

Summary

Report generated at Mon Oct 7 14:05:44 2019

Using args:  
google\_api\_key: [redacted]  
optimization\_radius\_mi: 200  
jet\_stream\_correction\_mph: 50  
num\_best\_routes: 20  
start\_from\_airport\_ids: [500000]  
data\_path: data/  
geo\_hash\_shuffles: 100  
html\_file: report.html  
routing\_overhead\_pct: 10  
start\_from\_continent\_codes: ['AN']  
max\_searches: 250000000  
geo\_hash\_resolution\_deg: 5.0  
disable\_jet\_stream\_correction: False  
disable\_optimization: False  
optimization\_max\_searches: 250000  
disable\_geo\_overrides: False

Completed in 5996.48s  
Searched 250000000 possible routes  
Searched 882085 additional routes for optimizations  
Found 3661 valid routes given mission constraints  
Showing top 20

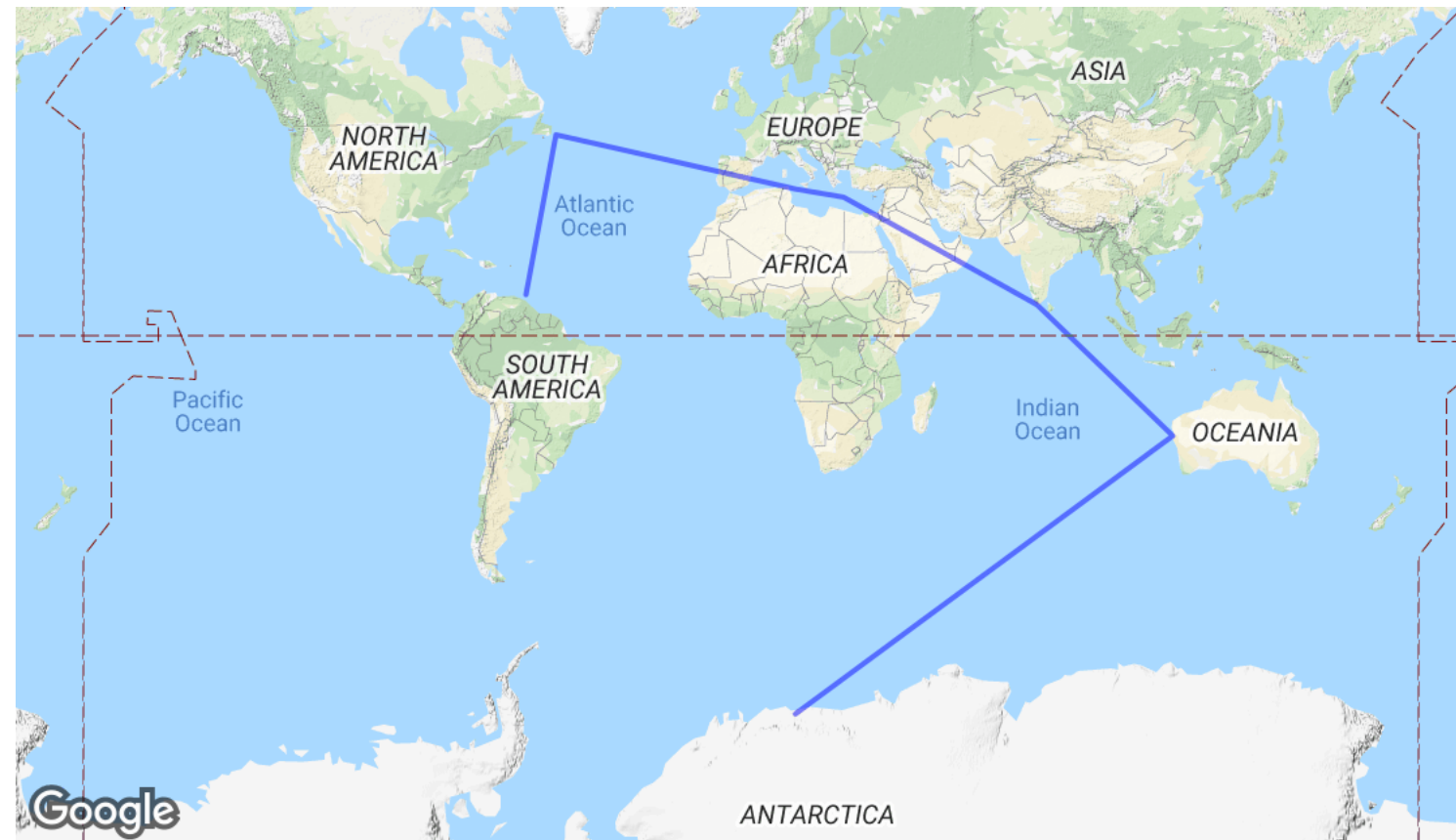
Route #1



AT17 AN RU (0 mi / 0.0 hrs / 0 mph)  
name: Novolazarevskaya Station  
country: n/a  
elevation: 335ft  
type: small\_airport  
plane: n/a  
nearest alternate medium\_airport: None  
nearest alternate large\_airport: None  
SBPS SA BR (4728 mi / 9.1 hrs / 520 mph)  
name: Porto Seguro Airport  
country: Brazil  
elevation: 168ft  
type: medium\_airport  
plane: g550  
nearest alternate medium\_airport: SBQV, 160.97 mi  
Vitória da Conquista Airport, BR  
nearest alternate large\_airport: SBCT, 903.95 mi  
Afonso Pena Airport, BR  
GCFV EU ES (3883 mi / 7.1 hrs / 549 mph)  
name: Fuerteventura Airport  
country: Spain  
elevation: 85ft  
type: medium\_airport

plane: g450  
nearest alternate medium\_airport: GMMA, 178.72 mi  
Smara Airport, EH  
nearest alternate large\_airport: GCLP, 99.47 mi  
Gran Canaria Airport, ES  
BGBW NA GL (2953 mi / 5.9 hrs / 496 mph)  
name: Narsarsuaq Airport  
country: Greenland  
elevation: 112ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: BGSF, 434.31 mi  
Kangerlussuaq Airport, GL  
nearest alternate large\_airport: None  
ENNA EU NO (2167 mi / 3.8 hrs / 573 mph)  
name: Banak Airport  
country: Norway  
elevation: 25ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: EFKT, 163.63 mi  
Kittilå Airport, FI  
nearest alternate large\_airport: ENBO, 328.68 mi  
Bodø Airport, NO  
ZBTJ AS CN (4134 mi / 7.2 hrs / 570 mph)  
name: Tianjin Binhai International Airport  
country: China  
elevation: 10ft  
type: large\_airport  
plane: g450  
AYVN OC PG (3593 mi / 6.5 hrs / 549 mph)  
name: Vanimo Airport  
country: Papua New Guinea  
elevation: 10ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: AYWK, 174.47 mi  
Wewak International Airport, PG  
nearest alternate large\_airport: AYPY, 618.58 mi  
Port Moresby Jacksons International Airport, PG  
Total Distance: 21457.96 miles  
Duration: 39.66

Route #2



AT17 AN RU (0 mi / 0.0 hrs / 0 mph)  
name: Novolazarevskaya Station  
country: n/a  
elevation: 335ft  
type: small\_airport  
plane: n/a  
nearest alternate medium\_airport: None  
nearest alternate large\_airport: None  
YSHK OC AU (5274 mi / 8.9 hrs / 594 mph)

```
name: Shark Bay Airport
country: Australia
elevation: 111ft
type: medium_airport
plane: g550
nearest alternate medium_airport: YPLM, 254.82 mi
      Learmonth Airport, AU
nearest alternate large_airport: None
VOTV AS IN (3763 mi / 7.7 hrs / 488 mph)
name: Trivandrum International Airport
country: India
elevation: 15ft
type: large_airport
plane: g450
LG54 EU GR (4138 mi / 8.6 hrs / 480 mph)
name: Tympaki Airport
country: Greece
elevation: 7ft
type: small_airport
plane: g450
nearest alternate medium_airport: HEBA, 404.43 mi
      Borg El Arab International Airport, EG
nearest alternate large_airport: LICC, 565.05 mi
      Catania-Fontanarossa Airport, IT
LICG EU IT (798 mi / 1.7 hrs / 475 mph)
name: Pantelleria Airport
country: Italy
elevation: 628ft
type: medium_airport
plane: g450
nearest alternate medium_airport: LICD, 98.04 mi
      Lampedusa Airport, IT
nearest alternate large_airport: LICC, 176.41 mi
      Catania-Fontanarossa Airport, IT
CYYT NA CA (3625 mi / 7.6 hrs / 476 mph)
name: St. John's International Airport
country: Canada
elevation: 461ft
type: large_airport
plane: g450
TTCP SA TT (2819 mi / 5.5 hrs / 515 mph)
name: Tobago-Crown Point Airport
country: Trinidad and Tobago
elevation: 38ft
type: medium_airport
plane: g450
nearest alternate medium_airport: TTPP, 51.39 mi
      Piarco International Airport, TT
nearest alternate large_airport: None
Total Distance: 20416.94 miles
Duration: 39.94
```

Route #3



AT17 AN RU (0 mi / 0.0 hrs / 0 mph)  
name: Novolazarevskaya Station  
country: n/a  
elevation: 335ft  
type: small\_airport  
plane: n/a  
nearest alternate medium\_airport: None  
nearest alternate large\_airport: None

SNIO SA BR (5104 mi / 9.8 hrs / 522 mph)  
name: Cipó Airport  
country: Brazil  
elevation: 499ft  
type: small\_airport  
plane: g550  
nearest alternate medium\_airport: SBUF, 119.96 mi  
Paulo Afonso Airport, BR  
nearest alternate large\_airport: SBBE, 958.87 mi  
Val de Cans/Júlio Cezar Ribeiro International Airport, BR

GOTT AF SN (2661 mi / 4.7 hrs / 560 mph)  
name: Tambacounda Airport  
country: Senegal  
elevation: 161ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: GOOK, 163.29 mi  
Kaolack Airport, SN  
nearest alternate large\_airport: GCLP, 987.11 mi  
Gran Canaria Airport, ES

EGPH EU GB (3265 mi / 6.1 hrs / 534 mph)  
name: Edinburgh Airport  
country: United Kingdom  
elevation: 135ft  
type: large\_airport  
plane: g450

BGTL NA GL (2330 mi / 4.8 hrs / 484 mph)  
name: Thule Air Base  
country: Greenland  
elevation: 251ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: BGSE, 756.79 mi  
Kangerlussuaq Airport, GL  
nearest alternate large\_airport: None

UHHH AS RU (4105 mi / 7.1 hrs / 574 mph)  
name: Khabarovsk-Novy Airport  
country: Russia  
elevation: 244ft  
type: large\_airport  
plane: g450

WAJJ AS ID (3900 mi / 7.4 hrs / 529 mph)  
name: Sentani Airport  
country: Indonesia  
elevation: 289ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: AYWK, 228.39 mi  
Wewak International Airport, PG  
nearest alternate large\_airport: AYPY, 661.07 mi  
Port Moresby Jacksons International Airport, PG

Total Distance: 21364.77 miles  
Duration: 39.95

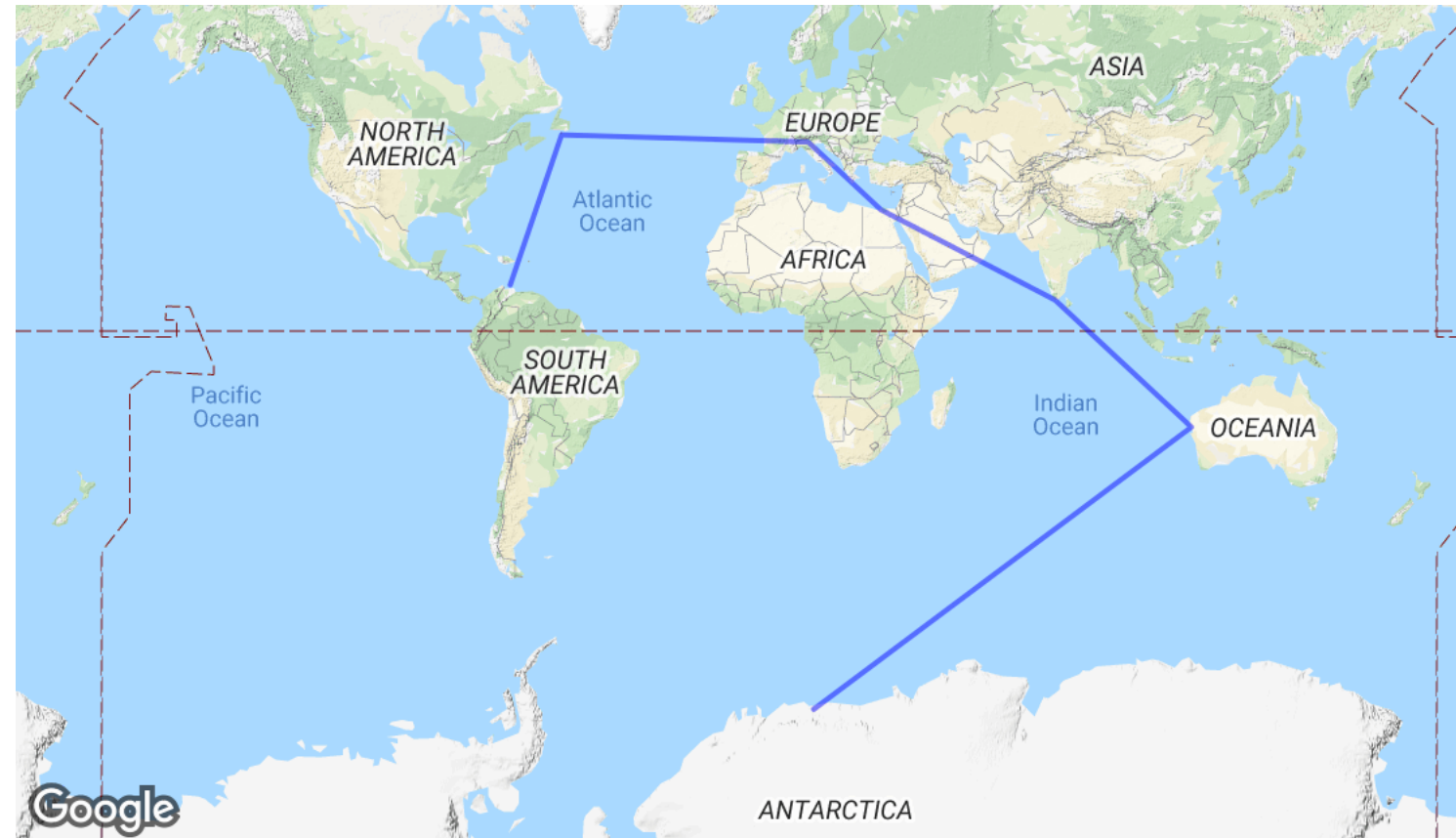
**Route #4**



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AT17 AN RU (0 mi / 0.0 hrs / 0 mph)
      name: Novolazarevskaya Station
      country: n/a
      elevation: 335ft
      type: small_airport
      plane: n/a
      nearest alternate medium_airport: None
      nearest alternate large_airport: None
SBSV SA BR (4969 mi / 9.5 hrs / 521 mph)
      name: Deputado Luiz Eduardo Magalhães International Airport
      country: Brazil
      elevation: 64ft
      type: large_airport
      plane: g550
GMLL AF EH (3564 mi / 6.5 hrs / 551 mph)
      name: Hassan I Airport
      country: Western Sahara
      elevation: 207ft
      type: medium_airport
      plane: g450
      nearest alternate medium_airport: GMMMA, 98.87 mi
      Smara Airport, EH
      nearest alternate large_airport: GCLP, 143.30 mi
      Gran Canaria Airport, ES
GMFO AF MA (936 mi / 1.7 hrs / 564 mph)
      name: Angads Airport
      country: Morocco
      elevation: 1535ft
      type: medium_airport
      plane: g450
      nearest alternate medium_airport: GMMW, 64.11 mi
      Nador International Airport, MA
      nearest alternate large_airport: GMMN, 338.71 mi
      Mohammed V International Airport, MA
BGTL NA GL (3871 mi / 7.9 hrs / 489 mph)
      name: Thule Air Base
      country: Greenland
      elevation: 251ft
      type: medium_airport
      plane: g450
      nearest alternate medium_airport: BGSGF, 756.79 mi
      Kangerlussuaq Airport, GL
      nearest alternate large_airport: None
UHKH AS RU (3953 mi / 6.9 hrs / 574 mph)
      name: Komsomolsk-on-Amur Airport
      country: Russia
      elevation: 92ft
      type: medium_airport
      plane: g450
      nearest alternate medium_airport: ZYJM, 384.43 mi
      Jiamusi Airport, CN
      nearest alternate large_airport: UHHH, 151.77 mi
      Khabarovsk-Novy Airport, RU
AYMO OC PG (4046 mi / 7.6 hrs / 533 mph)
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name: Momote Airport  
country: Papua New Guinea  
elevation: 12ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: AYWK, 279.65 mi  
Wewak International Airport, PG  
nearest alternate large\_airport: AYPY, 510.20 mi  
Port Moresby Jacksons International Airport, PG  
Total Distance: 21338.20 miles  
Duration: 40.00

Route #5



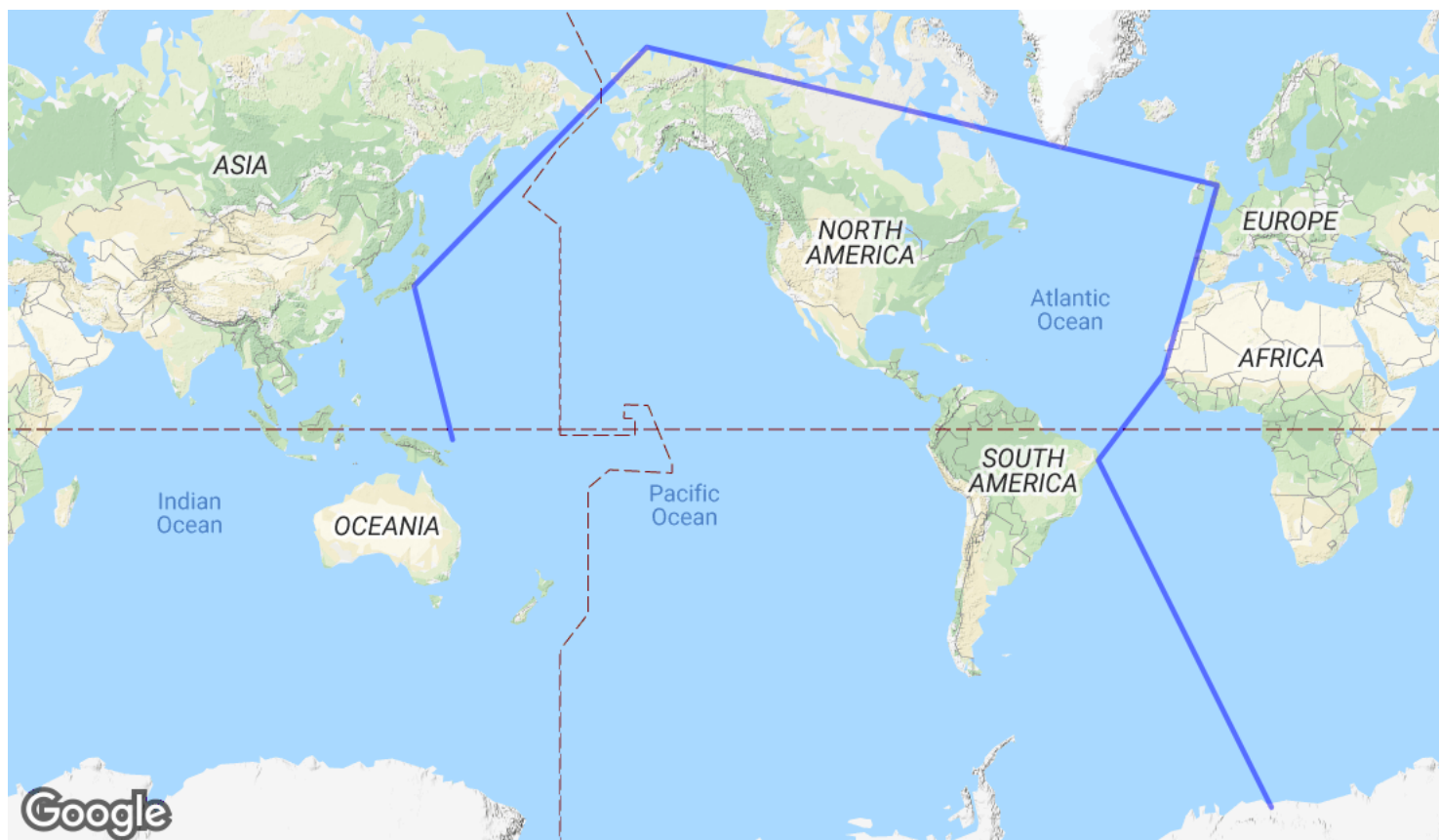
AT17 AN RU (0 mi / 0.0 hrs / 0 mph)  
name: Novolazarevskaya Station  
country: n/a  
elevation: 335ft  
type: small\_airport  
plane: n/a  
nearest alternate medium\_airport: None  
nearest alternate large\_airport: None  
YCAR OC AU (5348 mi / 9.0 hrs / 594 mph)  
name: Carnarvon Airport  
country: Australia  
elevation: 13ft  
type: medium\_airport  
plane: g550  
nearest alternate medium\_airport: YSHK, 70.29 mi  
Shark Bay Airport, AU  
nearest alternate large\_airport: None  
VOTV AS IN (3719 mi / 7.6 hrs / 487 mph)  
name: Trivandrum International Airport  
country: India  
elevation: 15ft  
type: large\_airport  
plane: g450  
HEAX AF EG (3737 mi / 7.8 hrs / 480 mph)  
name: El Nouzha Airport  
country: Egypt  
elevation: -6ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: HEBA, 23.70 mi  
Borg El Arab International Airport, EG  
nearest alternate large\_airport: LICC, 952.14 mi  
Catania-Fontanarossa Airport, IT  
LIPO EU IT (1586 mi / 3.2 hrs / 488 mph)  
name: Brescia Airport  
country: Italy  
elevation: 355ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: LIMP, 41.79 mi



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        Parma Airport, IT
nearest alternate large_airport: LEPA, 560.31 mi
        Palma De Mallorca Airport, ES
LFVP NA PM (3398 mi / 7.2 hrs / 475 mph)
name: St Pierre Airport
country: Saint Pierre and Miquelon
elevation: 27ft
type: medium_airport
plane: g450
nearest alternate medium_airport: CYJT, 165.47 mi
        Stephenville Airport, CA
nearest alternate large_airport: CYHZ, 376.21 mi
        Halifax / Stanfield International Airport, CA
TNCA SA AW (2751 mi / 5.4 hrs / 508 mph)
name: Queen Beatrix International Airport
country: Aruba
elevation: 60ft
type: medium_airport
plane: g450
nearest alternate medium_airport: SKCC, 358.70 mi
        Camilo Daza International Airport, CO
nearest alternate large_airport: None
Total Distance: 20540.14 miles
Duration: 40.21

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**Route #6**

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AT17 AN RU (0 mi / 0.0 hrs / 0 mph)
name: Novolazarevskaya Station
country: n/a
elevation: 335ft
type: small_airport
plane: n/a
nearest alternate medium_airport: None
nearest alternate large_airport: None
SBRF SA BR (5251 mi / 10.0 hrs / 524 mph)
name: Guararapes - Gilberto Freyre International Airport
country: Brazil
elevation: 33ft
type: medium_airport
plane: g550
nearest alternate medium_airport: SBJP, 67.78 mi
        Presidente Castro Pinto International Airport, BR
nearest alternate large_airport: None
GOOY AF SN (2179 mi / 3.9 hrs / 555 mph)
name: Léopold Sédar Senghor International Airport
country: Senegal
elevation: 85ft
type: large_airport
plane: g450
EGNC EU GB (3176 mi / 5.9 hrs / 539 mph)
name: Carlisle Airport
country: United Kingdom
elevation: 190ft

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```

type: medium_airport
plane: g450
nearest alternate medium_airport: EGQL, 99.20 mi
      RAF Leuchars, GB
nearest alternate large_airport: EINN, 293.24 mi
      Shannon Airport, IE
PABR NA US (3985 mi / 8.4 hrs / 475 mph)
name: Wiley Post Will Rogers Memorial Airport
country: United States
elevation: 44ft
type: medium_airport
plane: g450
nearest alternate medium_airport: PASC, 203.44 mi
      Deadhorse Airport, US
nearest alternate large_airport: None
RJAH AS JP (3599 mi / 6.4 hrs / 562 mph)
name: Hyakuri Airport
country: Japan
elevation: 105ft
type: medium_airport
plane: g450
nearest alternate medium_airport: RJTO, 113.44 mi
      Oshima Airport, JP
nearest alternate large_airport: RJFK, 632.00 mi
      Kagoshima Airport, JP
AYKV OC PG (3037 mi / 5.7 hrs / 537 mph)
name: Kavieng Airport
country: Papua New Guinea
elevation: 7ft
type: medium_airport
plane: g450
nearest alternate medium_airport: AYTK, 162.97 mi
      Tokua Airport, PG
nearest alternate large_airport: AYPY, 534.44 mi
      Port Moresby Jacksons International Airport, PG
Total Distance: 21226.88 miles
Duration: 40.26
```

Route #7



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AT17 AN RU (0 mi / 0.0 hrs / 0 mph)
name: Novolazarevskaya Station
country: n/a
elevation: 335ft
type: small_airport
plane: n/a
nearest alternate medium_airport: None
nearest alternate large_airport: None
SNAM SA BR (4531 mi / 8.8 hrs / 517 mph)
name: Santo Antônio do Amparo Airport
country: Brazil
elevation: 3601ft
type: small_airport
plane: g550
```



nearest alternate medium\_airport: SBTA, 152.26 mi  
Base de Aviação de Taubaté Airport, BR

nearest alternate large\_airport: SBCT, 419.00 mi  
Afonso Pena Airport, BR

GOOY AF SN (3395 mi / 6.1 hrs / 555 mph)  
name: Léopold Sédar Senghor International Airport  
country: Senegal  
elevation: 85ft  
type: large\_airport  
plane: g450

BGBW NA GL (3844 mi / 7.6 hrs / 503 mph)  
name: Narsarsuaq Airport  
country: Greenland  
elevation: 112ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: BGSF, 434.31 mi  
Kangerlussuaq Airport, GL

nearest alternate large\_airport: None

ENAN EU NO (1958 mi / 3.4 hrs / 573 mph)  
name: Andøya Airport  
country: Norway  
elevation: 43ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: ENNA, 218.31 mi  
Banak Airport, NO

nearest alternate large\_airport: ENBO, 146.99 mi  
Bodø Airport, NO

ZYHB AS CN (4127 mi / 7.2 hrs / 573 mph)  
name: Taiping Airport  
country: China  
elevation: 457ft  
type: large\_airport  
plane: g450

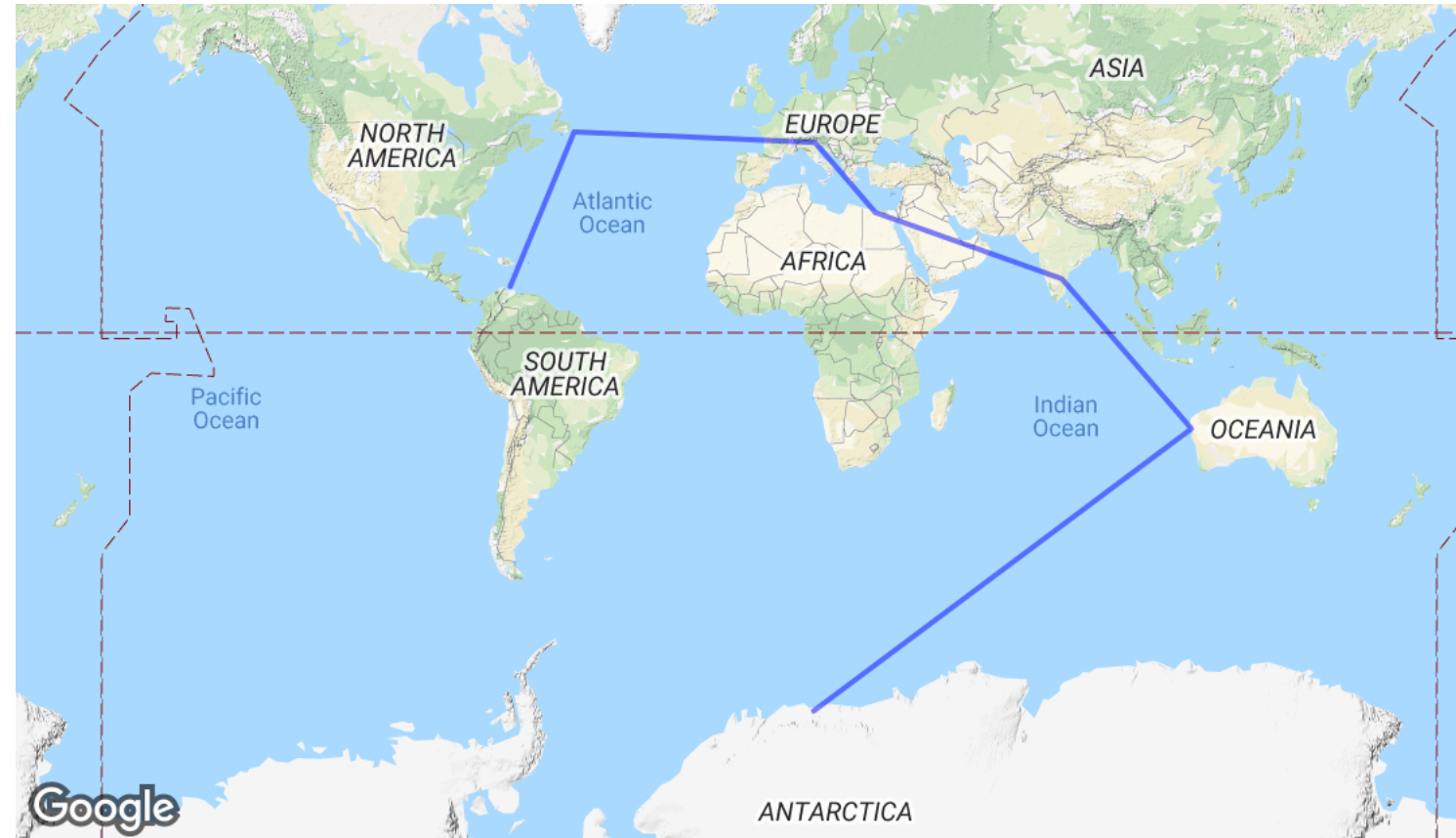
AYMO OC PG (3895 mi / 7.2 hrs / 544 mph)  
name: Momote Airport  
country: Papua New Guinea  
elevation: 12ft  
type: medium\_airport  
plane: g450  
nearest alternate medium\_airport: AYWK, 279.65 mi  
Wewak International Airport, PG

nearest alternate large\_airport: AYPY, 510.20 mi  
Port Moresby Jacksons International Airport, PG

Total Distance: 21749.43 miles

Duration: 40.28

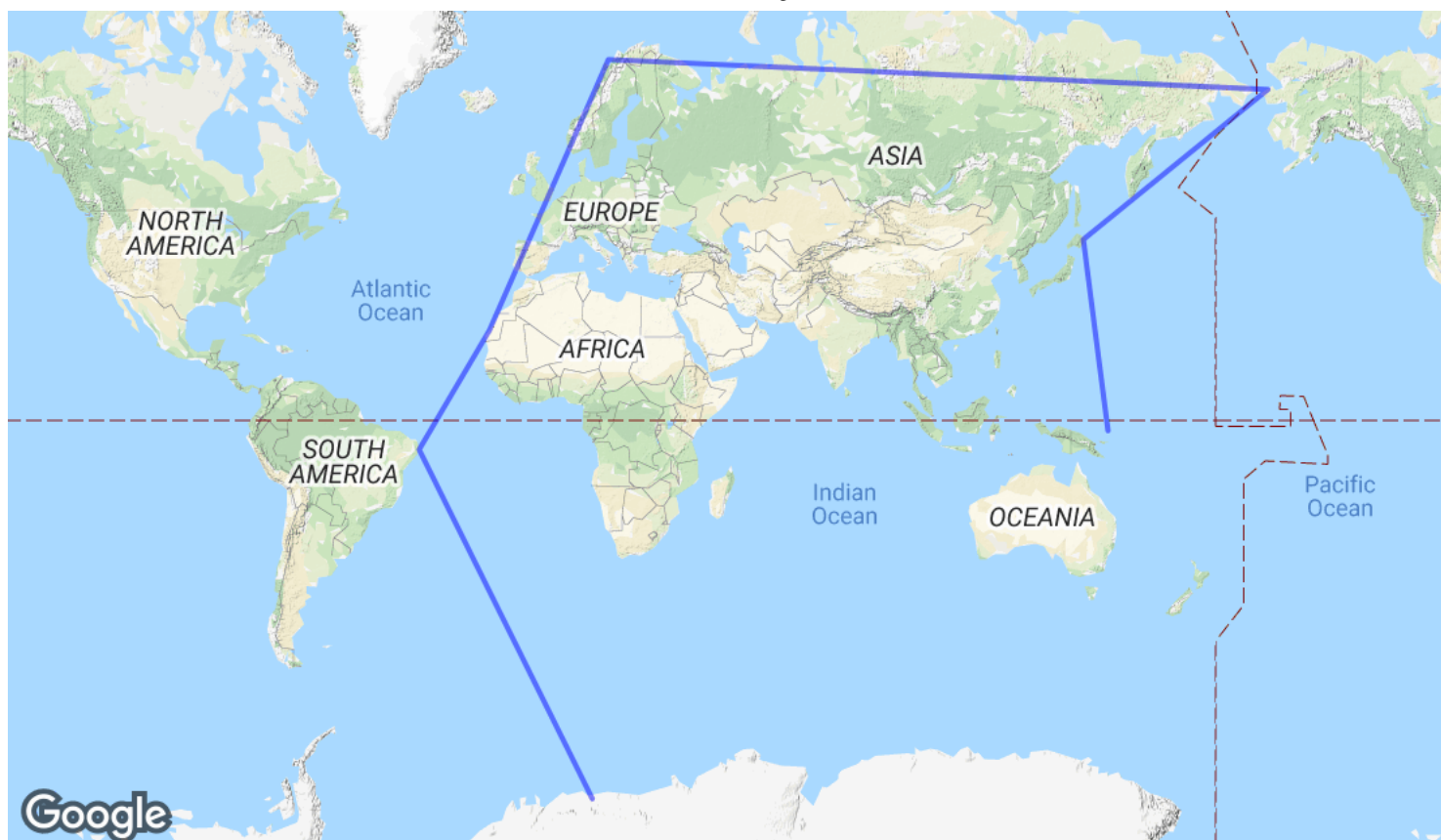
Route #8



AT17 AN RU (0 mi / 0.0 hrs / 0 mph)  
name: Novolazarevskaya Station  
country: n/a  
elevation: 335ft

```
type: small_airport
plane: n/a
nearest alternate medium_airport: None
nearest alternate large_airport: None
YCAR OC AU (5348 mi / 9.0 hrs / 594 mph)
name: Carnarvon Airport
country: Australia
elevation: 13ft
type: medium_airport
plane: g550
nearest alternate medium_airport: YSHK, 70.29 mi
      Shark Bay Airport, AU
nearest alternate large_airport: None
VOCP AS IN (3956 mi / 8.0 hrs / 491 mph)
name: Kadapa Airport
country: India
elevation: 430ft
type: medium_airport
plane: g450
nearest alternate medium_airport: VORY, 270.67 mi
      Rajahmundry Airport, IN
nearest alternate large_airport: VOTV, 434.95 mi
      Trivandrum International Airport, IN
HEAL AF EG (3706 mi / 7.8 hrs / 477 mph)
name: El Alamein International Airport
country: Egypt
elevation: 143ft
type: medium_airport
plane: g450
nearest alternate medium_airport: HEBA, 73.20 mi
      Borg El Arab International Airport, EG
nearest alternate large_airport: LICC, 887.68 mi
      Catania-Fontanarossa Airport, IT
LIPH EU IT (1475 mi / 3.0 hrs / 492 mph)
name: Treviso-Sant'Angelo Airport
country: Italy
elevation: 59ft
type: large_airport
plane: g450
CYYT NA CA (3291 mi / 6.9 hrs / 475 mph)
name: St. John's International Airport
country: Canada
elevation: 461ft
type: large_airport
plane: g450
TNCA SA AW (2886 mi / 5.7 hrs / 505 mph)
name: Queen Beatrix International Airport
country: Aruba
elevation: 60ft
type: medium_airport
plane: g450
nearest alternate medium_airport: SKCC, 358.70 mi
      Camilo Daza International Airport, CO
nearest alternate large_airport: None
Total Distance: 20663.49 miles
Duration: 40.44
```

**Route #9**



AT17 AN RU (0 mi / 0.0 hrs / 0 mph)  
 name: Novolazarevskaya Station  
 country: n/a  
 elevation: 335ft  
 type: small\_airport  
 plane: n/a  
 nearest alternate medium\_airport: None  
 nearest alternate large\_airport: None

SIPE SA BR (5285 mi / 10.1 hrs / 524 mph)  
 name: Itapessoca Airport  
 country: Brazil  
 elevation: 16ft  
 type: small\_airport  
 plane: g550  
 nearest alternate medium\_airport: SBJP, 35.81 mi  
 Presidente Castro Pinto International Airport, BR  
 nearest alternate large\_airport: None

GMMH AF EH (2768 mi / 5.0 hrs / 550 mph)  
 name: Dakhla Airport  
 country: Western Sahara  
 elevation: 36ft  
 type: medium\_airport  
 plane: g450  
 nearest alternate medium\_airport: GMMMA, 337.34 mi  
 Smara Airport, EH  
 nearest alternate large\_airport: GCLP, 293.10 mi  
 Gran Canaria Airport, ES

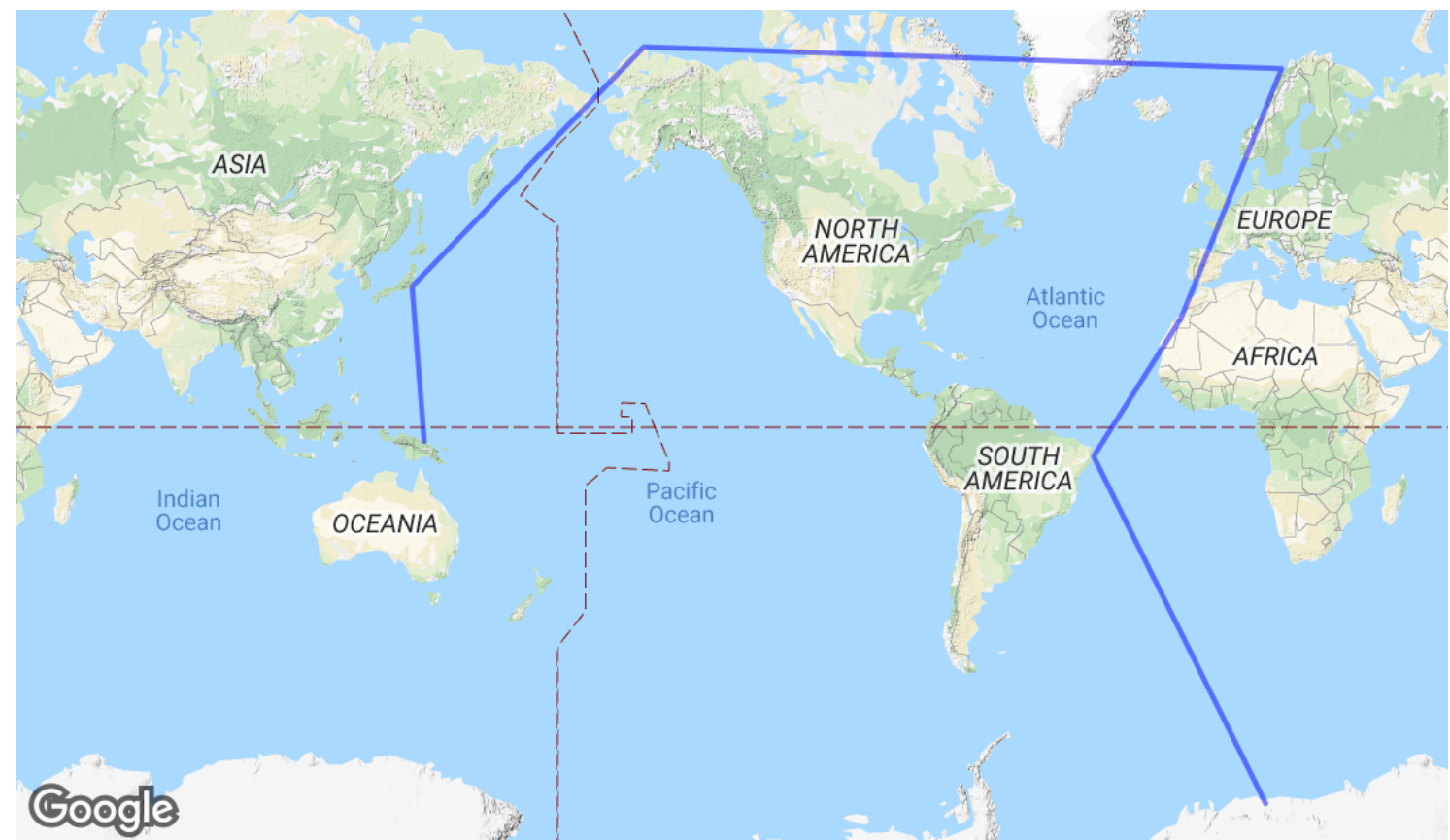
ENAN EU NO (3756 mi / 6.9 hrs / 547 mph)  
 name: Andøya Airport  
 country: Norway  
 elevation: 43ft  
 type: medium\_airport  
 plane: g450  
 nearest alternate medium\_airport: ENNA, 218.31 mi  
 Banak Airport, NO  
 nearest alternate large\_airport: ENBO, 146.99 mi  
 Bodø Airport, NO

PASH NA US (3378 mi / 7.1 hrs / 475 mph)  
 name: Shishmaref Airport  
 country: United States  
 elevation: 12ft  
 type: medium\_airport  
 plane: g450  
 nearest alternate medium\_airport: PAOM, 121.46 mi  
 Nome Airport, US  
 nearest alternate large\_airport: None

RJCM AS JP (2638 mi / 4.7 hrs / 565 mph)  
 name: Memanbetsu Airport  
 country: Japan  
 elevation: 135ft  
 type: medium\_airport  
 plane: g450  
 nearest alternate medium\_airport: RJEB, 47.73 mi  
 Monbetsu Airport, JP

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nearest alternate large_airport: UHHH, 535.46 mi
Khabarovsk-Novy Airport, RU
AYKV OC PG (3560 mi / 6.7 hrs / 531 mph)
name: Kavieng Airport
country: Papua New Guinea
elevation: 7ft
type: medium_airport
plane: g450
nearest alternate medium_airport: AYTK, 162.97 mi
Tokua Airport, PG
nearest alternate large_airport: AYPY, 534.44 mi
Port Moresby Jacksons International Airport, PG
Total Distance: 21384.47 miles
Duration: 40.45
```

Route #10



```
AT17 AN RU (0 mi / 0.0 hrs / 0 mph)
name: Novolazarevskaya Station
country: n/a
elevation: 335ft
type: small_airport
plane: n/a
nearest alternate medium_airport: None
nearest alternate large_airport: None
SIPE SA BR (5285 mi / 10.1 hrs / 524 mph)
name: Itapessoca Airport
country: Brazil
elevation: 16ft
type: small_airport
plane: g550
nearest alternate medium_airport: SBJP, 35.81 mi
Presidente Castro Pinto International Airport, BR
nearest alternate large_airport: None
GMAT AF MA (3248 mi / 5.9 hrs / 552 mph)
name: Tan Tan Airport
country: Morocco
elevation: 653ft
type: medium_airport
plane: g450
nearest alternate medium_airport: GMMMA, 122.85 mi
Smara Airport, EH
nearest alternate large_airport: GCLP, 259.76 mi
Gran Canaria Airport, ES
ENAN EU NO (3328 mi / 6.1 hrs / 545 mph)
name: Andøya Airport
country: Norway
elevation: 43ft
type: medium_airport
plane: g450
nearest alternate medium_airport: ENNA, 218.31 mi
Banak Airport, NO
nearest alternate large_airport: ENBO, 146.99 mi
Bodø Airport, NO
```

```
PABR NA US (2990 mi / 6.3 hrs / 475 mph)
  name: Wiley Post Will Rogers Memorial Airport
  country: United States
  elevation: 44ft
  type: medium_airport
  plane: g450
  nearest alternate medium_airport: PASC, 203.44 mi
    Deadhorse Airport, US
  nearest alternate large_airport: None
RJAA AS JP (3629 mi / 6.4 hrs / 562 mph)
  name: Narita International Airport
  country: Japan
  elevation: 141ft
  type: large_airport
  plane: g450
AYWK OC PG (3000 mi / 5.7 hrs / 528 mph)
  name: Wewak International Airport
  country: Papua New Guinea
  elevation: 19ft
  type: medium_airport
  plane: g450
  nearest alternate medium_airport: AYMH, 160.87 mi
    Mount Hagen Kagamuga Airport, PG
  nearest alternate large_airport: AYPY, 472.52 mi
    Port Moresby Jacksons International Airport, PG
Total Distance: 21480.19 miles
Duration: 40.48
```