

 SUPPLEMENT

# EXPLAINING EXTREME EVENTS OF 2016 FROM A CLIMATE PERSPECTIVE

## Editors

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©The Ocean Agency / XL Catlin Seaview Survey / Christophe Bailhache—A panoramic image of coral bleaching at Lizard Island on the Great Barrier Reef, captured by The Ocean Agency / XL Catlin Seaview Survey / Christophe Bailhache in March 2016.



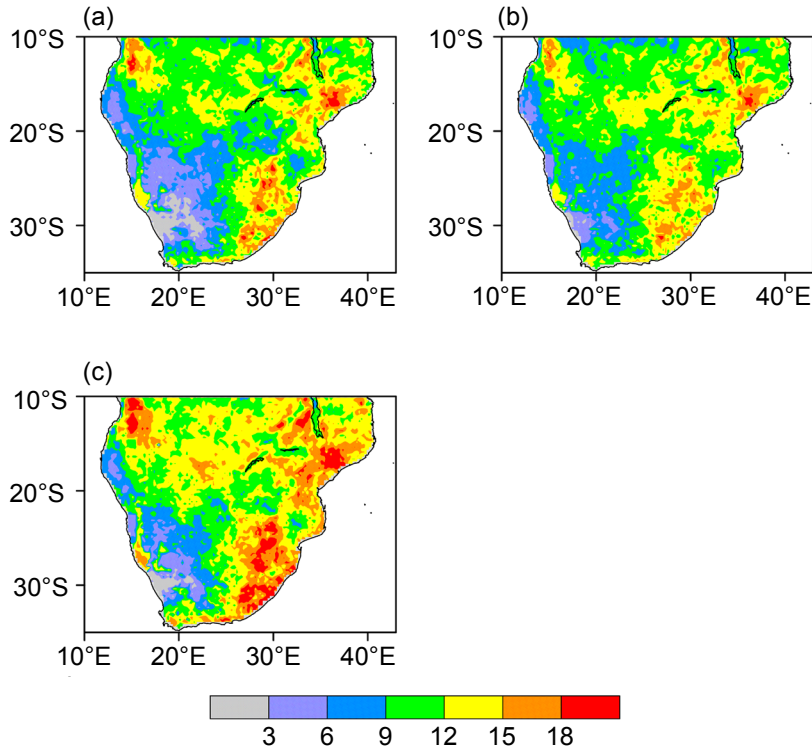
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# ES17. ANTHROPOGENIC INTENSIFICATION OF SOUTHERN AFRICAN FLASH DROUGHTS AS EXEMPLIFIED BY THE 2015/16 SEASON

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This document is a supplement to “Anthropogenic Intensification of Southern African Flash Droughts as Exemplified by the 2015/16 Season,” by Xing Yuan, Linying Wang, and Eric F. Wood (*Bull. Amer. Meteor. Soc.*, **99** (1), S86–S90) • ©2018 American Meteorological Society • DOI:10.1175/BAMS-D-17-0077.2

<b>TABLE ES17.1. CMIP5 model simulations used in this study.</b>			
<b>Models</b>	<b>ALL</b>	<b>NAT</b>	<b>CTL</b>
CCSM4	x	—	—
CMCC-CM	x	—	—
GFDL-CM3	x	—	x
GFDL-ESM2M	x	—	x
GISS-E2-H	x	—	—
GISS-E2-R	x	—	—
HadGEM2-CC	x	—	—
HadGEM2-ES	x	x	x
IPSL-CM5A-LR	x	x	x
IPSL-CM5A-MR	x	x	x
MIROC-ESM	x	—	x
MIROC-ESM-CHEM	x	—	x
MPI-ESM-LR	x	—	—
NorESM1-M	x	x	—
<b>Total</b>	<b>13</b>	<b>4</b>	<b>7</b>



**FIG. ES17.1.** Frequency of flash drought events (events decade<sup>-1</sup>) during the growing season (Oct–Mar). (a) Events with pentad-mean surface air temperature anomaly >1 std. dev., target pentad-mean soil moisture <40%, and target pentad soil moisture at least 10% lower than the preceding pentad; (b) as in (a), but target pentad-mean soil moisture <30%, and target pentad soil moisture at least 5% lower than the preceding pentad; (c) as in (a), but target pentad-mean soil moisture <50%. Frequency estimated by observed surface air temperature and VIC land surface hydrological model simulated soil moisture.