

# ERRATA (update jan2018)

for:

**Measured wind-wave climatology Lake IJssel (NL); Main results for the period 1997-2006 Report 2007.020; Rijkswaterstaat RIZA; Lelystad (NL) ISBN 978-90-369-1399-7**

- Recently, the true/final coordinates of the location FL37 turned up. The preliminary approximate FL37-coordinates in table 2.1 [155500,520000] should be replaced by the coordinates [155007, 519983], and the preliminary lake bed level of (approximately) -3.40m NAP should be replaced by the value -2.69m NAP. So the true location is 500 metres to the west and in 0.7 m shallower water than assumed previously. For S-W winds, this implies about 20-30% reduction of the geometrical fetch, compared to the dashed line in Figure 6.20e. This also affects some individual results (but not the conclusions) of later publications, such as:
  - A ten year wave data set for fetch- and depth limited wave growth, Bottema & van Vledder, Coastal Engineering 56-7 (2009), p. 703-725
  - Modelonzekerheden Bretschneider Bovenrivieren, Bottema & van Vledder, unclassified Report RWS WVL, 2015
- Recent research has suggested that data selection errors have been made while deriving the wind speed ratios of Figure 4.12 and 4.13, and that the wind speed ratios for 12 m/s and especially 6 m/s may have been underestimated. It is no longer possible to reproduce the graphs and identify potential errors. Therefore, Figure 4.12 and 4.13 and their discussion should no longer be taken into consideration.
- Recent research has also demonstrated that sloshing or run-up of waves against measuring piles and against wave instruments may lead to some wave height error while leaving the wave periods largely unaffected. Some error estimates have been presented in (Modelonzekerheden Bretschneider Bovenrivieren, Bottema & van Vledder, unclassified Report RWS WVL, 2015). Wave heights may be overestimated by about 7% when the instrument is roughly oriented towards ('looking into') the upwave direction (often South-West or West), and may be underestimated by a similar amount when the instrument is looking towards the downwave/downwind direction. Measuring piles could have caused even larger error, were it not for the fact that the present instruments were mounted at a sufficient distance from the piles to avoid significant pile disturbance errors.
- Equation (6.7a) and (6.7b) on page 148 both contain a printing error. The right hand side of the equations should start with  $\beta_1 g^2$  and  $\beta_2 g^2$  respectively, so that the full equations read:

$$(6.7a) \quad F_1(f) = \beta_1 g^2 (2\pi)^{-4} f_p^{-1} f^{-4} \left[ \exp\left(\left(\frac{f}{f_p}\right)^{-4}\right) \right]^\gamma \exp\left[\frac{-(f-f_p)^2}{2\sigma^2 f_p^2}\right]$$

$$(6.7b) \quad F_2(f) = \beta_2 g^2 (2\pi)^{-4} f_p^{3.35} f^{-8.35} \exp\left[\frac{-8.35}{4} \left(\frac{f}{f_{p2}}\right)^{-4}\right]$$

- On the data DVD, the XTB-files for the location FL37 in the directory METINGEN\_\data\Xtabel need some revision, since their present name is incorrect and confusing. The files to be modified have names of the types:
  - 2506????cap.xtb.
  - 2506????LAL.xtb
  - 2507????cap.xtb
  - 2507????LAL.xtb

For all these files, the following should be modified:

- on the first line, the location name FL25 should be replaced by FL37
- in the 3<sup>rd</sup> and 4<sup>th</sup> column of the file, coordinates are given that belong to the FL25-location. They should be replaced by the coordinates of the FL37-location: x=155507, y=519983
- in the 8th column, the water depths should be decreased by 0.22 m (the difference between the latest FL25 and the FL37 lake bed position)

File names of the first months of 2006 should not be modified as they correspond to the FL25-location, they can be recognised because they contain no 'cap' or 'LAL' indication.

- Also on the data-DVD, the MATLAB-script *getpaalistr.m* should be checked regarding the FL37 coordinates and NAPdepth, and modified/updated in the way indicated above.
- The MATLAB-script *getpaalistr.m* also contains a typing mismatch in the lake bed position of SL29: The statement 'NAPdepth = -2.22;' should read ': 'NAPdepth = -2.12;' Also the coordinates and lake bed position of FL37 should be modified/updated in the way indicated above.
- As a result of the latter error, there is also an error in part of the SL29 XTB-files on the data-DVD: The files containing data from 2003 and more recent years (starting as '2903...', '2904...', '2905...', '2906...' or '2907...') contain an error in their 8<sup>th</sup> column: all water depths in this column are 0.1 m to high. All other variables, including the water level of the 7<sup>th</sup> column, are correct in these files.