TABLE OF CONTENTS

Preface		- 1 -
1	Background	- 3 -
1.2	Satellite data	- 3 -
2	The method of small water bodies detection	- 5 -
2.2	Water as the target land-cover object	- 5 -
2.3	The method	- 6 -
2.3.1	Water Bodies Detection through Principal Component Analysis	- 6 -
2.3.2	Water bodies detection through image rationing	- 8 -
2.4	Testing of BOMOSA method on Terra Aster data	- 9 -
2.5	Testing of BOMOSA method on EO-1 ALI data	- 11 -
2.6	Conclusions – applicability, future use and limitations	- 12 -
References		- 14 -
3	Remote Sensing (RS) based evaluation method to assess potential water bodies - MANUAL	- 15 -
3.1	Small water bodies detection using image rationing - NDSI	- 16 -
3.1.1	Normalized Difference Snow Index (NDSI)	- 17 -
3.1.2	Recoding NDSI_260.tif image to get the final mask of water bodies	- 23 -
3.2	Small water bodies detection using Principal Component Analysis	- 32 -
3.2.1	Principal Component Analysis	- 33 -
3.3	Final water bodies mask	- 41 -
4	GPS integration	- 45 -