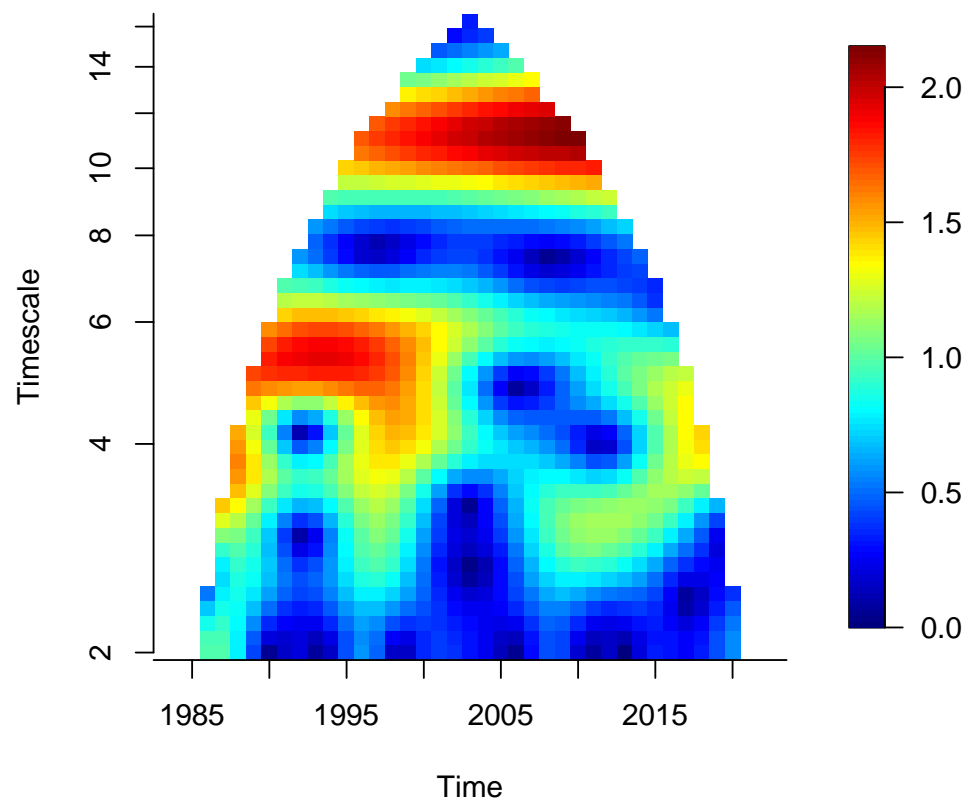
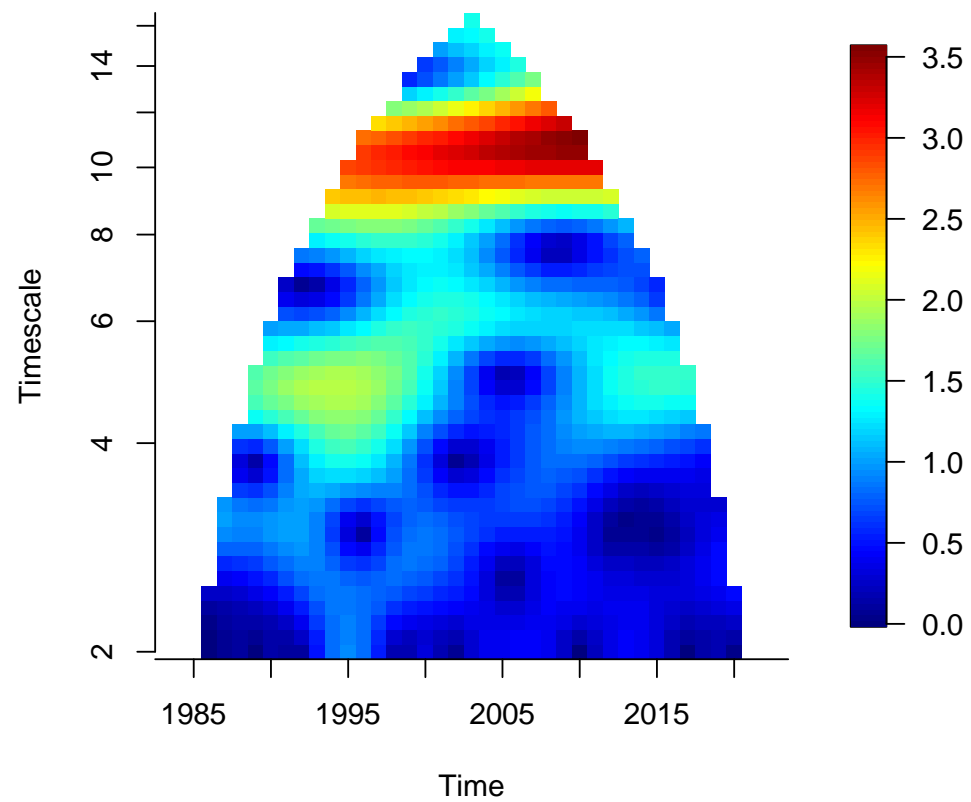


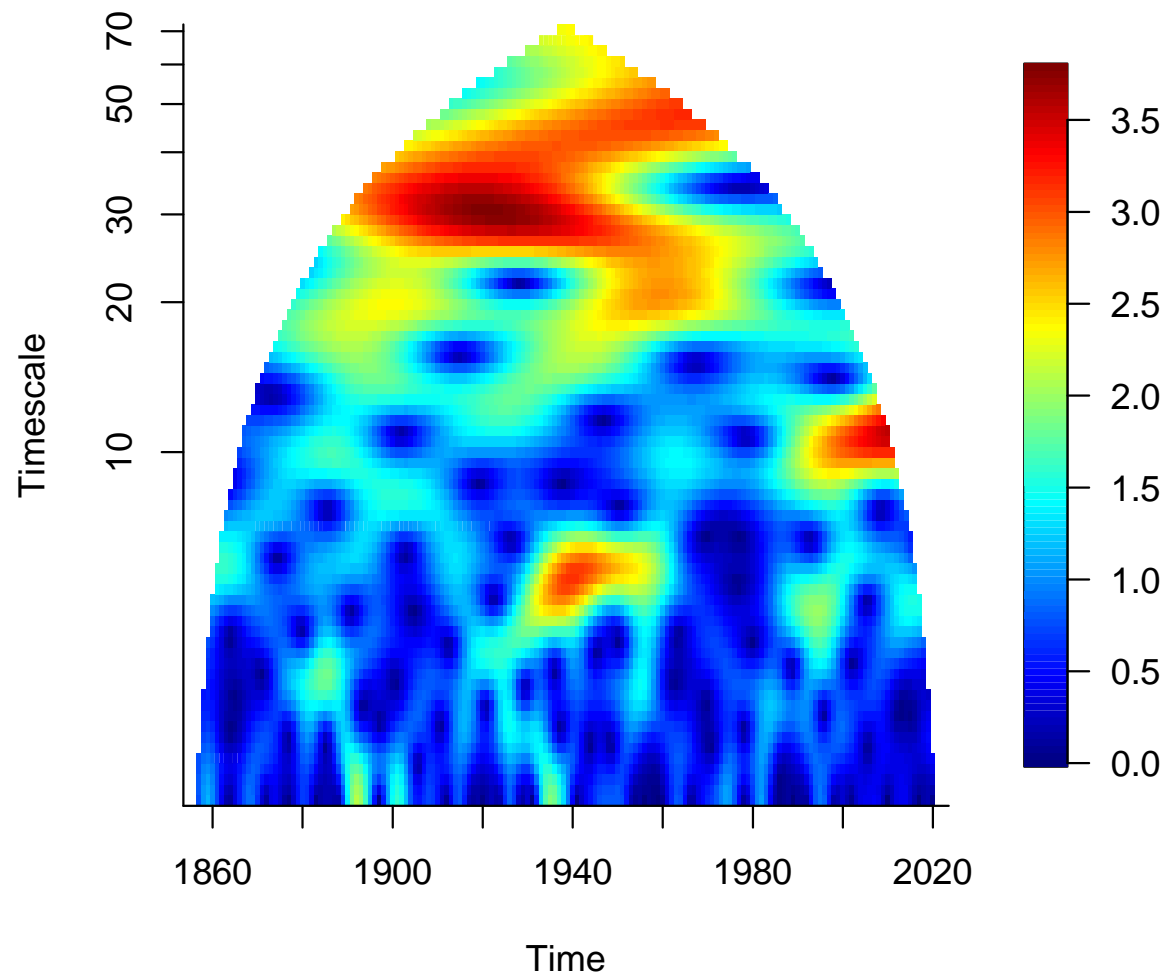
**ENSO Synchrony**



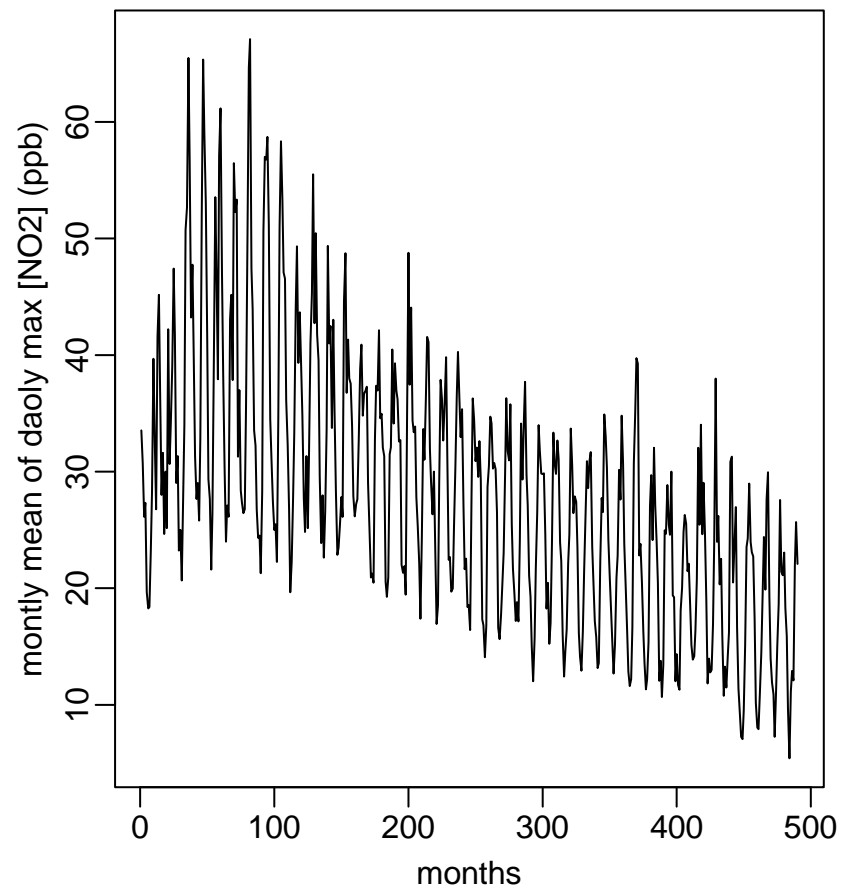
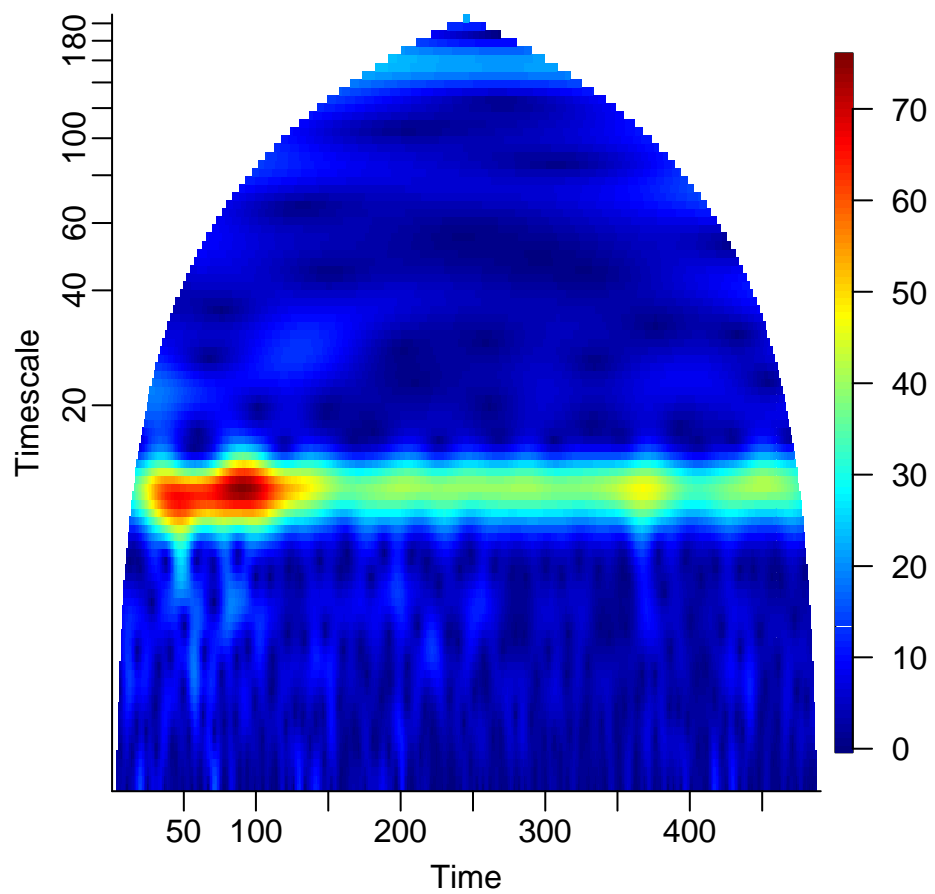
**PDO Synchrony**



# PDO\_All Synchrony



monthly air NO2



### Mean Growing Season Rainfall

| Jasper Ridge | Sig Coherence | Timescale       | p-value           |                |                   |
|--------------|---------------|-----------------|-------------------|----------------|-------------------|
| BRHO         | Marginal      | 19-21           | 0.0639            |                |                   |
| <b>PLER</b>  | <b>Y</b>      | <b>3-4 yr</b>   | <b>0.0209</b>     |                |                   |
| <b>MIDO</b>  | <b>Y</b>      | <b>11-15 yr</b> | <b>0.04295704</b> |                |                   |
| <b>CAMU</b>  | <b>Y</b>      | <b>10-20yr</b>  | <b>0.00599401</b> |                |                   |
| LACA         | N             |                 |                   |                |                   |
| <b>LAPL</b>  | <b>Y</b>      | <b>5-7yr</b>    | <b>0.04495504</b> |                |                   |
| LOMU         | N             |                 |                   |                |                   |
| VUMI         | N             |                 |                   |                |                   |
| Kirby Canyon | Sig Coherence | Timescale       | p-value           | Timescale      | p-value           |
| BRHO         | N             |                 |                   |                |                   |
| PLER         | N             |                 |                   |                |                   |
| CAMU         | No cover data |                 |                   |                |                   |
| FEMI         | N             |                 |                   |                |                   |
| FEPE         | N             |                 |                   |                |                   |
| LACA         | N             |                 |                   |                |                   |
| LAPL         | N             |                 |                   |                |                   |
| <b>MIDO</b>  | <b>Y</b>      | <b>4-5 yr</b>   | <b>0.0269</b>     | <b>5-10 yr</b> | <b>0.03996004</b> |

**ENSO**

| Jasper Ridge | Sig Coherence | Timescale       | p-value           |
|--------------|---------------|-----------------|-------------------|
| BRHO         | N             |                 |                   |
| <b>PLER</b>  | <b>Y</b>      | <b>20-21 yr</b> | <b>0.03996004</b> |
| MIDO         | N             |                 |                   |
| CAMU         | N             |                 |                   |
| LACA         | N             |                 |                   |
| LAPL         | N             |                 |                   |
| LOMU         | N             |                 |                   |
| VUMI         | N             |                 |                   |
| Kirby Canyon | Sig Coherence | Timescale       | p-value           |
| BRHO         | N             |                 |                   |
| PLER         | N             |                 |                   |
| CAMU         | No cover data |                 |                   |
| <b>FEMI</b>  | <b>Y</b>      | <b>10-11 yr</b> | <b>0.03299703</b> |
| FEPE         | N             |                 |                   |
| <b>LACA</b>  | <b>Y</b>      | <b>5-6 yr</b>   | <b>0.04595405</b> |
| <b>LAPL</b>  | <b>Y</b>      | <b>4-8yr</b>    | <b>0.01498501</b> |
| <b>MIDO</b>  | <b>Y</b>      | <b>7-14 yr</b>  | <b>0.00599401</b> |

**PDO**

| Jasper Ridge | Sig Coherence | Timescale       | p-value           |
|--------------|---------------|-----------------|-------------------|
| Species      |               |                 |                   |
| BRHO         | N             |                 |                   |
| <b>PLER</b>  | <b>Y</b>      | <b>3-5 yr</b>   | <b>0.01598402</b> |
| MIDO         | N             |                 |                   |
| CAMU         | N             |                 |                   |
| <b>LACA</b>  | <b>Y</b>      | <b>2-4 yr</b>   | <b>0.02397602</b> |
| <b>LAPL</b>  | <b>Y</b>      | <b>15-21 yr</b> | <b>0.01898102</b> |
| <b>LOMU</b>  | <b>Y</b>      | <b>11-20 yr</b> | <b>0.01498501</b> |
| <b>VUMI</b>  | <b>Y</b>      | <b>2-5 yr</b>   | <b>0.00799201</b> |
| Kirby Canyon | Sig Coherence | Timescale       | p-value           |
| BRHO         | N             |                 |                   |
| PLER         | N             |                 |                   |
| CAMU         | No cover data |                 |                   |
| <b>FEMI</b>  | <b>Y</b>      | <b>6-12 yr</b>  | <b>0.00799201</b> |
| FEPE         | N             |                 |                   |
| <b>LACA</b>  | <b>Y</b>      | <b>4-9 yr</b>   | <b>0.03396603</b> |
| LAPL         | N             |                 |                   |
| <b>MIDO</b>  | <b>Y</b>      | <b>6-9 yr</b>   | <b>0.04795205</b> |

**Mean Growing Season Rainfall**

| Kirby Canyon N12 | Sig Coherence | Timescale     | p-value           |
|------------------|---------------|---------------|-------------------|
| BRHO             | N             |               |                   |
| PLER             | N             |               |                   |
| Kirby Canyon N22 |               |               |                   |
| BRHO             | N             |               |                   |
| PLER             | N             |               |                   |
| Kirby Canyon N30 |               |               |                   |
| BRHO             | N             |               |                   |
| PLER             | N             |               |                   |
| Kirby Canyon S12 |               |               |                   |
| <b>BRHO</b>      | <b>Y</b>      | <b>4-9 yr</b> | <b>0.01498501</b> |
| PLER             | N             |               |                   |
| Kirby Canyon S22 |               |               |                   |
| BRHO             | N             |               |                   |
| PLER             | N             |               |                   |
| Kirby Canyon S30 |               |               |                   |
| BRHO             | N             |               |                   |
| PLER             | N             |               |                   |

**ENSO**

| Kirby Canyon N12 | Sig Coherence | Timescale      | p-value           |
|------------------|---------------|----------------|-------------------|
| BRHO             | N             |                |                   |
| PLER             | N             |                |                   |
| Kirby Canyon N22 |               |                |                   |
| <b>BRHO</b>      | <b>Y</b>      | <b>9-12 yr</b> | <b>0.03396603</b> |
| PLER             | N             |                |                   |
| Kirby Canyon N30 |               |                |                   |
| BRHO             | N             |                |                   |
| <b>PLER</b>      | <b>Y</b>      | <b>6-7 yr</b>  | <b>0.04895105</b> |
| Kirby Canyon S12 |               |                |                   |
| BRHO             | N             |                |                   |
| PLER             | N             |                |                   |
| Kirby Canyon S22 |               |                |                   |
| BRHO             | N             |                |                   |
| PLER             | N             |                |                   |
| Kirby Canyon S30 |               |                |                   |
| BRHO             | N             |                |                   |
| PLER             | N             |                |                   |

**PDO**

| Kirby Canyon N12 | Sig Coherence | Timescale     | p-value           | Timescale     | p-value           |
|------------------|---------------|---------------|-------------------|---------------|-------------------|
| BRHO             | N             |               |                   |               |                   |
| PLER             | N             |               |                   |               |                   |
| Kirby Canyon N22 |               |               |                   |               |                   |
| BRHO             | N             |               |                   |               |                   |
| PLER             | N             |               |                   |               |                   |
| Kirby Canyon N30 |               |               |                   |               |                   |
| BRHO             | N             |               |                   |               |                   |
| <b>PLER</b>      | <b>Y</b>      | <b>6-8 yr</b> | <b>0.02497502</b> |               |                   |
| Kirby Canyon S12 |               |               |                   |               |                   |
| BRHO             | N             |               |                   |               |                   |
| PLER             | N             |               |                   |               |                   |
| Kirby Canyon S22 |               |               |                   |               |                   |
| BRHO             | N             |               |                   |               |                   |
| PLER             | N             |               |                   |               |                   |
| Kirby Canyon S30 |               |               |                   |               |                   |
| BRHO             | N             |               |                   |               |                   |
| <b>PLER</b>      | <b>Y</b>      | <b>6-7 yr</b> | <b>0.04395604</b> | <b>3-4 yr</b> | <b>0.02797203</b> |