

**Williams, S.D. and M.R. Patterson. 2020. Resistance and robustness of the global coral–symbiont network. Ecology.**

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## **Data S1**

**Data S1 contains files needed to make the networks in the resistance and robustness code (Data S2).**

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## **File list**

`Global_edges.csv`: All edges in the global network of coral-symbiont associations. Delete first row with column names before calling in code. Each following row represents one link.

Symbiont Index – index number of symbiont node

Host Index – index number of host node

T\_MMM\_05\_degC – mean monthly maximum sea surface temperature for subregion of the host node

`Global_hostnodes.csv`: All host (coral species) nodes in global network of coral-symbiont associations. Each row is a node.

Node\_id – index number of node

Ocean – Ocean-basin location of node

Host\_Sci\_Name – scientific name of node

Type – host (0) or symbiont (1)

Genetic – Host family

Host\_tol – thermal tolerance value

Symbnodes\_notols.csv: All symbiont nodes in the global network that did not have assigned thermal tolerances. See Data S2 for code for missing tolerance values.

ID – index number of node

Phylotype – designated ITS2 type of symbiont node

Type – host (0) or symbiont (1)

Clade – clade of node

Symbnodes\_tols.csv: All symbiont nodes in the global network that did have assigned thermal tolerances.

ID – index number of node

Phylotype – designated ITS2 type of symbiont node

Type – host (0) or symbiont (1)

Clade – clade of node

Tolerance – thermal tolerance value

GeoSymbioScleractinians.csv: File of unfiltered data used from the GeoSymbio database to create the Global Network. See Franklin et al. (2012) for description. Each row is a sampled association.

GlobalNetwork.csv: Filtered data from GeoSymbioScleractinians.csv used to make the networks. Each row is a different known association and a link.

Clade – Symbiont clade

Type – Designated symbiont ITS2 type

Host\_Family – Coral host family

Host\_Genus – Coral host Genus

Host\_Sci\_Name – Coral host scientific name

Ocean – Ocean-basin scale location of sampling location of association

Region – Subregion scale location of sampling location of association

Host\_tol – Host node thermal tolerance

Symb\_ID – symbiont node ID

Host\_ID – host node ID

T\_MMM\_05 – Mean monthly maximum sea surface tolerance in 2005 of the subregion location

*Files for Host-Specific Exploratory Model:*

HostSpecific\_Globaledges.csv: All edges in the host-specific network of coral-symbiont associations. Delete first row with column names before calling in code. Each following row represents one link.

HostSpecific\_symbnodes.csv: All new symbiont nodes for the host-specific network

*Files for the generalized global network:*

Generalized\_global\_edges.csv: All edges in the generalized network of coral-symbiont associations. First column is the symbiont ID and second is the host ID

Generalized\_global\_hostnodes.csv: All host nodes with ID's for the generalized network.

*Files for additional spatial scales are available on the GitHub repository for this paper, DOI: 10.5281/zenodo.3595582. They can also be filtered from the GlobalNetwork.csv.*

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