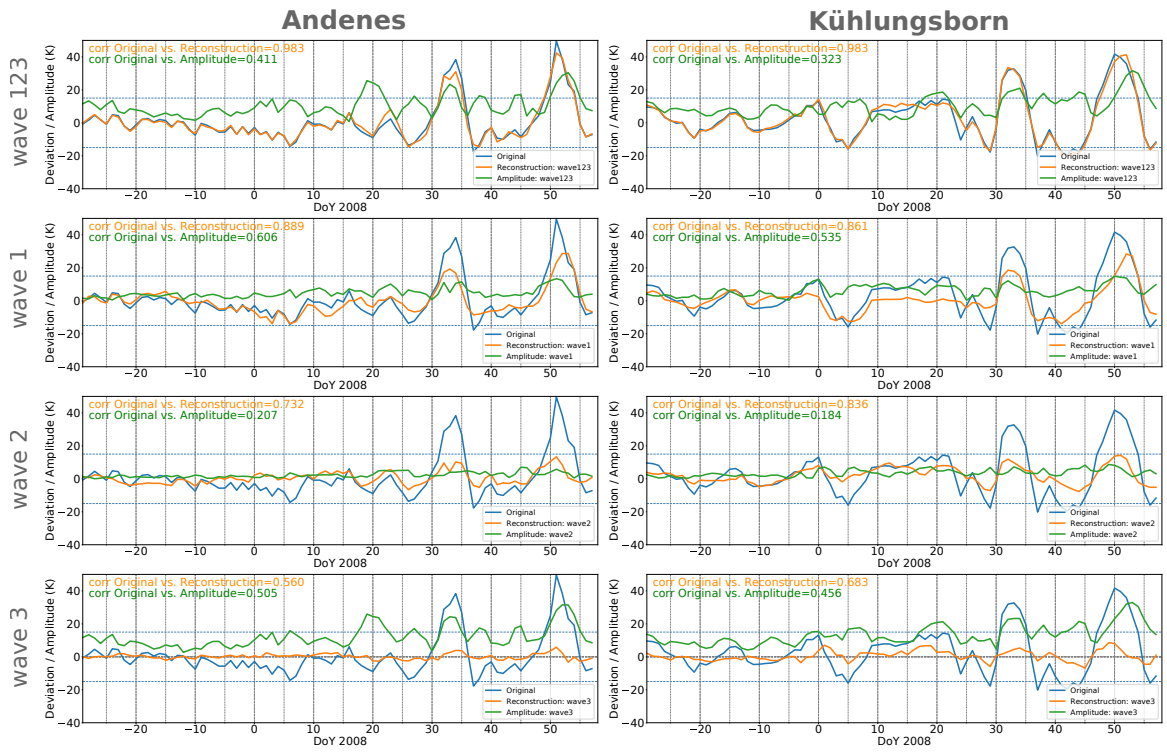
2006



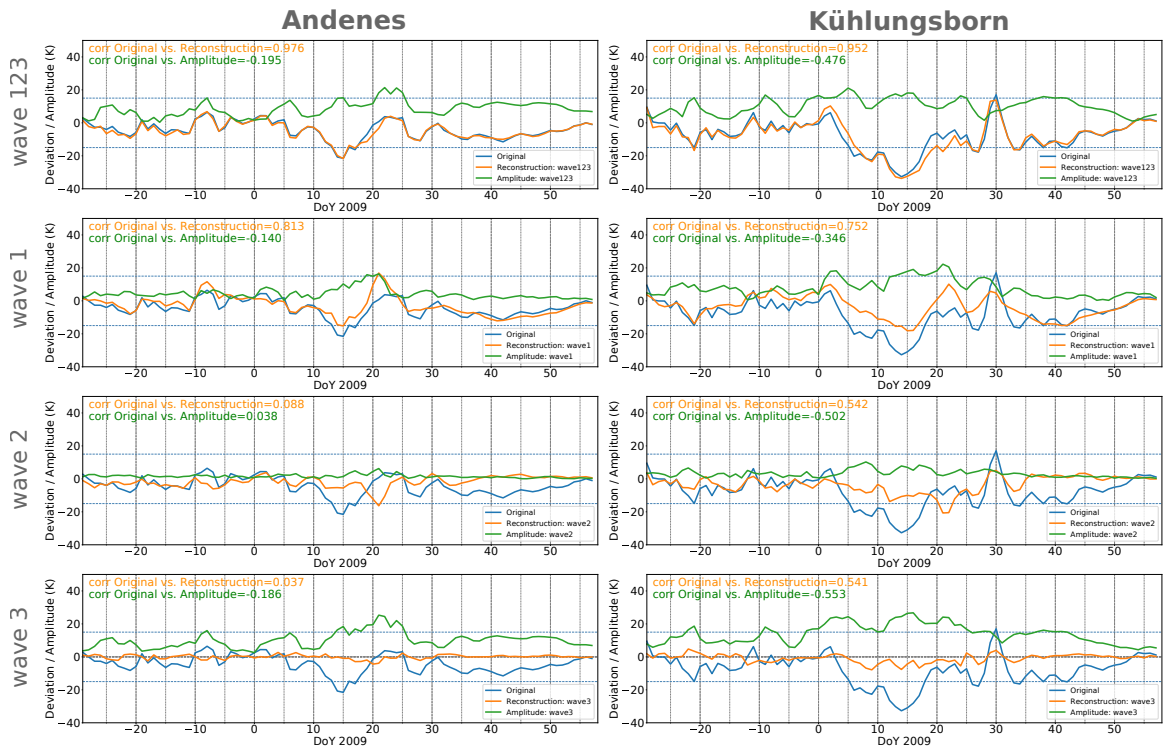
2007



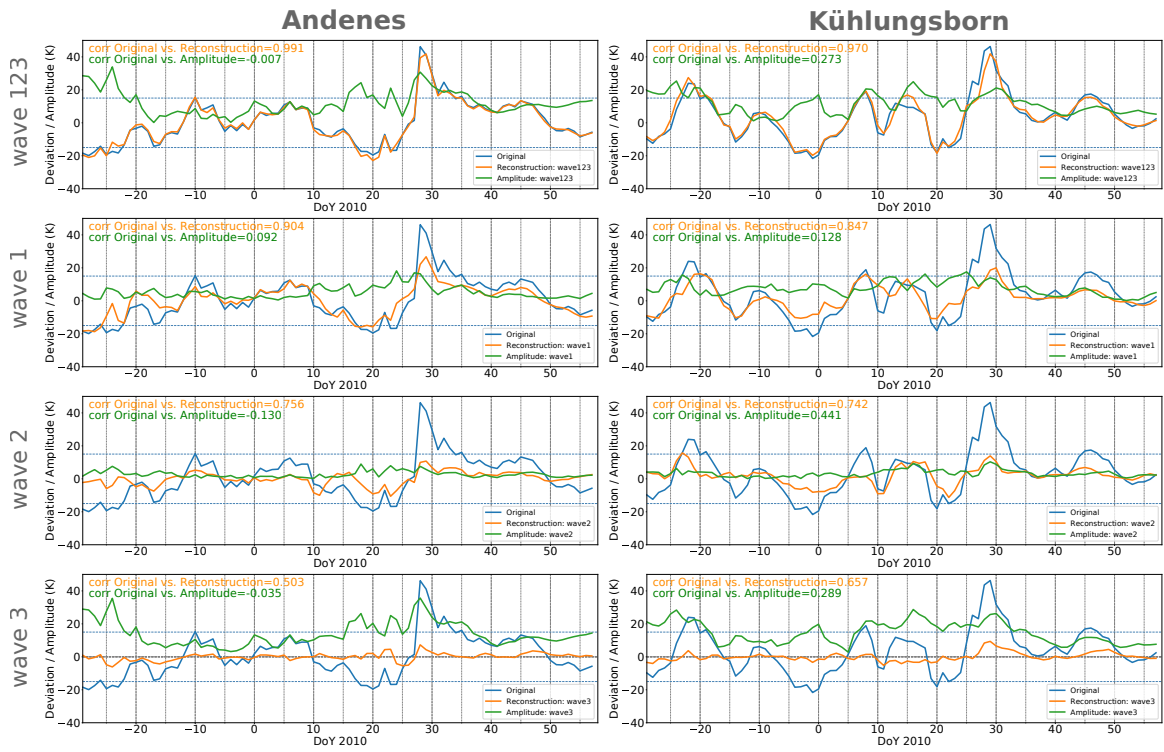
2008



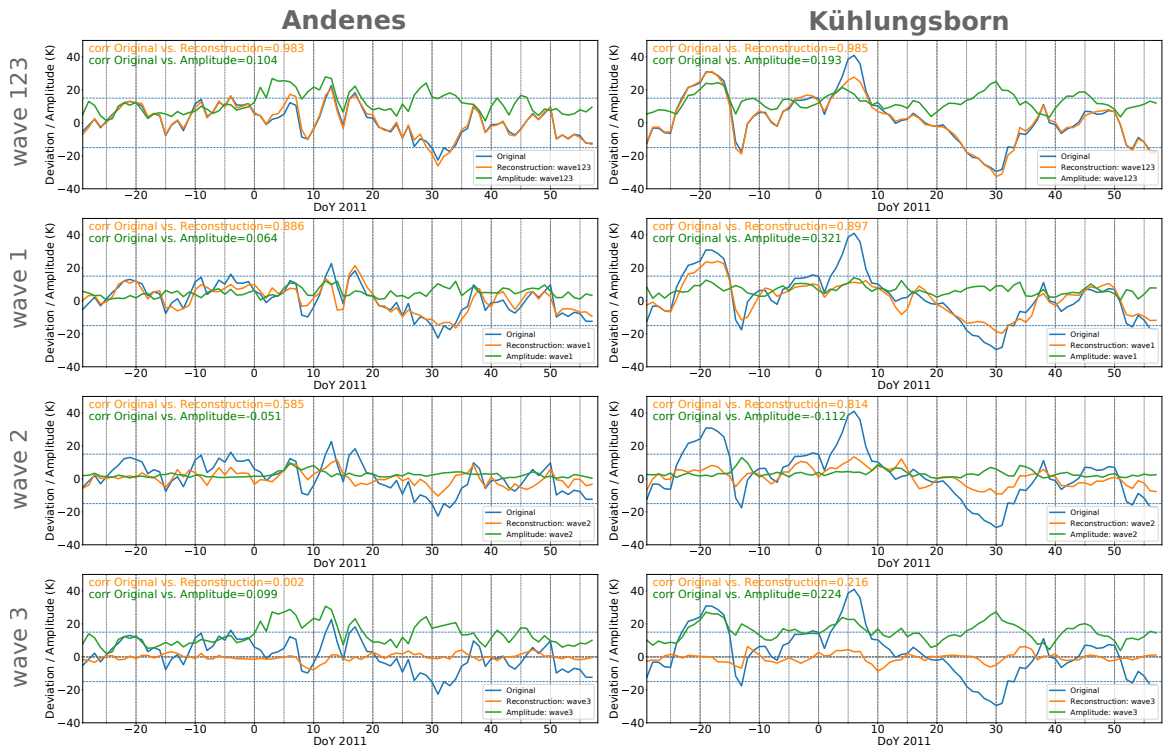
2009



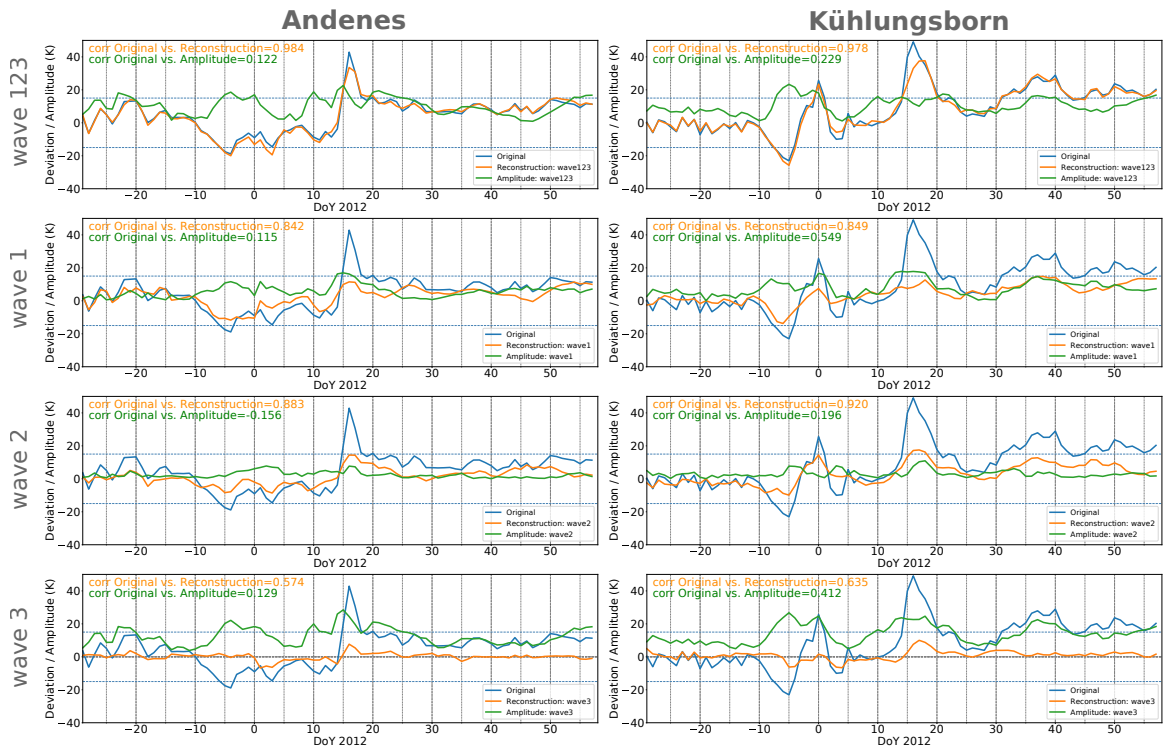
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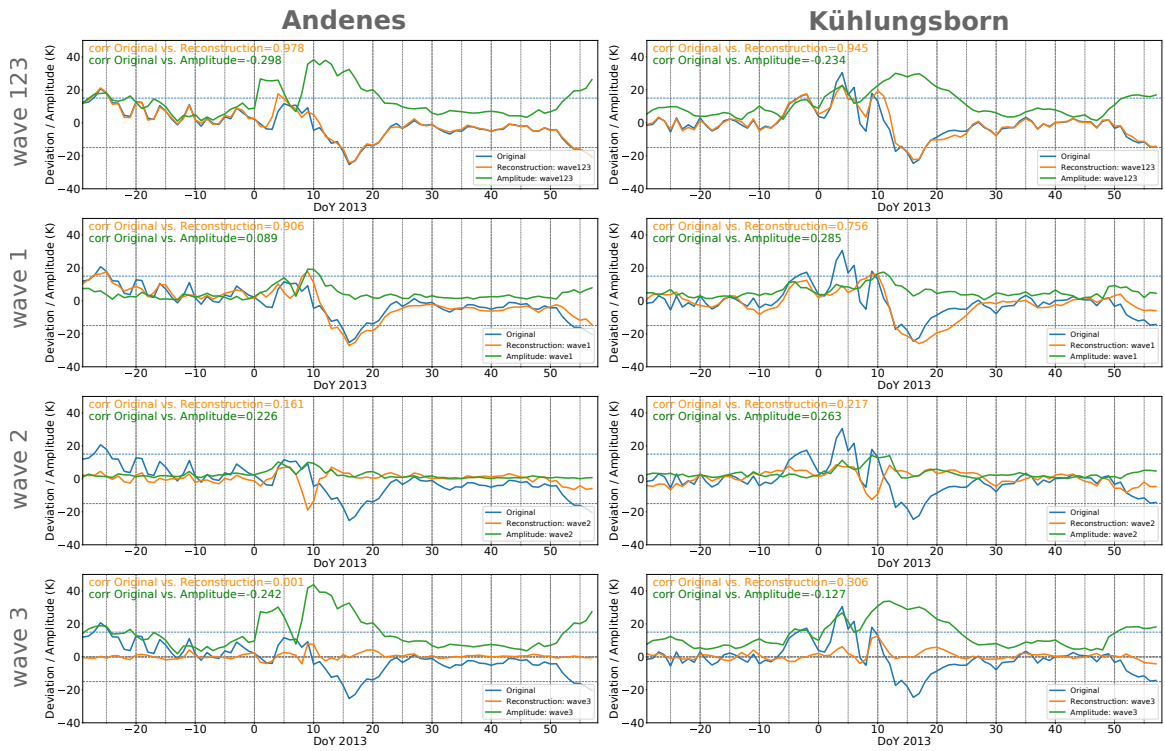
2011



## 2012

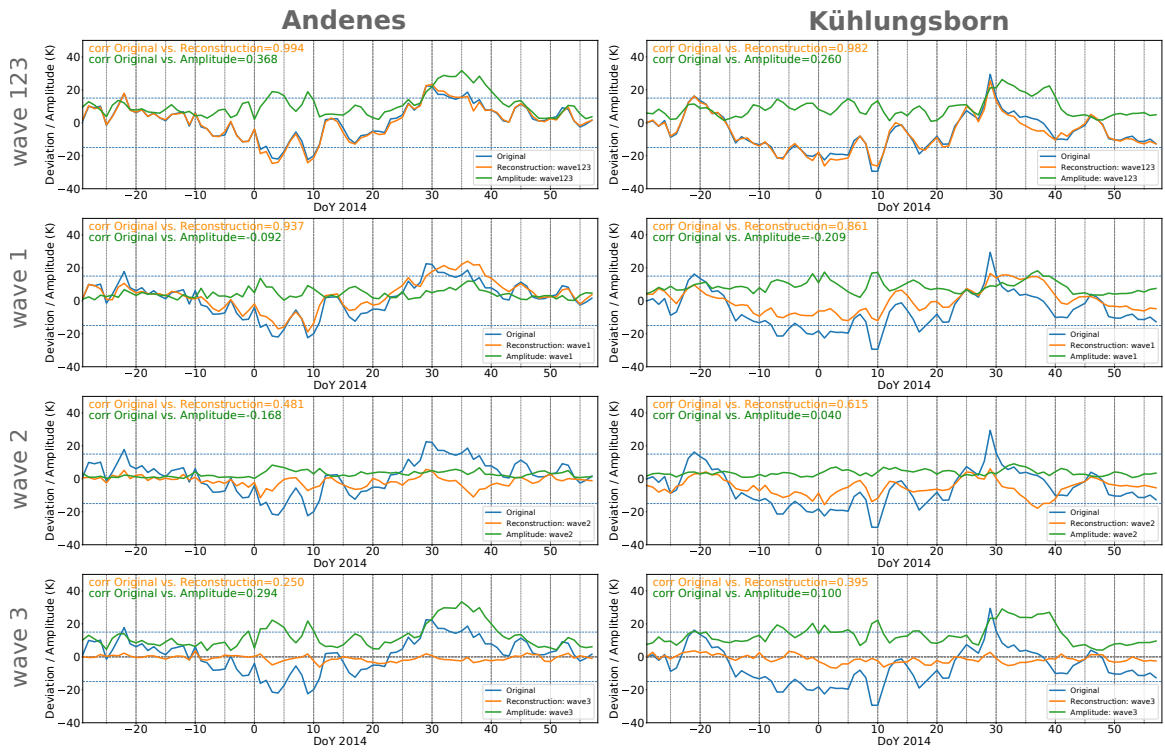


## 2013

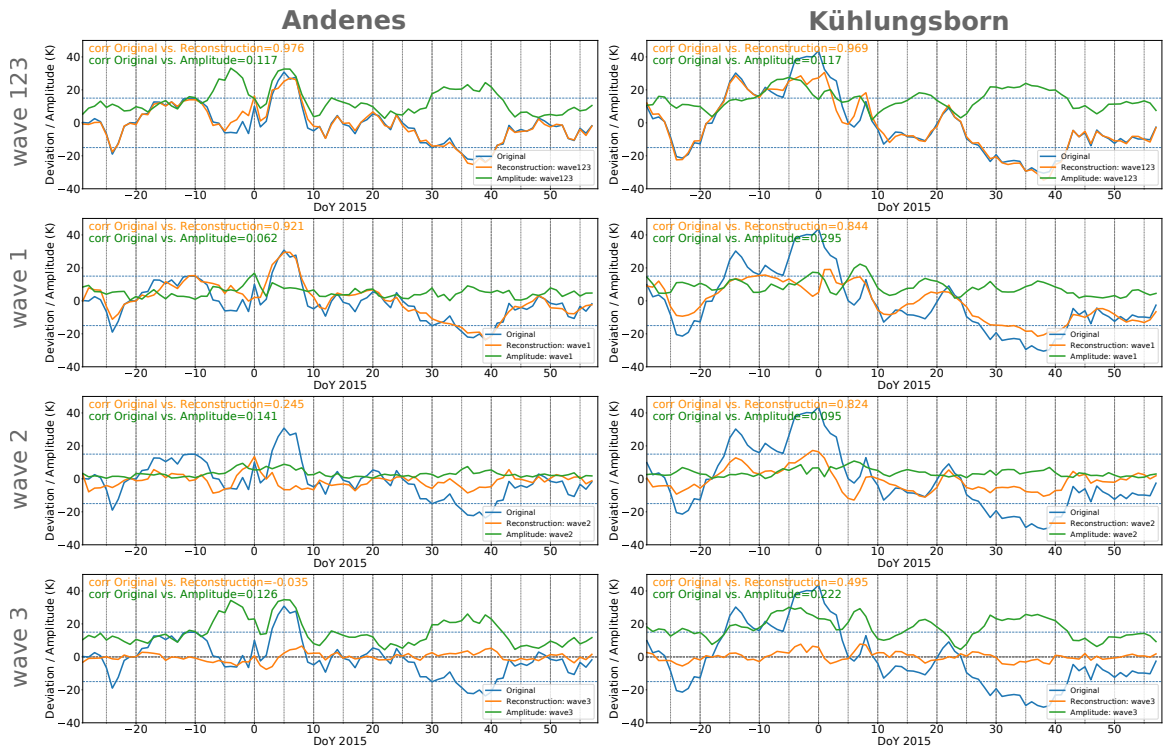




## 2014

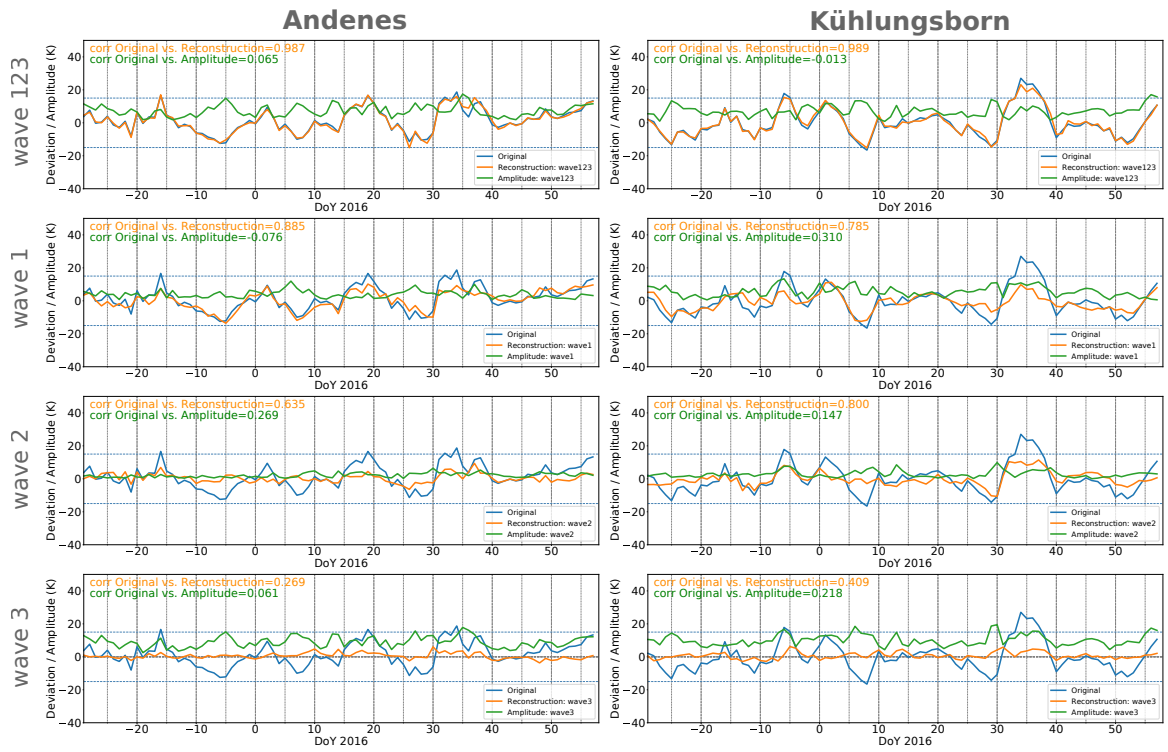


## 2015

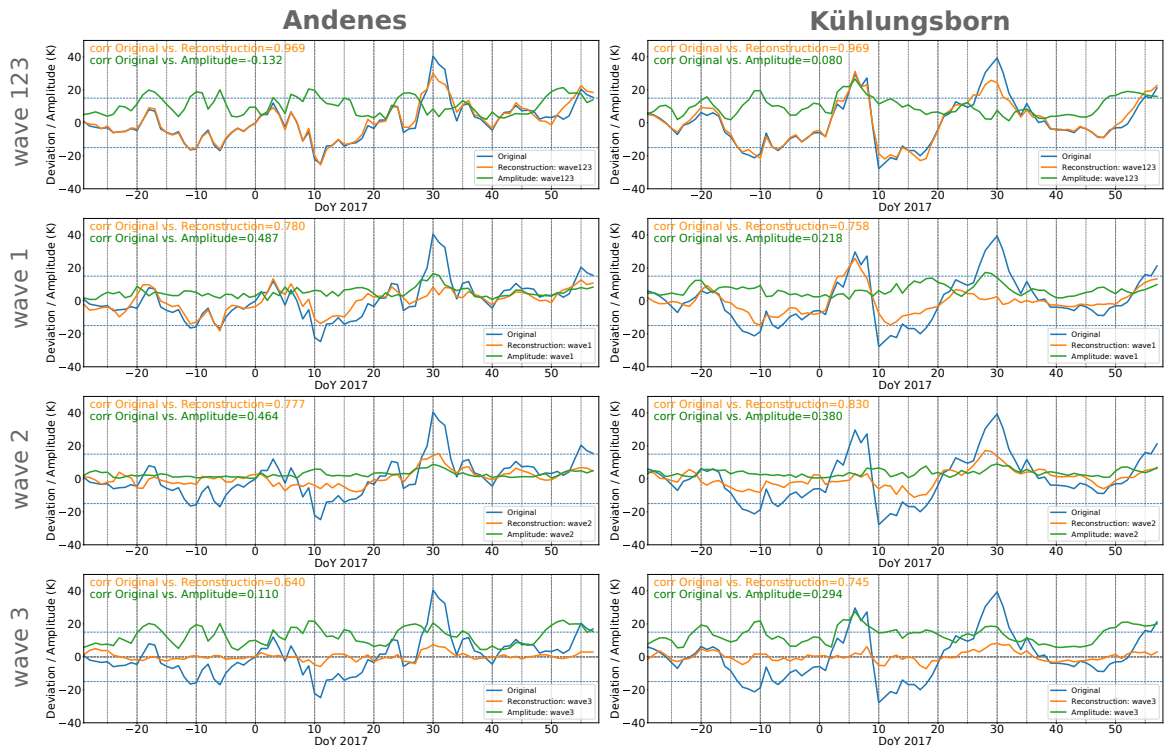




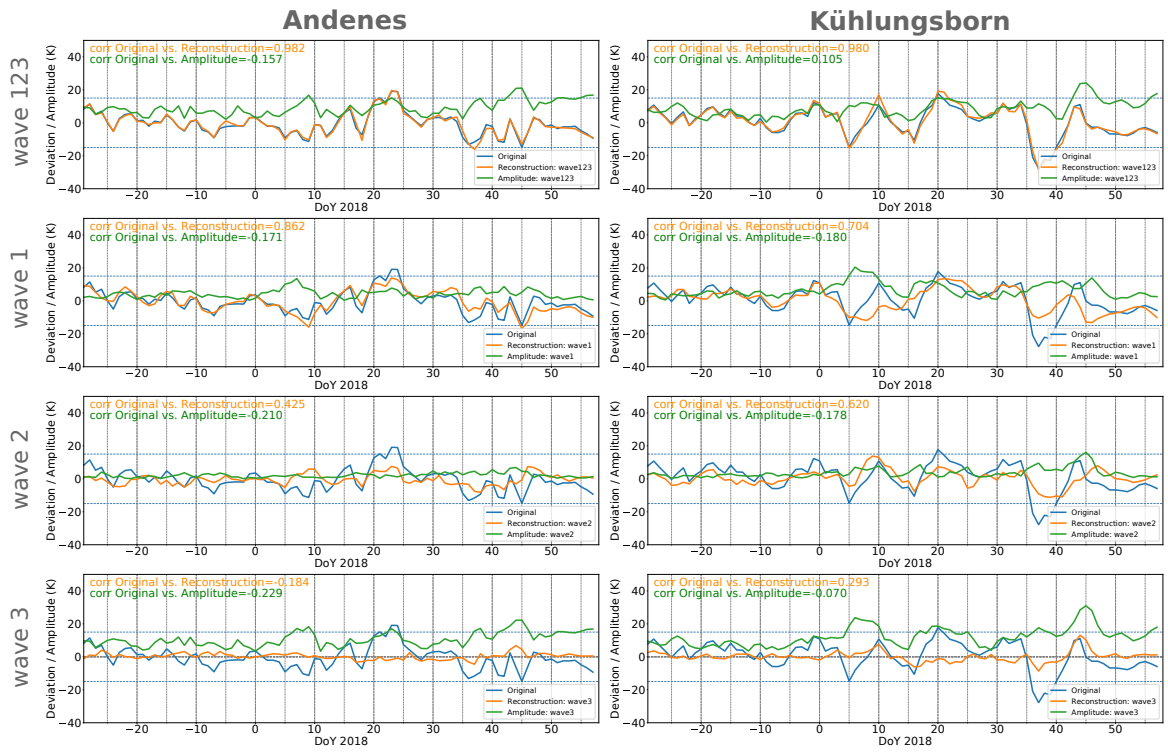
2016



2017



2018



2019

