

## Supplementary material

### 1. Change in reliability due to climate change

#### 1.1. Change in reliability for DJF (2025-2055)

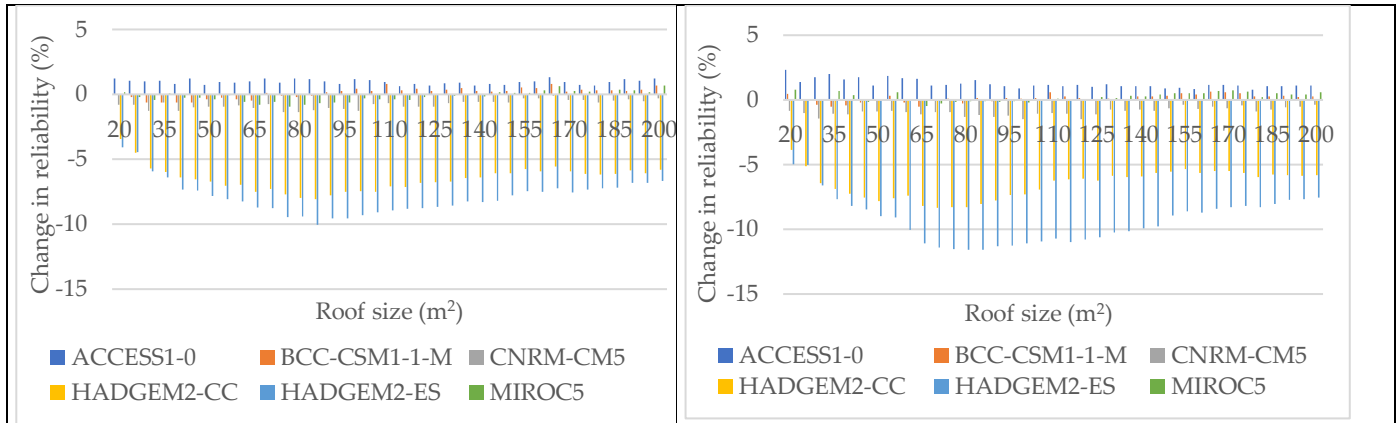


Figure S1: Change in reliability for 0.5 m³ tank size

Figure S2: Change in reliability for a 1 m³ tank size

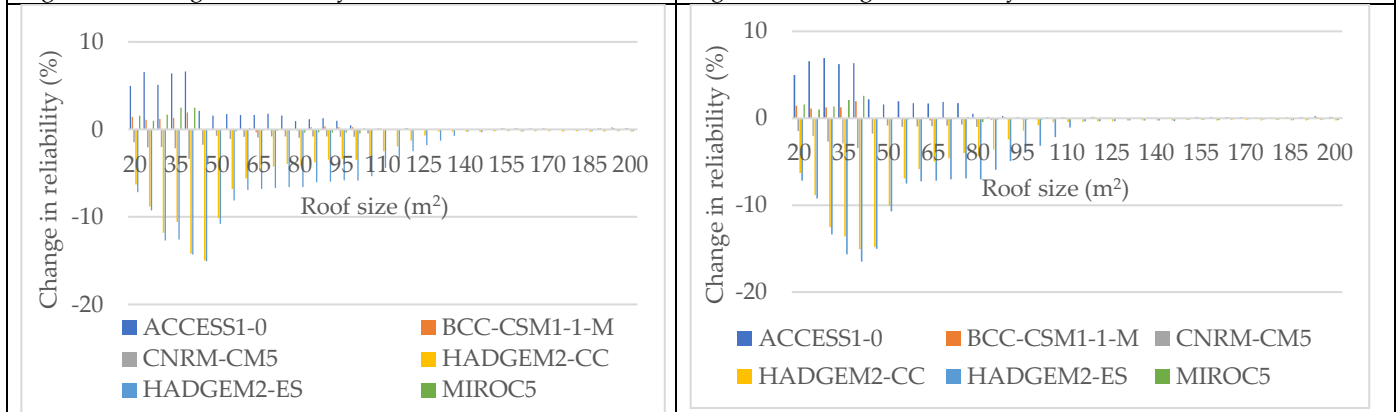


Figure S3: Change in reliability for a 10 m³ tank size

Figure S4: Change in reliability for a 15 m³ tank size

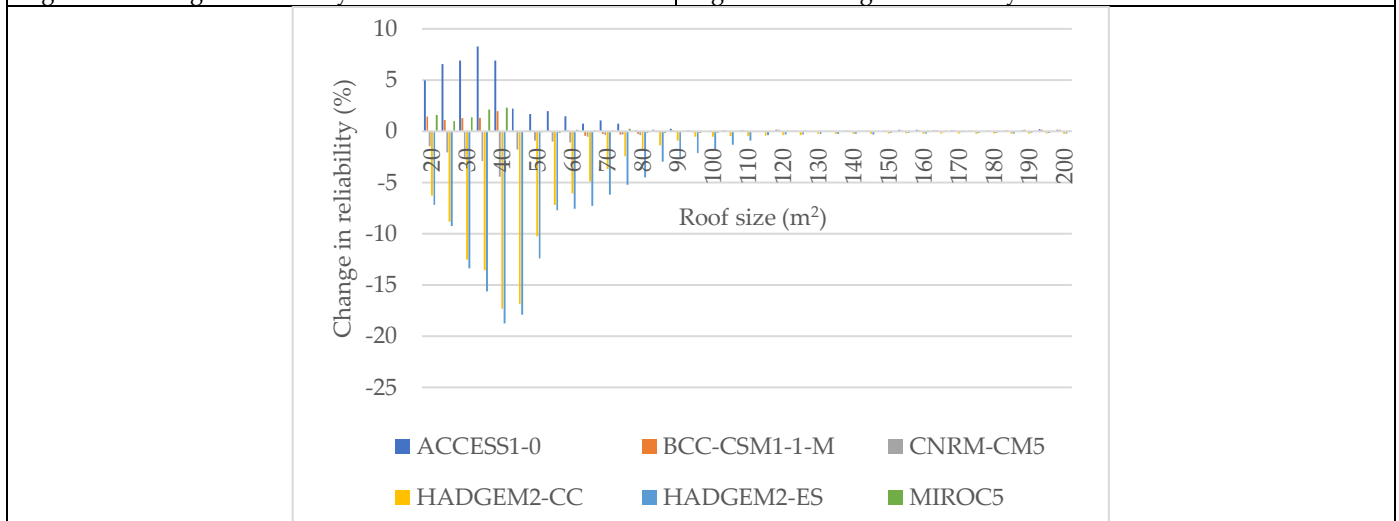


Figure S5: Change in reliability for a 20 m³ tank size

1.2. Change in reliability for DJF (2060-2090)

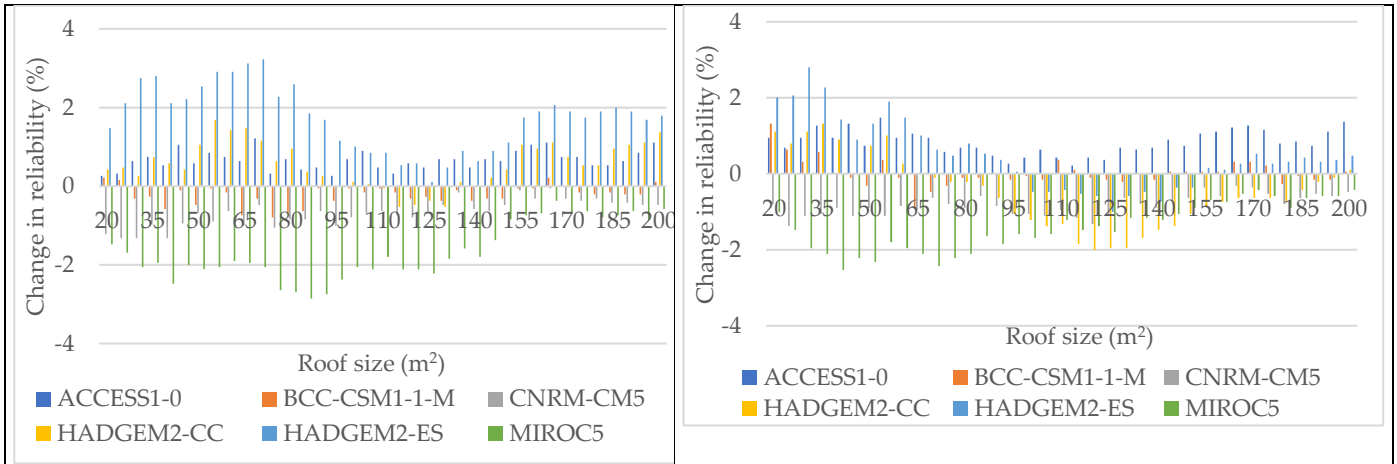


Figure S6: Change in reliability for 0.5 m<sup>3</sup> tank size

Figure S7: Change in reliability for a 1 m<sup>3</sup> tank size

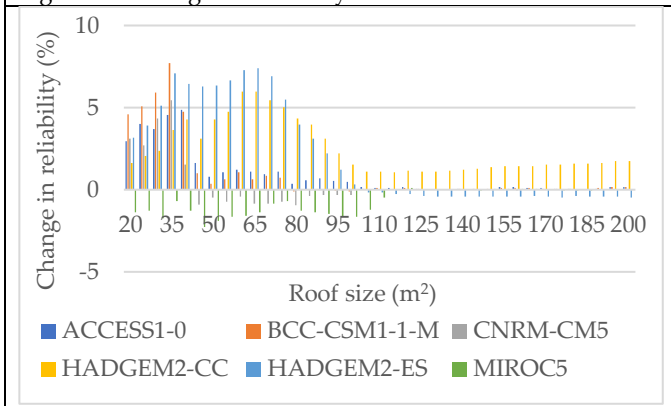


Figure S8: Change in reliability for a 10 m<sup>3</sup> tank size

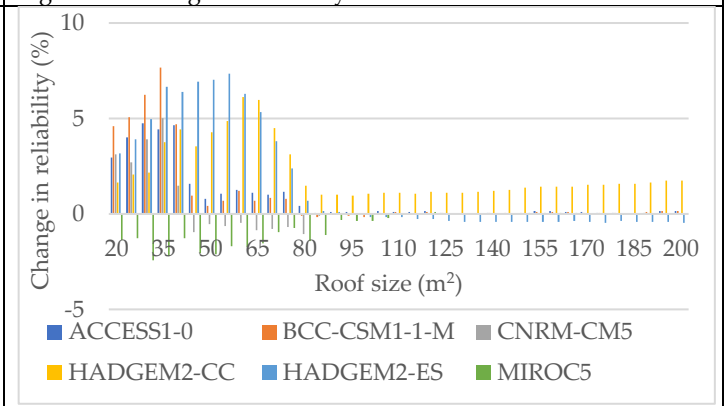


Figure S9: Change in reliability for a 15 m<sup>3</sup> tank size

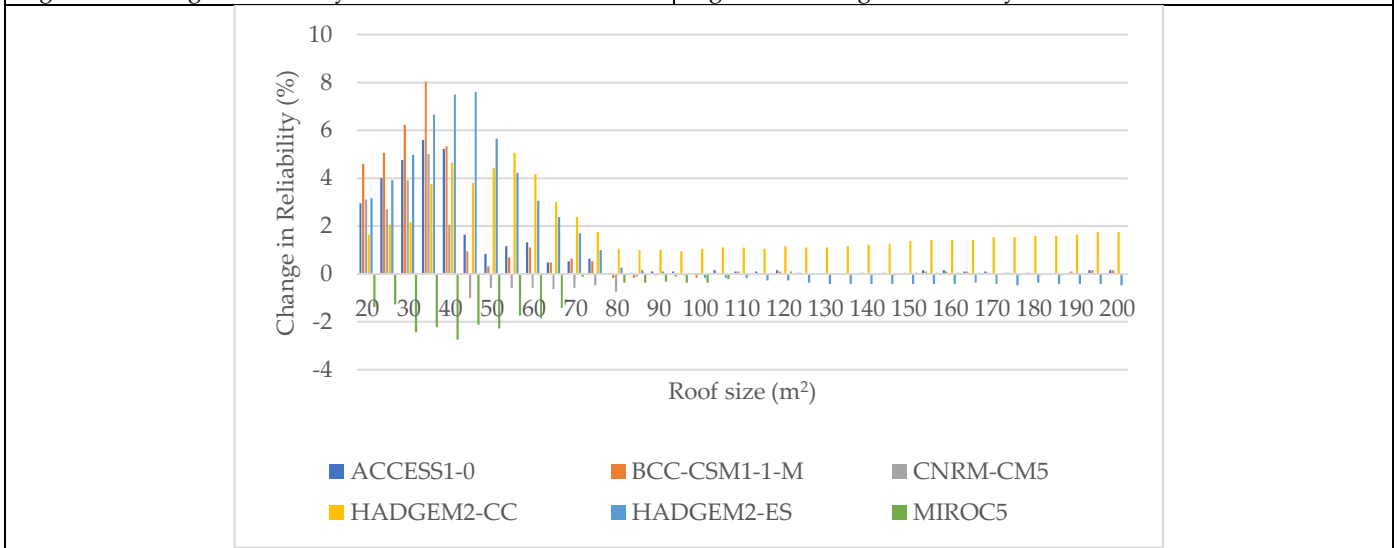


Figure S10: Change in reliability for a 20 m<sup>3</sup> tank size

### 1.3. Change in reliability for JJA (2025-2055)

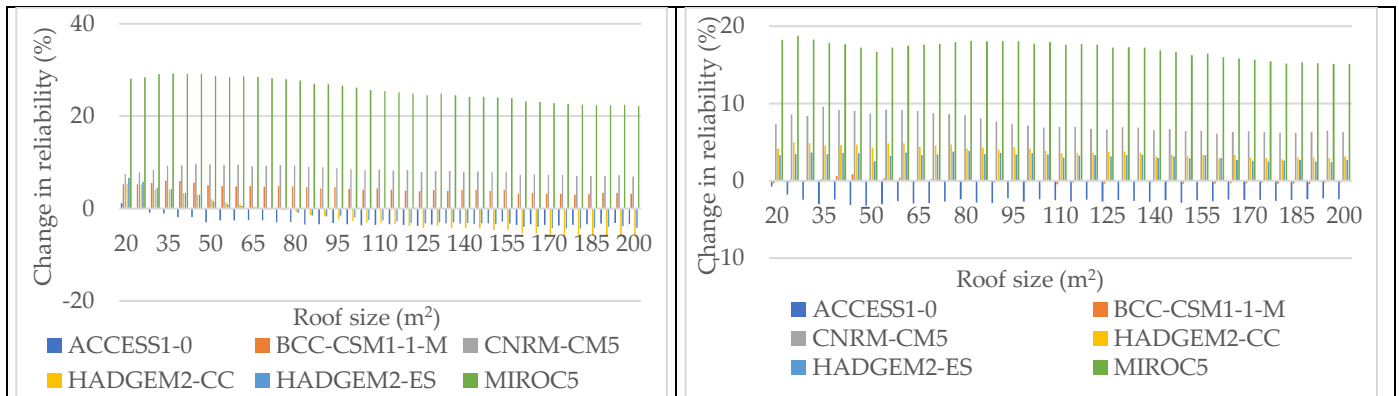


Figure S11: Change in reliability for a 0.5 m³ tank size

Figure S12: Change in reliability for a 1 m³ tank size

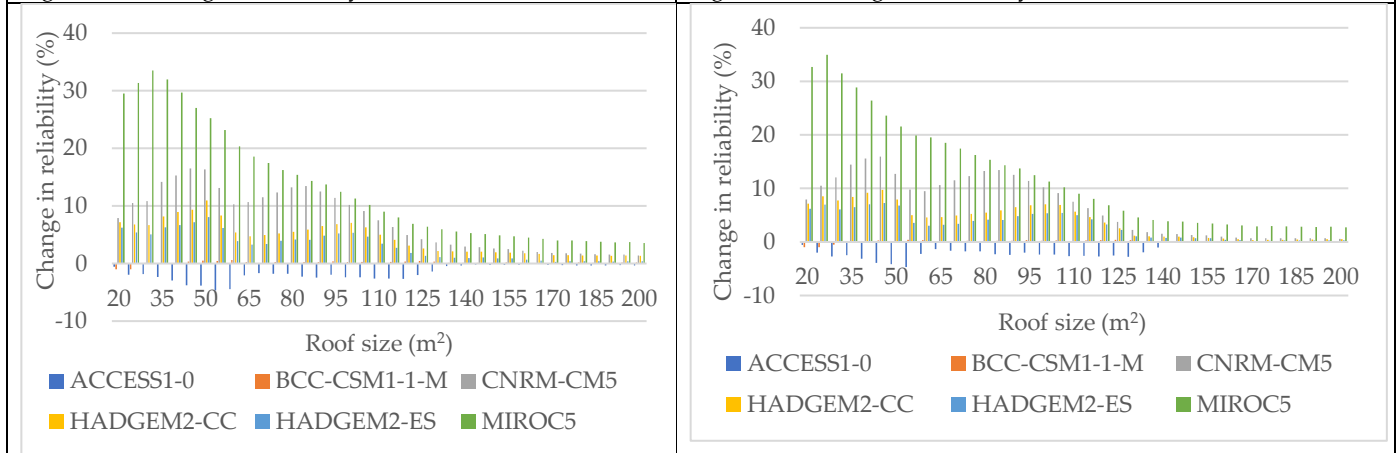


Figure S13: Change in reliability for a 10 m³ tank size

Figure S14: Change in reliability for a 15 m³ tank size

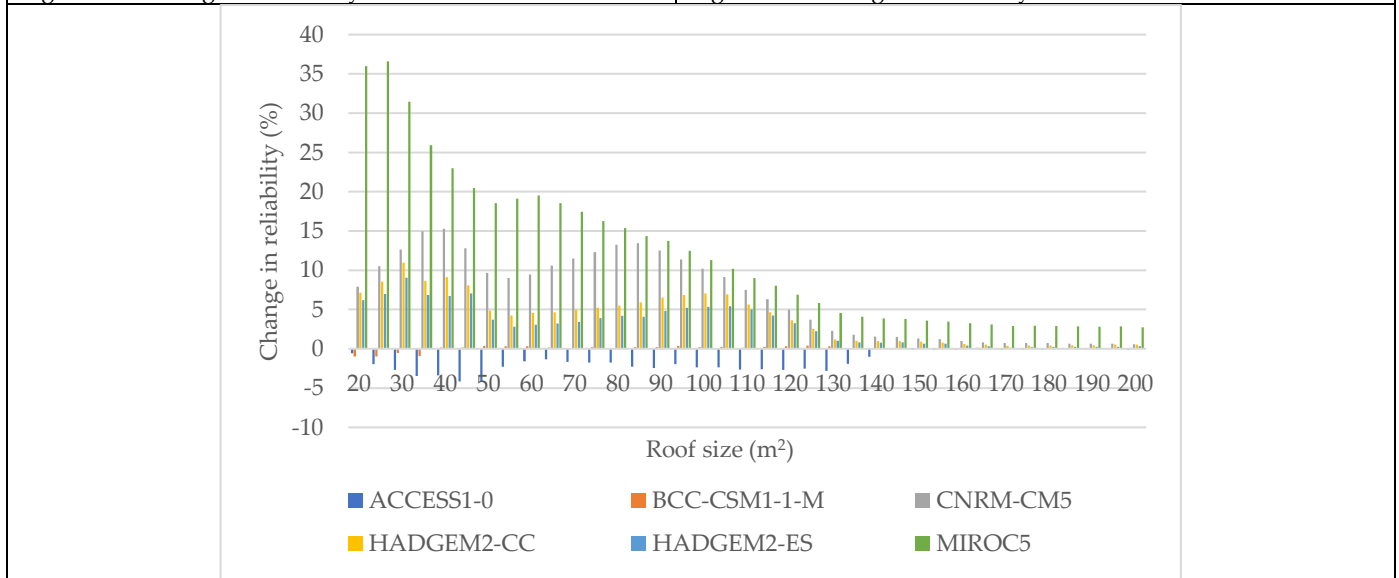
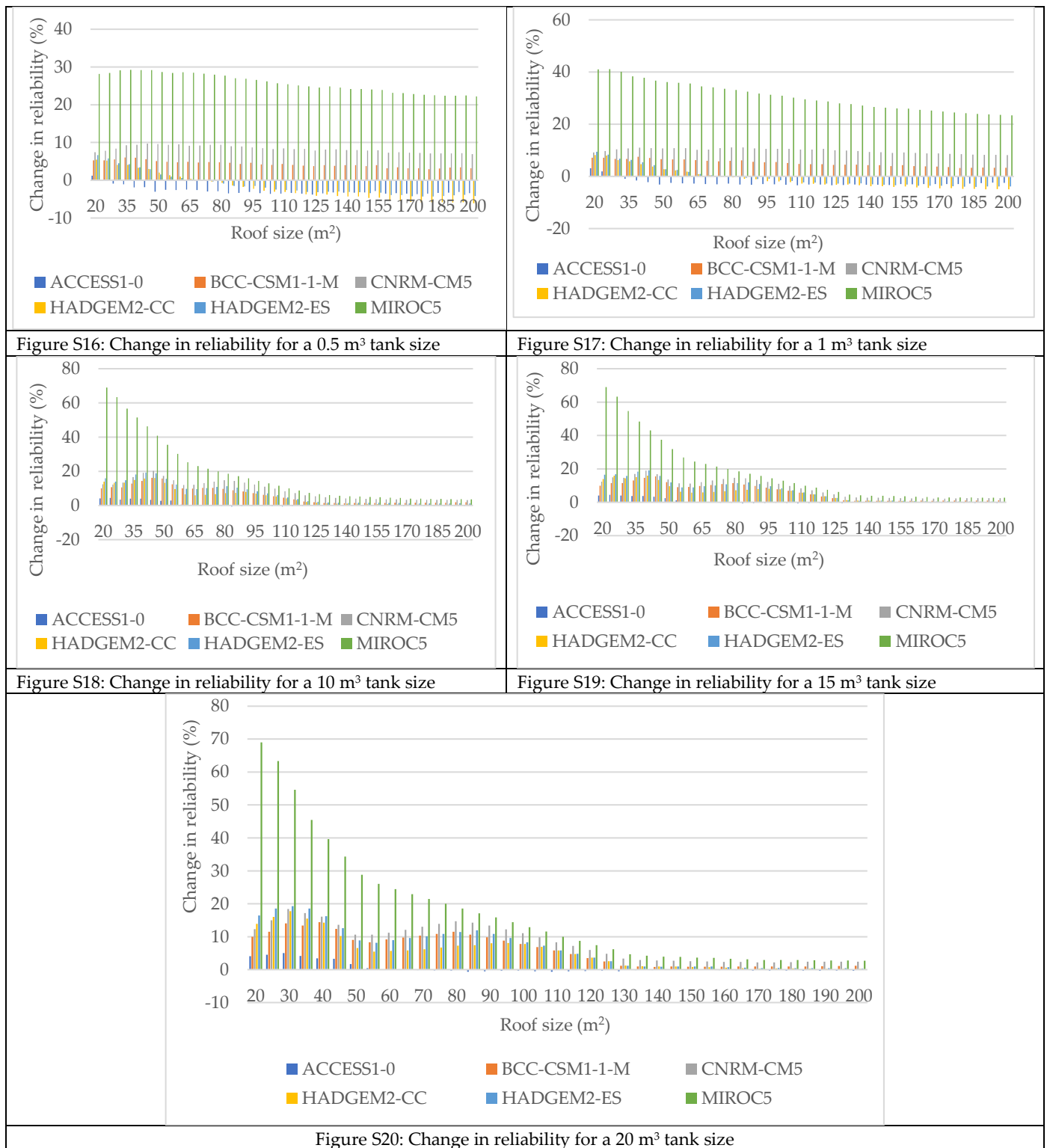


Figure S15: Change in reliability for a 20 m³ tank size

### 1.4. Change in reliability for JJA (2060-2090)



### 1.5. Change in reliability for MAM 2025-2055

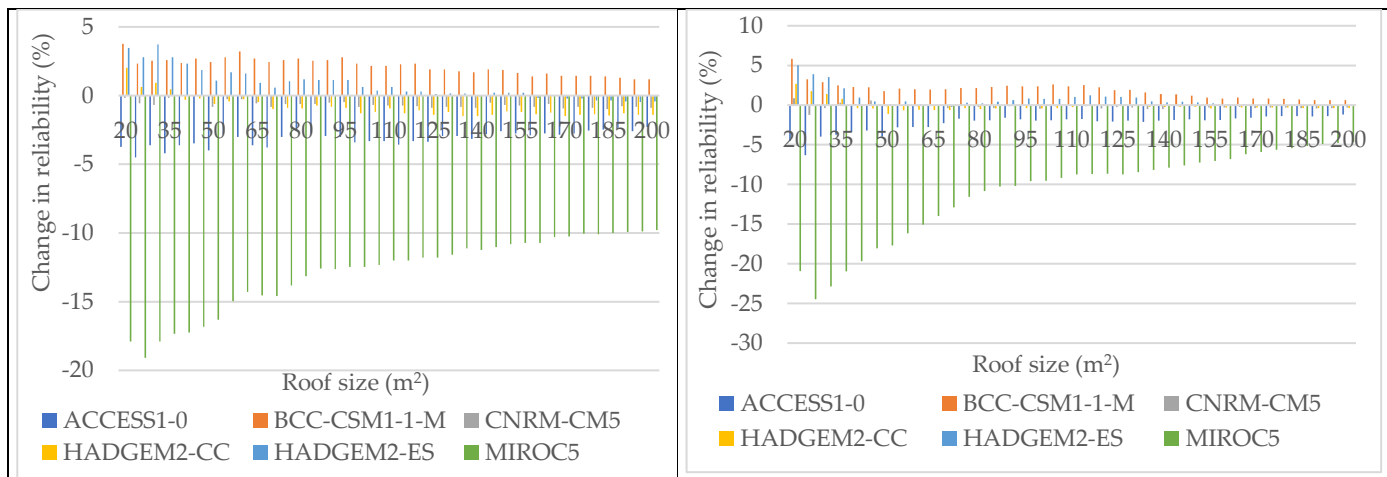


Figure S21: Change in reliability for a 0.5 m³ tank size

Figure S22: Change in reliability for a 1 m³ tank size

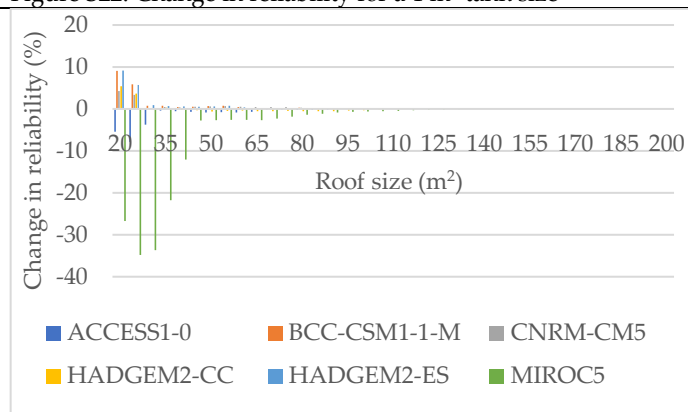
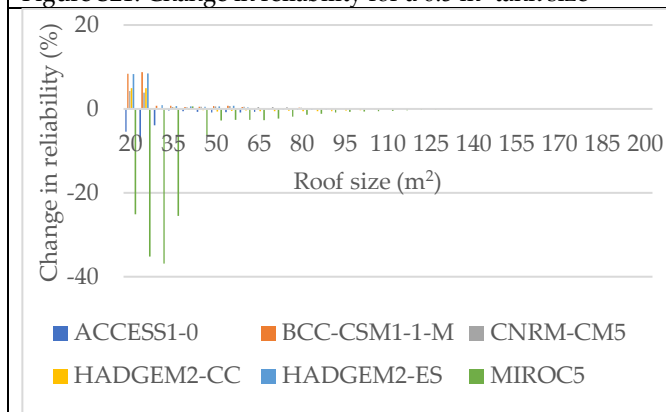


Figure S23: Change in reliability for a 10 m³ tank size

Figure S24: Change in reliability for a 15 m³ tank size

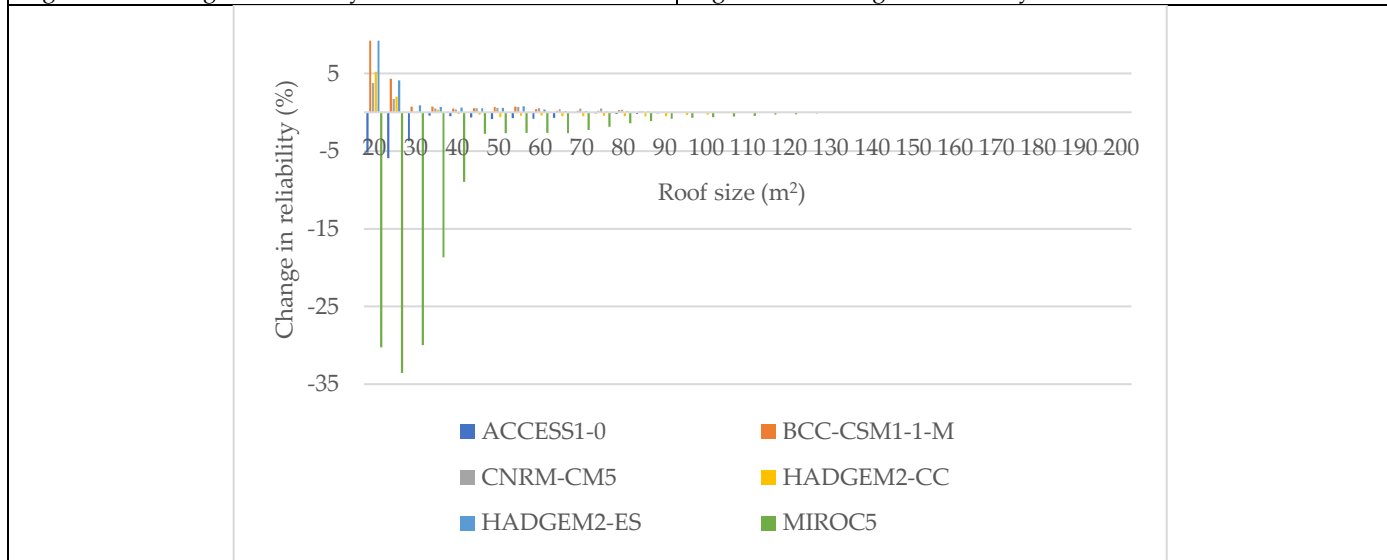


Figure S25: Change in reliability for a 20 m³ tank size

### 1.6. Change in reliability for MAM 2060-2090

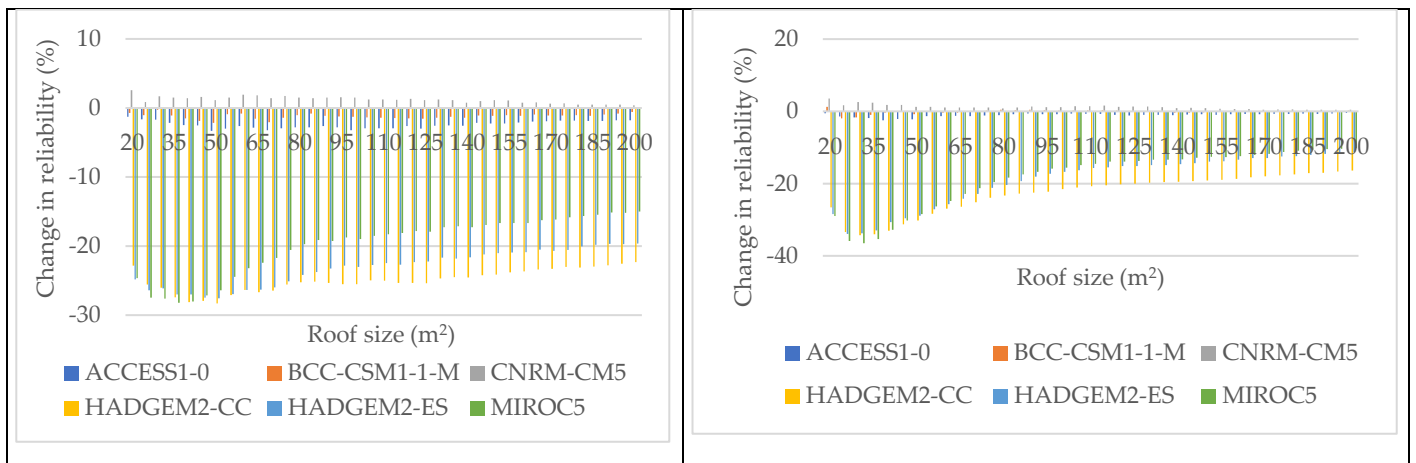


Figure S26: Change in reliability for a 0.5 m³ tank size

Figure S27: Change in reliability for a 1 m³ tank size

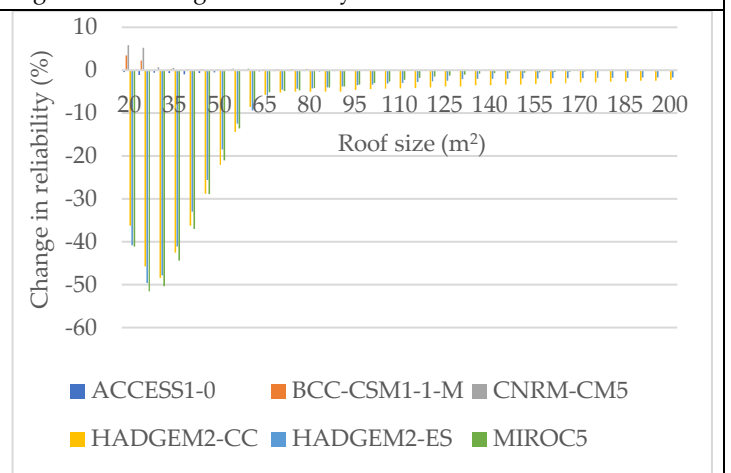
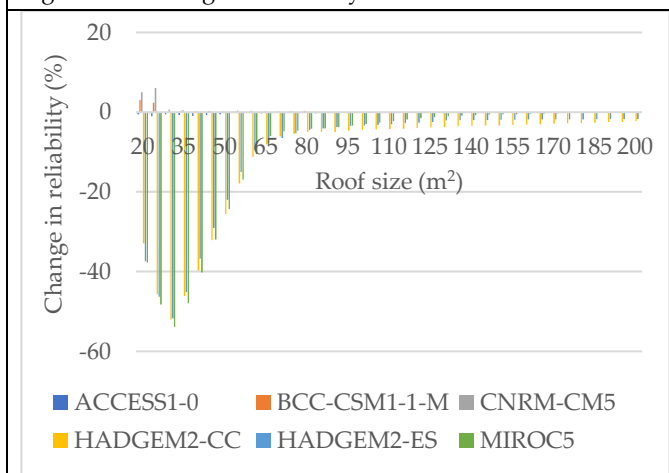


Figure S28: Change in reliability for a 10 m³ tank size

Figure S29: Change in reliability for a 15 m³ tank size

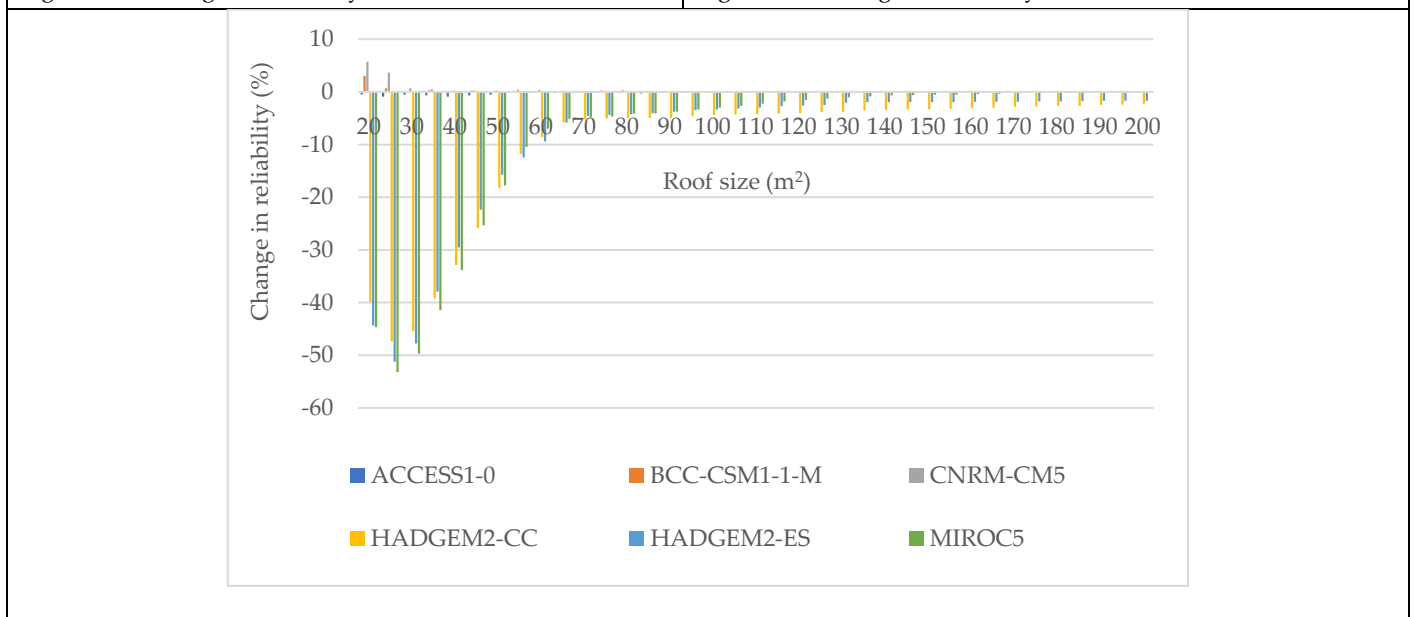


Figure S30: Change in reliability for a 20 m³ tank size

1.7. Change in reliability for SON (2025-2055)

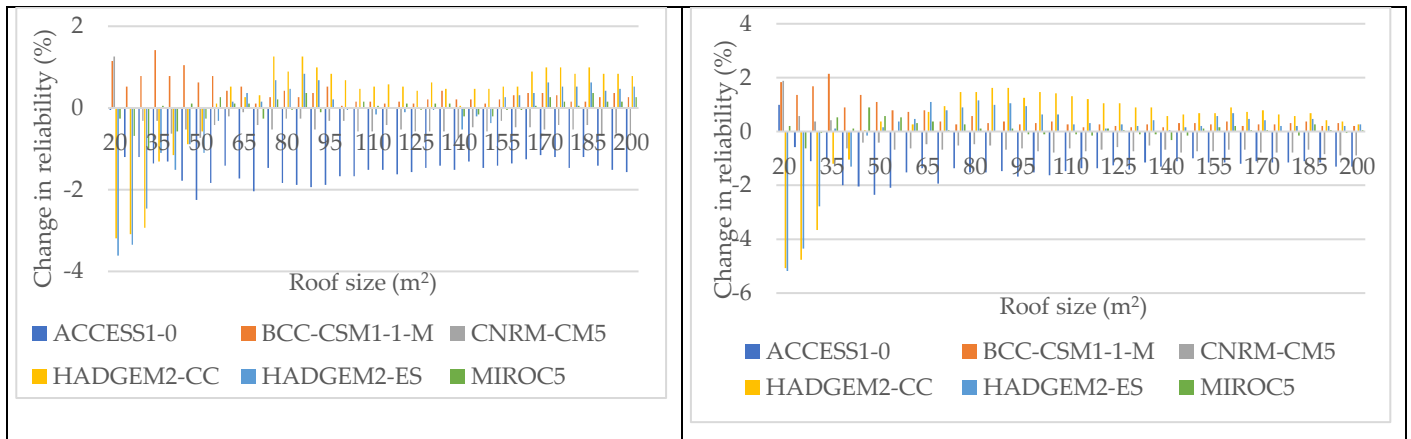


Figure S31: Change in reliability for a 0.5 m³ tank size

Figure S32: Change in reliability for a 1 m³ tank size

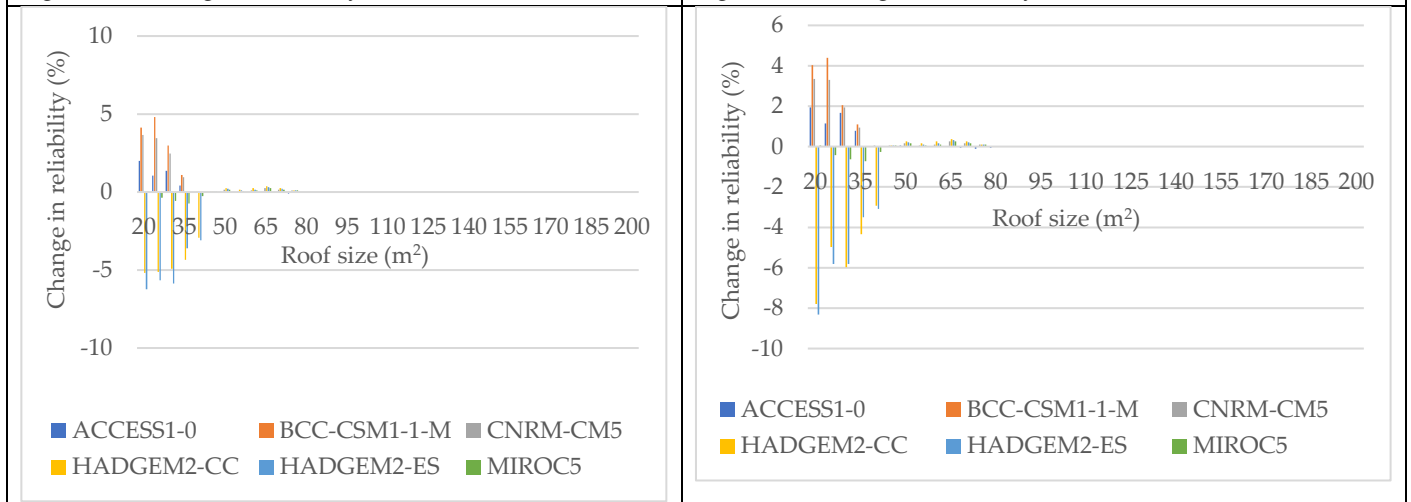


Figure S33: Change in reliability for a 10 m³ tank size

Figure S34: Change in reliability for a 15 m³ tank size

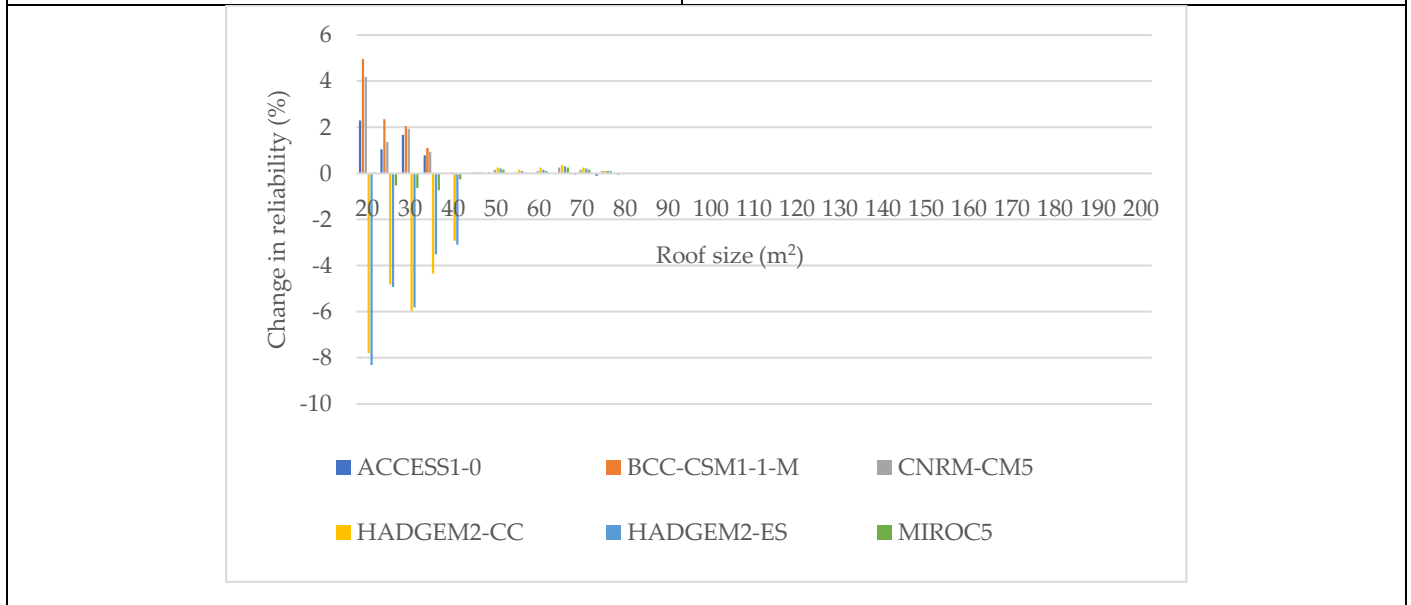


Figure S35: Change in reliability for a 20 m³ tank size

### 1.8. Change in reliability for SON (2060-2090)

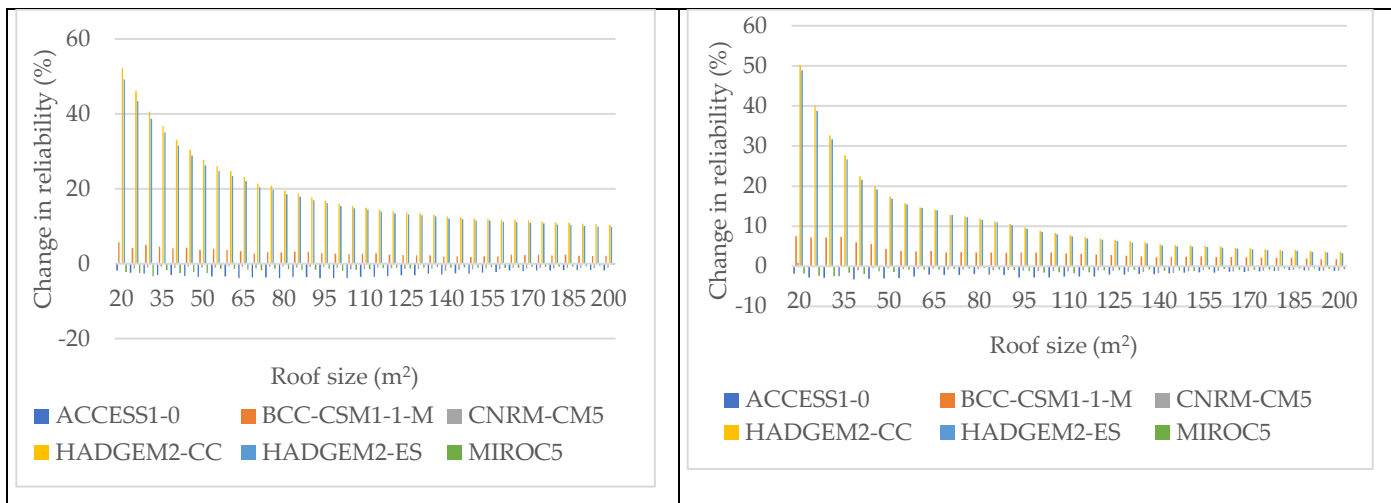


Figure S36: Change in reliability for a 0.5 m<sup>3</sup> tank size

Figure S37: Change in reliability for a 0.5 m<sup>3</sup> tank size

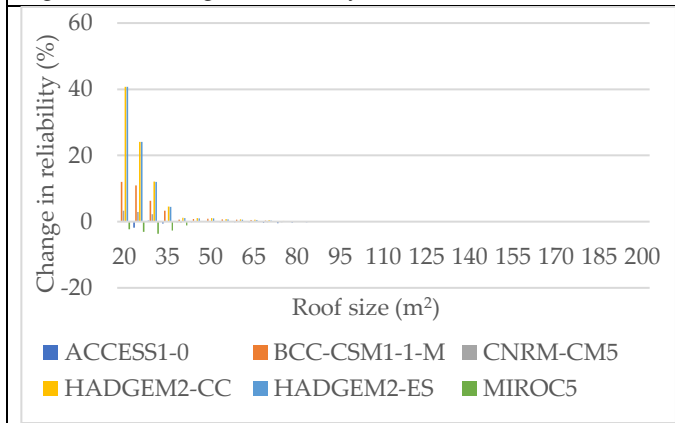


Figure S38: Change in reliability for a 10 m<sup>3</sup> tank size

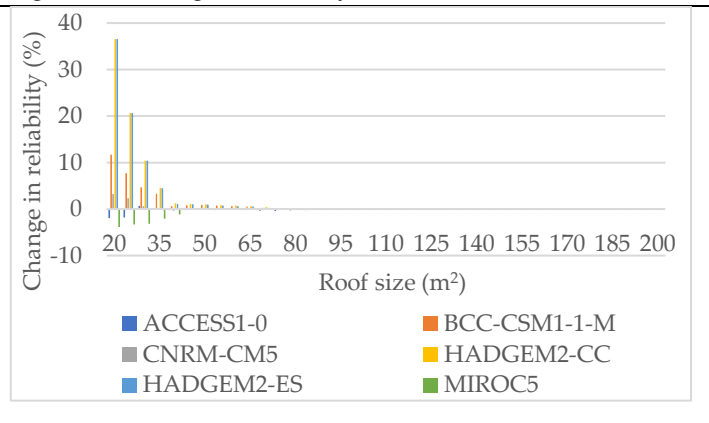


Figure S39: Change in reliability for a 15 m<sup>3</sup> tank size

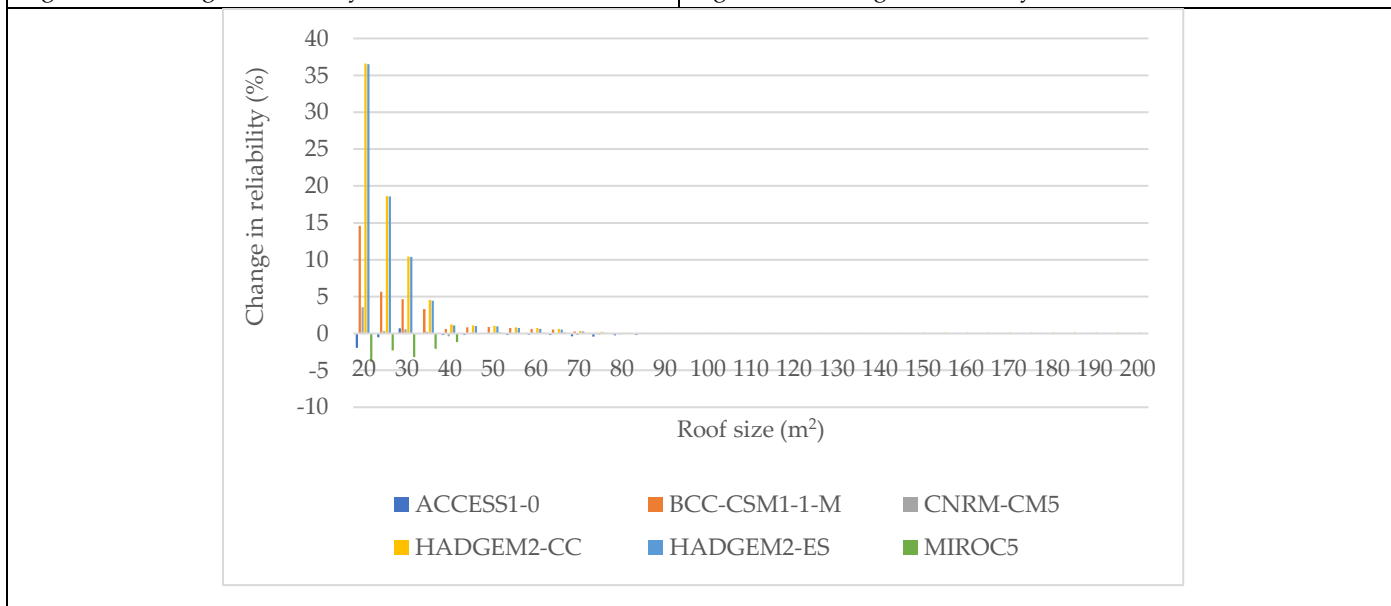


Figure S40: Change in reliability for a 20 m<sup>3</sup> tank size



2. Reliability projections due to climate change  
 2.1. Reliability projections for DJF (2060-2090)

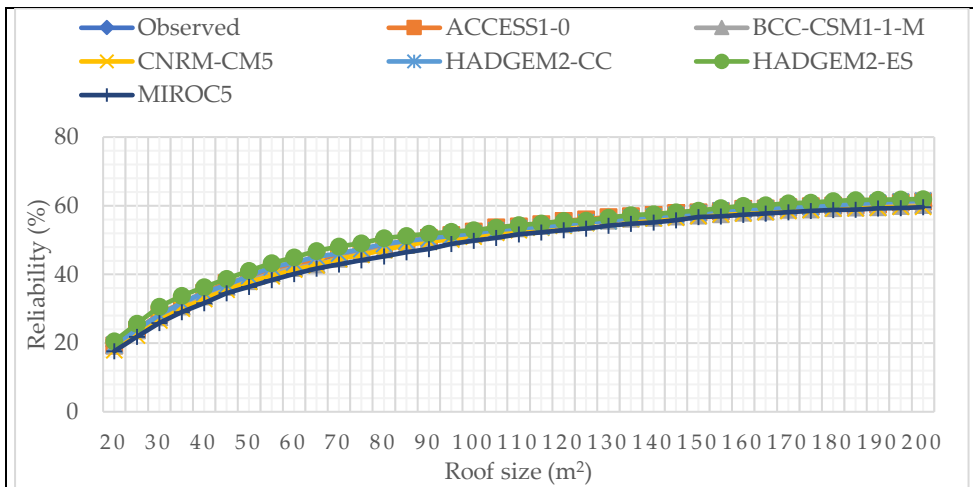


Figure S41: Reliability projections for DJF season for a 0.5 m³ tank size (2060-2090)

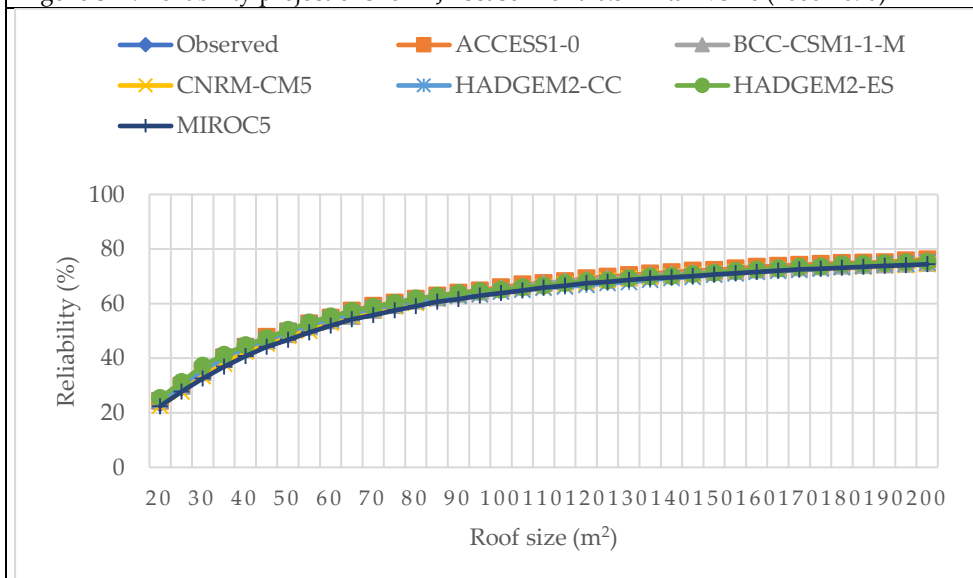


Figure S42: Reliability projections for DJF season for a 1 m³ tank size (2060-2090)

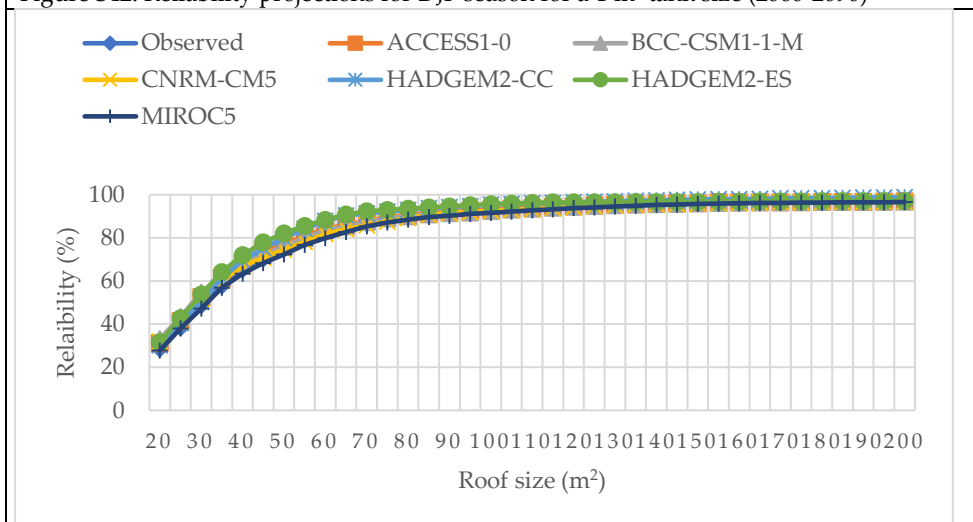


Figure S43: Reliability projections for DJF season for a 5 m³ tank size (2060-2090)

## 2.2. Reliability projections for JJA (2025-2055)

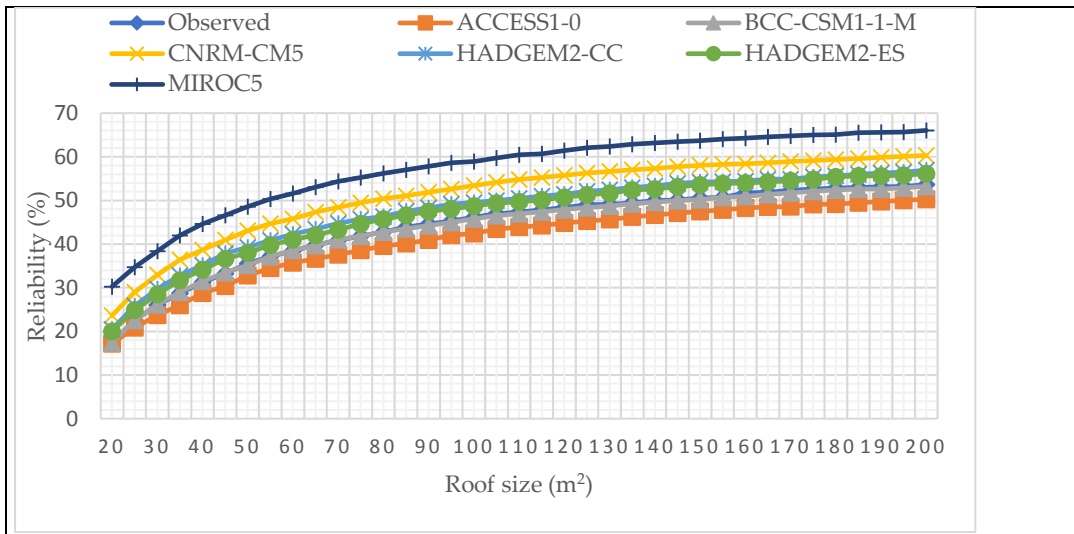


Figure S44: Reliability projections for JJA season for a 0.5 m<sup>3</sup> tank size (2025-2055)

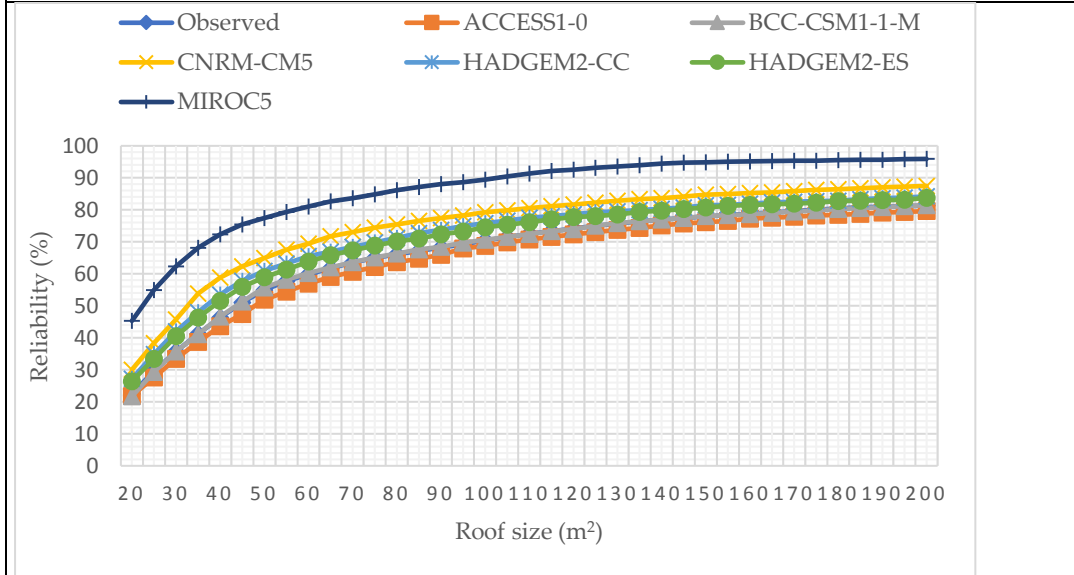


Figure S45: Reliability projections for JJA season for a 2 m<sup>3</sup> tank size (2025-2055)

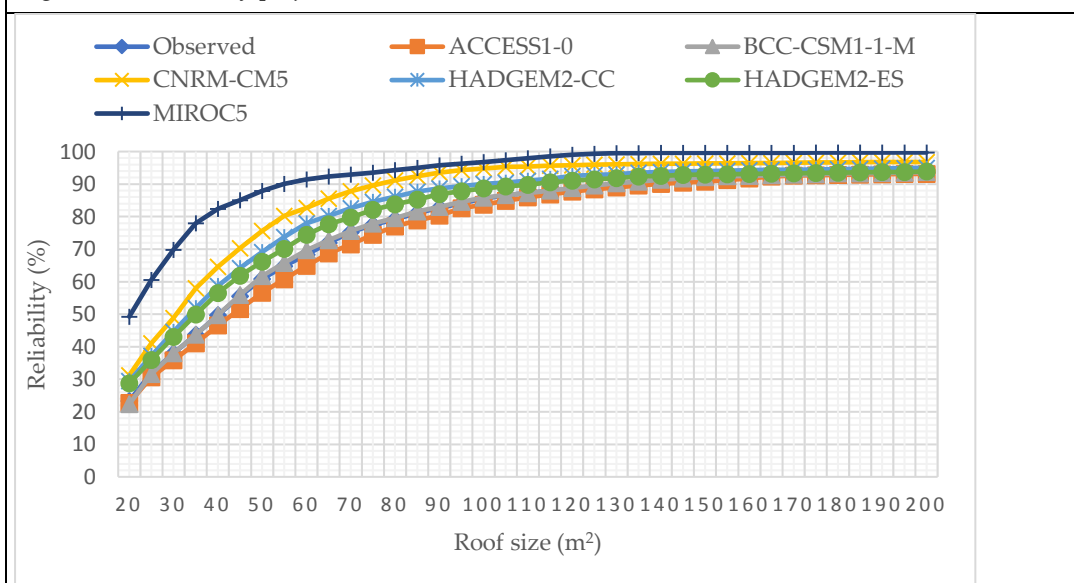


Figure S46: Reliability projections for JJA season for a 5 m<sup>3</sup> tank size (2025-2055)

### 2.3. Reliability projections for MAM (2025-2055)

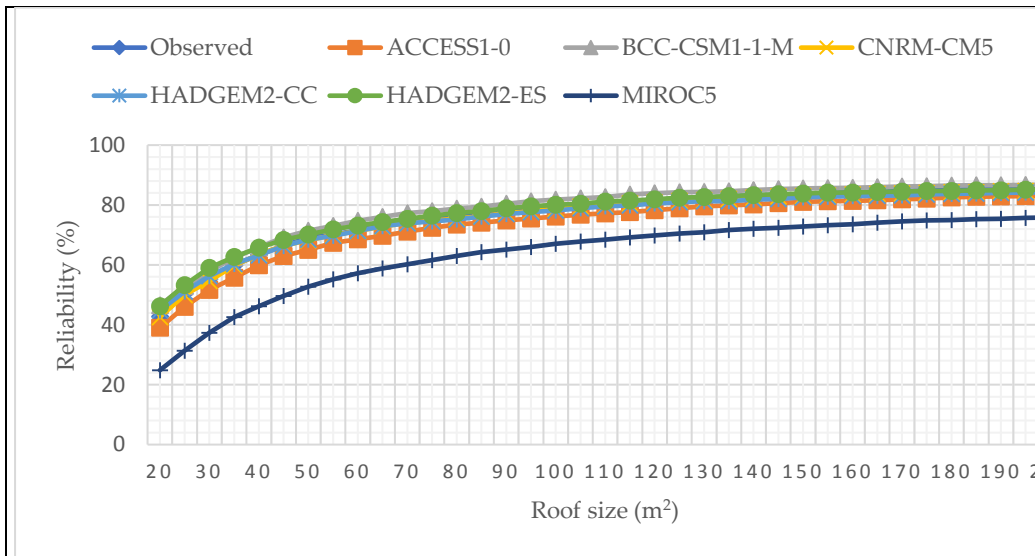


Figure S47: Reliability projections for MAM season for a 0.5 m³ tank size (2025-2055)

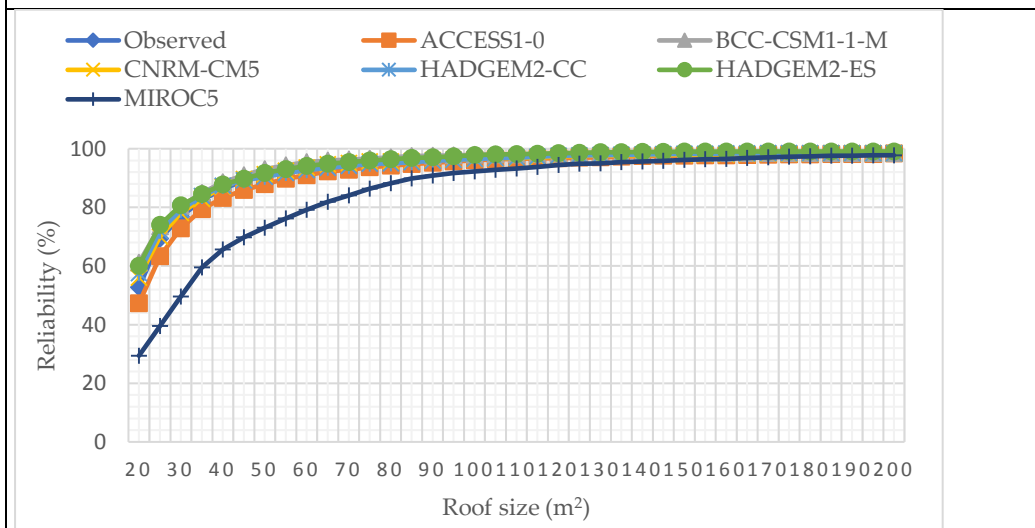


Figure S48: Reliability projections for MAM season for a 2 m³ tank size (2025-2055)

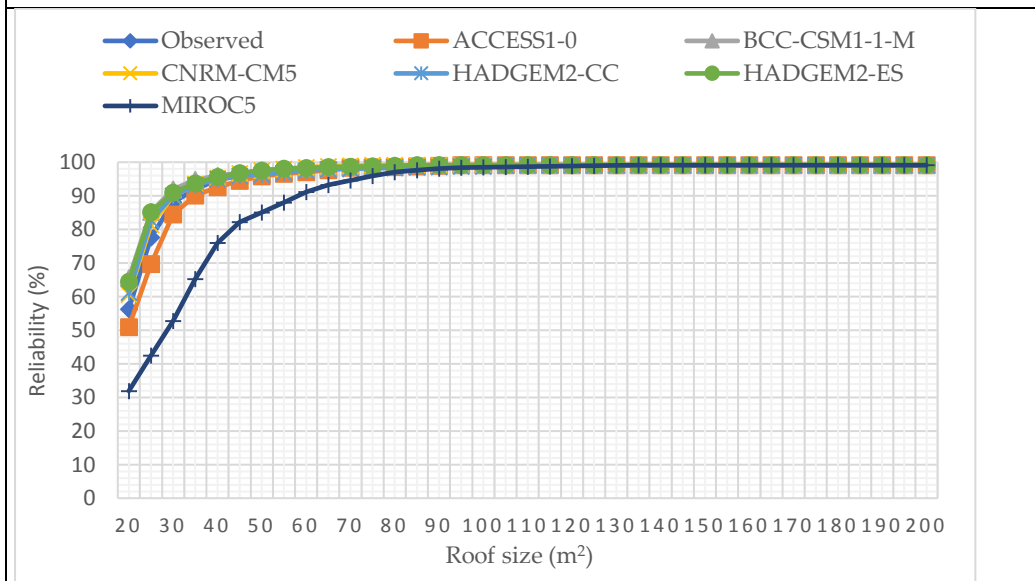


Figure S49: Reliability projections for MAM season for a 5 m³ tank size (2025-2055)

#### 2.4. Reliability projections for SON (2025-2055)

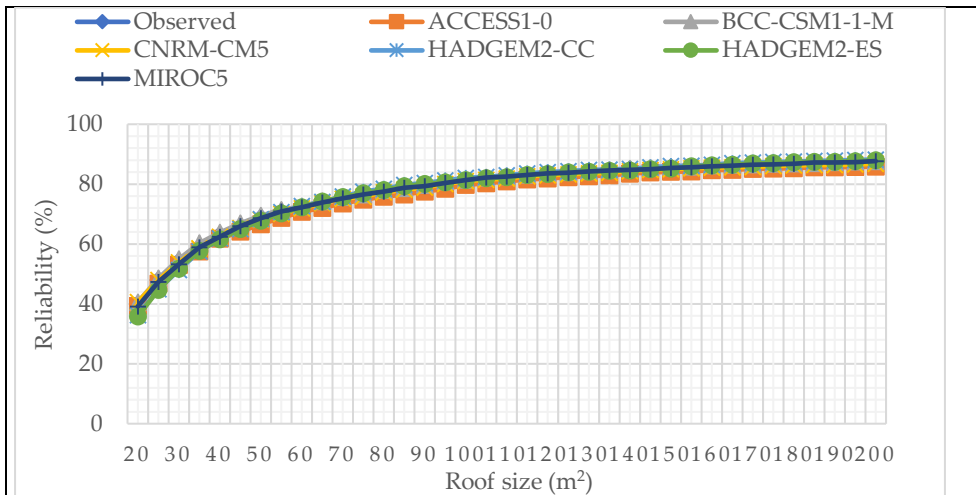


Figure S50: Reliability projections for SON season for a 0.5 m<sup>3</sup> tank size (2025-2055)

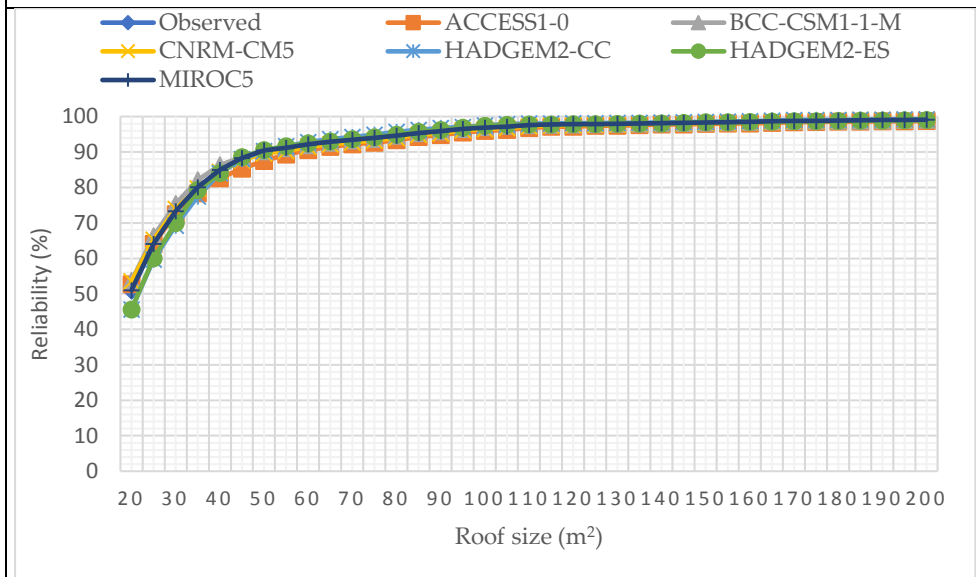


Figure S51: Reliability projections for SON season for a 2 m<sup>3</sup> tank size (2025-2055)

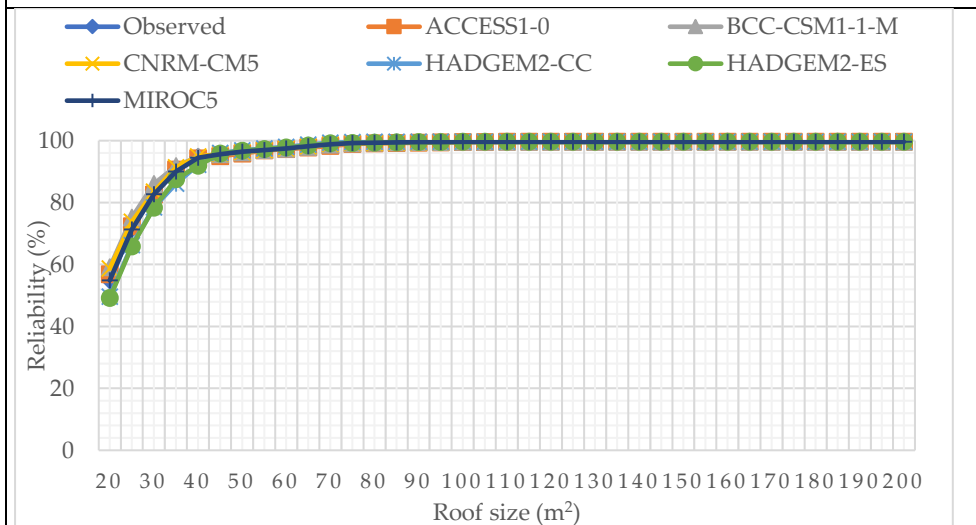


Figure S52: Reliability projections for SON season for a 5 m<sup>3</sup> tank size (2025-2055)