Supplementary Material

Assessing Agricultural Vulnerability to Drought in a Heterogeneous Environment: A Remote Sensing-based Approach

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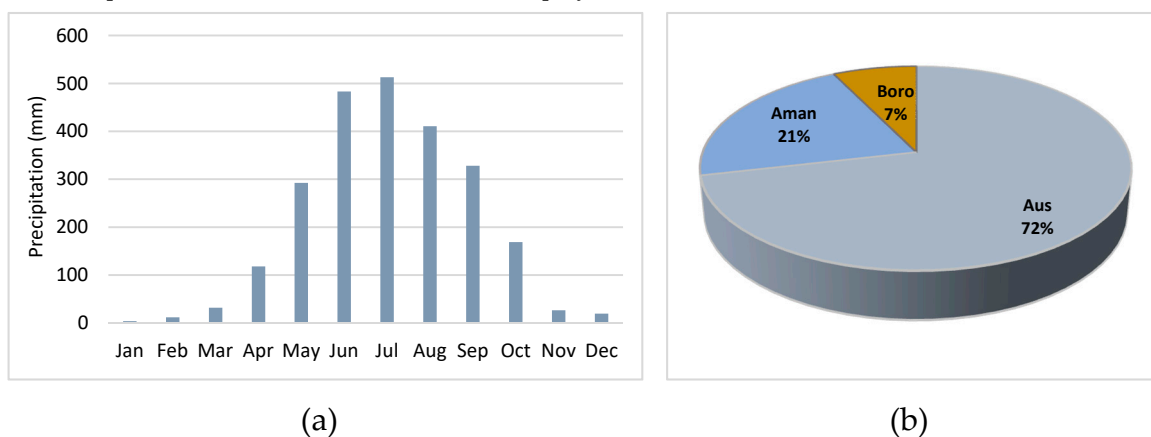* Correspondence: email: ilme.faridatul@connect.polyu.hk

(a)   (b)

Figure S1. Temporal variations in the precipitation: (a) 13 years average precipitation (mm), and (b) precipitation (%) in the major cropping seasons.
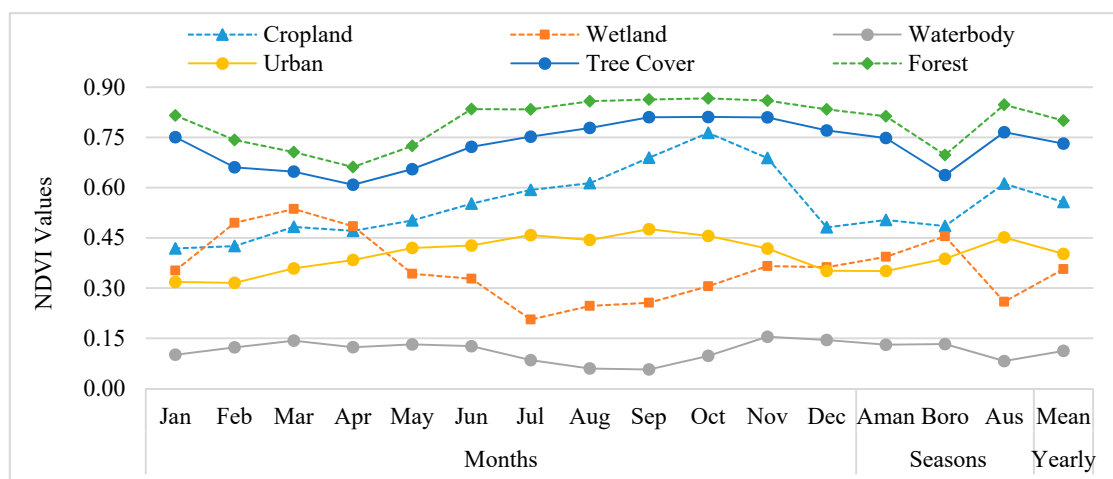

Figure S2. Temporal variations of NDVI for cropland and other land cover types.
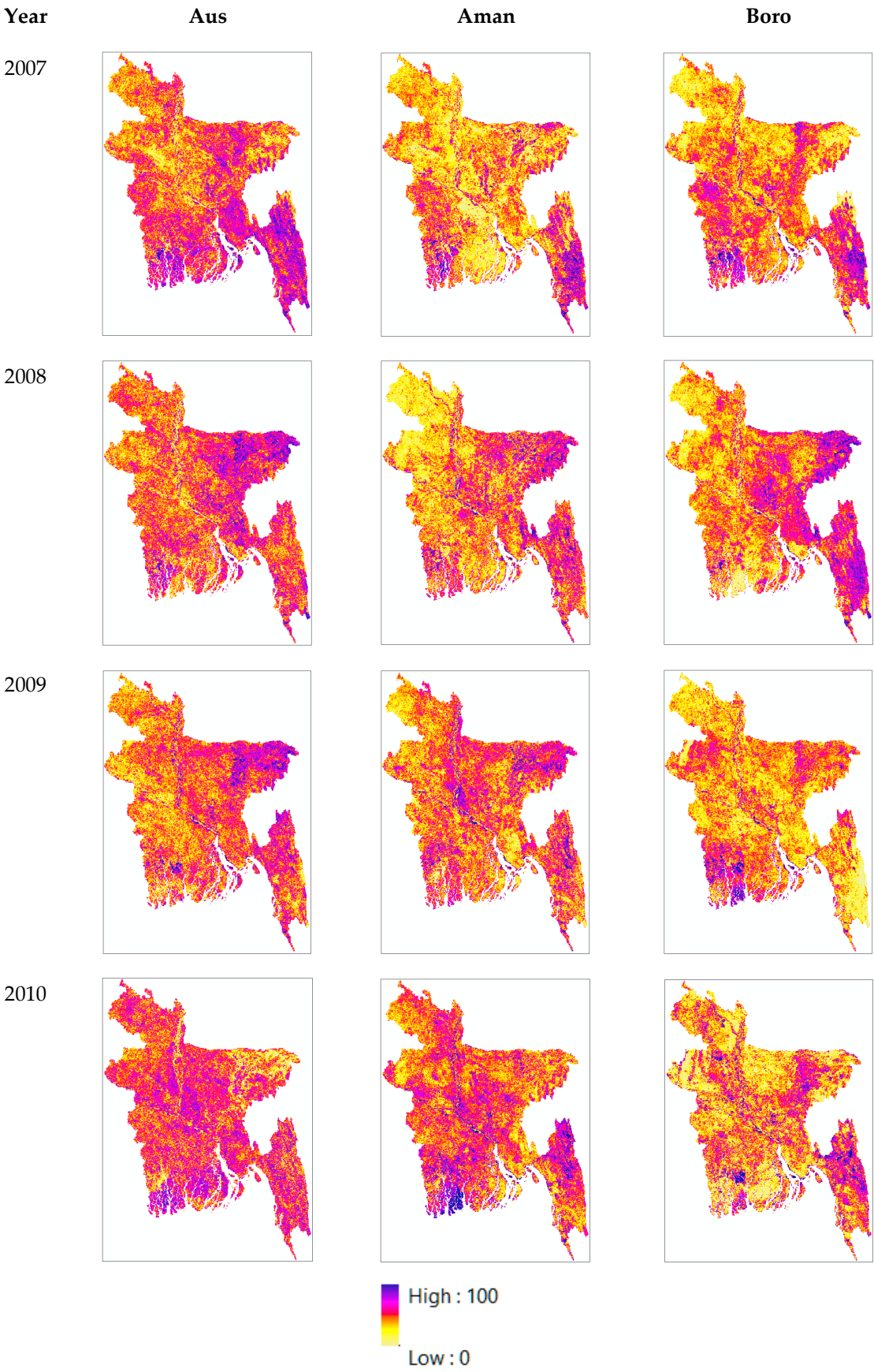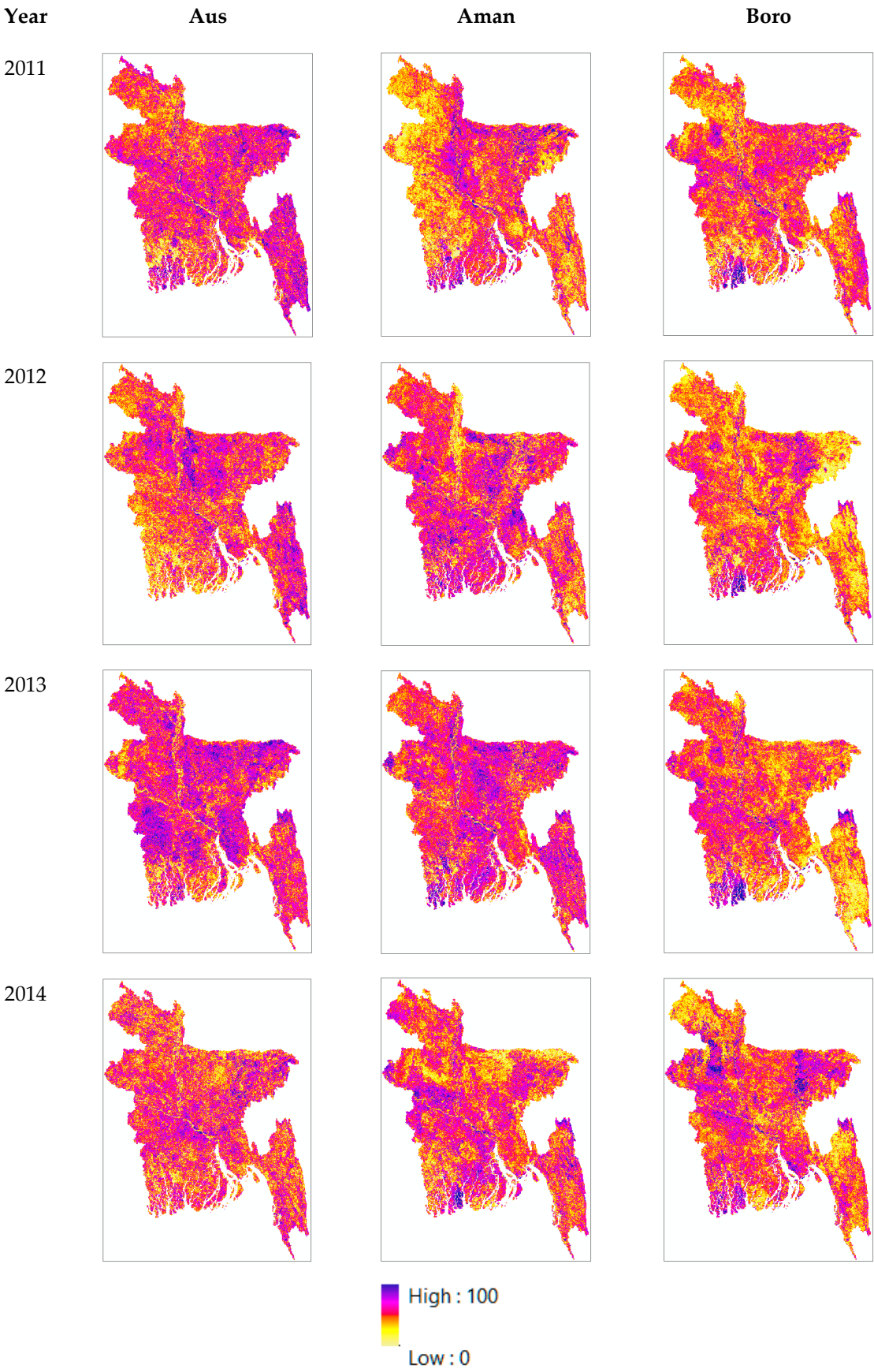
Year	Aus	Aman	Boro
2007			
2008			
2009			
2010			

High : 100

Low : 0

Figure S3. Cont.

Year	Aus	Aman	Boro
2011			
2012			
2013			
2014			

High : 100

Low : 0

Figure S3. Cont.

Year	Aus	Aman	Boro
2015			
2016			
2017			

High : 100

Low : 0
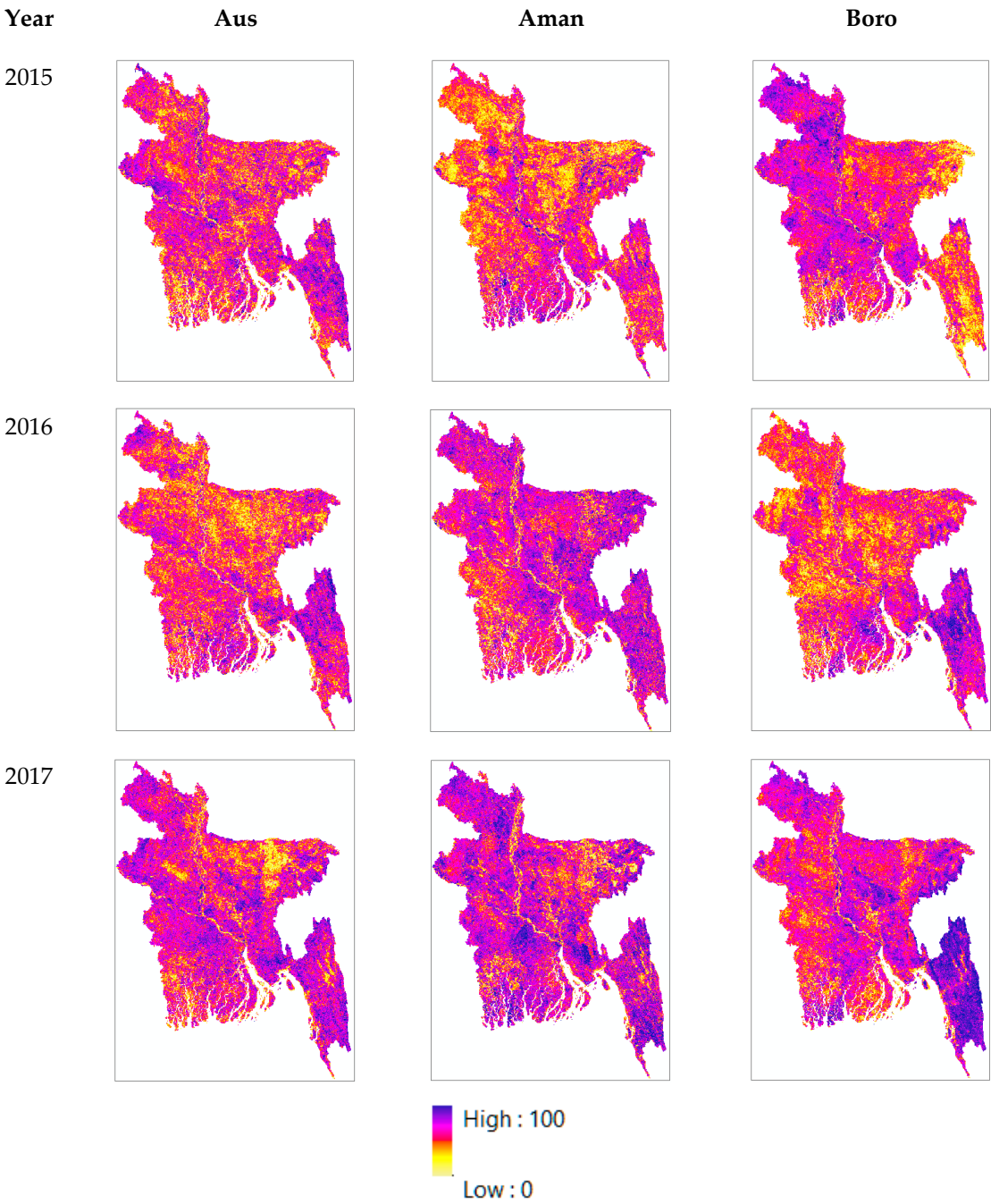
Figure S3. Seasonal Multiyear VCI maps.

Year	Aus	Aman	Boro
2007			
2008			
2009			
2010			

High : 100

Low : 0

Figure S4. Cont.

Year	Aus	Aman	Boro
2011			
2012			
2013			
2014			

High : 100

Low : 0

Figure S4. Cont.

Year	Aus	Aman	Boro
2015			
2016			
2017			

High : 100

Low : 0
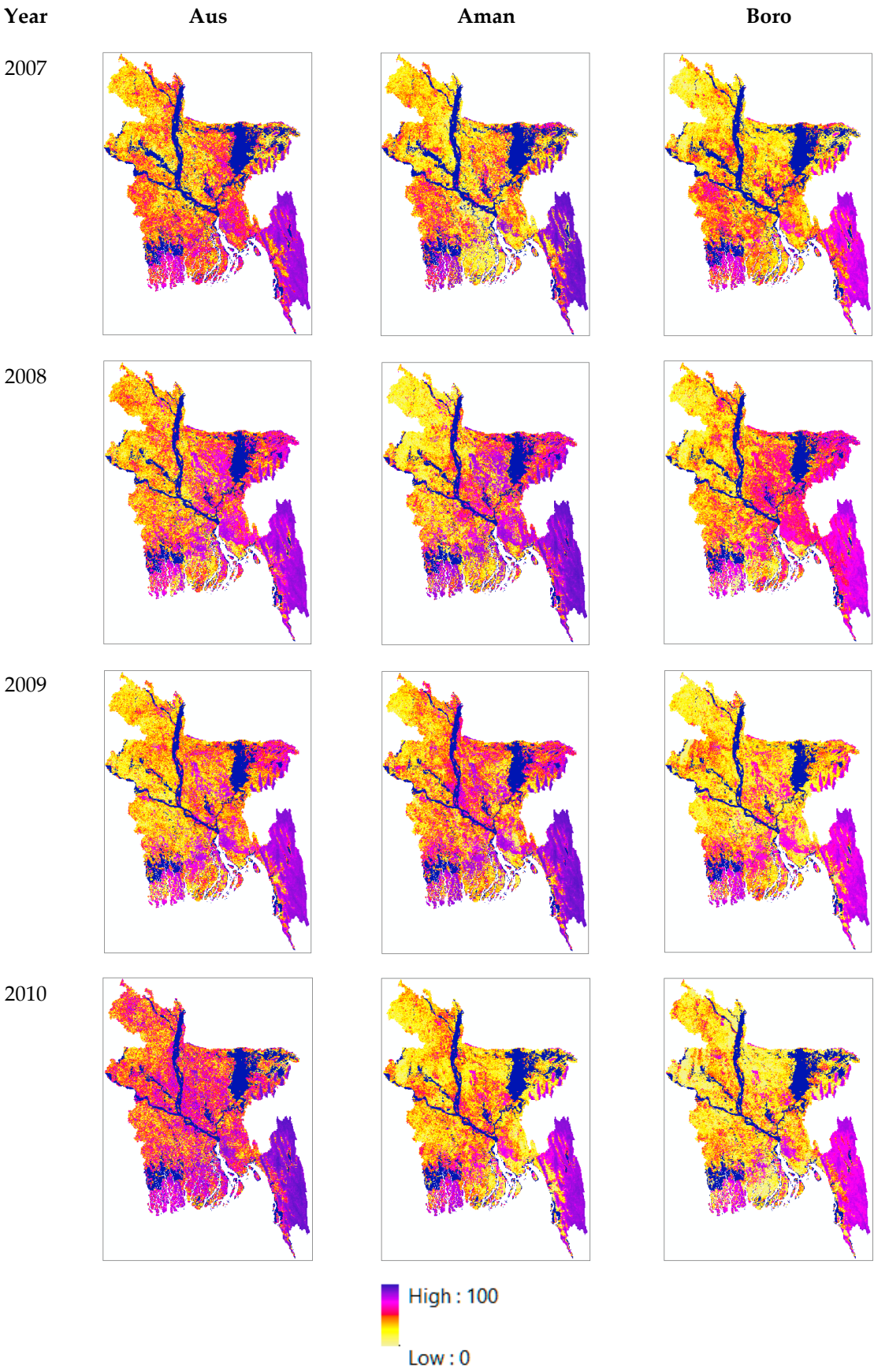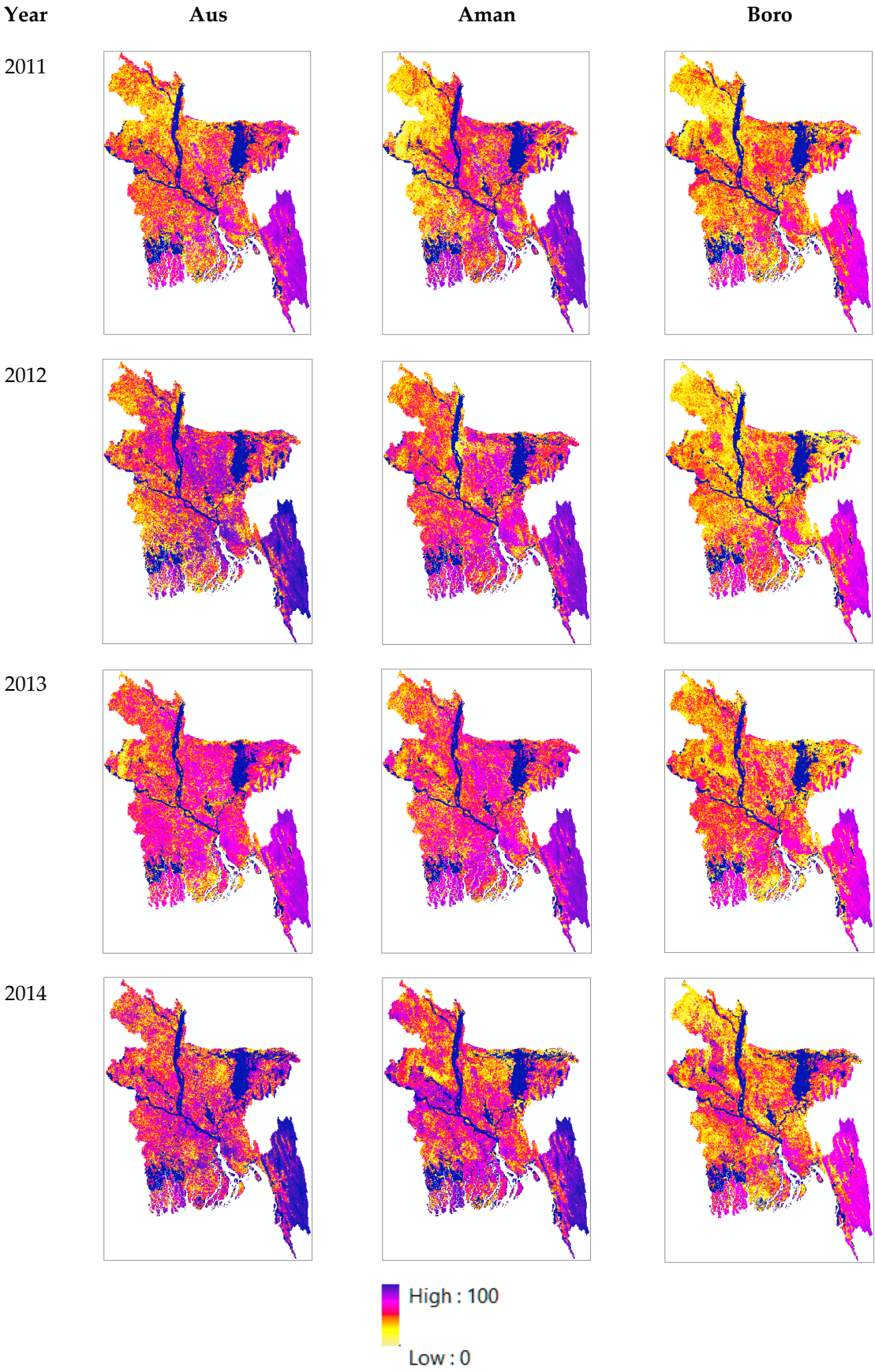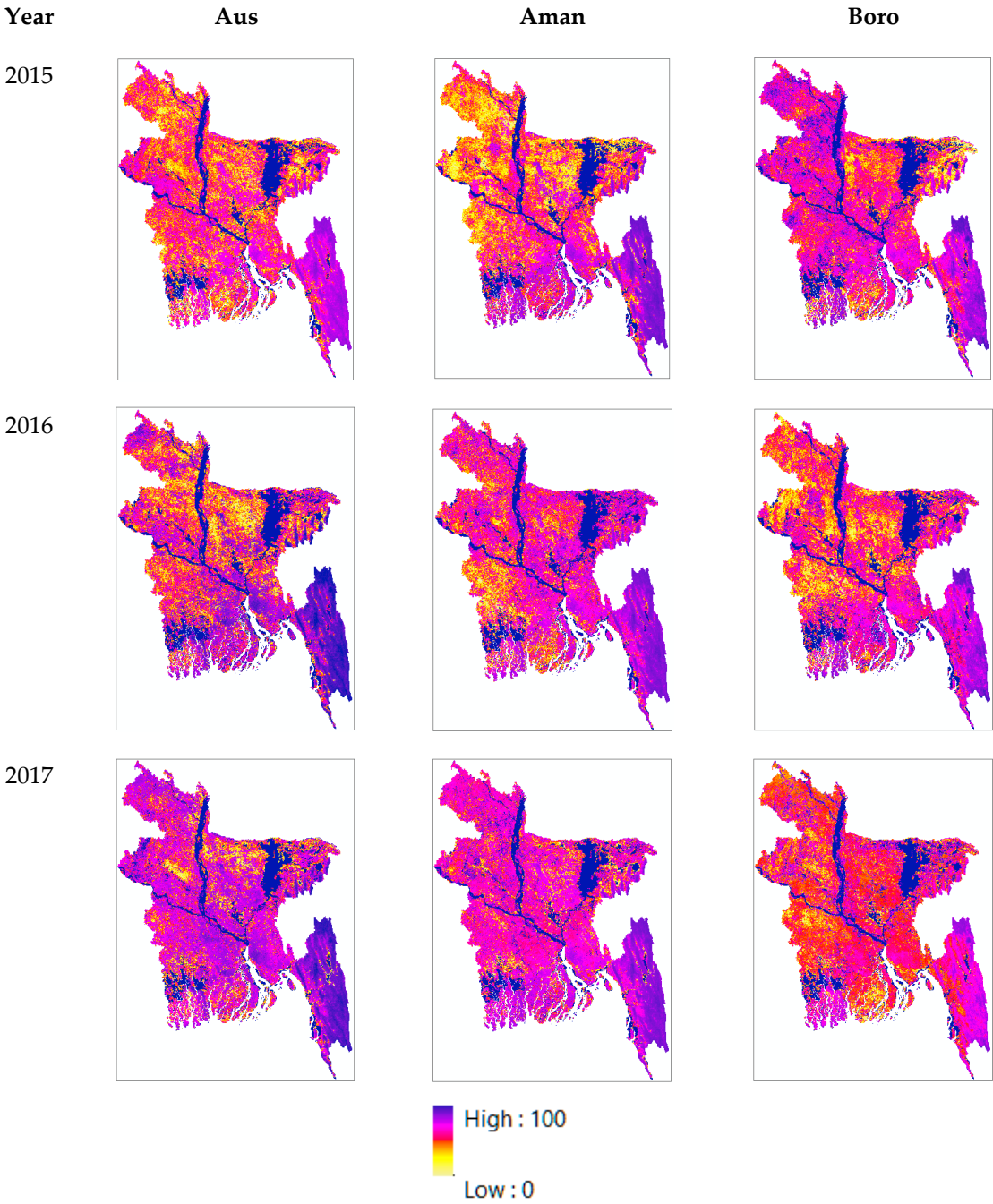
Figure S4. Seasonal Multiyear mVCI maps

Broad cropping seasons and yearly drought conditions	**Kharif**	**Rabi**	**Yearly Mean**

(a) (b) (c)

Drought Index Values

☐ 0 - 30
☐ 30.1 - 50
☐ 50.1 - 70
☐ 70.1 - 100

(dj) (e) (f)
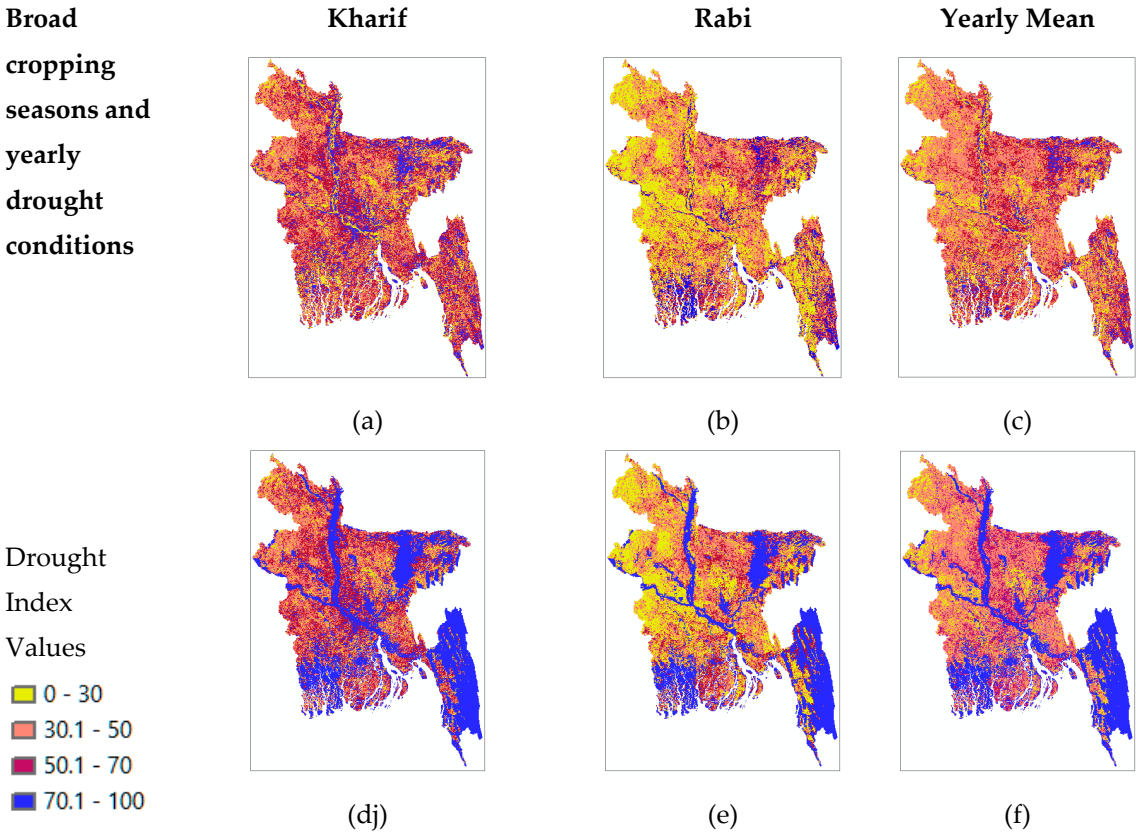
Figure S5. Spatial distribution of vegetation conditions in 2006 based on (a-c) VCI, and (d-f) mVCI

Broad cropping seasons and yearly drought conditions	**Kharif**	**Rabi**	**Yearly Mean**

(a) (b) (c)

Drought Index Values

☐ 0 - 30
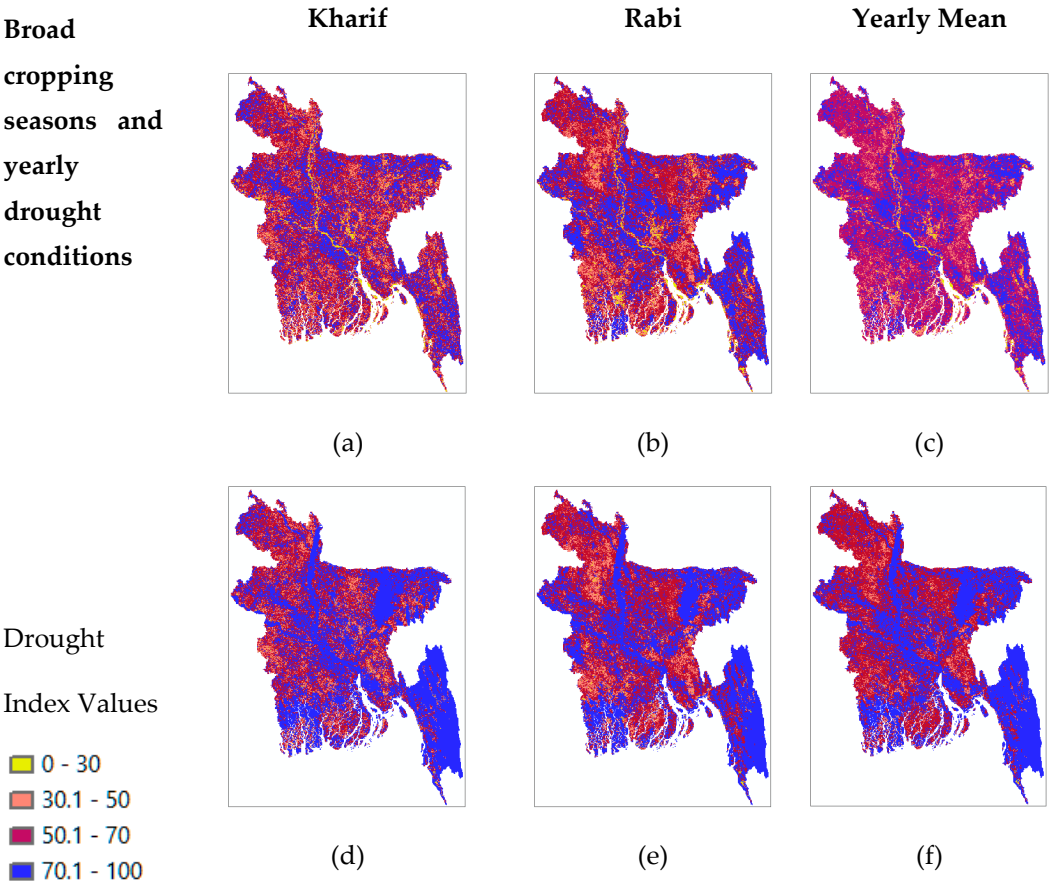☐ 30.1 - 50
☐ 50.1 - 70
☐ 70.1 - 100

(d) (e) (f)

Figure S6. Spatial distribution of vegetation conditions in 2018 based on (a-c) VCI, and (d-f) mVCI.