



PI supporting Control & Monitoring Emergency Systems

Manuel Chávez

Empowering Business in Real Time
PI Infrastructure for the Enterprise

PI supporting Control & Monitoring Emergency Systems

PEMEX GAS Y PETROQUÍMICA BÁSICA

Amine & sulfur recovery



- H_2S / CO_2 removal & sulfur production

Cryogenic & fractionation



- Natural gas production
- C_2+ separation



- Production of:
 - Ethane
 - LPG
 - Naphtha

Transport & sales



- Natural gas
- LPG
- Ethane
- Sulfur
- Naphtha

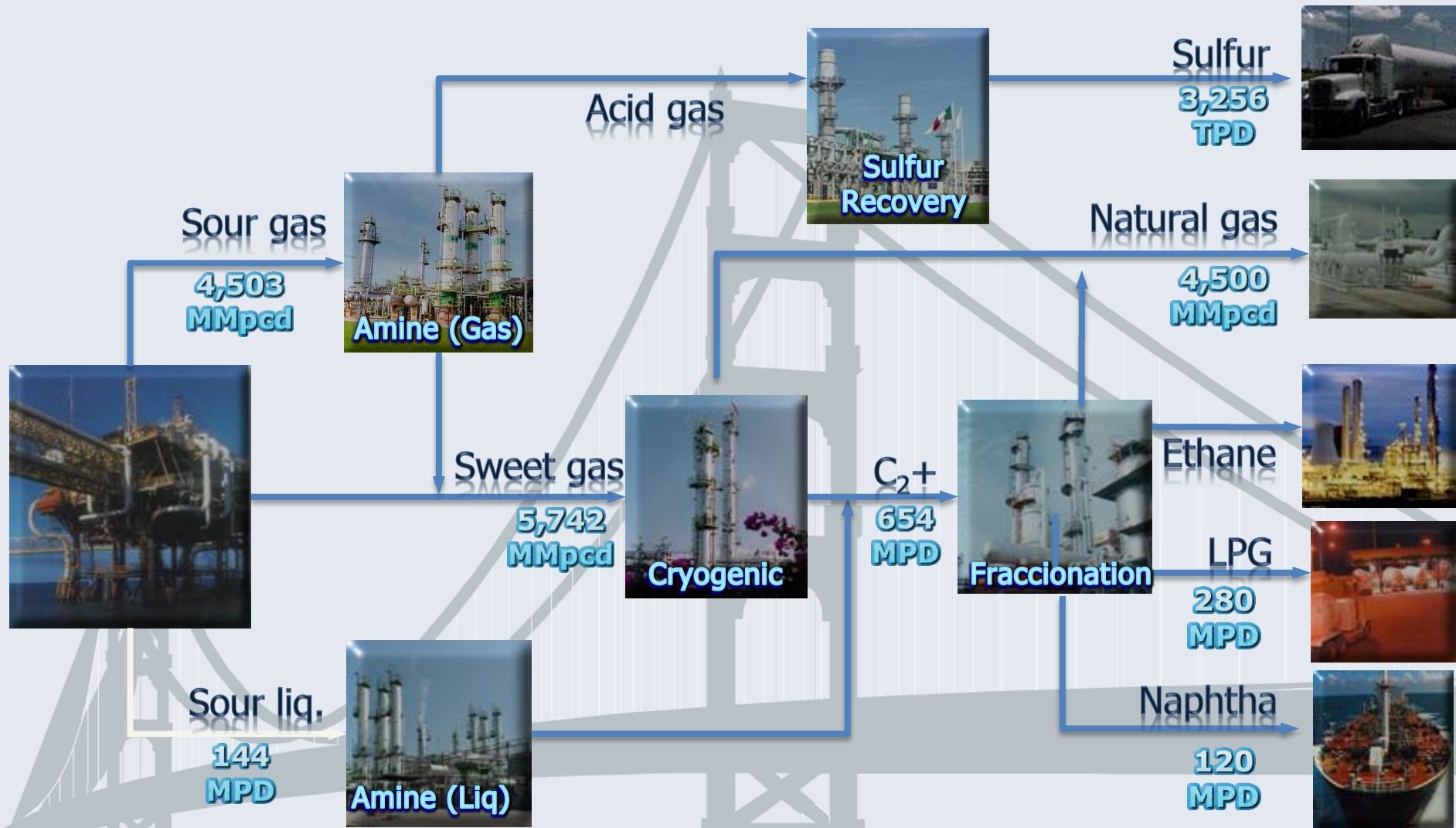
PEMEX EXPLORACIÓN Y PRODUCCIÓN

Gas

Liquids



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Reynosa

Burgos

Arenque

Poza Rica

20 Amine units (gas)

6 Amine units (liq)

14 sulfur units

19 Cryogenic units

12 Fractionation units

Matapionche

Coatzacoalcos

La Venta

Ciudad Pemex

Nuevo Pemex

Cactus

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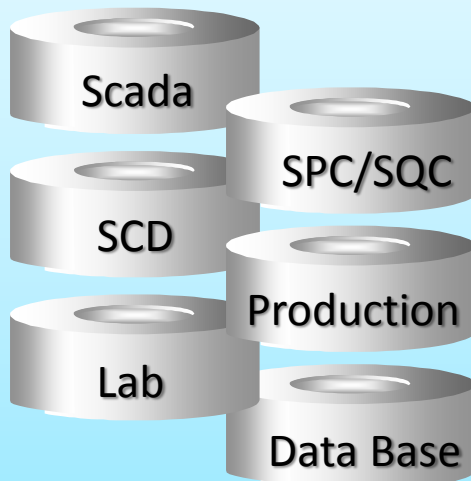
Data source

Gaps

Business decisions



Legacy systems

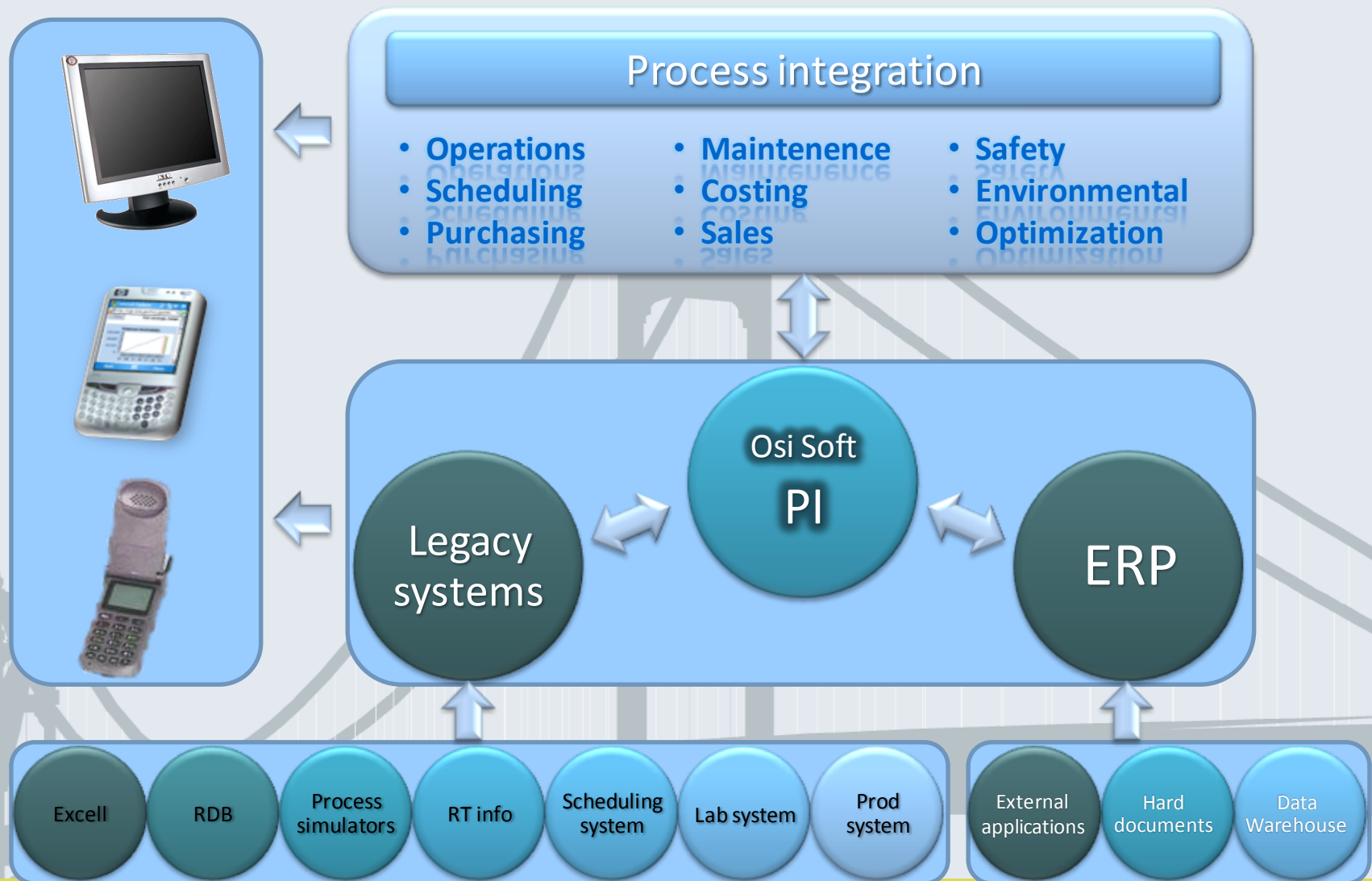


- ♦ **Integration**
- ♦ **Time**
- ♦ **Training & Access**



- ♦ **Planning**
- ♦ **Production**
- ♦ **Operation**
- ♦ **Transport**
- ♦ **Maintenance**
- ♦ **Safety**
- ♦ **Environment**
- ♦ **Costs**
- ♦ **Optimization**
- ♦ **Sales**
- ♦ **Clients**

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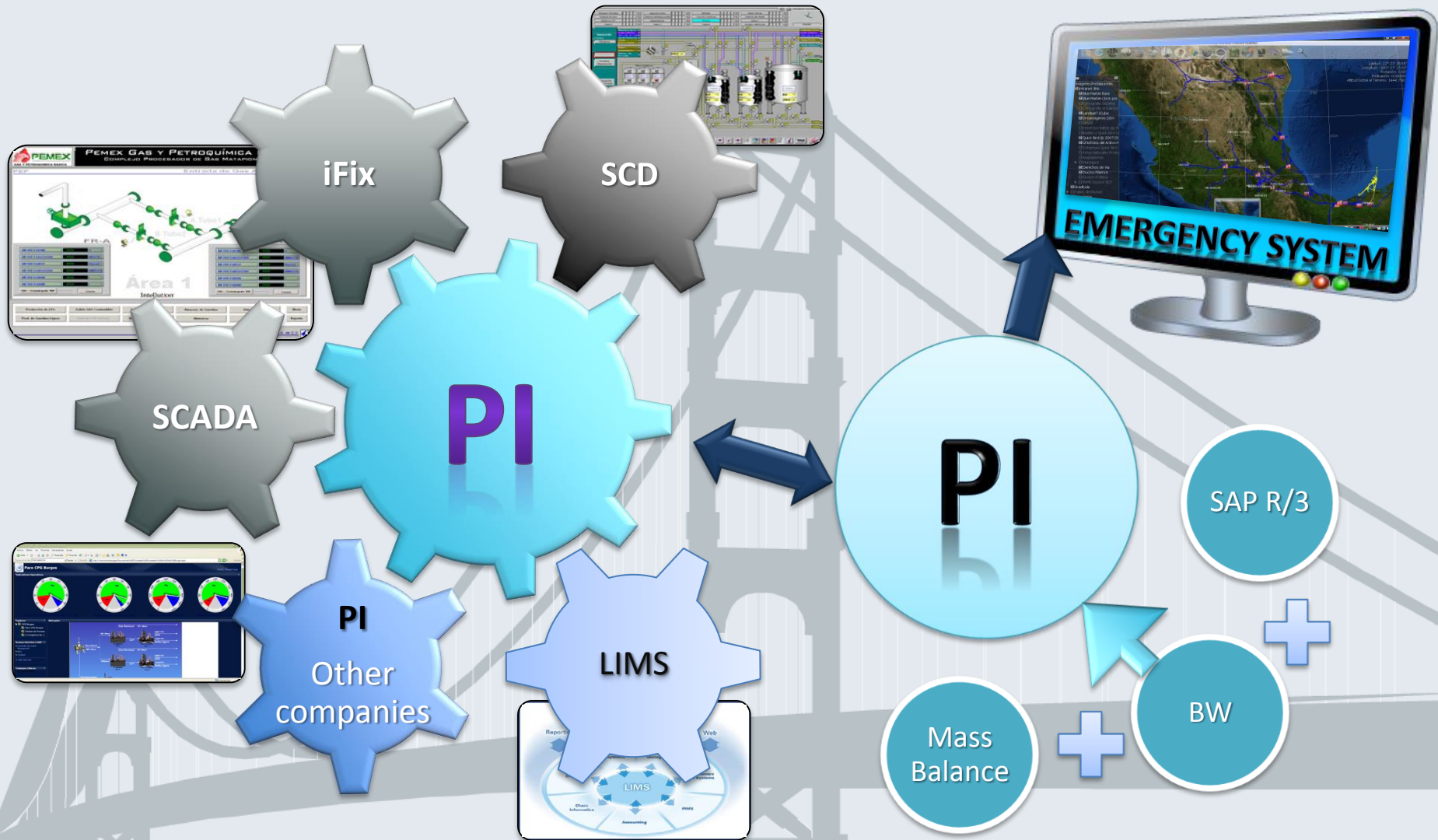
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Visual KPI at PEMEX

- Pemex Gas
- Pemex Exploration & Production
- It puts PI in our pockets!



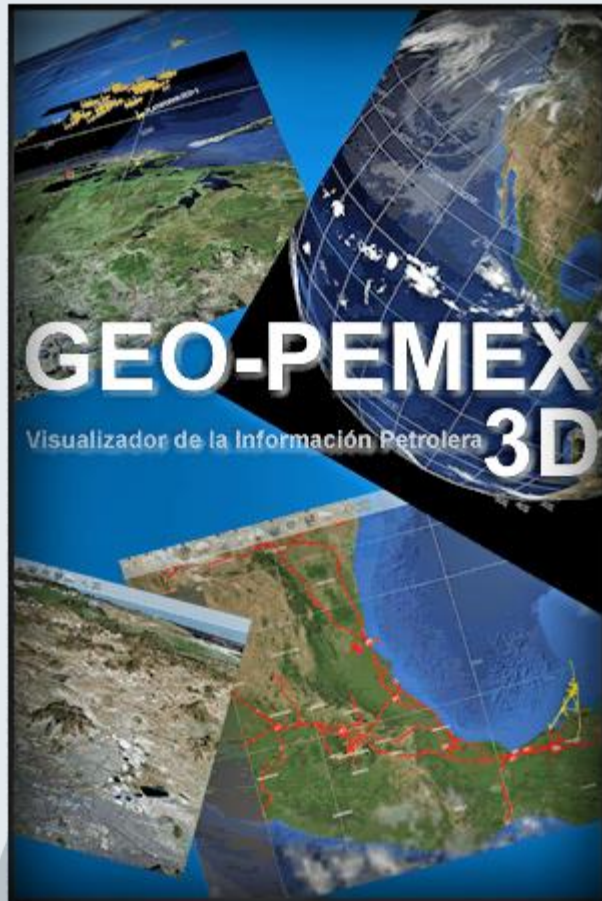
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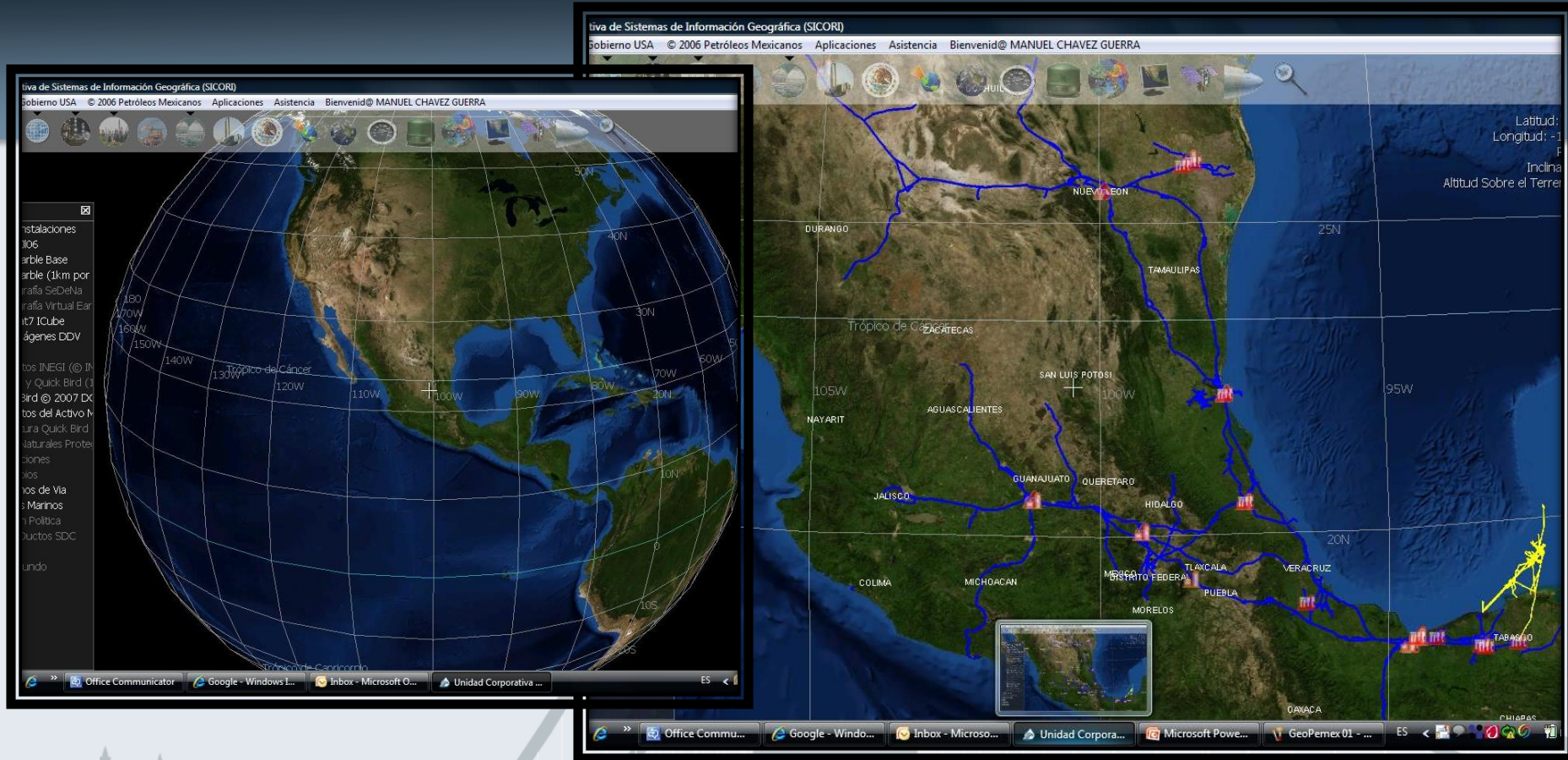
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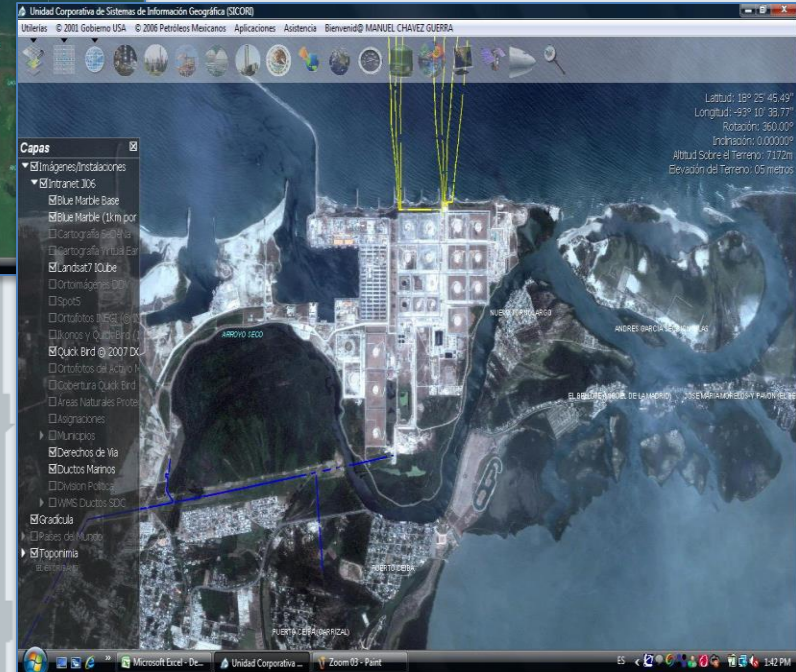
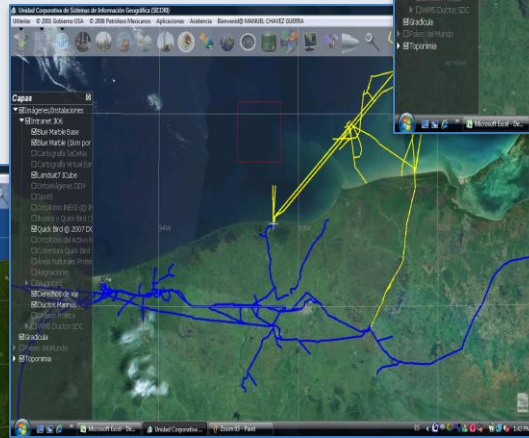
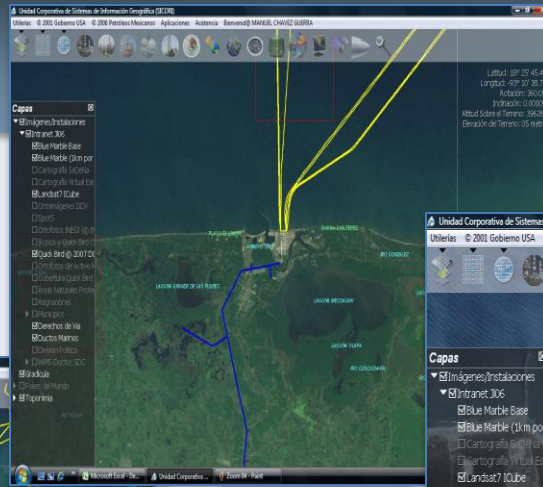


- GEO-PEMEX is an Intranet site which allows 3D visualization of PEMEX and more than 200 thousand cities, counties and towns in México. It is built on a geographic environment including satellite images and aeropictures.
- GEO-PEMEX features include:
 - Railways plotting over 3D maps
 - Pipelines
 - On-shore and Off-shore facilities
 - Refineries, petrochemical and gas plants
 - Political information
 - Military data
- GEO-PEMEX allows to configure links for different applications such as RT information.



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- Emergency system must be an “easy to use” solution
- “Google earth” type solution enable everybody to have a quick start
- It is available information of refineries, petrochemical and gas plants besides onshore and offshore production locations.

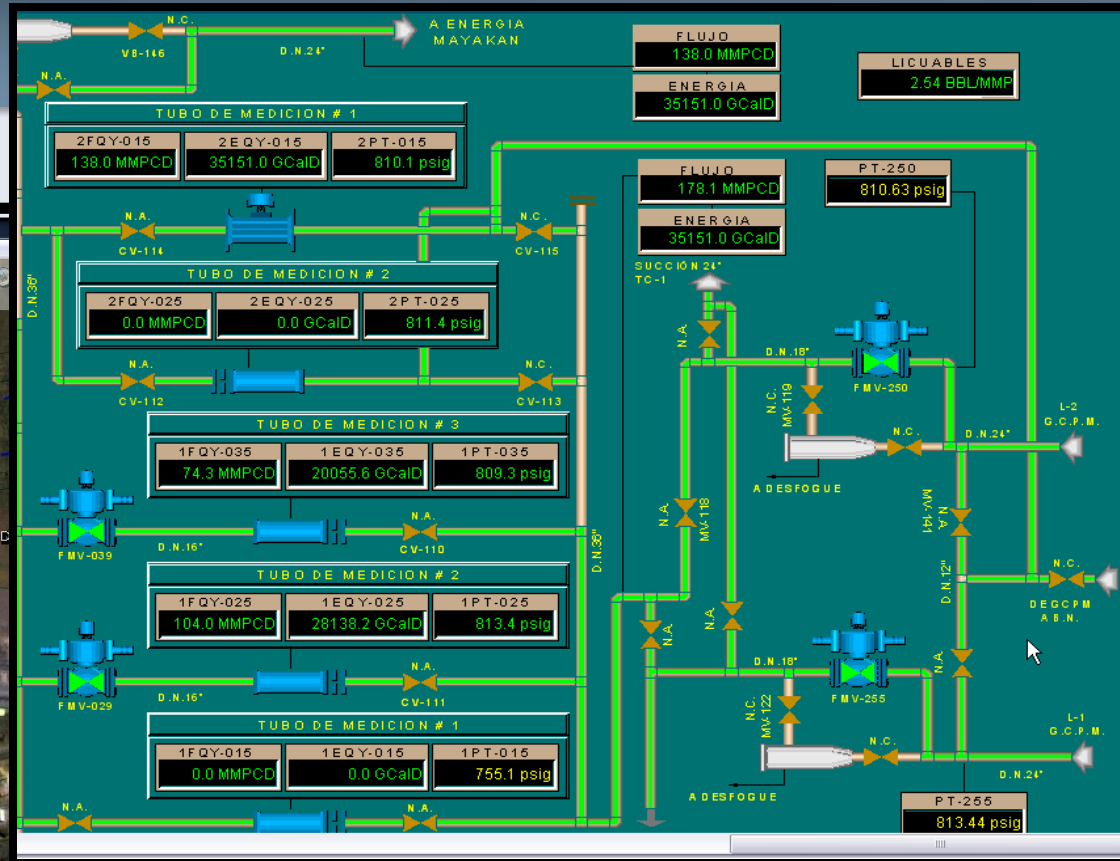
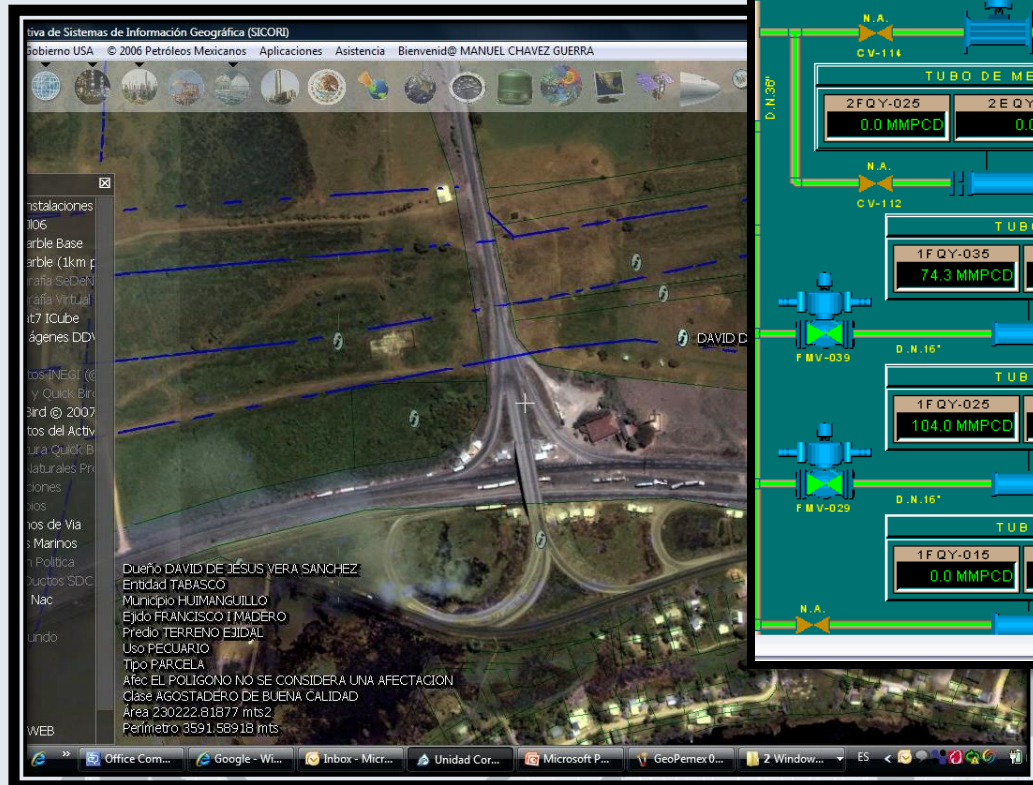


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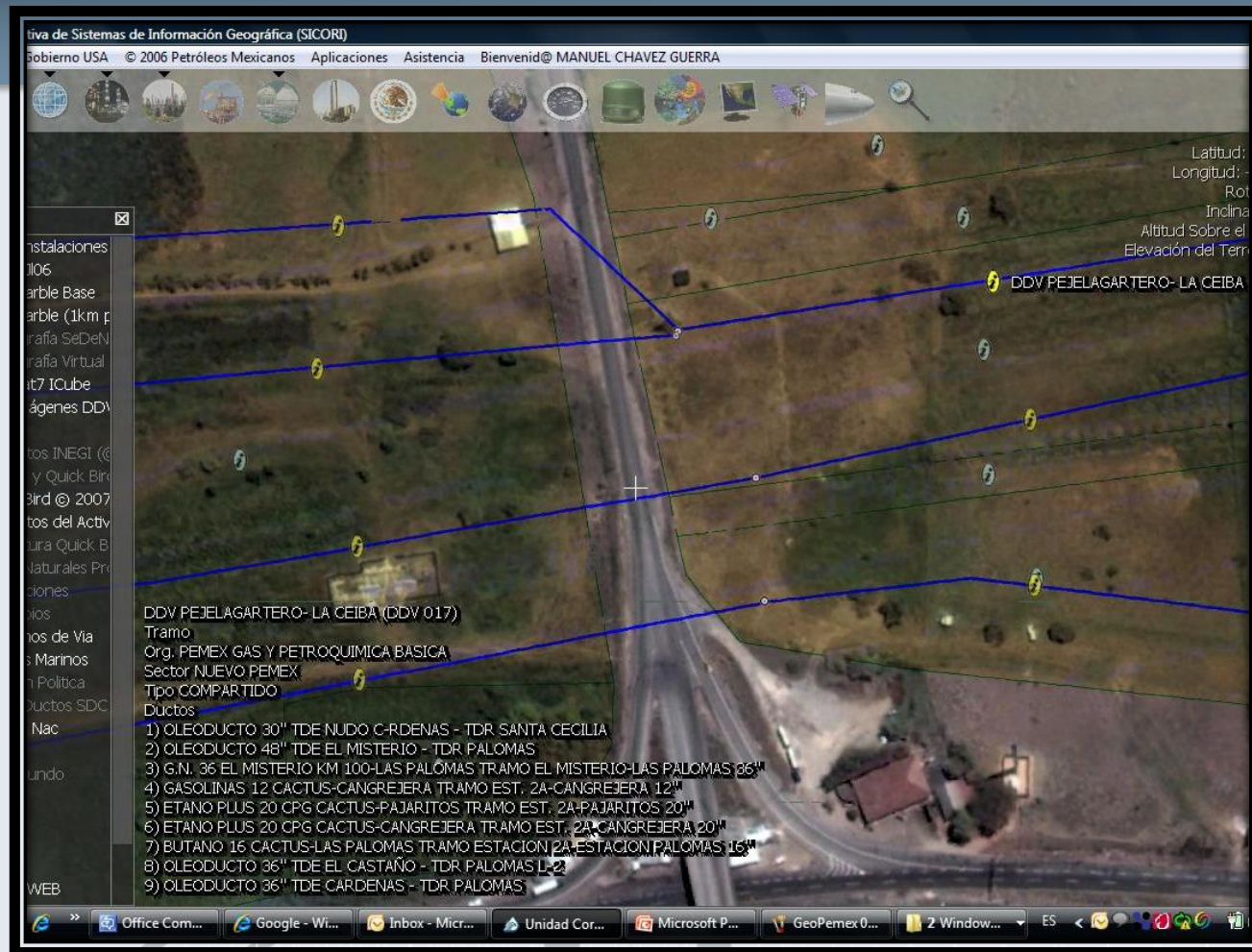


- Clicking on the PI-Links it is possible to reach RT data



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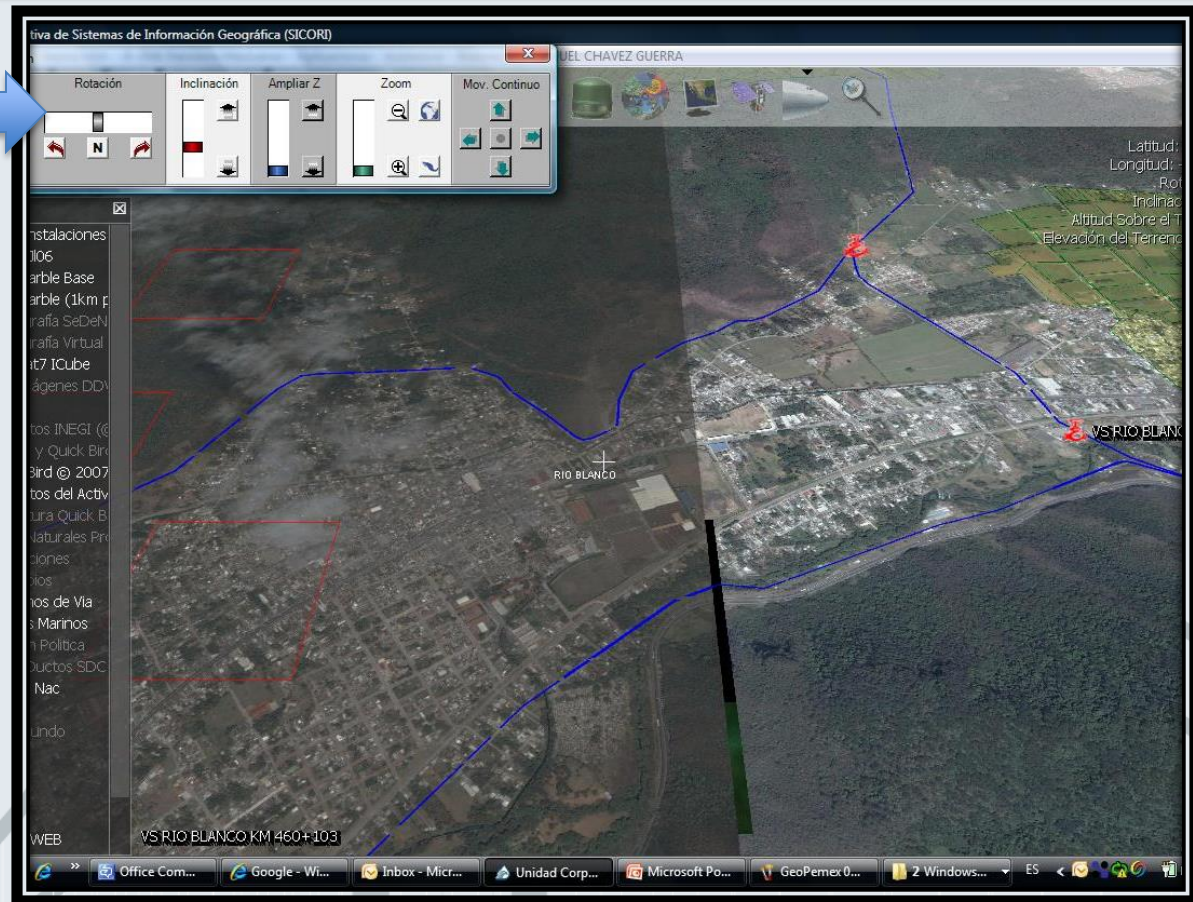
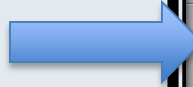
- Pipelines RT data is available



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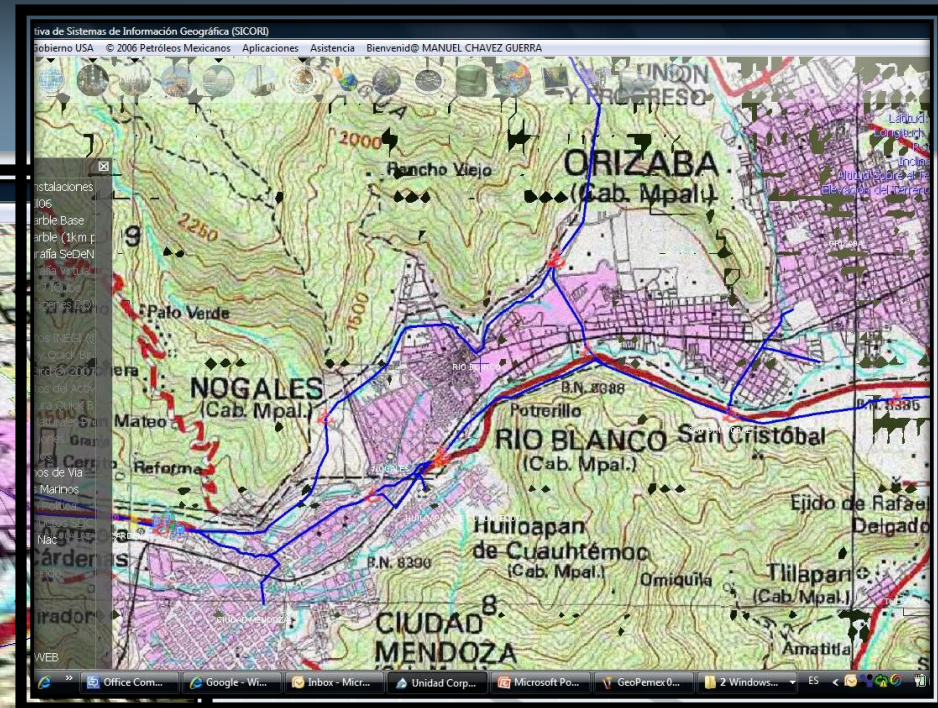
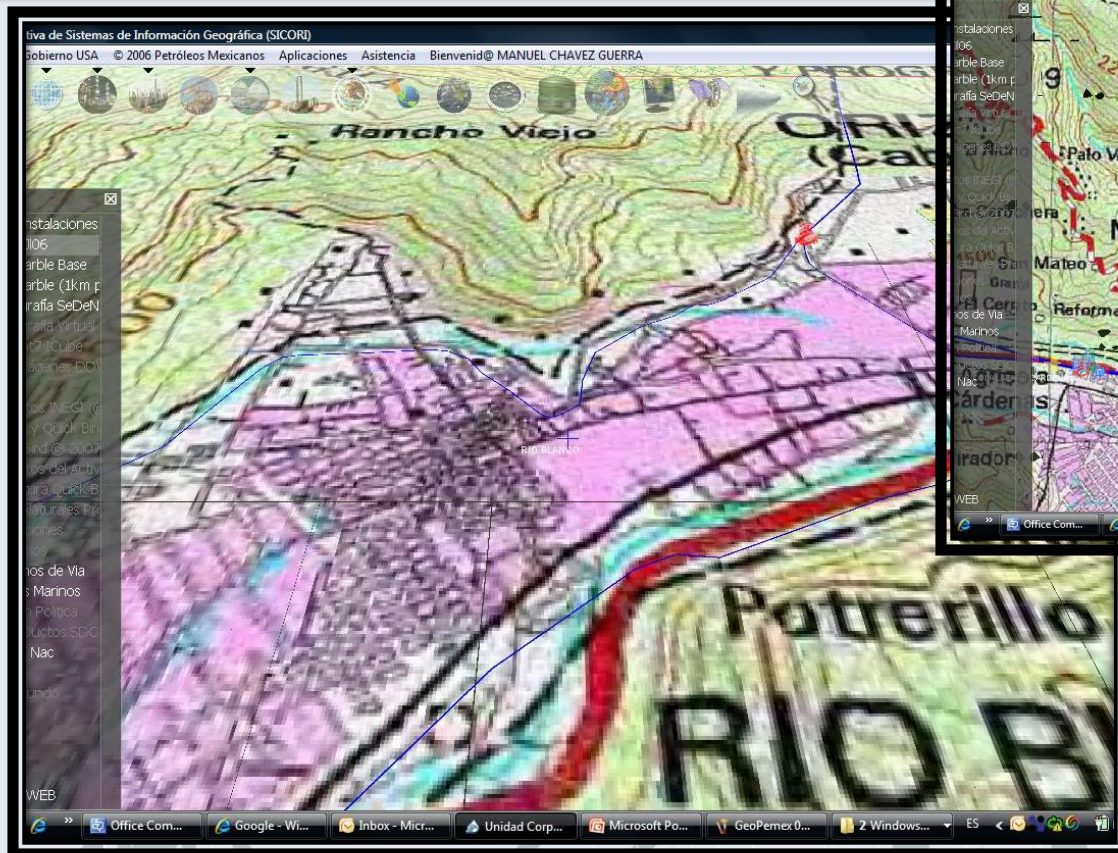
- Detail railway information when cursor is located over “I” icon.

Navigation
controllers



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➤ Perspective visualization



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➤ Military maps



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LIVE DEMO

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